Electronic Supplementary Material (ESI) for Natural Product Reports.

Marine natural products (2018) C9NP00069K

Supplementary Information

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1 Introduction

In the main Review document, only the structures of a selection of highlighted compounds are shown. However, *all* structures are available for viewing, along with names, taxonomic origins, locations, biological activities and other information in this Supplementary Information (SI) document. Each page of the SI document contains at least one array of numbered structures. The numbers are those assigned in the Review document. For structures that have their absolute configurations fully described, the compound number in the diagrams is preceded with †. Below each structural array the relevant information for each reference and associated compounds is listed. The first line contains the **Main article reference** #, followed by **Taxonomy**, **Location** and **Article title**. Each section is separated by the // symbol. The following indented line(s) provide information about each compound referred to in the Review for that publication. This information is provided in the following order, again separated by // (* is inserted where there are no data): **Compound number**, **Status** (**N** for a new compound; **M** for new to marine; **R** for a revision (structure, stereochemistry, stereochemical assignment etc)), **Compound name**, **Biological activity** and **Other information**. To assist your viewing, these headings are noted in the footer at the bottom of each page. To conserve space, the **Title** and **Location** data may have been abbreviated, and are not as complete as in the source, MarinLit. Most **Main article reference** numbers are hyperlinked to the relevant DOI or URL. Where those are not available, the full reference is given in a brief Bibliography at the end of this SI document. **Compound numbers** are hyperlinked to a Chemspider entry where available.

1.1 Abbreviations

In the **Biological activity** and **Other information** sections the following abbreviations have been used:

AA	anti-allergenic
abs. config.	absolute configuration
AchE	acetylcholine esterease
activ.	activity
anal.	analysis
AB	antibacterial
antifoul.	antifouling
antitryps.	antitrypanosomal
antimal.	antimalarial
AF	antifungal
AI	anti-inflammatory
AM	antimicrobial
AO	antioxidant
AV	antiviral
A. niger	*Aspergillus niger*
bact.	bacteria
B. subtilis	*Bacillus subtilis*
BACE 1	beta-site amyloid precursor protein cleaving enzyme 1
biosynth.	biosynthesis/biosynthetic
BGC	biosynthetic gene cluster
calc.	calculation(s)
C. albicans	*Candida albicans*
CI	cell invasion
CM	cell migration
compar.	comparison
connect.	connectivity
cytotox.	cytotoxicity/cytotoxic
DFT	density functional theory
degrad.	degradation
deriv.	derivative
determ.	determined
diffrac.	diffraction
DPPH	2,2-diphenyl-1-picrylhydrazyl
ECD	electronic circular dichroism
E. coli	*Escherichia coli*
estab.	established
expt.	experimental
GSK 3β	glycogen synthase kinase 3β
HSV T1	*Herpes simplex* virus type 1
hum.	human
HTCL	human tumour cell line
IDO	indoleamine 2,3-dioxygenase
IMPDH	inosine-5"-monophosphate dehydrogenase
IA	inactive
inhib.	inhibitor/inhibition/inhibitory
insep.	inseparable
immunomod.	immunomodulatory
isol.	isolated
K. pneumoniae	*Klebsiella pneumoniae*
MIC	minimum inhibitory concentration
M. tuberculosis	*Mycobacterium tuberculosis*
M. smegmatis	*Mycobacterium smegmatis*
mod.	Moderate
MOA	mechanism of action
microb.	microbial, microbe
mixt.	mixture
MRSA	methicillin resistant *Staphlococcus aureus*
NMCL	normal mammalian cell line
NRPS	nonribosomal peptide synthase
NO	nitrous oxide
norm.	normal
NMCL	normal mammalian cell line
NT	not tested
PD	Parkinson’s Disease
P. notatum	*Penicillium notatum*
P. falciparum	*Plasmodium falciparum*
prod.	production
PKS	polyketide synthase
prop.	proposed
PTP1B	protein-tyrosine phosphatase 1B
P. aeruginosa	*Pseudomonas aeruginosa*

recept.	Receptor
rel. config.	relative configuration
SAR	structure activity relationship
S. cerevisiae	*Saccharomyces cerevisiae*
spec. rot.	specific rotation
spectro.	spectroscopic/spectrometric
S. aureus	*Staphlococcus aureus*
stereochem.	stereochemistry
struct.	structure
synth.	synthesis/synthetic
TB	tuberculosis
TRAIL	tumor necrosis factor-related apoptosis-inducing ligand
TRP	transient receptor potential
T. mentagrophytes	*Trichophyton mentagrophytes*
T. brucei	*Trypanosoma brucei*

2 Additional reviews

This listing is of reviews not included in the Review highlights section of the MNP review. Their placement here does not necessarily imply a lesser importance of the work described, but more likely that they may be of interest to only a smaller group of readers or have a more limited scope of coverage

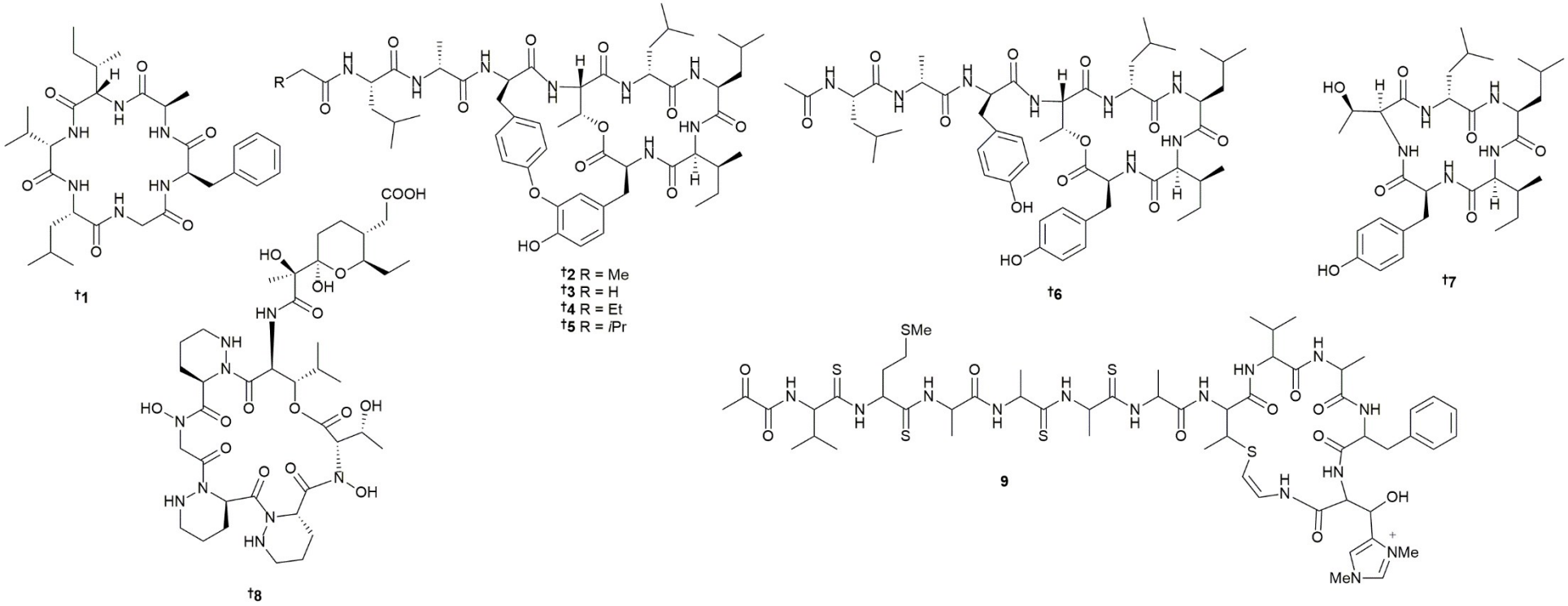
s1	bioactivity	Marine natural product peptides with therapeutic potential: Chemistry, biosynthesis, and pharmacology
s2	bioactivity	Addressing the issue of tetrodotoxin targeting
s3	bioactivity	Photoredox reactions of quinones
s4	bioactivity, antibacterial	Antibacterial and antibiofilm potentials of marine pyrrole-2-aminoimidazole alkaloids and their synthetic analogs
s5	bioactivity, anti-inflammatory	Review of anti-inflammatory, immune-modulatory and wound healing properties of molluscs
s6	bioactivity, anti-obesity	The evaluation and utilization of marine-derived bioactive compounds with anti-obesity effect
s7	bioactivity, antituberculous	New antituberculous drugs derived from natural products: current perspectives and issues in antituberculous drug development
s8	bioactivity, antivirals from microbes	Current landscape and future prospects of antiviral drugs derived from microbial products
s9	bioactivity, cardio-metabolic disease	Marine omega-3 fatty acids, complications of pregnancy and maternal risk factors for offspring cardio-metabolic disease
s10	bioactivity, folate biosynthesis	Review on abyssomicins: inhibitors of the chorismate pathway and folate biosynthesis
s11	bioactivity, cyclic-AMP pathway	Natural products as modulators of the cyclic-AMP pathway: evaluation and synthesis of lead compounds
s12	bioactivity, glioblastoma	Drug resistance in glioblastoma and cytotoxicity of seaweed compounds, alone and in combination with anticancer drugs: a mini review
s13	bioactivity, hypoglycemic	Bioactive compounds from marine macroalgae and their hypoglycemic benefits
s14	bioactivity, inflammation	Marine-derived protein kinase inhibitors for neuroinflammatory diseases
s15	bioactivity, inflammation	Raging the war against inflammation with natural products
s16	bioactivity, neurotoxicity	Mechanisms and effects posed by neurotoxic products of cyanobacteria/microbial eukaryotes/dinoflagellates in algae blooms: a review
s17	bioactivity, nicotinic acetylcholine receptor	Neuronal nicotinic acetylcholine receptor modulators from cone snails
s18	bioactivity, obesity and type-2 diabetes	Branched fatty acyl esters of hydroxyl fatty acids (FAHFAs), appealing beneficial endogenous fat against obesity and type-2 diabetes
s19	bioactivity, obesity hypertension	Overview on the antihypertensive and anti-obesity effects of secondary metabolites from seaweeds
s20	bioactivity, pain	Tetrodotoxin, a candidate drug for Nav1.1-induced mechanical pain?
s21	bioactivity, pain	Nav1.7 inhibitors for the treatment of chronic pain
s22	bioactivity, proteasome	Clogging the ubiquitin-proteasome machinery with marine natural products: last decade update
s23	bioactivity, PTP1B	Protein tyrosine phosphatase 1B inhibitors from natural sources
s24	bioactivity, toxicology	Mixtures of lipophilic phycotoxins: exposure data and toxicological assessment
s25	bioactivity, trypanosomatid parasite	Active natural product scaffolds against trypanosomatid parasites: a review
s26	bioactvity, Immune effects	Immune effects of the neurotoxins ciguatoxins and brevetoxins
s27	biosynthesis	On ovothiol biosynthesis and biological roles: from life in the ocean to therapeutic potential
s28	biosynthesis, alkylproline	Biosynthesis and incorporation of an alkylproline-derivative (APD) precursor into complex natural products
s29	biosynthesis, chromenols	Natural 6-hydroxy-chromanols and -chromenols: structural diversity, biosynthetic pathways and health implications
s30	biosynthesis, enzymes	Recent examples of a-ketoglutarate-dependent mononuclear non-haem iron enzymes in natural product biosyntheses

s31	biosynthesis, enzymes	Cobalamin-dependent radical *S*-adenosyl-L-methionine enzymes in natural product biosynthesis
s32	biosynthesis, meroterpenoid	Asymmetric alkene and arene halofunctionalization reactions in meroterpenoid biosynthesis
s33	biosynthesis, NRPS	Structural, functional and evolutionary perspectives on effective re-engineering of non-ribosomal peptide synthetase assembly lines
s34	biosynthesis, pseudo NP	Artificial i*n vitro* biosynthesis systems for the development of pseudo-natural products
s35	biosynthesis, secondary metabolim	Unrivalled diversity: the many roles and reactions of bacterial cytochromes P450 in secondary metabolism
s36	biosynthesis, synthetic biology	Synthetic biology approaches: towards sustainable exploitation of marine bioactive molecules
s37	bioactivity, cancer	A brief review of potent anti-CNS tumourics from marine sponges: covering the period from 1994 to 2014
s38	bioactivity, cancer	Marine fungi: a source of potential anticancer compounds
s39	bioactivity, cancer	Marine invertebrate natural products that target microtubules
s40	bioactivity, cancer	The anti-cancer effects of frondoside A
s41	bioactivity, cancer	Fumitremorgins and relatives – from tremorgenic compounds to valuable anti-cancer drugs
s42	bioactivity, cancer	Anticancer activity of seaweeds
s43	bioactivity, cancer	Investigation of the anti-prostate cancer properties of marine-derived compounds
s44	bioactivity, cancer	Molecular targets of active anticancer compounds derived from marine sources
s45	bioactivity, cancer	Developments of cyanobacteria for nano-marine drugs: relevance of nanoformulations in cancer therapies
s46	bioactivity, cancer	Staurosporine: new lease of life for parent compound of today's novel and highly successful anti-cancer drugs
s47	bioactivity, cancer	Marine drugs: a hidden wealth and a new epoch for cancer management
s48	bioactivity, cancer	Marine natural products for multi-targeted cancer treatment: a future insight
s49	bioactivity, cancer	Marine drugs for cancer: surfacing biotechnological innovations from the oceans
s50	bioactivity, cancer	Current report of natural product development against breast cancer stem cells
s51	bioactivity, cancer	Seaweed secondary metabolites *in vitro* and *in vivo* anticancer activity
s52	bioactivity, cancer	Anticancer activity of natural compounds from plant and marine environment
s53	cosmetics	The promise of marine molecules as cosmetic active ingredients
s54	drug discovery	Natural products for drug discovery in the 21st century: innovations for novel drug discovery
s55	drug discovery	Current screening methodologies in drug discovery for selected human diseases
s56	drug discovery	Marine natural products in medicinal chemistry
s57	ecology, fish pheromones	Discovery and characterization of natural products that act as pheromones in fish
s58	ecology, predator defense	The role of bacterial natural products in predator defense
s59	health	Natural products for human health: an historical overview of the drug discovery approaches
s60	health, biotoxins	How the marine biotoxins affect human health
s61	location, Brazil	Natural products from marine invertebrates and microorganisms in Brazil between 2004 and 2017: still the challenges, more rewards
s62	location, China	Natural products research in China from 2015 to 2016
s63	location, Madagascar	Novel bioactive natural products isolated from Madagascar Plants and Marine Organisms (2009–2017)
s64	location, polar	Natural products from polar organisms: structural diversity, bioactivities and potential pharmaceutical applications
s65	metabolomics, fungal	From genomics to metabolomics, moving toward an integrated strategy for the discovery of fungal secondary metabolites
s66	methodologies, extraction	Overview on the application of modern methods for the extraction of bioactive compounds from marine macroalgae

s67	methodologies, extraction	State-of-the-art extraction methodologies for bioactive compounds from algal biome to meet bio-economy challenges and opportunities
s68	methodologies, GCMS profiling	GC–MS approaches for the screening of metabolites produced by marine-derived *Aspergillus*
s69	organism, Actinobacteria	Natural product potential of the genus *Nocardiopsis*
s70	organism, Actinobacteria	Secondary metabolites of actinomycetes and their antibacterial, antifungal and antiviral properties
s71	organism, Actinobacteria	Actinomycetes, an inexhaustible source of naturally occurring antibiotics
s72	organism, algae	Seaweed bioactive compounds against pathogens and microalgae: potential uses on pharmacology and harmful algae bloom control
s73	organism, algae	An overview of odoriferous marine seaweeds of the *Dictyopteris* genus: insights into their chemical diversity, biological potential and ecological roles
s74	organism, algae	Marine microalgae with anti-cancer properties
s75	organism, algae	A review of the components of seaweeds as potential candidates in cancer therapy
s76	organism, algae	Secondary metabolites and biological activity of invasive macroalgae of southern Europe
s77	organism, algae	Phycochemical constituents and biological activities of *Fucus* spp.
s78	organism, algae	Potential role of seaweed polyphenols in cardiovascular-associated disorders
s79	organism, algae	Bioactivities of the edible brown seaweed, *Undaria pinnatifida*: a review
s80	organism, algae	From marine origin to therapeutics: the antitumor potential of marine algae-derived compounds
s81	organism, algae	Microalgae as the source of natural products
s82	organism, algae	Phlorotannins are polyphenolic metabolites of brown algae
s83	organism, algae	Photoprotective substances derived from marine algae
s84	organism, Ascidian	Ascidian toxins with potential for drug development
s85	organism, Cyanobacteria	Isolation and identification of siderophores produced by cyanobacteria
s86	organism, Cyanobacteria	Cyanobacterial pigments: perspectives and biotechnological approaches
s87	organism, Echinoderms	Pharmacological potential of sea cucumbers
s88	organism, Echinoderms	Saponins from sea cucumber and their biological activities
s89	organism, Echinoderms	Bioactive compounds and biological functions of sea cucumbers as potential functional foods
s90	organism, fungi	Marine fungi: an untapped bioresource for future cosmeceuticals
s91	organism, fungi	Classic fungal natural products in the genomic age: the molecular legacy of Harold Raistrick
s92	organism, fungi	Endophytic fungi—alternative sources of cytotoxic compounds: a review
s93	organism, fungi	Novel natural products from extremophilic fungi
s94	organism, fungi	New bioactive metabolites from the marine-derived fungi *Aspergillus*
s95	organism, fungi	Diversity of biologically active secondary metabolites from endophytic and saprotrophic fungi of the ascomycete order Xylariales
s96	organism, fungi	The fungal metabolites with potential antiplasmodial activity
s97	organism, fungi	Marine-derived *Phoma*—the gold mine of bioactive compounds
s98	organism, fungi	Mangrove-associated fungi: a novel source of potential anticancer compounds
s99	organism, fungi	Marine-derived *Trichoderma* species as a promising source of bioactive secondary metabolites
s100	organism, microrganism	Biological and chemical diversity of ascidian-associated microorganisms
s101	organism, Mollusc	Discovery methodology of novel conotoxins from *Conus* species

s102	organism, myxobacteria	Marine myxobacteria: a few good halophiles
s103	organism, OSMAC	Extending the one strain many compounds (OSMAC) principle to marine microorganisms
s104	organism, Sponge	Chemistry and biological activities of the marine sponges of the genera *Mycale* (*Arenochalina*), *Biemna* and *Clathria*
s105	organism, sponge	*Batzella*, *Crambe* and *Monanchora*: highly prolific marine sponge genera yielding compounds with potential applications for cancer and other therapeutic areas
s106	structure class, peptides	Marine natural peptides: determination of absolute configuration using liquid chromatography methods and evaluation of bioactivities
s107	structure class, peptides	Recent advances in antibacterial and antiendotoxic peptides or proteins from marine resources
s108	structure class, peptides	Therapeutic properties and biological benefits of marine-derived anticancer peptides
s109	structure class, peptides	Natural peptides in drug discovery targeting acetylcholinesterase
s110	structure class, peptides	Anticancer Activity of Bacterial Proteins and Peptides
s111	structure class, peptides from ascidians	Bioactive peptides from marine ascidians and future drug development–a review
s112	structure class, peptides from fungi	Structural diversity and biological activities of cyclic depsipeptides from fungi
s113	structure class, peptides, algae	Bioactive peptides derived from seaweed protein and their health benefits: antihypertensive, antioxidant, and antidiabetic properties
s114	structure class, peptides antimicrobial	Antimicrobial metallopeptides
s115	structure class, peptides, sponge	Cyclic azole-homologated peptides from marine sponges
s116	poisoning	Accumulation of *Dinophysis* toxins in bivalve molluscs
s117	poisoning, marine toxins	Human poisoning from marine toxins: unknowns for optimal consumer protection
s118	structure class	The chemical biology and coordination chemistry of putrebactin, avaroferrin, bisucaberin, and alcaligin
s119	structure class	Sterol and sphingoid glycoconjugates from microalgae
s120	structure class	Diterpenes from the marine algae of the genus *Dictyota*
s121	structure class, 4-Quinolone N-oxides	4-Quinolone *N*-oxides as bacterial weapons
s122	structure class, azepinoindole alkaloids	Non-monoterpenoid azepinoindole alkaloids
s123	structure class, azoles	The use of azoles containing natural products in cancer prevention and treatment: an overview
s124	structure class, ciguatoxins	Differential toxin profiles of ciguatoxins in marine organisms: chemistry, fate and global distribution
s125	structure class, diterpenes	Halimane diterpenoids: sources, structures, nomenclature and biological activities
s126	structure class, diterpenes	Bioactive pimarane-type diterpenes from marine organisms
s127	structure class, indole alkaloids	Structural and stereochemical diversity in prenylated indole alkaloids containing the bicyclo[2.2.2]diazaoctane ring system from marine and terrestrial fungi
s128	structure class, indole alkaloids	Search for new prenylated indole alkaloids inspired by their biosynthetic pathway
s129	structure class, isoprenoids	Highly oxygenated isoprenoid lipids derived from fungi and fungal endophytes: origin and biological activities
s130	structure class, NP with N-S bond	Natural products containing a nitrogen–sulfur bond
s131	structure class, palytoxin	Palytoxin congeners
s132	structure class, sesquiterpenes	Eremophilane-type sesquiterpenes from fungi and their medicinal potential
s133	structure class, sesquiterpenoids	Linear triquinane sesquiterpenoids: their isolation, structures, biological activities, and chemical synthesis
s134	structure class, sesterterpenoids	A new family of sesterterpenoids isolated around the Pacific Rim
s135	structure class, sesterterpenoids	Marine sesterterpenes: an overview

s136	structure class, steroids	Naturally occurring aromatic steroids and their biological activities
s137	structure class, triterpenes	Triterpenoids

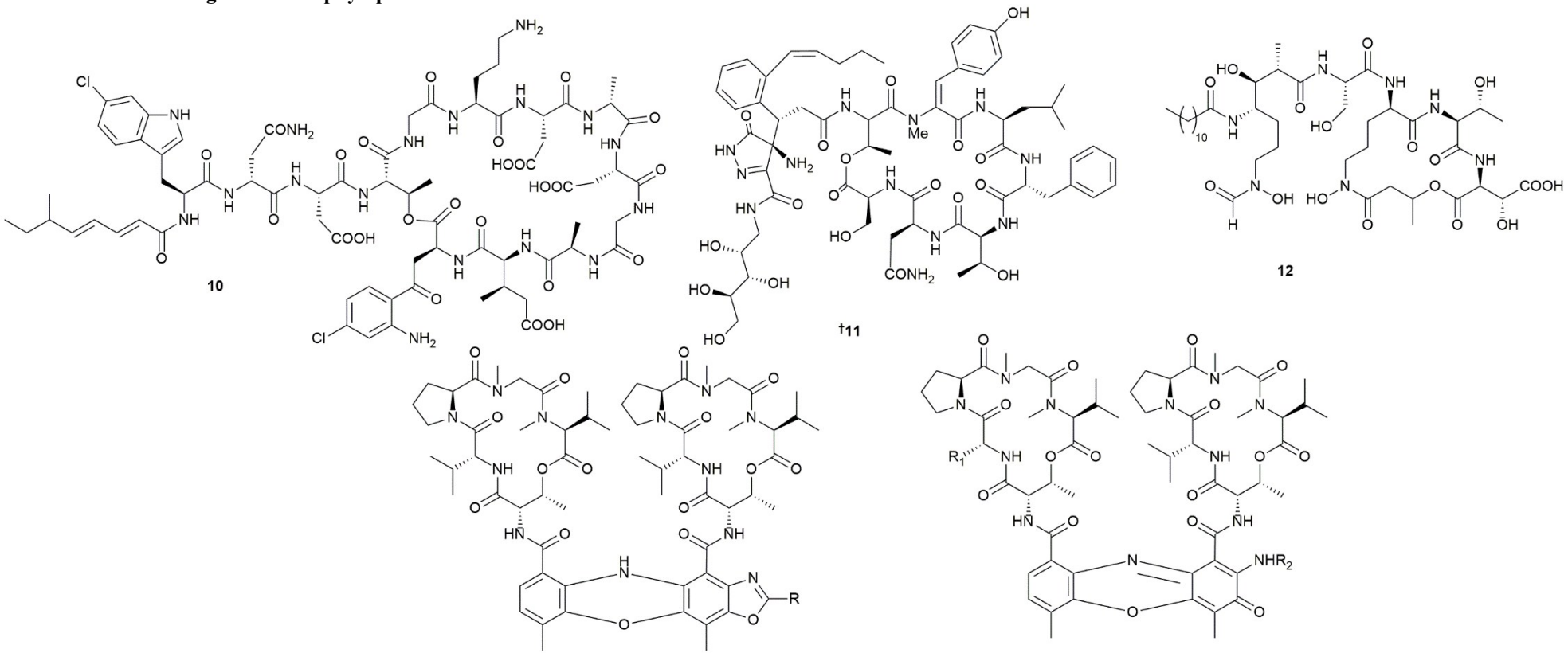


16 Firmicutes *Bacillus* sp // Kiel fjord, Germany // Bacicyclin, a new AB cyclic hexapeptide from *Bacillus* sp. strain BC028 isol. from *Mytilus edulis*
1 // N // bacicyclin // Mod. AB activ. vs 2 strain. // Abs. config. by Marfey's method.

17 Firmicutes *Bacillus safensis* // Seongsan, Jeju Is., S. Korea // Seongsanamides A–D: antiallergic bicyclic peptides from *Bacillus safensis* KCTC 12796BP
2 // N // seongsanamide A // Mod. to low antiallergic activ. IA vs mast cells. // Abs. config. by Marfey's method, spectro. data and BGC anal.
3 // N // seongsanamide B // Mod. to low antiallergic activ. IA vs mast cells. // Abs. config. by Marfey's method, spectro. data and BGC anal.
4 // N // seongsanamide C // Mod. antiallergic activ. IA vs mast cells. // Abs. config. by Marfey's method, spectro. data and BGC anal.
5 // N // seongsanamide D // Mod. to low antiallergic activ. IA vs mast cells. // Abs. config. by Marfey's method, spectro. data and BGC anal.
6 // N // seongsanamide E // No antiallergic activ. IA vs mast cells. // Abs. config. by Marfey's method, spectro. data and BGC anal.
7 // N // seongsanamide F // No antiallergic activ. IA vs mast cells. // Abs. config. by Marfey's method, spectro. data and BGC anal.

18 Actinobacteria *Streptomyces* sp // Wando, Republic of Korea // Coculture of marine *Streptomyces* sp. with *Bacillus* sp. produces a new piperazic acid-bearing cyclic peptide
8 // N // dentigerumycin E // Mod. cytotox. vs 5 HTCLs Mod. activ. in wound and cell invasion assays. // Abs. config. by Marfey's method, NMR and BGC anal.

19 Actinobacteria *Streptomyces* sp // Ishigaki Is., Okinawa, Japan // Neothioviridamide, a polythioamide cpd produced by heterologous expression of a *Streptomyces* sp. cryptic RiPP BGC
9 // N // neothioviridamide // Mod. cytotox. vs 3 HTCLs // Only one AA (Phe) had abs. config. determ. due to racemisation.



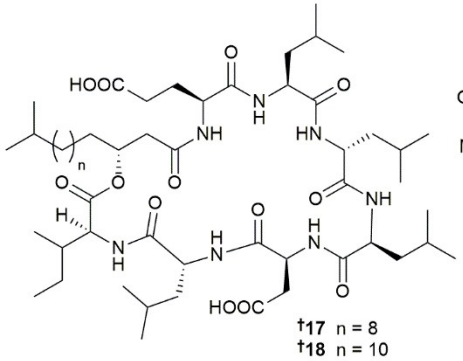
20 Actinobacteria *Saccharomonospora* sp // * // Isolation and structure elucidation of lipopeptide antibiotic taromycin B from the activated taromycin BGC
10 // N // taromycin B // Mod. to no AB activ. vs 6 strain. // Abs. config. by spec. rot. compar. and biosynth. grounds. C-9 unassigned

21 Actinobacteria *Streptomyces* sp // * // WS9326H, an antiangiogenic pyrazolone-bearing peptide from an intertidal mudflat actinomycete
11 // N // WS9326H // IA vs 5 HTCLs and several imicrob. strain. Mod. antiangiogenic activ. // Abs. config. by Marfey's and Mosher's methods.

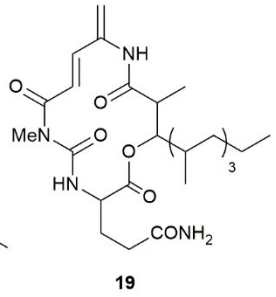
22 Proteobacteria *Variovorax* sp // Clyde River, Nunavut, Canada // Isolation of imaqobactin, an amphiphilic siderophore from the Arctic marine bacterium *Variovorax* species RKJM285
12 // N // imaqobactin // Siderophoric activ. Mod. AB activ. vs 4 strain. // Partial abs. config. by Marfey's method.

23 Actinobacteria *Streptomyces* sp // Xisha Is. // Anti-MRSA actinomycins D_1-D_4 from the marine sponge-associated *Streptomyces* sp. LHW52447
13 // N // actinomycin D1 // potent AB activ. vs MRSA (3 strain). Low cytotox. vs 1 HTCL // Abs. config. by Marfey's method.
14 // N // actinomycin D2 // potent AB activ. vs MRSA (3 strain). Low cytotox. vs 1 HTCL // Abs. config. by Marfey's method.
15 // N // actinomycin D3 // Mod. AB activ. vs MRSA (3 strain). Low cytotox. vs 1 HTCL // Abs. config. by Marfey's method.
16 // N // actinomycin D4 // Mod. AB activ. vs MRSA (3 strain). Low cytotox. vs 1 HTCL // Abs. config. by Marfey's method.

3 Marine microorganisms and phytoplankton: 3.1 Marine-sourced bacteria



†17 n = 8
†18 n = 10



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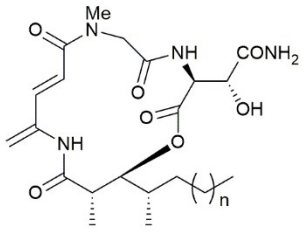
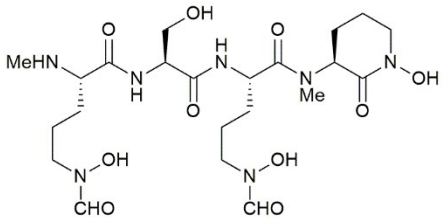
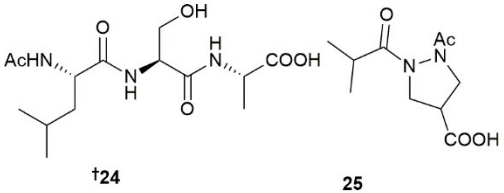


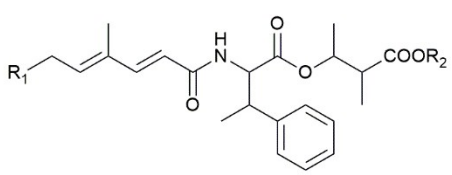
†20 n = 11
†21 n = 12
†22 n = 13

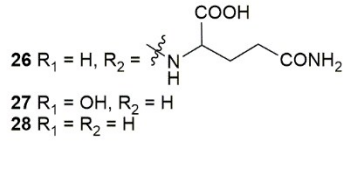


†23



†24 25





26 R_1 = H, R_2 =
27 R_1 = OH, R_2 = H
28 R_1 = R_2 = H

24 Firmicutes *Bacillus* sp // Hannibal Bank, Coiba National Park, Veraguas, Panama // Pumilacidins from the octocoral-associated *Bacillus* sp. DT001 display anti-proliferative effects in *Plasmodium falciparum*
17 // M // pumilacidin A // Inhib. malaria parasite via mitochondrial dysfunction and decreased cytosolic Ca^{2+} // *
18 // M // pumilacidin C // Inhib. malaria parasite via mitochondrial dysfunction and decreased cytosolic Ca^{2+} //*

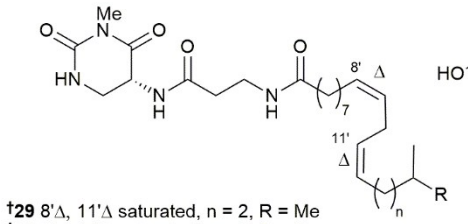
25 Actinobacteria *Streptomyces* sp // Andaman sea, Ranong, Thailand // Rakicidin F, a new AB cyclic depsipeptide from a marine sponge-derived *Streptomyces* sp.
19 // N // rakicidin F // Low AB vs 2 strain. No cytotox. vs 1 HTCL // *

26 Actinobacteria *Micromonospora chalcea* // * // Rakicidins G - I, cyclic depsipeptides from marine *Micromonospora chalcea* FIM 02-523
20 // N // rakicidin G // potent to mod. cytotox. vs 2 HTCLs potent to mod. AB activ. vs 5 strain. // Abs. config. assigned based on data compar.
21 // N // rakicidin H // potent to mod. cytotox. vs 2 HTCLs potent to mod. AB activ. vs 5 strain. // Abs. config. assigned based on data compar.
22 // N // rakicidin I // potent to mod. cytotox. vs 2 HTCLs potent to mod. AB activ. vs 5 strain. // Abs. config. assigned based on data compar.

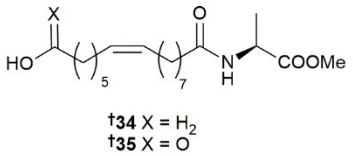
27 Actinobacteria *Amycolatopsis albispora* // Indian Ocean // Albisporachelin, a new hydroxamate type siderophore from the deep ocean sediment-derived actinomycete *Amycolatopsis albispora* WP1T
23 // N // albisporachelin // Siderophoric activ. // Abs. config. by Marfey's method..

28 Actinobacteria *Streptomyces* sp // Putuo Mountain, Zhoushan City, Zhejiang, China // Anti-glioma natural products downregulating tumor glycolytic enzymes from marine actinomycete *Streptomyces* sp. ZZ406
24 // N // *N*-acetyl-*L*-leucine-*L*-serine-*L*-alanine // IA vs 3 HTCLs // Abs. config. by Marfey's method.
25 // N // 1-acetyl-2-isobutyrylpyrazolidine-4-carboxylic acid // IA vs 3 HTCLs // *

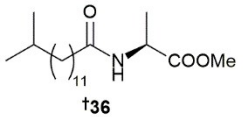
29 Actinobacteria *Streptomyces caniferus* // * // Characterization of the jomthonic acids biosynth. pathway and isolation of novel analogues in *Streptomyces caniferus* GUA-06-05-006A
26 // N // jomthonic acid D // * // *
27 // N // jomthonic acid E // * // *
28 // M // jomthonic acid A // * // *



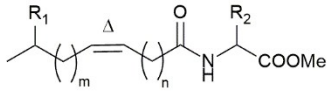
†**29** 8'Δ, 11'Δ saturated, n = 2, R = Me
†**30** 8'Δ, 11'Δ saturated, n = 3, R = H
†**31** 11'Δ saturated, n = 0, R = Me
†**32** 11'Δ saturated, n = 1, R = H
†**33** n = 3, R =Me



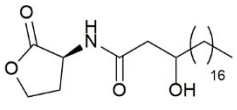
†**34** X = H_2
†**35** X = O



†**36**



37 Δ saturated, n = 7, m = 4, R_1 = H, R_2 = Et
38 n = 7, m = 4, R_1 = H, R_2 = Et
39 n = 7, m = 4, R_1 = H, R_2 = *i*Pr
40 Δ saturated, n = 7, m = 4, R_1 = H, R_2 = H
41 n = 7, m = 4, R_1 = H, R_2 = H



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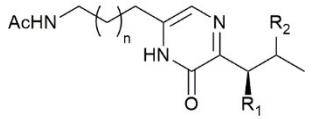
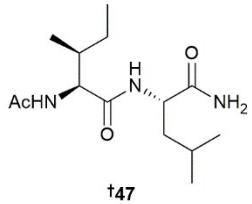


†**43** R_1 = H, R_2 = Me, n =1
44 R_1 = H, R_2 = Me, n =2
†**45** R_1 = Me, R_2 = H, n =2
†**46** R_1 = Me, R_2 = H, n =1



†**47**

30 Actinobacteria *Streptomyces* sp // Florida Keys, USA // Biemamides A–E, inhibition of the TGF-ß pathway that block the epithelial to mesenchymal transition
29 // N // biemamide A // TGF-β inhib. EMT induc. // Abs. config. by Marfey's method. and ECD.
30 // N // biemamide B // TGF-β inhib. EMT induc. // Abs. config. by Marfey's method. and ECD.
31 // N // biemamide C // TGF-β inhib. EMT induc. // Abs. config. by ECD.
32 // N // biemamide D // TGF-β inhib. EMT induc. // Abs. config. by ECD.
33 // N // biemamide E // TGF-β inhib. EMT induc. // Abs. config. by ECD.

31 Proteobacteria *Roseovarius tolerans* // Ekho Lake, Antarctica // Oxygenated *N*-acyl alanine methyl esters (NAMEs) from the marine bacterium *Roseovarius tolerans* EL-164
34 // N // (*Z*)-(16-hydroxyhexadec-9-enoyl)-*L*-alanine methyl ester // Mod. to low AB activ. vs 4 strain. // Abs. config. by total synth.
35 // N // (*Z*)-(15-carboxypentadec-9-enoyl)-*L*-alanine methyl ester // IA vs 4 bact. // Abs. config. by total synth.

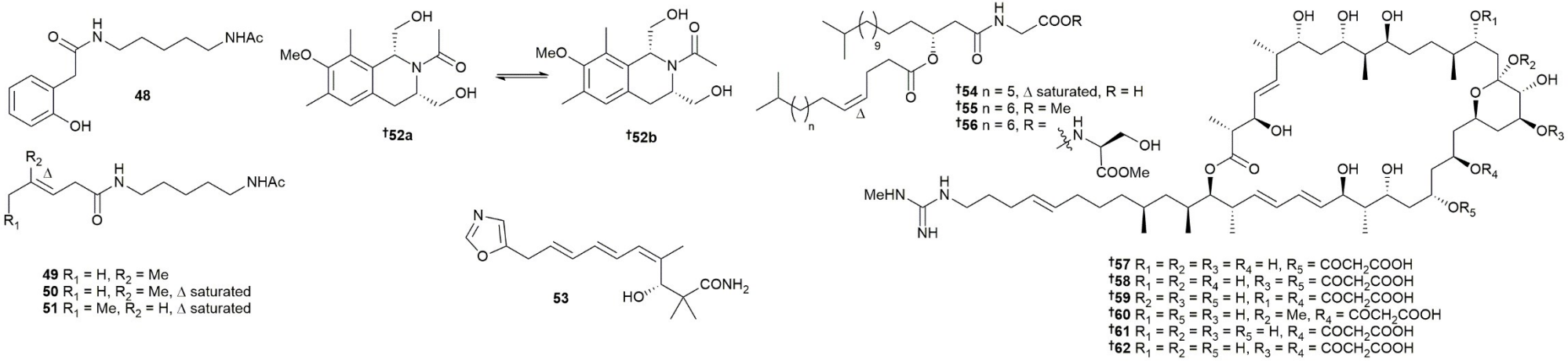
32 Proteobacteria *Roseovarius* sp, *Loktanella* sp // North Sea // *N*-Acylated amino acid methyl esters from marine *Roseobacter* group bacteria
36 // N // *N*-(13-methyltetradecanoyl)alanine methyl ester (iso-C15:0-NAME) // * // Abs. config. by total synth.
37 // N // *N*-(hexadecanoyl)-2-aminobutyric acid methyl ester (C16:0-NABME) // Low to mod. AM activ. vs 11 strain. IA vs 1 HTCL // *
38 // N // *N*-[(*Z*)-hexadec-9-enoyl]-2-aminobutyric acid methyl ester (C16:1-NABME) // Low-mod. AM activ. vs 11 strain. Low cytotox. vs 1 HTCL // *
39 // N // *N*-[(*Z*)-hexadec-9-enoyl]valine methyl ester (Z9-C16:1-NAVME) // IA vs 11 AM strain. IA vs 1 HTCL // *
40 // N // C16:0-NAGME // * // *
41 // N // *N*-[(*Z*)-hexadec-9-enoyl]glycine methyl ester (Z9-C16:1-NAGME) // Low to mod. AM activ. vs 11 strain. IA vs 1 HTCL // *

33 Proteobacteria *Rhodovulum sulfidophilum* // * // Identification of novel long chain *N*-acylhomoserine lactones of chain length C_{20} from the marine phototrophic bacterium *Rhodovulum sulfidophilum*
42 // N // 3-OH-C20-homoserine lactone // Some cell-to-cell signaling activ. //

34 Actinobacteria *Streptomyces* sp // Zhoushan Is., Zhejiang, China // Streptopyrazinones A-D, rare metabolites from marine-derived *Streptomyces* sp. ZZ446
43 // N // streptopyrazinone A // Low AM activ. vs 3 strain. IA vs 4 HTCLs // Struct. confirmed by X-ray diffrac.
44 // N // streptopyrazinone B // Low AM activ. vs 3 strain. IA vs 4 HTCLs // *
45 // N // streptopyrazinone C // Low AM activ. vs 3 strain. IA vs 4 HTCLs // Abs. config. by ECD.
46 // N // streptopyrazinone D // Low AM activ. vs 3 strain. IA vs 4 HTCLs // Abs. config. by ECD.
47 // N // *N*-acetyl-*L*-isoleucine-*L*-leucinamide // Low AM activ. vs 3 strain. IA vs 4 HTCLs // Abs. config. by Marfey's method.

3 Marine microorganisms and phytoplankton:

3.1 Marine-sourced bacteria



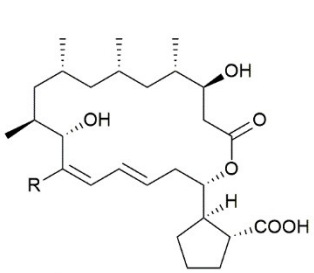
35 Actinobacteria *Streptomyces* sp // Futian Mangrove Forest Reserve, Shenzhen, Guangdong, China // Bisamides and rhamnosides from mangrove actinomycete *Streptomyces* sp. SZ-A15
48 // N // *N* 1-acetyl-*N*7-*o*-hydroxy-phenylacetyl cadaverine // No cytotox. vs 1 HTCL No BRD4 inhib. // *
49 // N // *N* 1-acetyl-*N*7-4"-methyl-3"-pentenoyl cadaverine // No cytotox. vs 1 HTCL No BRD4 inhib. // *
50 // N // *N* 1-acetyl-*N*7-4"-methyl-pentoyl cadaverine // No cytotox. vs 1 HTCL No BRD4 inhib. // *
51 // N // *N* 1-acetyl-*N*7-*n*-hexanoyl cadaverine // No cytotox. vs 1 HTCL No BRD4 inhib. // *

36 Actinobacteria *Streptomyces* sp // Arnarnesstrýtur // Deconvolution of *E/Z* tetrahydroisoquinoline amide rotamers and conformers from a marine-derived *Streptomyces* strain
52a // N // (*E*)-*N*-acetyl-MY336-a // Weak TB activ. IA vs panel of bact. // Abs. config. by ECD.
52b // N // (*Z*)-*N*-acetyl-MY336-a // Weak TB activ. IA vs panel of bact. // Abs. config. by ECD.

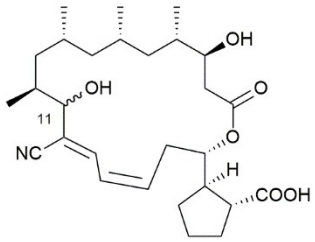
37 Actinobacteria *Streptomyces* sp // S. Atlantic Ocean // Prod and identification of inthomycin B produced by a deep-sea sediment-derived *Streptomyces* sp. YB104 based on cultivation-dependent approach
53 // M // inthomycin B // * // *

38 Bacteroidetes *Aequorivita* sp // Edmonson Point, Antarctica // Linear aminolipids with mod. AM activ. from the Antarctic Gram-negative bacterium *Aequorivita* sp.
54 // N // *R*-(+)-*N*-[15-methyl-3-(12-methyltridecanoyloxy)-hexadecanoyl]glycine // Low activ. vs MRSA. // Abs. config. by spec. rot. compar.
55 // N // *R*-(+)-*N*-[15-methyl-3-(13-methyl-4*Z*-tetradecenoyloxy)-hexadecanoyl]glycine methyl ester // Low activ. vs MRSA // Abs. config. by spec. rot. compar.
56 // N // *N*-[*N*-[3R-15-methyl-3-(13-methyl-4*Z*-tetradecenoyloxy)-hexadecanoyl]glycyl]-*l*-serine methyl ester // IA vs MRSA // Abs. config. by spec. rot. compar.

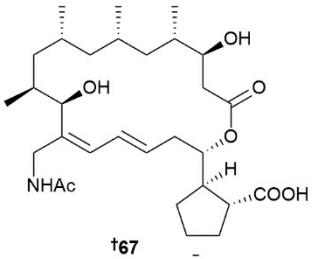
39 Actinobacteria *Streptomyces* sp // Heishijiao Bay, Dalian, China // Identification and prop. relative and abs. config.s of niphimycins C–E from the marine-derived *Streptomyces* sp. IMB7-145 by genomic analysis
57 // N // niphimycin C // Low to mod. AM activ. vs 44 strain. Mod. to low cytotox. vs 4 HTCLs // Abs. config. proposed based on BGC anal.
58 // N // niphimycin D // Low to mod. AM activ. vs38 strain. Mod. to no cytotox. vs 4 HTCLs // Abs. config. proposed based on BGC anal
59 // N // niphimycin E // Low to mod. AM activ. vs 38 strain. Mod. to low cytotox. vs 4 HTCLs // Abs. config. proposed based on BGC anal.
60 // N // 17-*O*-methylniphimycin // Low to mod. AM activ. vs 38 strain. Mod. cytotox. vs 4 HTCLs // Abs. config. proposed based on BGC anal.
61 // M // niphimycin Ia // Low to mod. AM activ. vs 44 strain. Mod. to low cytotox. vs 4 HTCLs // Abs. config. proposed based on BGC anal.
62 // M // 19-*O*-malonylniphimycin // Low to mod. AM activ. vs 38 strain. Mod. to low cytotox. vs 4 HTCLs // Abs. config. proposed based on BGC anal.



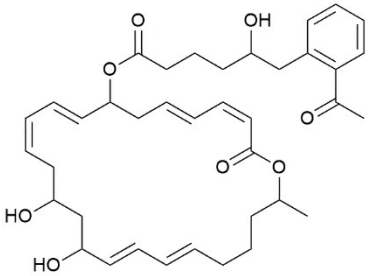
†63 R = CN
†66 R = CH_2NHAc



†64 11*R*
†65 11*S*



†67



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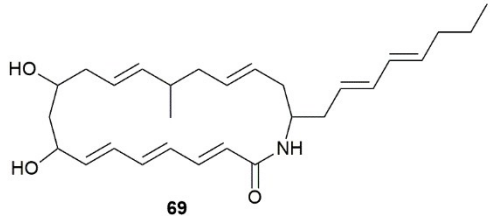

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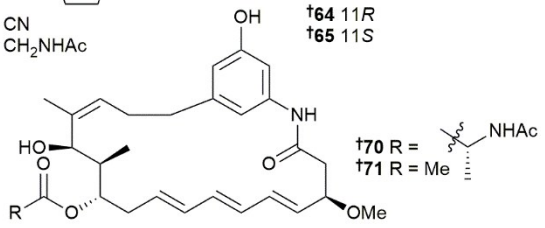
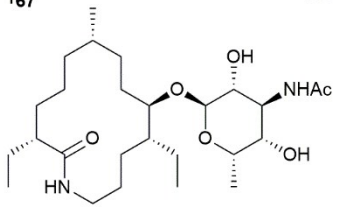
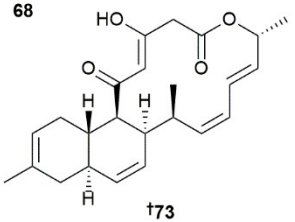


†70 R =

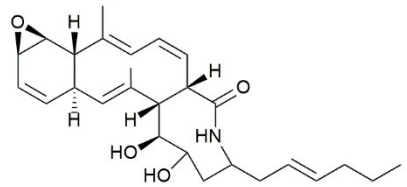
†71 R = Me



†72



†73



74

41 Actinobacteria *Streptomyces rochei* // Yalongwan, China // Borrelidins F–I, cytotox. and cell migration inhibiting agents from mangrove-derived *Streptomyces rochei* SCSIO ZJ89
63 // N // borrelidin F // Mod. cytotox. vs 5 HTCLs Mod. cytotox. vs 2 NMCLs. // Abs. config. by spectro. data anal.
64 // N // borrelidin G // Mod. cytotox. vs 5 HTCLs Mod. cytotox. vs 2 NMCLs. // Abs. config. by spectro. data anal.
65 // N // borrelidin H // potent to mod. cytotox. vs 5 HTCLs Mod. cytotox. vs 2 NMCLs. Inhib. cell migration vs 2 HTCLs // Abs. config. by spectro. data anal.
66 // N // borrelidin I // IA vs 5 HTCLs IA vs 2 NMCLs. // Abs. config. by spectro. data anal.

42 Actinobacteria *Streptomyces mutabilis* // North Hurghada, Egypt // *N*-Acetylborrelidin B: a new bioactive metabolite from *Streptomyces mutabilis* sp. MII
67 // M // *N*-acetylborrelidin B // Mod. AB activ. vs 5 strain. IA vs 1 HTCL // Abs. config. assigned based on congener data compar.

43 Firmicutes *Bacillus subtilis* // Gulf of Mannar, India // AB aryl-crowned polyketide from *Bacillus subtilis* associated with seaweed *Anthophycus longifolius*
68 // N // 7-*O*-6'-(2"-acetyl phenyl)-5'-hydroxyhexanoate-macrolactin // Mod. AB activ. vs 10 strain. // Data does not support struct.

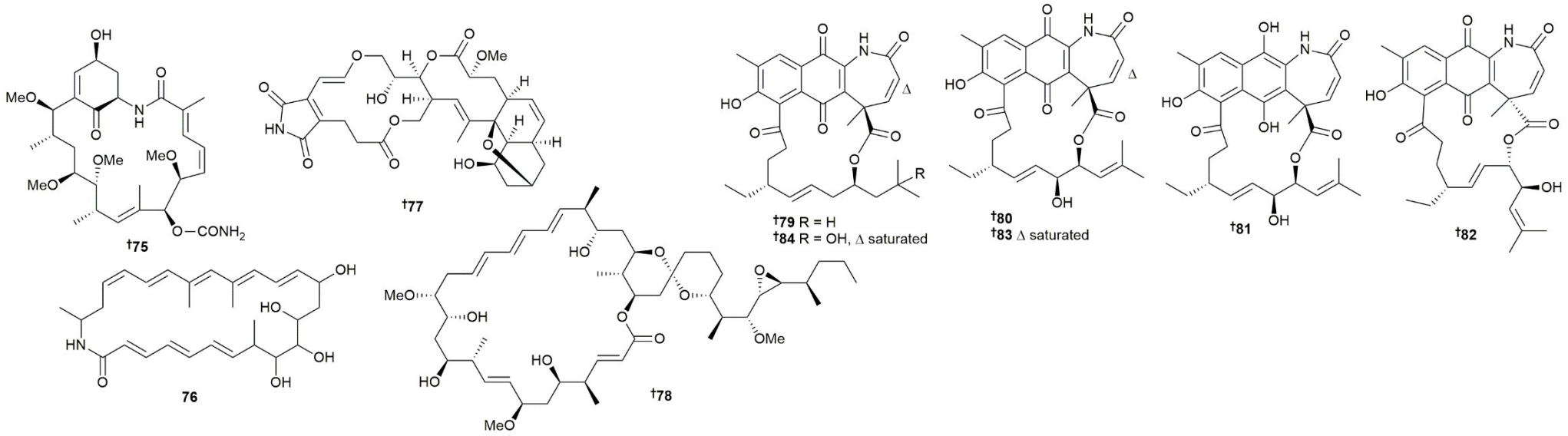
44 Actinobacteria *Streptomyces* sp // Okinawa prefecture, Japan // JBIR-150, a novel 20-membered polyene macrolactam from marine-derived *Streptomyces* sp. OPMA00071
69 // N // JBIR-150 // Mod. to low cytotox. vs 3 HTCLs // *

45 Proteobacteria *Ochrobactrum* sp // S. China Sea // New ansamycins from the deep-sea-derived bacterium *Ochrobactrum* sp. OUCMDZ-2164
70 // N // trienomycin H // Mod. to low cytotox. vs 3 HTCLs // Abs. config. by ECD, degrad. chem. and Marfey's method.
71 // N // trienomycin I // IA vs 3 HTCLs // Abs. config. by ECD and degrad. chem.

46 Actinobacteria *Nocardiopsis* sp // S. California, USA // Fluvirucin B6, a new macrolactam isol. from a marine-derived actinomycete of the genus *Nocardiopsis*
72 // N // fluvirucin B6 // Weak AB activ. vs 6 strain. // Abs. config. proposed based on spectro. data compar.

47 Actinobacteria *Streptomyces cyaneofuscatus* // Avilés submarine canyon // Anthracimycin B, a potent antibiotic against Gram-positive bact. isol. from cultures of the deep-sea actinomycete *Streptomyces cyaneofuscatus* M-169
73 // N // anthracimycin B // potent to no activ. vs 7 micro. strain. // Abs. config. by spectro. data compar.

48 Actinobacteria *Streptomyces varsoviensis* // East Sea // A new macrolactam derivative from the marine actinomycete HF-11225
74 // N // nivelactam B // Weak cytotox. vs 2 HTCLs Weak AF activ. vs 1 strain. // *



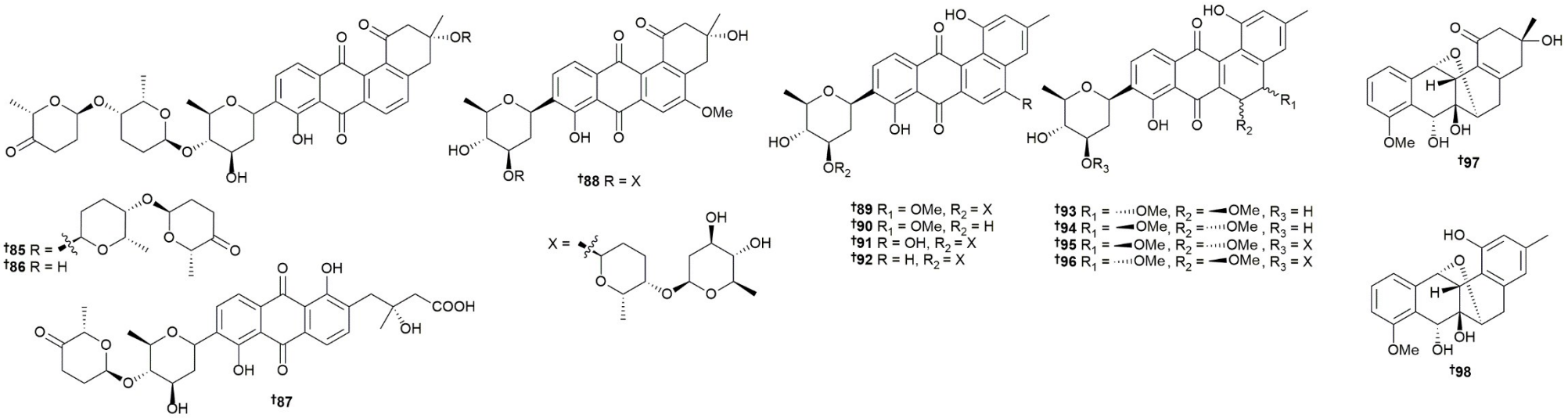
49 Actinobacteria *Streptomyces* sp // Hastings Point, Australia // HSQC-TOCSY fingerprinting-directed discovery of antiplasmodial polyketides from the marine ascidian-derived *Streptomyces* sp. (USC-16018)
75 // N // herbimycin G // Weak antimalarial activ. vs 2 *P. falciparum* strain. No cytotox. vs 1 cell line. // Abs. config. by ECD.

50 Actinobacteria *Micromonospora* sp // Ningbo, China // Structure elucidation and antitumour activity of a new macrolactam produced by marine-derived actinomycete *Micromonospora* sp. FIM05328
76 // N // FW05328-1 // potent to mod. cytotox. vs 3 HTCLs IA vs 5 microbes // *

51 Actinobacteria *Streptomyces seoulensis* // Qingdao, Port China // Discovery, biosynth., and heterologous prod of streptoseomycin, an anti-microaerophilic bacteria macrodilactone
77 // N // streptoseomycin // Mod. to low AB activ. vs 8 strain. No cytotox. vs 3 mammalian cell lines. // Abs. config. by X-ray diffrac.

52 Actinobacteria *Micromonospora* sp // Bahamas Is. // Integration of genomic data with NMR anal. enables assignment of the full stereostructure of neaumycin B, a potent inhib. of glioblastoma from a marine-derived *Micromonospora*
78 // M // neaumycin B // potent to mod. cytotox. vs 4 HTCLs // Abs. config. by gene cluster mining and NMR data.

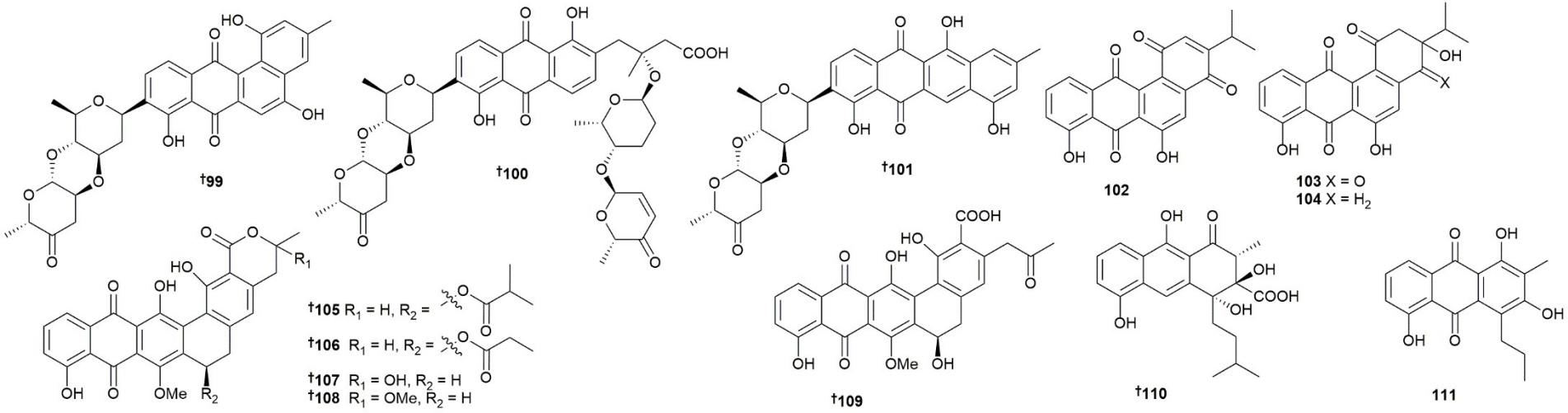
53 Actinobacteria *Streptomyces olivaceus* // Indian Ocean // Genome mining of *Streptomyces olivaceus* SCSIO T05: discovery of olimycins A and B and assignment of absolute configuration
79 // N // olimycin A // * // Abs. config. by ECD and X-ray diffrac.
80 // N // olimycin B // * // Abs. config. by ECD.
81 // R // divergolide C // * // Abs. config. by ECD.
82 // R // divergolide I // * // Abs. config. by ECD.
83 // R // divergolide J // * // Abs. config. by ECD.
84 // R // divergolide K // * // Abs. config. by ECD.



54 Actinobacteria *Streptomyces lusitanus* // * // Grincamycins I–K, cytotox. angucycline glycosides derived from marine-derived actinomycete *Streptomyces lusitanus* SCSIO LR32
85 // N // grincamycin I // Low cytotox. vs 6 HTCLs // Abs. config. assigned based on congener data compar.
86 // N // grincamycin J // Mod. cytotox. vs 5 HTCLs // Abs. config. assigned based on congener data compar.
87 // N // grincamycin K // IA vs 6 HTCLs // Abs. config. assigned based on congener data compar.

55 Actinobacteria *Streptomyces diastaticus* // Yalong bay, China // Angucycline glycosides from mangrove-derived *Streptomyces diastaticus* subsp. SCSIO GJ056
88 // N // urdamycin N1 // * // Abs. config. tentatively assigned based on congener data compar.
89 // N // urdamycin N2 // * // Abs. config. tentatively assigned based on congener data compar.
90 // N // urdamycin N3 // * // Abs. config. tentatively assigned based on congener data compar.
91 // N // urdamycin N4 // * // Abs. config. tentatively assigned based on congener data compar.
92 // N // urdamycin N5 // * // Abs. config. tentatively assigned based on congener data compar.
93 // N // urdamycin N6 // * // Abs. config. of aglycone by ECD.
94 // N // urdamycin N7 // * // Abs. config. of aglycone by ECD.
95 // N // urdamycin N8 // * // Abs. config. of aglycone by ECD.
96 // N // urdamycin N9 // * // Abs. config. of aglycone by ECD.

56 Actinobacteria *Streptomyces* sp // Kiaochow Bay, China // Kiamycins B and C, unusual bridged angucyclinones from a marine sediment-derived *Streptomyces* sp.
97 // N // kiamycin B // IA vs 8 HTCLs // Abs. config. by X-ray diffrac. and ECD.
98 // N // kiamycin C // * // Abs. config. by ECD.



57 Actinobacteria *Streptomyces* sp // Xiaoshi Is., Weihai, China // Angucycline glycosides from sediment strain *Streptomyces* sp. and their cytotoxic act.. against hepatoma carcinoma cells
99 // N // landomycin N // IA vs 4 HTCLs // Abs. config. determ. based on spectro. data compar.
100 // N // galtamycin C // IA vs 4 HTCLs // Abs. config. determ. based on spectro. data compar.
101 // N // vineomycin D // IA vs 4 HTCLs // Abs. config. determ. based on spectro. data compar.

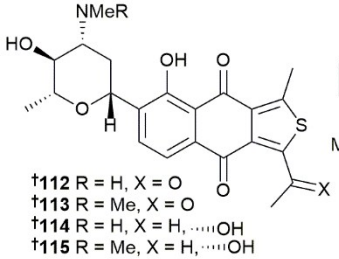
58 Actinobacteria *Nocardiopsis* sp // * // Nocardiopsistins A-C: new angucyclines with anti-MRSA active isolate from a marine sponge-derived *Nocardiopsis* sp. HB-J378
102 // N // nocardiopsistin A // Mod. AB activ. vs MRSA. IA vs 2 other microb.strain. // *
103 // N // nocardiopsistin B // Mod. AB activ. vs MRSA. IA vs 2 other microb. strain. // *
104 // N // nocardiopsistin C // Mod. AB activ. vs MRSA. IA vs 2 other microb. strain. // *

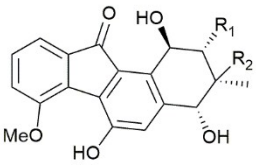
59 Actinobacteria *Streptosporangium* sp // Lijiao Bay, Huanghai Sea, China // Hexaricins, pradimicin-like polyketides from a marine sediment-derived *Streptosporangium* sp. and their antioxidant effects
105 // N // hexaricin D // Low AO. // Abs. config. by ECD and spec. rot. data compar.
106 // N // hexaricin E // Low AO. // Abs. config. by ECD and spec. rot. data compar.
107 // N // hexaricin F // Mod. AO. // Abs. config. by ECD and spec. rot. data compar.
108 // N // hexaricin G // Mod. AO. // Abs. config. by ECD and spec. rot. data compar.
109 // N // hexaricin H // Low AO. // Abs. config. by ECD and spec. rot. data compar.

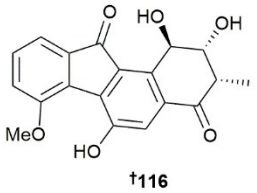
60 Actinobacteria *Streptomyces olivaceus* // Indian Ocean // Biosynth. Baeyer–Villiger chemistry enables access to two anthracene scaffolds from a single gene cluster in deep-sea-derived *Streptomyces olivaceus* SCSIO T05
110 // M // rishirilide C // * // *
111 // N // lupinacidin D // * // *

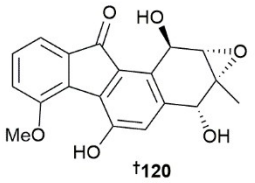
3 Marine microorganisms and phytoplankton:

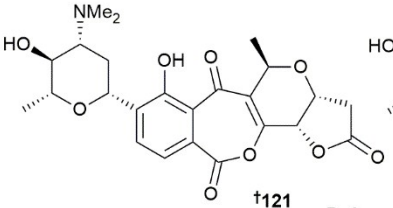
3.1 Marine-sourced bacteria

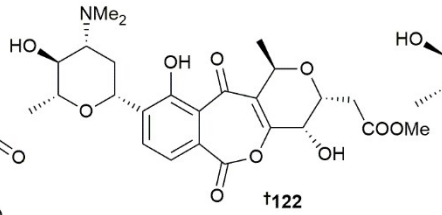


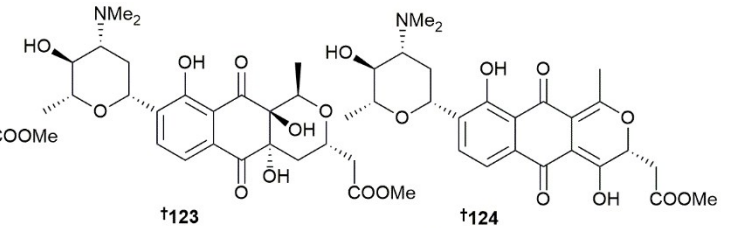


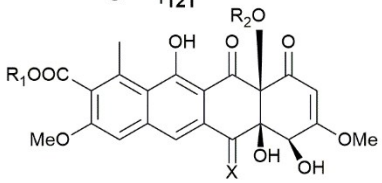


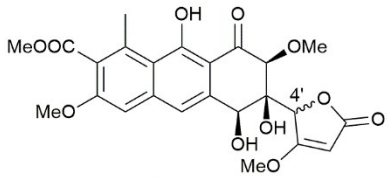


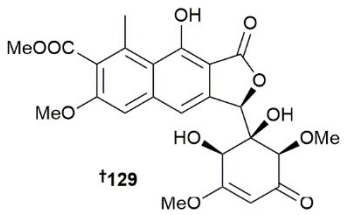










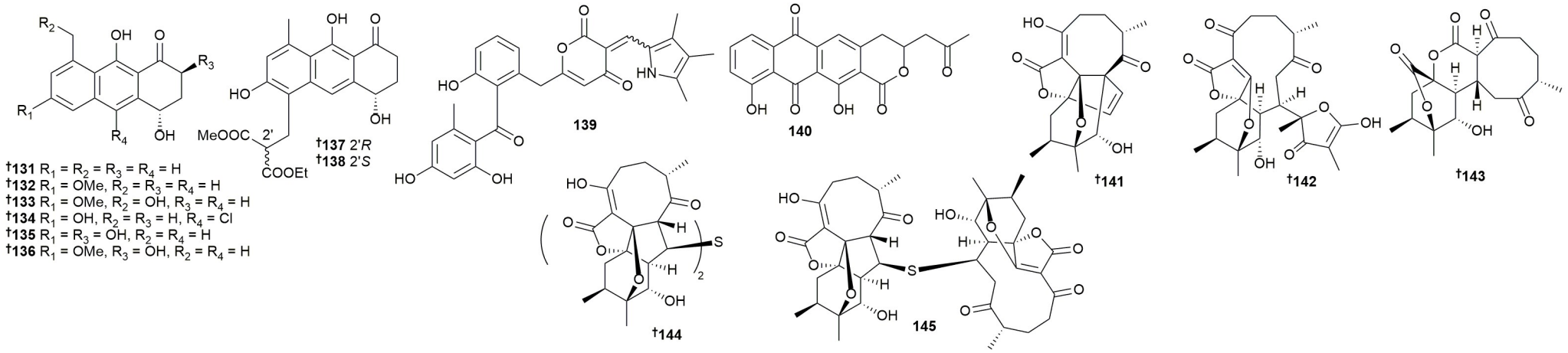


61 Actinobacteria *Streptomyces* sp // ShengSi Is., Zhejiang Province, China // Thioquinomycins A-D, novel naphthothiophenediones from the marine-derived *Streptomyces* sp. SS17F
112 // N // thioquinomycin A // Low cytotox. vs 1 HTCL Low inhib. vs 2 kinases. // Abs. config. by X-ray diffrac.
113 // N // thioquinomycin B // Low cytotox. vs 1 HTCL Low inhib. vs 2 kinases. // Abs. config. by ECD and NMR compar.
114 // N // thioquinomycin C // Low cytotox. vs 1 HTCL Low inhib. vs 2 kinases. // Abs. config. by ECD, Mosher's method and NMR compar.
115 // N // thioquinomycin D // Low cytotox. vs 1 HTCL Low inhib. vs 2 kinases. // Abs. config. by ECD, Mosher's method and NMR compar.

62 Actinobacteria *Streptomyces* sp // * // Fluostatins M–Q featuring a 6-5-6-6 ring skeleton and high oxidized A-rings from marine *Streptomyces* sp. PKU-MA00045
116 // N // fluostatin M // IA vs 4 bact., NO assay and 1 HTCL // Abs. config. by ECD.
117 // N // fluostatin N // IA vs 4 bact., NO assay and 1 HTCL // Abs. config. by ECD.
118 // N // fluostatin O // IA vs 4 bact., NO assay and 1 HTCL // Abs. config. by ECD.
119 // N // fluostatin P // IA vs 4 bact., NO assay and 1 HTCL // Abs. config. by ECD and X-ray diffrac.
120 // N // fluostatin Q // IA vs 4 bact., NO assay and 1 HTCL // Abs. config. by ECD.

63 Actinobacteria *Streptomyces* sp // Xiamen Is., Fujian province, China // Medermycin-type naphthoquinones from the marine-derived *Streptomyces* sp. XMA39
121 // N // strepoxepinmycin A // IA vs 2 HTCLs and ROCK2 enzyme. Mod. AM activ. vs 3 strain. // Abs. config. by ECD/spec. data compar.
122 // N // strepoxepinmycin B // IA vs 2 HTCLs and ROCK2 enzyme. Mod. AM activ. vs 3 strain. // Abs. config. by ECD/spec. data compar.
123 // N // strepoxepinmycin C // IA vs 2 HTCLs and ROCK2 enzyme. Mod. AM activ. vs 3 strain. // Abs. config. by ECD/spec. data compar.
124 // N // strepoxepinmycin D // Mod. activ. vs 2 HTCLs and ROCK2 enzyme. Mod. AM activ. vs 3 strain. // Abs. config. by ECD/spect. data compar.

64 Actinobacteria *Saccharothrix* sp // Heishijiao Bay, Dalian, China // Seco-tetracenomycins from the marine-derived actinomycete *Saccharothrix* sp. 10-10
125 // N // saccharothrixone E // IA vs 3 HTCLs // Abs. config. by ECD.
126 // N // saccharothrixone F // IA vs 3 HTCLs // Abs. config. by ECD.
127 // N // saccharothrixone G // IA vs 3 HTCLs // Abs. config. by ECD.
128 // N // saccharothrixone H // IA vs 3 HTCLs // Abs. config. by ECD.
129 // N // saccharothrixone I // IA vs 3 HTCLs // Abs. config. by ECD.
130 // N // 13-de-*O*-methyltetracenomycin X // IA vs 3 HTCLs // Abs. config. by ECD.

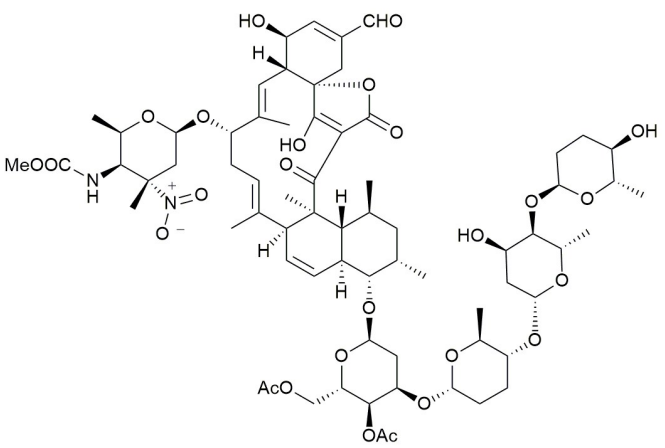


65 Actinobacteria *Streptomyces* sp // Near Hainan, China // Alokicenones A-H, eight tetrahydroanthracenes from the mangrove-derived *Streptomyces* sp. HN-A101
131 // N // alokicenone A // Mod. cytotox. vs 2 HTCLs Mod. inhib. vs ROCK2 and BRD4. // Abs. config. by ECD.
132 // N // alokicenone B // Mod. cytotox. vs 2 HTCLs Mod. inhib. vs ROCK2, no inhib. of BRD4. // Abs. config. by ECD.
133 // N // alokicenone C // No cytotox. vs 2 HTCLs Mod. inhib. vs ROCK2, no inhib. of BRD4. // Abs. config. by ECD.
134 // N // alokicenone D // No cytotox. vs 2 HTCLs No inhib. vs ROCK2 and BRD4. // Abs. config. by ECD.
135 // N // alokicenone E // No cytotox. vs 2 HTCLs No inhib. vs ROCK2 and BRD4. // Abs. config. by ECD.
136 // N // alokicenone F // No cytotox. vs 2 HTCLs No inhib. vs ROCK2 and BRD4. // Abs. config. by ECD.
137 // N // alokicenone G // No cytotox. vs 2 HTCLs Mod. inhib. vs ROCK2 and BRD4. // Abs. config. by ECD.
138 // N // alokicenone H // No cytotox. vs 2 HTCLs Mod. inhib. vs ROCK2 and BRD4. // Abs. config. by ECD.

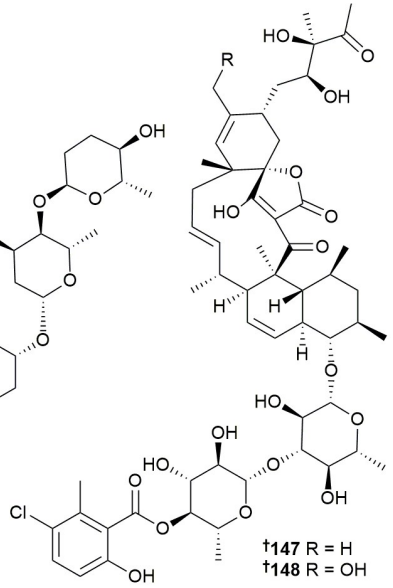
66 Actinobacteria *Micromonospora rosaria*, *Streptomyces albus* // * // Marine bact. aromatic polyketides from host-dependent heterologous expression and fungal mode of cyclization
139 // N // SEK43F // IA vs 7 bact. Weak cytotox. vs 4 HTCLs // *
140 // N // fluoquinone // IA vs 7 bact. // Racemic.

67 Actinobacteria *Streptomyces koyangensis* // S. China Sea // Abyssomicin monomers and dimers from the marine-derived *Streptomyces koyangensis* SCSIO 5802
141 // N // neoabyssomicin D // IA vs 9 bact. Low AV vs 1 strain. // Abs. config. by X-ray diffrac.
142 // N // neoabyssomicin E // IA vs 9 bact. and a virus. // Abs. config. by ECD and spec. data compar.
143 // N // neoabyssomicin A2 // IA vs 9 bact. and a virus. // Abs. config. by X-ray diffrac.
144 // N // neoabyssomicin F // Mod. to low AB activ. vs 9 strain. IA vs a virus. // Abs. config. by X-ray diffrac.
145 // N // neoabyssomicin G // Mod. to low AB activ. vs 9 strain. IA vs a virus. // *

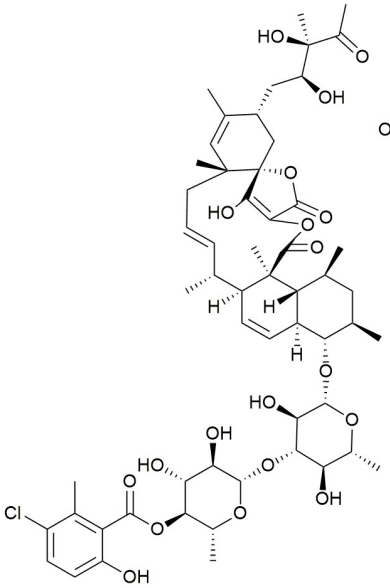
3 Marine microorganisms and phytoplankton: 3.1 Marine-sourced bacteria



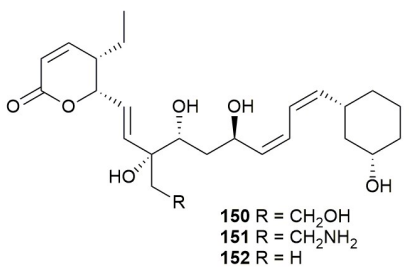
†146



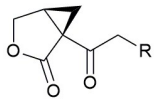
†147 R = H
†148 R = OH



†149



150 R = CH_2OH
151 R = CH_2NH_2
152 R = H



†153 R = *n*-Pr
†154 R = *i*-Pr
†155 R = *i*-But

68 Actinobacteria *Micromonospora carbonacea* // Ling shui Bay, Hainan Province, China // Tetrocarcin Q, a new spirotetronate with a unique glycosyl group from a marine-derived actinomycete *Micromonospora carbonacea* LS276

146 // N // tetrocarcin Q // Mod. AB activ. vs 1 strain. // Abs. config. of aglycone by ECD. Sugars had only rel. config. determ.

69 Actinobacteria *Micromonospora* sp // * // Marine mammal microbiota yields novel antibiotic with potent activ. against *Clostridium difficile*.

147 // N // phocoenamicin // Disrupts membrane potential. Mod. to no AB activ. vs 15 strain. // Abs. config. determ. using spectro. and deriv.

70 Actinobacteria *Streptomyces* sp // Gran Canaria, Spain // Phocoenamicins B and C, new AB spirotetronates isol. from a marine *Micromonospora* sp.

148 // N // phocoenamicin B // Mod. to low AM activ. vs 5 strain. //Abs. config. by compar. with congener data and biosynth. grounds.

149 // N // phocoenamicin C // Mod. to low AM activ. vs 5 strain. // Abs. config. by compar. with congener data and biosynth. grounds.

71 Actinobacteria *Streptomyces* sp // Hatsu-shima, Sagami-Bay, Japan // Lactomycins A–C, dephosphorylated phoslactomycin derivative that inhibit cathepsin B, from the marine-derived *Streptomyces* sp. ACT232

150 // N // lactomycin A // Mod. inhib. of cathepsin B. IA vs 1 HTCL // *

151 // N // lactomycin B // Mod. inhib. of cathepsin B. IA vs 1 HTCL // *

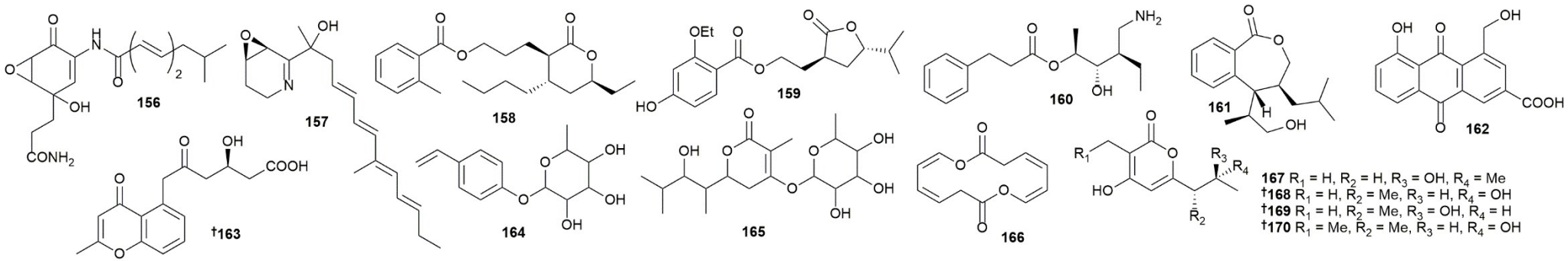
152 // N // lactomycin C // Mod. inhib. of cathepsin B. IA vs 1 HTCL // *

72 Actinobacteria *Salinispora arenicola* // * // Structural elucidation of trace components combining GC/MS, GC/IR, DFT-calculations and synthesis—salinilactones, unprecedented bicyclic lactones from *Salinispora* bacteria

153 // N // salinilactone B // Low AB activ. vs 2 strain. // Only sub-µg quantity isol. Struct. and abs. config. by total synth.

154 // N // salinilactone A // Low AB activ. vs 2 strain. // Only sub-µg quantity isol. Struct. and abs. config. by total synth.

155 // N // salinilactone C // Low AB activ. vs 2 strain. // Only sub-µg quantity isol. Struct. and abs. config. by total synth.



73 Actinobacteria *Nocardiopsis* sp, *Streptomyces* sp // * // Nitrosopyridine probe to detect polyketide natural products with conjugated alkenes: discovery of novodaryamide and nocarditriene
156 // M // novodaryamide // * // *
157 // N // nocarditriene // * // *

74 Firmicutes *Bacillus amyloliquefaciens* // * // Previously undescribed AB polyketides from heterotrophic *Bacillus amyloliquefaciens* associated with seaweed *Padina gymnospora*
158 // N // 11-(15-butyl-13-ethyl-tetrahydro-12-oxo-2H-pyran-13-yl) propyl-2-methylbenzoate // Low AB activ. vs 6 strain. // struct. not supported by data.
159 // N // 9-(tetrahydro-12-isopropyl-11-oxofuran-10-yl)-ethyl-4-ethoxy-2-hydroxybenzoate // Low AB activ. vs 6 strain. // struct. not supported by data.
160 // N // 12-(aminomethyl)-11-hydroxyhexanyl-10-phenylpropanoate // Low AB activ. vs 6 strain. // struct. not supported by data.
161 // N // 7-(14-hydroxypropan-13-yl)-8-isobutyl-7,8-dihydrobenzo[c]oxepin-1(3*H*)-one // Low AB activ. vs 6 strain. // struct. not supported by data.

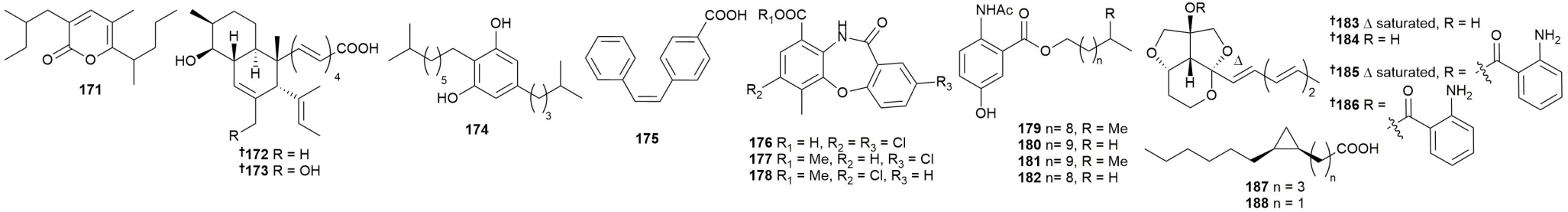
28 Actinobacteria *Streptomyces* sp // Putuo Mountain, Zhoushan City, Zhejiang, China // Anti-glioma natural products downregulating tumor glycolytic enzymes from marine actinomycete *Streptomyces* sp. ZZ406
162 // N // 1-hydroxymethyl-8-hydroxy-anthraquinone-3-carboxylic acid // Mod. cytotox. vs 3 HTCLs // *
163 // N // phaeochromycin I // Mod. cytotox. vs 3 HTCLs // Abs. config. by ECD.

35 Actinobacteria *Streptomyces* sp // Futian Mangrove Forest Reserve, Shenzhen, Guangdong, P. R. China // Bisamides and rhamnosides from mangrove actinomycete *Streptomyces* sp. SZ-A15
164 // N // 4-rhamnosyl-phenylethylene // No cytotox. vs 1 HTCL No BRD4 inhib. // *
165 // N // 5-(1",3"-dimethyl-2"-hydroxyl-butyl)-2-en-2-methyl-3-rhamnosyl-*d*-valerolactone // No cytotox. vs 1 HTCL No BRD4 inhib. // *

75 Actinobacteria *Brevibacterium* sp // Qingdao, China // Heterologous expression of a VioA variant activates cryptic cpds in a marine-derived *Brevibacterium strain*
166 // N // brevidiolide // IA vs 7 bact. // *

76 Actinobacteria *Streptomyces* sp // Zhanqiao Beach, Qingdao, Shandong Province, China // New a-pyridones with quorum-sensing inhibitory activity from diversity-enhanced extracts of a *Streptomyces* sp. derived from marine algae
167 // N // germicidin K // IA vs 15 bact. // *
168 // N // germicidin L // IA vs 15 bact. // Abs. config. by X-ray diffrac. and Mosher's method.
169 // N // germicidin M // IA vs 15 bact. // Abs. config. by X-ray diffrac.
170 // N // germicidin N // IA vs 15 bact. // Abs. config. by X-ray diffrac.

3 Marine microorganisms and phytoplankton: 3.1 Marine-sourced bacteria



77 Actinobacteria *Nocardiopsis* sp // S. China Sea // Bioprospecting of novel and bioactive cpds from marine actinomycetes isolated from S China Sea sediments
171 // N // $C_{16}H_{26}O_2$ // Low cytotox. vs 1 murine cell line. // *

78 Proteobacteria *Janthinobacterium* sp // * // Novel AF janthinopolyenemycins A and B from a co-culture of marine-associated *Janthinobacterium* spp. ZZ145 and ZZ148
172 // N // janthinopolyenemycin A // Mod. AF activ. vs 1 strain. IA vs 2 bact. // Abs. config. by ECD.
173 // N // janthinopolyenemycin B // Mod. AF activ. vs 1 strain. IA vs 2 bact. // Abs. config. by ECD.

79 Bacteroidetes *Zobellia galactanovorans* // Kappeln, Germany // AM dialkylresorcins from marine-derived microorganisms: insights into their mode of action and putative ecological relevance
174 // N // zobelliphol // Mod. to no AM activ. vs 15 strain. Low cytotox. vs 1 HTCL Bact. DNA syn. inhib. // *

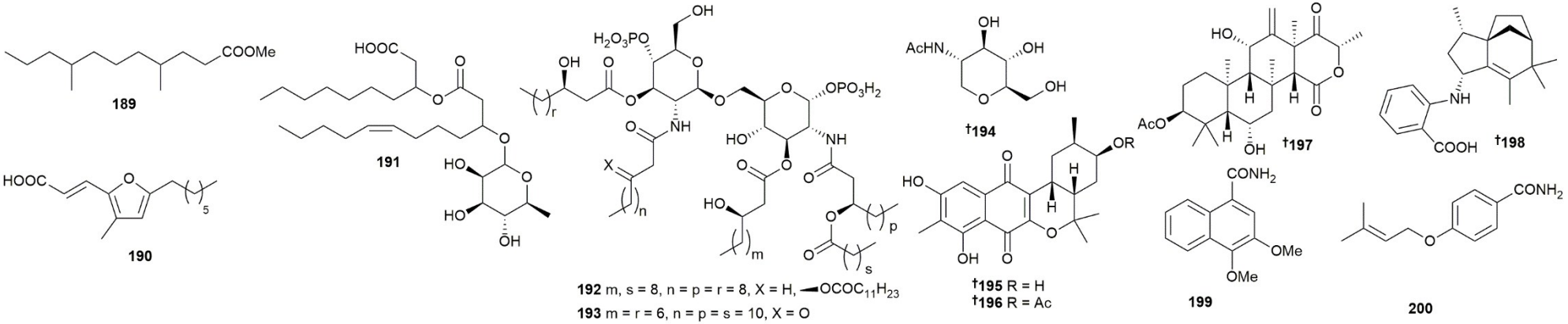
80 Actinobacteria *Kocuria mariana* // Sonmiani Beach, Karachi, Pakistan // Isolation, purification, structural elucidation and AM activity of kocumarin, a novel antibiotic isol. from actinobacterium *Kocuria marina* CMG S2 associated with the brown seaweed *Pelvetia canaliculata*
175 // N // kocumarin // Mod. AM activ. vs 14 strain. // Data does not support chemical structure.

81 Actinobacteria *Streptomyces olivaceus* // * // Genome mining for mycemycin: discovery and elucidation of related methylation and chlorination biosynth. chemistries
176 // N // mycemycin F // * // *
177 // N // mycemycin G // * // *
178 // N // mycemycin H // * // *

82 Actinobacteria *Streptomyces* sp // Hainan Is., China // Anthocidins A–D, new 5-hydroxyanthranilic acid related metabolites from the sea urchin-associated actinobacterium, *Streptomyces* sp. HDa1
179 // N // anthocidin A // IA vs 5 bact. and 2 HTCL // Struct. confirmed by X-ray diffrac.
180 // N // anthocidin B // IA vs 5 bact. and 2 HTCL // *
181 // N // anthocidin C // IA vs 5 bact. and 2 HTCL // *
182 // N // anthocidin D // IA vs 5 bact. and 2 HTCL // *

83 Actinobacteria *Streptomyces* sp // Kosrae Is. // Streptoglycerides A–D with a rare 6/5/5 tricyclic ring skeleton from a marine actinomycete *Streptomyces* species
183 // N // streptoglyceride A // IA in NO inhib. assay No cytotox. vs 1 cell line. // Abs. config. by ECD.
184 // N // streptoglyceride B // IA in NO inhib. assay No cytotox. vs 1 cell line. // Abs. config. by spectro. data anal.
185 // N // streptoglyceride C // Weak activ. in NO inhib. assay Mod. cytotox. vs 1 cell line. // Abs. config. by spectro. data anal.
186 // N // streptoglyceride D // Mod. activ. in NO inhib. assay Strong cytotox. vs 1 cell line. // Abs. config. by spectro. data anal.

84 Proteobacteria *Labrenzia* sp // Kronsgaard, Germany // Cyclopropane-containing fatty acids from the marine bacterium *Labrenzia* sp. 011 with AM and GPR84 activ.
187 // N // labrenzide // Low AB activ. vs 2 strain. Low AF activ. vs 2 strain. IA vs GPR84 enzyme. // *
188 // N // *cis*-cascarillic acid // Low AB activ. vs 6 strain. Mod. AF activ. vs 3 strain. potent inhib. of GPR84 enzyme. // *



85 Actinobacteria *Streptomyces albogriseolus* // Pichavaram, Tamil nadu, India, Cuddalore Port, Tami lnadu, India and Annagkovil, Tamil nadu, India // Isolation, structure elucidation and antibacterial activirty of methyl-4,8-dimethylundecanate from the marine actinobacterium *Streptomyces albogriseolus* ECR64
189 // N // methyl-4,8-dimethylundecanate // Activ. vs 5 fish bact. // Data does not support chemical structure.

86 Actinobacteria *Mumia* sp // Shimokoshikijima Is., Kagoshima Prefecture, Japan // Mumiamicin: structure and bioactiv. of a new furan fatty acid from *Mumia* sp. YSP-2-79
190 // N // mumiamicin // Weak to no AM activ. vs 6 strain. IA vs 2 HTCLs AO activ. // *

87 Proteobacteria *Pseudomonas* sp // Norwegian Sea // Characterization of rhamnolipids produced by an arctic marine bacterium from the *Pseudomonas fluorescence* group
191 // N // $C_{28}H_{50}O_9$ // Low AB activ. vs 5 strain. IA vs 2 HTCLs // *

88 Proteobacteria *Cobetia pacifica* // Sea of Japan // Lipid A structure and immunoinhibitory effect of the marine bacterium *Cobetia pacifica* KMM 3879^T
192 // N // *C. pacifica* KMM 3879T hexaacylated lipid A // Weak immunomod. activ. // Abs. config. determ. using spectro. and deriv.

89 Proteobacteria *Spiribacter salinus* // * // The structure of the lipid A from the halophilic bacterium *Spiribacter salinus* M19-40T
193 // N // *S. salinus* M19-40T lipid A // * // Lipid A is a mixture; several different fatty acid side chains.

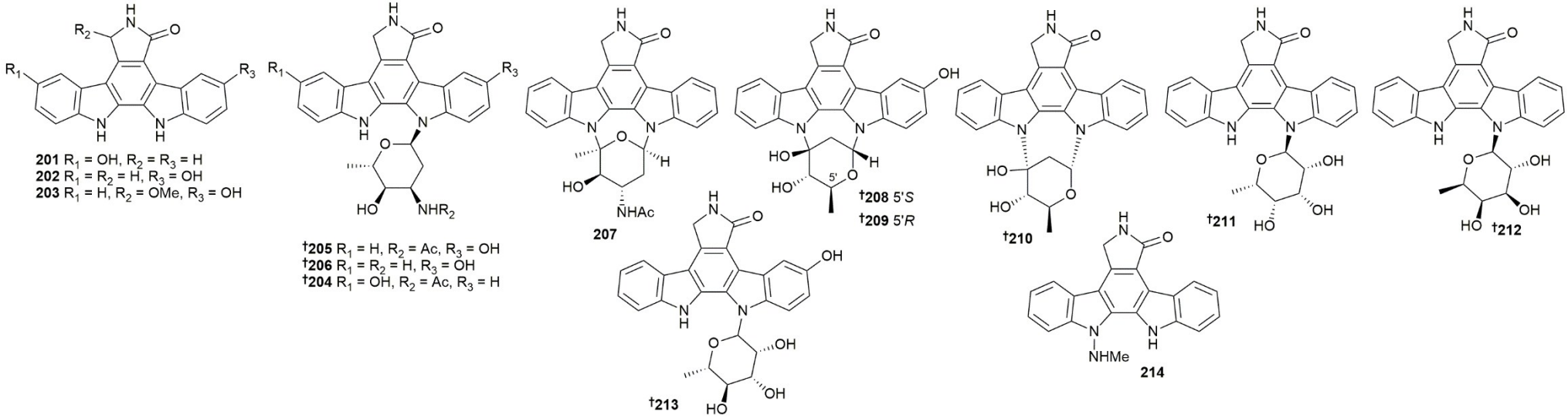
90 Firmicutes *Virgibacillus dokdonensis* // * // Identification, characteristics and mechanism of 1-deoxy-*N*-acetylglucosamine from deep-sea *Virgibacillus dokdonensis* MCCC 1A00493
194 // M // 1-deoxy-*N*-acetylglucosamine // Mod. AB activ. vs 2 of 9 strain tested. // Abs. config. by DFT-NMR and ECD calcs and total synth.

91 Actinobacteria *Streptomyces* sp // La Jolla, California, USA // New naphthoquinone terpenoids from marine actinobacterium, *Streptomyces* sp. CNQ-509
195 // N // 10-dihydro-12-hydroxynaphterpin // Free radical scavenging activ. // Abs. config. by chem. deriv. and Mosher's method.
196 // N // $C_{23}H_{26}O_7$ // Free radical scavenging activ. // Abs. config. by chem. deriv. and Mosher's method.

92 Actinobacteria *Nocardiopsis* sp // Helwan, Egypt // Terretonin N: a new meroterpenoid from *Nocardiopsis* sp.
197 // N // terretonin N // Mod. to no AB activ. vs 5 strain. IA vs 1 HTCL // Abs. config. by X-ray diffrac.

93 Actinobacteria *Streptomyces* sp // Antarctica // Antartin, a cytotox. zizaane-type sesquiterpenoid from a *Streptomyces* sp. isol. from an Antarctic marine sediment
198 // N // antartin // Mod. to low cytotox. vs 12 HTCLs // Abs. config. by ECD.

94 Actinobacteria *Streptomyces spectabilis* // Qionghai, Hainan Province, China // Bioactive aromatic metabolites from the sea urchin-derived actinomycete *Streptomyces spectabilis* strain HDa1
199 // N // 3,4-dimethoxy-1-naphthamide // Low AChE inhib. // *
200 // M // *p*-*O*-(3,3-dimethylallyl)benzamide // Low AChE inhib. // *

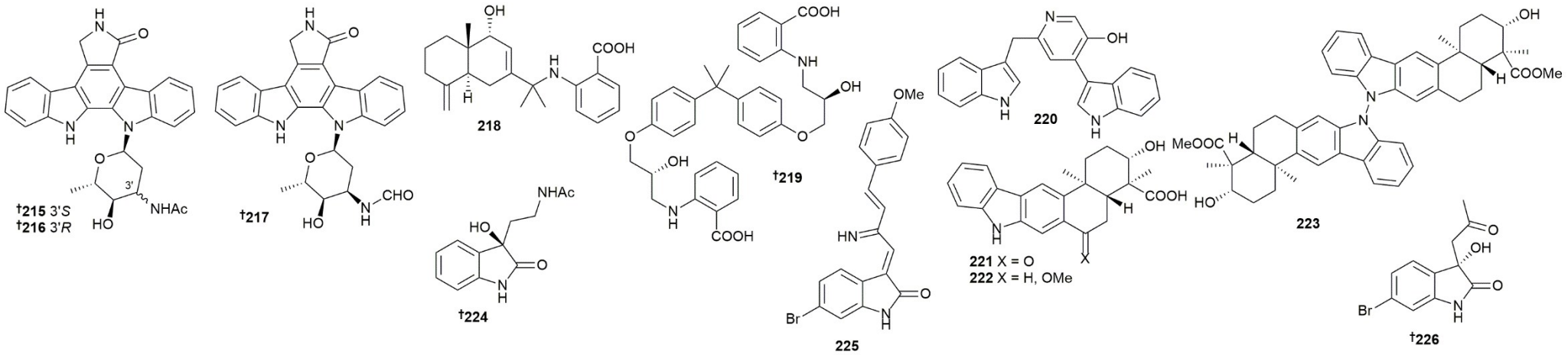


95 Actinobacteria *Streptomyces* sp // Dongtou, Zhejiang Province, China // Bioactive indolocarbazoles from the marine-derived *Streptomyces* sp. DT-A61
201 // N // 9-hydroxy-K252c // Mod. cytotox. vs 1 HTCL Mod. inhib. of 3 protein kinases. // *
202 // N // 3-hydroxy-K252c // Low cytotox. vs 1 HTCL Mod. to potent inhib. of 3 protein kinases. // *
203 // N // 3-hydroxy-7-methoxy-K252c // Low cytotox. vs 1 HTCL Mod. to no inhib. of 3 protein kinases. // Racemic, potential artifact.
204 // N // 9-hydroxy-3'-*N*-acetylholyrine A // Cytotox. vs 1 HTCL Mod. to no inhib. of 3 protein kinases. // Abs. config. by ECD.
205 // N // 3-hydroxy-3'-*N*-acetylholyrine A // Mod. cytotox. vs 1 HTCL Mod. to potent inhib. of 3 protein kinases. // Abs. config. by ECD
206 // N // 3-hydroxyholyrine A // Mod. cytotox. vs 1 HTCL Mod. to potent inhib. of 3 protein kinases. // Abs. config. by ECD.
207 // N // 3'-*O*-demethyl-4'-*N*-demethyl-4'-*N*-acetyl-4'-epi-staurosporine // Mod. cytotox. vs 1 HTCL Mod. to potent inhib. of 3 protein kinases. // *
208 // N // streptocarbazole D // Low cytotox. vs 1 HTCL Mod. to potent inhib. of 3 protein kinases. // Abs. config. by ECD.
209 // N // streptocarbazole E // Mod. cytotox. vs 1 HTCL Mod. to no inhib. of 3 protein kinases. // Abs. config. by ECD.

96 Actinobacteria *Streptomyces* sp // Dongtou Is., China // Cytotox. indolocarbazoles alkaloids from the *Streptomyces* sp. A65
210 // N // streptocarbazole C // Low cytotox. vs 1 HTCL Mod. inhib. Of BTK enzyme; IA vs PKC. // Abs. config. by X-ray diffrac.
211 // N // 3'-epi-K252d // Mod. cytotox. vs 1 HTCL Mod. inhib. of PKC and BTK enzymes. // Abs. config. by X-ray diffrac.
212 // N // 2',4'-epi-K252d // Mod. cytotox. vs 1 HTCL Mod. inhib. of PKC and BTK enzymes. // Abs. config. by ECD data compar.

97 Actinobacteria *Streptomyces* sp // S. China Sea // Precursor-directed generation of indolocarbazoles with topoisomerase IIa inhib. activ.
213 // N // 3-hydroxy-K252d // Mod. cytotox. vs 3 HTCLs // Abs. config. by degrad. and GCMS anal.

98 Actinobacteria *Streptomyces* sp // Ningbo County, Zhejiang province, China // One new indolocarbazole alkaloid from the *Streptomyces* sp. A22
214 // N // 12-*N*-methyl-k252c // Mod. activ. vs 3 kinases. // *



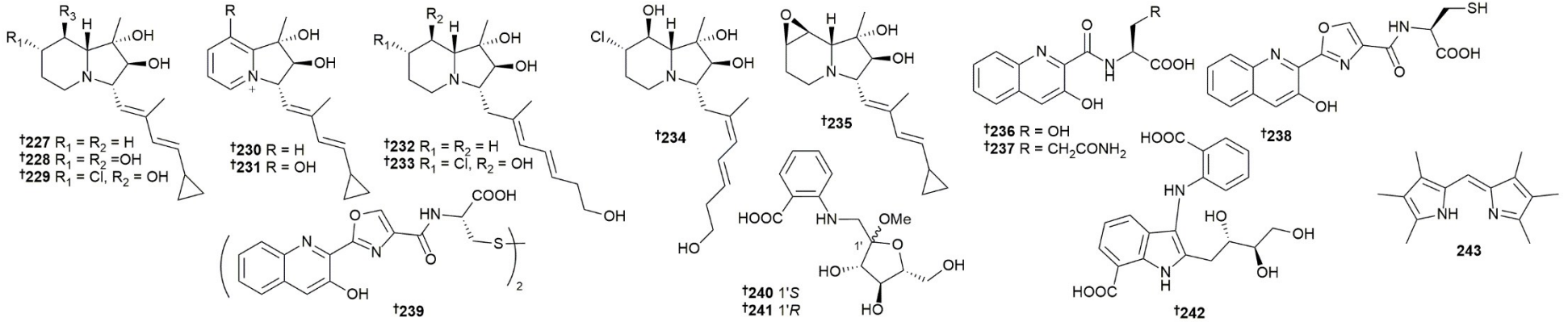
99 Actinobacteria *Streptomyces* sp // Dongtou County, Zhejiang Province, China // Bioactive metabolites from marine-derived *Streptomyces* sp. A68 and its rifampicin resistant mutant strain R-M1
215 // N // 3'-epi-*N*-acetyl-holyrine A // Mod. kinase inhib. vs 3 enzymes. Mod. cytotox. vs 1 HTCL // Abs. config. by X-ray diffrac.
216 // N // 3'-*N*-acetyl-holyrine A // Mod. kinase inhib. vs 3 enzymes. Mod. cytotox. vs 1 HTCL // *
217 // N // 3'-*N*-formyll-holyrine A // Mod. kinase inhib. vs 3 enzymes. Mod. cytotox. vs 1 HTCL // *
218 // N // eudesm-4(15),7-diene-9a-hydroxy-11-amino-benzoic acid // No kinase inhib. vs 3 enzymes. Mod. cytotox. vs 1 HTCL // *
219 // N // (9*R*,22*R*)-bisphenol A bis(9, 22-hydroxy-10,23-anthranilicacid-propyl) ether // Mod. kinase inhib. vs 3 enzymes. Mod. cytotox. vs 1 HTCL // Abs. config. by Mosher's method

100 Firmicutes *Lysinibacillus fusiformis* // * // Isolation and structure determination of lysiformine from bact. associated with marine sponge *Halichondria okadai*
220 // N // lysiformine // Low cytotox. vs P388. // *

101 Actinobacteria *Streptomyces xinghaiensis* // * // Genome mining of *Streptomyces xinghaiensis* NRRL B-24674T for the discovery of the gene cluster involved in anticomplement activ. and detection of novel xiamycin analogs
221 // N // 19-carbonyl-xiamycin // * // *
222 // N // 19-methoxyl-xiamycin // * // *
223 // N // 19-hydroxyl-24-methyl ester-*N*-*N*-dixiamycin // * // *

102 Firmicutes *Bacillus subterraneus* // S. China Sea // Bacilsubteramide A, a new indole alkaloid, from the deep-sea-derived *Bacillus subterraneus* 11593
224 // N // bacilsubteramide A // IA in an antiallergic assay // Abs. config. by ECD.

103 Actinobacteria *Saccharomonospora* sp, *Dietzia* sp // Red Sea, Hurghada, Egypt // New Pim-1 kinase inhib. from the co-culture of two sponge-associated actinomycetes
225 // N // saccharomonosporine A // potent Pim-1 kinase inhib. Mod. cytotox. vs 2 HTCLs // -
226 // N // convolutamydine F // No Pim-1 kinase inhib. IA vs 2 HTCLs // Abs. config. by spec. rot. data compar.

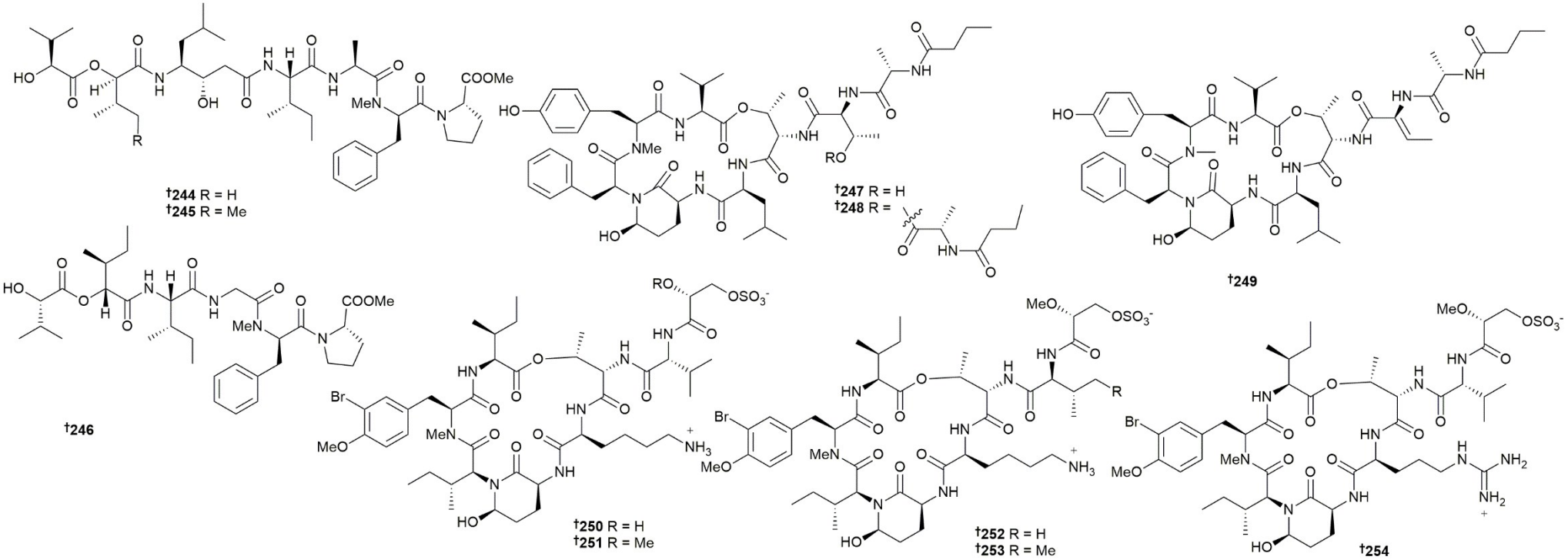


104 Actinobacteria *Streptomyces* sp // Hainan Is., P. R. China // Cyclizidine-type alkaloids from *Streptomyces* sp. HNA39
227 // N // cyclizidine B // IA vs 2 HTCLs and ROCK2 enzyme. // Abs. config. by ECD.
228 // N // cyclizidine C // Mod. cytotox. vs 2 HTCLs Mod. inhib. of ROCK2 enzyme. // Abs. config. by ECD.
229 // N // cyclizidine D // Low cytotox. vs 2 HTCLs IA vs ROCK2 enzyme. // Abs. config. by ECD.
230 // N // cyclizidine E // IA vs 2 HTCLs and ROCK2 enzyme. // Abs. config. by ECD.
231 // N // cyclizidine F // IA vs 2 HTCLs and low inhib. vs ROCK2 enzyme. // Abs. config. by ECD.
232 // N // cyclizidine G // IA vs 2 HTCLs and ROCK2 enzyme. // Abs. config. by ECD.
233 // N // cyclizidine H // Low to no cytotox. vs 2 HTCLs Low inhib. of ROCK2 enzyme. // Abs. config. by ECD.
234 // N // cyclizidine I // IA vs 2 HTCLs and low inhib. vs ROCK2 enzyme. // Abs. config. by ECD.
235 // M // (+)-ent-cyclizidine // Low cytotox. vs 2 HTCLs IA vs ROCK2 enzyme. // Abs. config. by ECD.

105 Actinobacteria *Streptomyces cyaneofuscatus* // Avilés Canyon, Cantabrian Sea // New 3-hydroxyquinaldic acid deriv. from cultures of the marine derived actinomycete *Streptomyces cyaneofuscatus* M-157
236 // N // $C_{13}H_{12}N_2O_5$ // IA vs 3 bact. Low cytotox. vs 1 HTCL // Abs. config. by Marfey's method.
237 // N // $C_{15}H_{15}N_3O_5$ // IA vs 3 bact. and 1 HTCL // Abs. config. by Marfey's method.
238 // N // $C_{16}H_{13}N_3O_5S$ // NT. // Abs. config. by Marfey's method.
239 // N // $C_{32}H_{24}N_6O_{10}S_2$ // IA vs 3 bact. and 1 HTCL // Abs. config. by spectro. data compar. Produced by dimerisation of compound ***238*** in solution.

106 Actinobacteria *Streptomyces* sp // NaoZhu Is., Guangdong Province, China // Anthranosides A–C, anthranilate deriv. from a sponge-derived *Streptomyces* sp. CMN-62
240 // N // anthranoside A // IA in HTCL, virus and NF-κB assays. // Abs. config. by X-ray diffrac.
241 // N // anthranoside B // IA in HTCL, virus and NF-κB assays. // Abs. config. by ECD and NMR compar.
242 // N // anthranoside C // IA in HTCL and NF-κB assays. Low activ. vs 1 virus. // Abs. config. by fragment synth. and spectro. data compar.

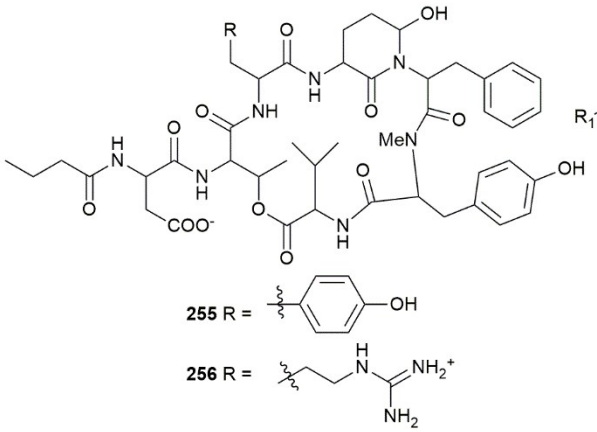
66 Actinobacteria *Micromonospora rosaria*, *Streptomyces albus* // // Marine bact. aromatic polyketides from host-dependent heterologous expression and fungal mode of cyclization
243 // M // 3,3',4,4',5,5'-hexamethyl-2,2'-dipyrrolylmethene // IA vs 7 bact. // *

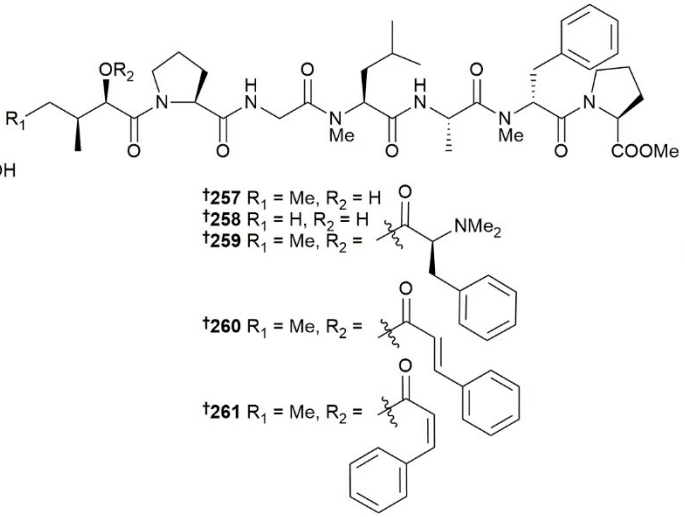


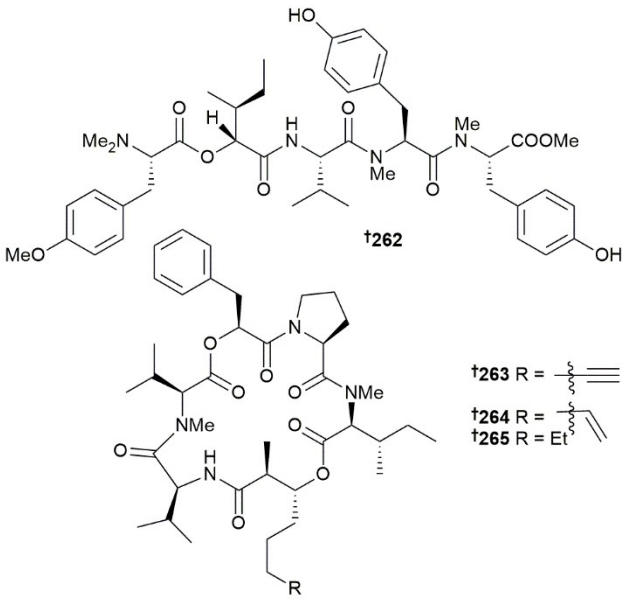
122 Cyanobacteria // Izena Is., Okinawa, Japan // Izenamides A and B, statine-containing depsipeptides, and an analogue from a marine cyanobacterium
244 // N // izenamide A // Inhib. of cathepsin D (IC_{50} = 380 nM). IA vs 3 HTCLs // Abs. config. by degrad. and chiral HPLC.
245 // N // izenamide B // Inhib. of cathepsin D (IC_{50} = 270 nM). IA vs 3 HTCLs // Abs. config. by degrad. and chiral HPLC, and Mosher's method.
246 // N // izenamide C // IA vs cathepsin D and 3 HTCLs // Abs. config. by degrad. and chiral HPLC.

123 Cyanobacteria *Leptolyngbya* sp // Loggerhead Key, Florida // Structural diversity and anticancer activ. of marine-derived elastase inhib.: key features and mechanisms mediating the antimetastatic effects in invasive breast cancer
247 // N // loggerpeptin A // potent inhib. of chymotrypsin and elastase enzymes (IC_{50} = 240 - 290 nM). // Abs. config. by degrad. and chiral HPLC.
248 // N // loggerpeptin B // potent inhib. of chymotrypsin and elastase enzymes (IC_{50} = 220 - 890 nM). // Abs. config. by degrad. and chiral HPLC
249 // N // loggerpeptin C // potent inhib. of chymotrypsin and elastase enzymes (IC_{50} = 350 - 620 nM). // Abs. config. by degrad. and chiral HPLC.

124 Cyanobacteria *Symploca* sp // Ghurab Reef, Jizan, Saudi Arabia // Jizanpeptins, Cyanobacteria protease inhib. from a *Symploca* sp. cyanobacterium collected in the Red Sea
250 // N // jizanpeptin A // Inhib. of serine protease trypsin (IC_{50} = 160 nM). Low tox. vs 2 HTCLs // Abs. config. by Marfey's method and chiral HPLC.
251 // N // jizanpeptin B // Inhib. of serine protease trypsin (IC_{50} = 190 nM). Low tox. vs 2 HTCLs // Abs. config. by Marfey's method and chiral HPLC.
252 // N // jizanpeptin C // Inhib. of serine protease trypsin (IC_{50} = 72 nM). Low tox. vs 2 HTCLs // Abs. config. by Marfey's method and chiral HPLC.
253 // N // jizanpeptin D // Inhib. of serine protease trypsin (IC_{50} = 1000 nM). Low tox. vs 2 HTCLs // Abs. config. by Marfey's method and chiral HPLC
254 // N // jizanpeptin E // Inhib. of serine protease trypsin (IC_{50} = 150 nM). Low tox. vs 2 HTCLs // Abs. config. by Marfey's method and chiral HPLC.





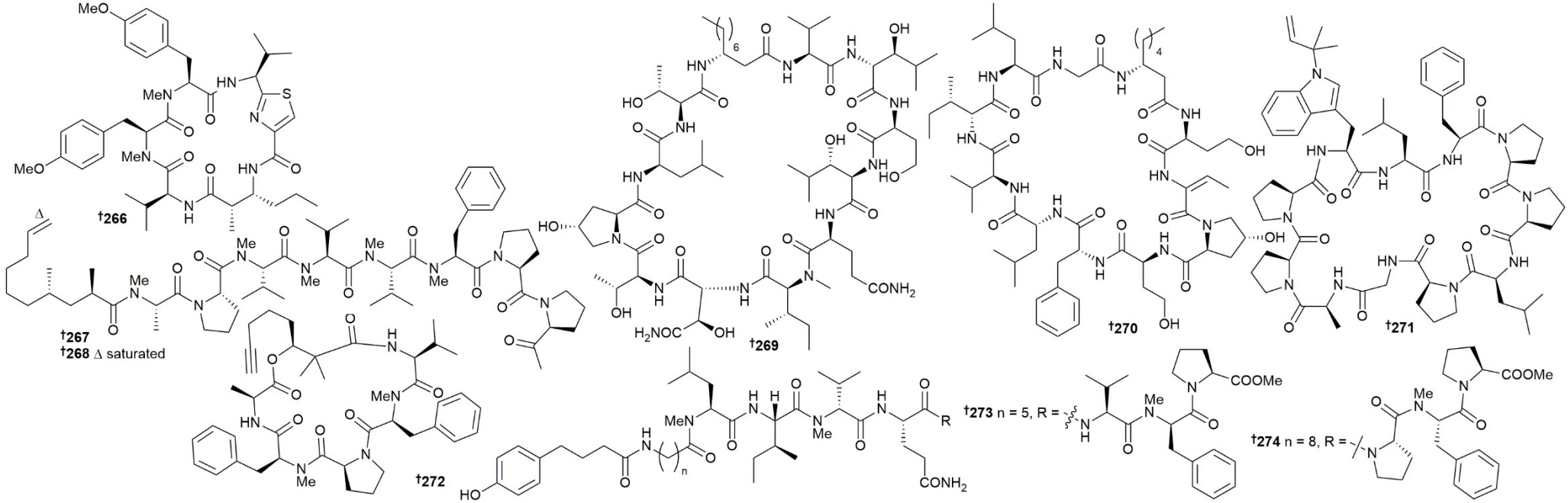


125 Cyanobacteria *Nostoc edaphicum* // Gulf of Gdansk // Cyanopeptolins with trypsin and chymotrypsin inhib. activ. from the cyanobacterium *Nostoc edaphicum* CCNP1411
255 // N // CP985 // IA vs thrombin, elastase, trypsin and protein phosphatase 1. Activ. vs chymotrypsin, IC_{50} = 0.26 µM. IA vs 1 HTCL // *
256 // N // CP962 // IA vs thrombin, elastase, chymotrypsin, and protein phosphatase 1. Low activ. vs trypsin. IA vs 1 HTCL // *

126 Cyanobacteria // Brinton Channel, Summerland Key, Florida, USA // Discovery, synthesis, pharmacological profiling, and biological characterization of brintonamides A–E, novel dual protease and GPCR modulators from a marine cyanobacterium
257 // N // brintonamide A // Inhib. of chymotrypsin, caspase 14, KLK7, IC_{50} = 8.98, 50.3, 22.1 µM, resp. // Abs. config. by degrad. and chiral HPLC.
258 // N // brintonamide B // IA vs chymotrypsin and KLK7. // Abs. config. by degrad. and chiral HPLC.
259 // N // brintonamide C // IA vs chymotrypsin and KLK7. // Abs. config. by degrad. and chiral HPLC.
260 // N // brintonamide D // Inhib. of caspase 14, KLK7, chymase, IC_{50} = 10.1, 18.9, 23.2 µM, resp. // Abs. config. by degrad. and chiral HPLC.
261 // N // brintonamide E // IA vs chymotrypsin and KLK7. // Abs. config. by degrad. and chiral HPLC.

127 Cyanobacteria *Moorea bouillonii* // Fingers Reef, Guam // Apratyramide, a marine-derived peptidic stimulator of VEGF-A and other growth factors with potential application in wound healing
262 // N // apratyramide // Up-regulated growth factors in HaCaT cells; induced secretion of VEGF-A. // Abs. config. by chiral HPLC./total synth.

128 Cyanobacteria *Lyngyba majuscula* // Tiahura sector, Moorea Is., French Polynesia // Structures and activ. of tiahuramides A–C, cyclic depsipeptides from a Tahitian collection of the marine cyanobacterium *Lyngbya majuscula*
263 // N // tiahuramide A // IA vs 3 bact. Mod. inhib. of sea urchin fertilized egg div IA vs 1 HTCL // Abs. config. by Marfey's and Mosher's method .
264 // N // tiahuramide B // IA vs 3 bact. Mod. inhib. of sea urchin fertilized egg div.. Mod. activ. vs 1 HTCL // Abs. config. by Marfey's and Mosher's method .
265 // N // tiahuramide C // Mod. AB vs 1 strain. Mod. inhib. of sea urchin fertilized egg div. Mod. activ. vs 1 HTCL // Abs. config. by Marfey's and Mosher's method.



129 Cyanobacteria *Moorea bouillonii* // Kakeroma Is., Kagoshima prefecture, Japan // Kakeromamide A, a new cyclic pentapeptide inducing astrocyte differentiation isol. from the marine cyanobacterium *Moorea bouillonii*

266 // N // kakeromamide A // Induced differentiation of neural stem cells. Mod. cytotox. vs 1 HTCL // Abs. config. by Marfey's method.

130 Cyanobacteria *Okeania* sp // Bise, Okinawa Prefecture, Japan // Isolation of jahanene and jahanane, and total synth. of the jahanyne family

267 // N // jahanene // Mod. cytox. vs 2 HTCLs // Abs. config. by reduction and spec. rot. compar.

268 // N // jahanane // Mod. cytox. vs 2 HTCLs // Abs. config. by spec. rot. compar.

131 Cyanobacteria *Hormothamnion enteromorphoides*, *Hydrocoryne enteromorphoides* // Garden Key, Dry Tortugas National Park, USA // Discovery of new A- and B-type laxaphycins with synergistic anticancer activ.

269 // N // laxaphycin B4 // Mod. cytotox. vs HCT-116 (IC_{50} = 1.7 μM). // Abs. config. by chiral HPLC and Marfey's method.

270 // N // laxaphycin A2 // Low cytotox. vs HCT-116 (IC_{50} = 29.0 μM). // Abs. config. by chiral HPLC and Marfey's method.

132 Cyanobacteria *Symploca borealis* // Minna Is., Okinawa Prefecture, Japan // Croissamide, a proline-rich cyclic peptide with an *N*-prenylated tryptophan from a marine cyanobacterium *Symploca* sp.

271 // N // croissamide // IA vs 2 HTCLs, malaria, bact. and protease assays. Weak inhib. against NO prod. // Abs. config. by acid hydrolysis and chiral anal.

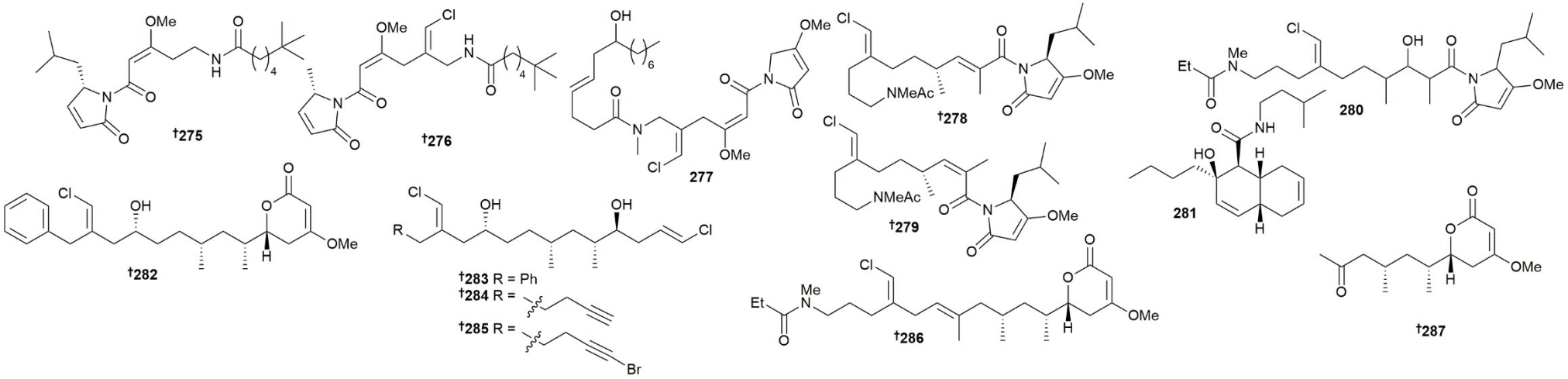
133 Cyanobacteria *Lyngbya* sp // St. John's Is., Singapore // Benderamide A, a cyclic depsipeptide from a Singapore collection of marine cyanobacterium cf. *Lyngbya* sp.

272 // N // benderamide A // IA vs 3 HTCLs // Abs. config. by Marfey's method and NMR anal.

134 Cyanobacteria *Caldora penicillata* // Hoshino, Okinawa, Japan // Hoshinoamides A and B, acyclic lipopeptides from the marine cyanobacterium *Caldora penicillata*

273 // N // hoshinoamide A // Low cytotox. vs HeLa IC_{50} 14 μM. Mod. activ. vs *P. falciparum* IC_{50} = 0.52 μM // Abs. config. by chiral HPLC and Marfey's method.

274 // N // hoshinoamide B // Low cytotox. vs HeLa IC_{50} 29 μM. Mod. activ. vs *P. falciparum* IC_{50} = 1.0 μM // Abs. config. by chiral HPLC and Marfey's method.



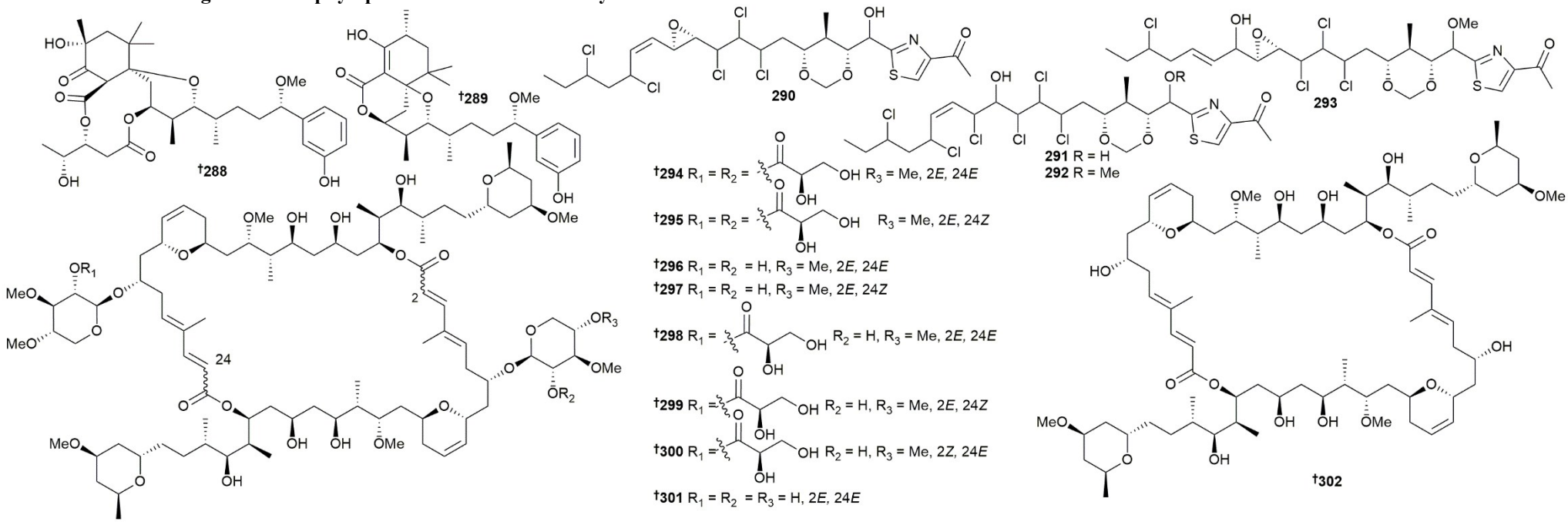
135 Cyanobacteria *Okeania* sp // Irijima, Okinawa Prefecture, Japan // Ypaoamides B and C, linear lipopeptides from an *Okeania* sp. marine cyanobacterium
275 // N // ypaoamide B // Induced glucose uptake in rat L6 myotubes. // Abs. config. by Marfey's method.
276 // N // ypaoamide C // Induced glucose uptake in rat L6 myotubes. // Abs. config. by Marfey's method.

136 Cyanobacteria *Moorea producens* // Kahala Beach, Oahu Is., Hawaii // A new malyngamide from the marine cyanobacterium *Moorea producens*
277 // N // $C_{28}H_{43}ClN_2O_6$ // IA vs L1210 leukemia cells; Low toxicity vs *Palaemon paucidens*. // *

137 Cyanobacteria *Trichodesmium* sp // Padre Is., Corpus Christi, Texas, USA // The metabolome of a Cyanobacteria bloom visualized by MS/MS-based molecular networking reveals new neurotoxic smenamide analogs (C, D, and E)
278 // N // smenamide C // Mod. cytotox. vs neuro-2A and HCT-116. // Abs. config. by ECD comp.
279 // N // smenamide D // No cytotox. vs neuro-2A and HCT-116. // Abs. config. by chiro-optical comp.
280 // N // smenamide E // Mod. cytotox. vs neuro-2A and HCT-116. // *

138 Cyanobacteria *Caldora penicillata* // Ikei Is., Okinawa, Japan // Caldorin, a new polyketide from the marine cyanobacterium *Caldora penicillata*
281 // N // caldorin // Weak SOAT inhib. Mod. osteoblast differentiation inhib. IA vs 2 HTCLs // *

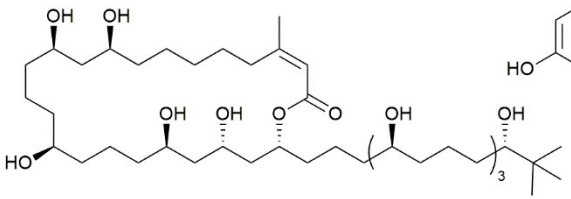
139 Cyanobacteria *Trichodesmium* sp // Padre Is., Corpus Christi, Texas, USA // Trichophycins B–F, chlorovinylidene-containing polyketides isol. from a Cyanobacteria bloom
282 // N // trichophycin B // Low toxicity vs neuro-2A cells. // Abs. config. by Mosher's method , ECD, J-based and DFT calc.
283 // N // trichophycin C // Low toxicity vs neuro-2A cells. // Abs. config. by Mosher's method , ECD, J-based and DFT calc.
284 // N // trichophycin D // Low toxicity vs neuro-2A cells. // Abs. config. by comp. of data with trichophycins B and C.
285 // N // trichophycin E // Low toxicity vs neuro-2A cells. // Abs. config. by comp. of data with trichophycins B and C.
286 // N // trichophycin F // Low toxicity vs neuro-2A cells. // Abs. config. by comp. of data with trichophycins B and C.
287 // N // tricholactone // * // Abs. config. by comp. of data with trichophycins B and C.



140 Cyanobacteria *Lyngbya* sp // Sanya harbour, Hainan, China // Two marine Cyanobacteria aplysiatoxin polyketides, neo-debromoaplysiatoxin A and B, with K^+ channel inhib. activ.
288 // N // neo-debromoaplysiatoxin A // Mod. activ. vs Kv1.5 channel, IC_{50} = 6.94 µM. IA vs 2 HTCLs // Abs. config. by X-ray diffrac.
289 // N // neo-debromoaplysiatoxin B // potent activ. vs Kv1.5 channel, IC_{50} = 0.30 µM. IA vs 2 HTCLs // Abs. config. by ECD.

141 Cyanobacteria *Fischerella* sp // // Aranazoles: extensively chlorinated nonribosomal peptide–polyketide hybrids from the cyanobacterium *Fischerella* sp. PCC 9339
290 // N // aranazole A // IA vs 1 HTCL, 3 microb. strain and 1 virus. // *
291 // N // aranazole B // * // *
292 // N // aranazole C // * // *
293 // N // aranazole D // * // *

142 Cyanobacteria *Phormidium* sp // Fagaalu Park, American Samoa, U.S. // Samholides, swinholide-related metabolites from a marine cyanobacterium cf. *Phormidium* sp.
294 // N // samholide A // Strong cytotox. vs H-460 (IC_{50} = 170 nM). // Abs. config. proposed by data compar., and biosynth. grounds.
295 // N // samholide B // Strong cytotox. vs H-460 (IC_{50} = 520 nM). // Abs. config. proposed by data compar., and biosynth. grounds..
296 // N // samholide C // Strong cytotox. vs H-460 (IC_{50} = 210 nM). // Abs. config. proposed by data compar., and biosynth. grounds..
297 // N // samholide D // Strong cytotox. vs H-460 (IC_{50} = 170 nM). // Abs. config. proposed by data compar., and biosynth. grounds..
298 // N // samholide E // Strong cytotox. vs H-460 (IC_{50} = 170 nM). // Abs. config. proposed by data compar., and biosynth. grounds..
299 // N // samholide F // Strong cytotox. vs H-460 (IC_{50} = 170 nM). // Abs. config. proposed by data compar., and biosynth. grounds..
300 // N // samholide G // Strong cytotox. vs H-460 (IC_{50} = 210 nM). // Abs. config. proposed by data compar., and biosynth. grounds..
301 // N // samholide H // Strong cytotox. vs H-460 (IC_{50} = 470 nM). // Abs. config. proposed by data compar., and biosynth. grounds.
302 // N // samholide I // Strong cytotox. vs H-460 (IC_{50} = 910 nM). // Abs. config. proposed by data compar., and biosynth. grounds..



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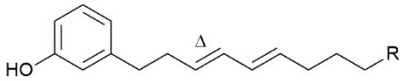
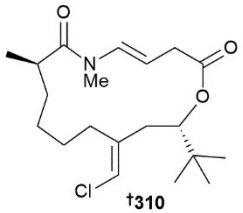


304 Δ saturated, R = H
305 Δ saturated, R =
306 R = H



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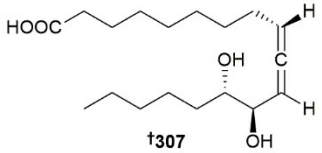

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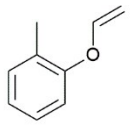

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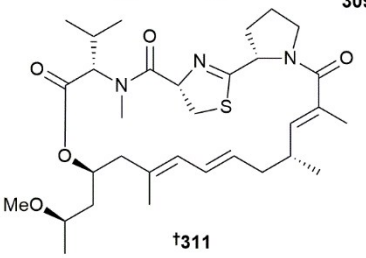

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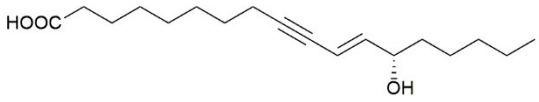


†308

143 Cyanobacteria *Okeania hirsuta* // Isla Bastimentos Park, Panama // Bastimolide B, an antimalarial 24-membered marine macrolide possessing a *tert*-butyl group
303 // N // bastimolide B // Mod. activ. vs *P. falciparum* (IC_{50} = 5.7 μM). // Abs. config. by degrad. and spectroscopic methods

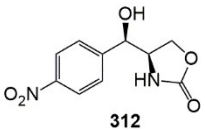
144 Cyanobacteria *Hormoscilla* sp // Anae Is., Guam // Isolation and characterization of anaephenes A–C, alkylphenols from a filamentous cyanobacterium (*Hormoscilla* sp., Oscillatoriales)
304 // N // anaephene A // AM vs 5 strain (MICs 11 - >22 μg/mL). Low cytotox. vs 3 HTCLs (IC_{50} 26 - 38 μM). // *
305 // N // anaephene B // AM vs 5 strain (MICs 6.1 - >24 μg/mL). Low cytotox. vs 3 HTCLs (IC_{50} 28 - 71 μM). // *
306 // N // anaephene C // AM vs 5 strain (MICs 22 - >22 μg/mL). Low cytotox. vs 3 HTCLs (IC_{50} 42 - >100 μM). // *

146 Cyanobacteria *Pseudanabaena* sp // Tahiti, French Polynesia // Stereochemical study of puna'auic acid, an allenic fatty acid from the eastern indo-pacific cyanobacterium *Pseudanabaena* sp
307 // N // puna'auic acid // * // Abs. config. by DFT-NMR, ECD calc. and total synth.
308 // N // $C_{18}H_{30}O_3$ // * // Abs. config. by compar. with spectro. data.

147 Cyanobacteria *Microcoleus chthonoplastes* // Near Kozhikode District, Kerala, India // Novel lipoxygenase inhib., 1-ethenoxy-2-methylbenzene, from marine Cyanobacteria *Microcoleus chthonoplastes*
309 // N // 1-ethenoxy-2-methylbenzene // Mild lipoxygenase inhib.(IC_{50} = 22.8 μM). // NMR data does not agree with proposed struct.

155 * // * // Total synth. of laingolide B stereoisomers and assignment of abs. config.
310 // R // laingolide B // * // Abs. config. by total synth.

156 * // * // Asymmetric synth. of the C15–C32 fragment of alotamide and determination of the relative stereochem.
311 // R // alotamide A // * // Rel. config. at C-19, C-28 and C-30 by total synth.



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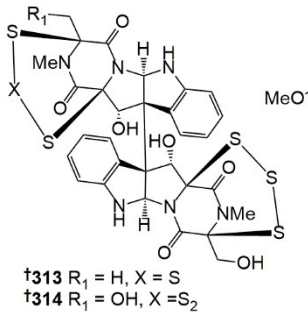
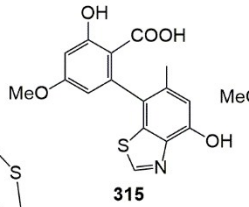


†313 R_1 = H, X = S
†314 R_1 = OH, X =S_2



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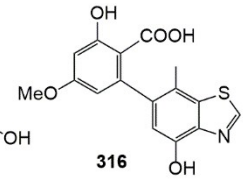

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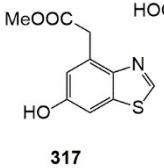

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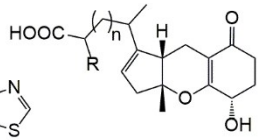
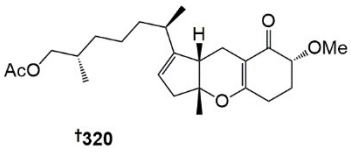
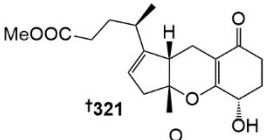


318 R = Me, n = 3
319 R = H, n = 1



†320



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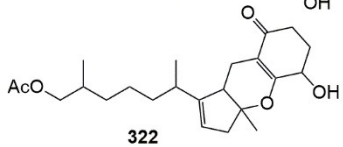


322

158 Ascomycota *Acremonium vitellinum* // (unidentified red alga) Qingdao, China // Insecticidal activ. of chloramphenicol deriv. isol. from a marine alga-derived endophytic fungus, *Acremonium vitellinum*, against the cotton bollworm, *Helicoverpa armigera* (Hübner) (Lepidoptera: Noctuidae)
312 // M // $C_{10}H_{10}N_2O_5$ // potent Insecticidal activ. vs. *Helicoverpa armigera* (cotton bollworm). // *

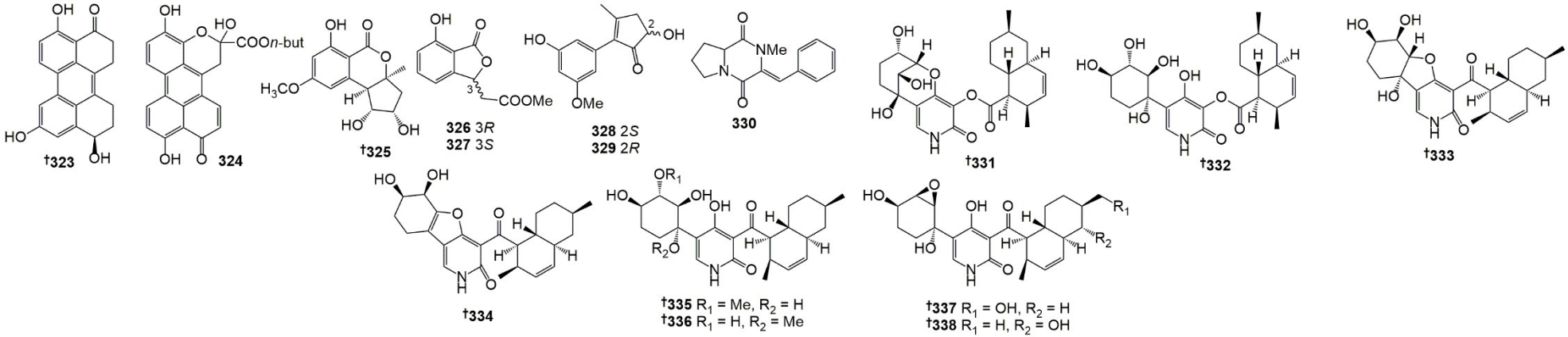
159 Ascomycota *Acrostalagmus luteoalbus* // (sediment) Liaodong Bay, China // Chetracins E and F, cytotox. epipolythiodioxopiperazines from the marine-derived fungus *Acrostalagmus luteoalbus* HDN13-530
313 // N // chetracin E // Mod. - strong cytotox. vs. 5 HTCLs // *
314 // N // chetracin F // Mod. - strong cytotox. vs. 5 HTCLs // *

160 Ascomycota *Alternari*a sp // (sponge, *Callyspongia* sp.) Xuwen County, Guangdong Province, China // Two new altenusin/thiazole hybrids and a new benzothiazole deriv. from the marine sponge-derived fungus *Alternaria* sp. SCSIOS02F49
315 // N // altenusinoide A // IA AO (DPPH assay). No inhib. COX-2. // *
316 // N // altenusinoide B // IA AO (DPPH assay). No inhib. COX-2. // *
317 // N // methyl 2-(6-hydroxybenzothiazol-4-yl) acetate // IA AO (DPPH assay). No inhib. COX-2. // *

161 Ascomycota *Alternaria alternata* // (isopd, *Ligia exotica*) Changdao Is., Yantai, Shandong Province, China // Two new tricycloalternarene acids from the marine-derived fungus *Alternaria alternata* ICD5-11
318 // N // tricycloalternarene K // IA vs 2 bact. // *
319 // N // tricycloalternarene L // IA vs 2 bact. // *

163 Ascomycota *Alternaria alternata* // (red alga, *Lomentaria hakodatensis*) Kongdong Is., China // Two new tricycloalternarene esters from an alga-epiphytic isolate of *Alternaria alternata*
320 // N // 17-*O*-methyltricycloalternarene D // Weak inhib. 4 phytoplankton. // *
321 // N // methyl nortricycloalternarate // Weak inhib. 4 phytoplankton. // *

164 Ascomycota *Alternaria* sp // (brown alga, *Laminaria japonica*) Weihai, China // Cytotox. tricycloalternarene cpds from endophyte *Alternaria* sp. W-1 associated with *Laminaria japonica*
322 // N // 2*H*-(2*E*)-tricycloalternarene 12a // Weak cytotox. vs. 2 HTCLs // *



165 Ascomycota *Alternaria* sp // (sponge, *Callyspongia* sp.) Xuwen County, Guangdong Province, China // Perylenequione deriv. with anticancer activ. isol. from the marine sponge-derived fungus, *Alternaria* sp. SCSIO41014

323 // N // altertoxin VII // Mod. cytotox. vs. 3 HTCLs IA vs 1 bact. // *

324 // N // butyl xanalterate // Mod. cytotox. vs. 1 HTCL IA vs 1 bact. // *

325 // N // nordihydroaltenuene A // NT vs. 3 HTCLs IA vs. 1 bact. // *

326 // N // (*S*)-isoochracinate A1 // NT vs. 3 HTCLs IA vs. 1 bact. // *

327 // N // (*R*)-isoochracinate A2 // NT vs. 3 HTCLs IA vs. 1 bact. // *

328 // N // (*S*)-alternariphent A1 // NT vs. 3 HTCLs IA vs. 1 bact. // *

329 // N // (*R*)-alternariphent A2 // NT vs. 3 HTCLs IA vs. 1 bact. // *

166 Ascomycota *Annulohypoxylon stygium* // (red alga, *Bostrychia radicans*) Rio Escuro mangrove, Sao Paulo State, Brazil // Photoprotective potential of metabolites isol. from algae-associated fungi *Annulohypoxylon stygium*

330 // N // 3-benzylidene-2-methylhexahydropyrrolo [1,2-a] pyrazine-1,4-dione // Photoprotective (UV-B absorbance) with no phototoxicity. // *

167 Ascomycota *Arthrinium* sp // (sediment) S. China Sea // Bioactive pyridone alkaloids from a deep-sea-derived fungus *Arthrinium* sp. UJNMF0008

331 // N // arthpyrone D // IA vs. 2 HTCLs, 4 bact., 1 fungus and AChE. // *

332 // N // arthpyrone E // IA vs. 2 HTCLs, 4 bact., 1 fungus and AChE. // *

333 // N // arthpyrone F // Mod. AB vs. 2 strain. IA vs. 2 HTCLs, 2 further bact., 1 fungus and AChE. // *

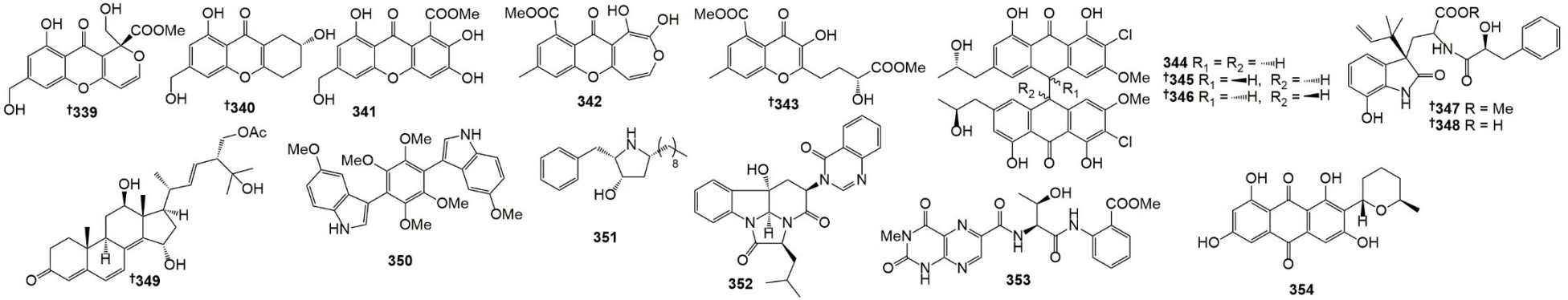
334 // N // arthpyrone G // Mod. AB vs. 2 strain. IA vs. 2 HTCLs, 2 further bact., 1 fungus and AChE. // *

335 // N // arthpyrone H // Mod. AB vs. 2 strain. IA vs. 2 HTCLs, 2 further bact., 1 fungus and AChE. // *

336 // N // arthpyrone I // Mod. AB vs. 2 strain. IA vs. 2 HTCLs, 2 further bact., 1 fungus and AChE. // *

337 // N // arthpyrone J // IA vs. 2 HTCLs, 4 bact., 1 fungus and AChE. // *

338 // N // arthpyrone K // IA vs. 2 HTCLs, 4 bact., 1 fungus and AChE. // *



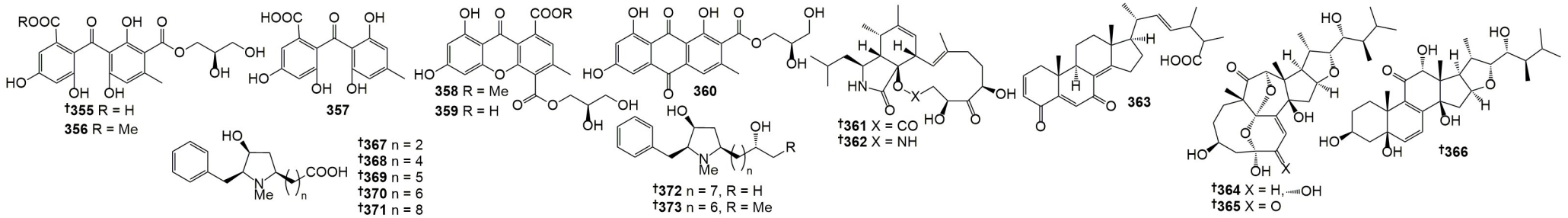
168 Ascomycota *Arthrinium* sp // (deep-sea sediment) S. China Sea // New chromones from a marine-derived fungus, *Arthrinium* sp., and their biological activ.
339 // N // arthone A // IA AO in DPPH and ABTS assays, AM vs. 4 bact., AF vs. 1 fungus and NO prod. inhib. // *
340 // N // arthone B // IA AO in DPPH and ABTS assays, AM vs. 4 bact., AF vs. 1 fungus and NO prod. inhib. // *
341 // N // arthone C // potent AO in DPPH assay, mod. AO vs. ABTS assay IA vs. 4 bact., 1 fungus and NO prod. inhib. // *
342 // N // arthone D // IA AO in DPPH and ABTS assays, AM vs. 4 bact., AF vs. 1 fungus and NO prod. inhib. // *
343 // N // arthone E // IA AO in DPPH and ABTS assays, AM vs. 4 bact., AF vs. 1 fungus and NO prod. inhib. // *

169 Ascomycota *Aspergillus alliaceus* // (unidentified marine alga) Biovioyica GmbH // Coculture of two developmental stages of a marine-derived *Aspergillus alliaceus* results in the prod of the cytotox. bianthrone allianthrone A
344 // N // allianthrone A // Weak cytotox. vs. 2 HTCLs IA vs.5 bact. and 1 fungus // *
345 // N // allianthrone B // IA vs. 2 HTCLs, 5 strain bact. and 1 fungus // Probable artefact.
346 // N // allianthrone C // IA vs. 2 HTCLs, 5 strain bact. and 1 fungus // Probable artefact.

170 Ascomycota *Aspergillus alabamensis* // (red alga, *Ceramium japonicum*) Qingdao, China // Two new diketomorpholine deriv. and a new highly conjugated ergostane-type steroid from the marine algal-derived endophytic fungus *Aspergillus alabamensis* EN-547
347 // N // 4-epi-seco-shornephine A methyl ester // Weak AB vs. 4 strain. // *
348 // N // 4-epi-seco-shornephine A carboxylic acid // Weak AB vs. 2 strain. // *
349 // N // 28-acetoxy-12ß,15a,25-trihydroxyergosta-4,6,8(14),22-tetraen-3-one // Weak AB vs. 3 strain. // *

171 Ascomycota Aspergillus candidus // (sponge, *Epipolasis* sp.) Similan Is. National Park, Phang-Nga Province, Thailand // Bis-indolyl benzenoids, hydroxypyrrolidine deriv. and other constituents from cultures of the marine sponge-associated fungus *Aspergillus candidus* KUFA0062
350 // N // candidusin D // Weak cytotox. vs. 7 HTCLs // *
351 // N // preussin C // Weak cytotox. vs. 7 HTCLs // *

172 Ascomycota *Aspergillus* sp // (sponge, *Agelas oroides*) Aliaga-Izmir coast, Turkey // Induc. of new metabolites from sponge-associated fungus *Aspergillus carneus* by OSMAC approach
352 // N // isopropylchaetominine // potent cytotox. vs. 1 murine TCL. IA vs. 11 bact. // *
353 // N // isoterrelumamide A // IA vs. 1 murine TCL and 11 bact. // *
354 // N // 5'-epi-averufanin // IA vs. 1 murine TCL. Mod. AB vs. 2 strain. // *



173 Ascomycota *Aspergillus europaeus* // (sponge, *Xestospongia testudinaria*) Weizhou Is., China // Polyketide deriv. from the sponge associated fungus *Aspergillus europaeus* with antioxidant and NO inhib. activ.

355 // N // eurobenzophenone A // IA AO (DPPH assay). No inhib. NF-κB prod. // *

356 // N // eurobenzophenone B // IA AO (DPPH assay). potent inhib. NF-κB prod. Weak inhib. NO prod. // *

357 // N // eurobenzophenone C // potent AO (DPPH assay). No inhib. NF-κB prod. // *

358 // N // euroxanthone A // IA AO (DPPH assay). potent inhib. NF-κB prod. Weak inhib. NO prod. // *

359 // N // euroxanthone B // IA AO (DPPH assay). No inhib. NF-κB prod. // *

360 // N // (+)1-*O*-demethylvariecolorquinone A // IA AO (DPPH assay). No inhib. NF-κB prod. // *

174 Ascomycota *Aspergillus flavipes* // (sediment) Panjin Red Beach National Nature Reserve, Liaoning province, China // Cytotox. cytochalasans from *Aspergillus flavipes* PJ03-11 by OSMAC

361 // N // flavichalasine N // Mod. cytotox.vs. 1 HTCL, sig. cytotox. vs. 1 HTCL, potent cytotox vs. 1 HTCL // *

362 // N // flavichalasine O // Mod. cytotox.vs. 1 HTCL, sig. cytotox. vs. 2 HTCLs // *

175 Ascomycota *Aspergillus flavus* // (unspecified source) Bohai Sea // New oxygenated steroid from the marine-derived fungus *Aspergillus flavus*

363 // N // aspersteroid A // Mod. AB vs. 3 strain. Mod. cytotox. vs. 1 HTCL // *

176 Ascomycota *Aspergillus flocculosus* // (sponge, *Phakellia fusca*) Yongxing Is., China // Aspersecosteroids A and B, two 11(9?10)-*abeo*-5,10-secosteroids with a dioxatetraheterocyclic ring system from *Aspergillus flocculosus* 16D-1

364 // N // aspersecosteroid A // potent Inhib. TNF-α and IL-6 prod. IA vs. 2 HTCLs and 1 inflammatory model CL. // *

365 // N // aspersecosteroid B // potent Inhib. TNF-α and IL-6 prod. IA vs. 2 HTCLs and 1 inflammatory model CL. // *

366 // N // asperflosterol // potent Inhib. TNF-α and IL-6 prod. IA vs. 2 HTCLs and 1 inflammatory model CL. // *

177 Ascomycota *Aspergillus flocculosus* // (sponge, *Phakellia fusca*) Yongxing Is., China // Preussins with inhib. of IL-6 expression from *Aspergillus flocculosus* 16D-1, a fungus isol. from the marine sponge *Phakellia fusca*

367 // N // preussin C // Mod. inhib. IL-6 prod. IA vs. 3 HTCLs and 3 fungi. // *

368 // N // preussin D // Mod. inhib. IL-6 prod. IA vs. 3 HTCLs and 3 fungi. // *

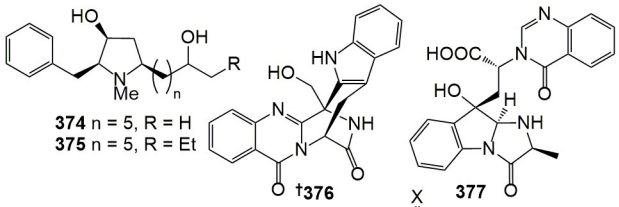
369 // N // preussin E // Mod. inhib. IL-6 prod. IA vs. 3 HTCLs and 3 fungi. // *

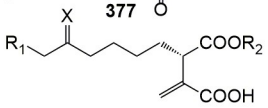
370 // N // preussin F // Mod. inhib. IL-6 prod. IA vs. 3 HTCLs and 3 fungi. // *

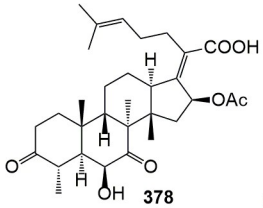
371 // N // preussin G // potent inhib. IL-6 prod. IA vs. 3 HTCLs and 3 fungi. // *

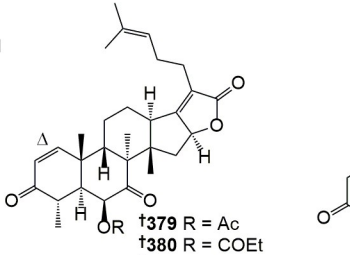
372 // N // preussin H // Mod. inhib. IL-6 prod. IA vs. 3 HTCLs and 3 fungi. // *

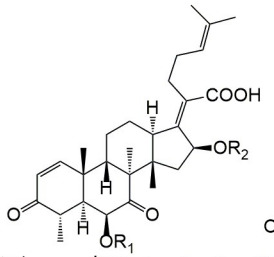
373 // N // preussin I // potent inhib. IL-6 prod. IA vs. 3 HTCLs and 3 fungi. // *

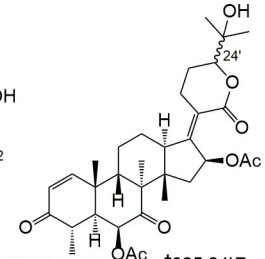


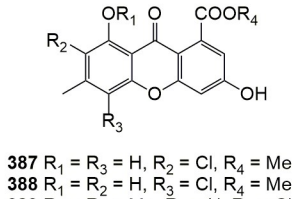












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74 // N // preussin J // potent inhib. IL-6 prod. IA vs. 3 HTCLs and 3 fungi. // *

375 // N // preussin K // Mod. inhib. IL-6 prod. IA vs. 3 HTCLs and 3 fungi. // *

178 Ascomycota *Aspergillus fumigatus* // (deep-sea sediment) Indian Ocean // Bioactive novel indole alkaloids and steroids from deep sea-derived fungus *Aspergillus fumigatus* SCSIO 41012

376 // N // fumigatoside E // Mod. AB vs. 4 strain. potent AF vs. 1 strain, mod. AF vs. 1 strain. // *

377 // N // fumigatoside F // Mod. AB vs. 1 strain. IA AF vs. 2 strain. // *

378 // N // 3,7-diketo-cephalosporin P1 // Weak AB vs. 1 strain. IA AF vs. 2 strain. // *

179 Ascomycota *Aspergillus fumigatus* // (unidentified sponge) Wenchang, Hainan Province, China // Helvolic acid deriv. with AB activ. against *Streptococcus agalactiae* from the marine-derived fungus *Aspergillus fumigatus* HNMF0047

379 // N // 16-*O*-deacetylhelvolic acid 21,16-lactone // IA vs. 4 bact. // *

380 // N // 6-*O*-propionyl-6,16-*O*-dideacetylhelvolic acid 21,16-lactone // IA vs. 4 bact. // *

381 // N // 1,2-dihydro-6,16-*O*-dideacetylhelvolic acid 21,16-lactone // IA vs. 4 bact. // *

382 // N // 1,2-dihydro-16-O-deacetylhelvolic acid 21,16-lactone // IA vs. 4 bact. // *

383 // N // 16-*O*-propionyl-16-*O*-deacetylhelvolic acid // Weak-mod. AB vs. 2 strain. // *

384 // N // 6-*O*-propionyl-6-*O*-deacetylhelvolic acid // Weak-mod. AB vs. 2 strain. // *

385 // R // 6ß,16ß-diacetoxy-25-hydroxy-3,7-dioxo-29-nordammara-1,17(20)-dien-21,24-lactone // IA vs. 4 bact. // *

386 // N // 24-epi-6ß,16ß-diacetoxy-25-hydroxy-3,7-dioxo-29-nordammara-1,17(20)-diene-21,24-lactone // IA vs. 4 bact. // *

180 Ascomycota *Aspergillus iizukae* // (sediment) Kenli, Shandong, China // potential AV xanthones from a coastal saline soil fungus *Aspergillus iizukae*

387 // N // methyl-(2-chloro-l,6-dihydroxy-3-methylxanthone)-8-carboxylate // potent AV vs. 1 strain, weak vs. 2 further strain. // *

388 // N // methyl-(4-chloro-l,6-dihydroxy-3-methylxanthone)-8-carboxylate // potent AV vs. 3 strain. // *

389 // N // methyl-(4-chloro-6-hydroxy-1-methoxy-3-methylxanthone)-8-carboxylate // Weak AV vs. 1 strain, IA vs. 2 further strain. // *

390 // N // methyl-(6-hydroxy-1-methoxy-3-methylxanthone)-8-carboxylate // Weak AV vs. 2 strain, IA vs. 1 further strain. // *

391 // N // 4-chloro-1,6-dihydroxy-3-methylxanthone-8-carboxylic acid // Weak AV vs. 1 strain, IA vs. 2 further strain. // *

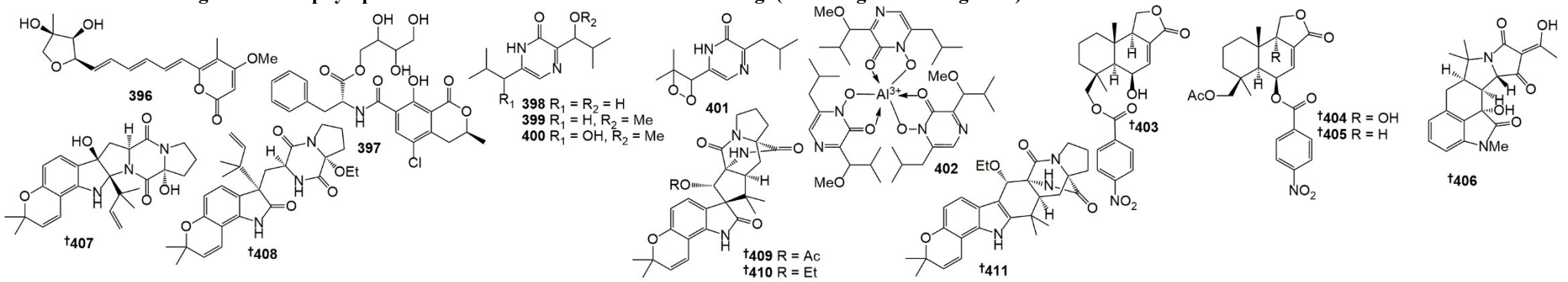
392 // M // 2,4-dichloro-1,6-dihydroxy-3-methylxanthone-8-carboxylic acid // Weak AV vs. 1 strain, IA vs. 2 further strain. // *

181 Ascomycota *Aspergillus niger* // (sponge, *Haliclona* sp.) Linshui, Hainan Province, China // Asperitaconic acids A–C, AB itaconic acid deriv. produced by a marine-derived fungus of the genus *Aspergillus*

393 // N // asperitaconic acid A // Weak-mod. AB vs. 1 bact. IA vs. 2 HTCLs // *

394 // N // asperitaconic acid B // Weak-mod. AB vs. 1 bact. IA vs. 2 HTCLs // *

395 // N // asperitaconic acid C // Weak-mod. AB vs. 1 bact. IA vs. 2 HTCLs // *



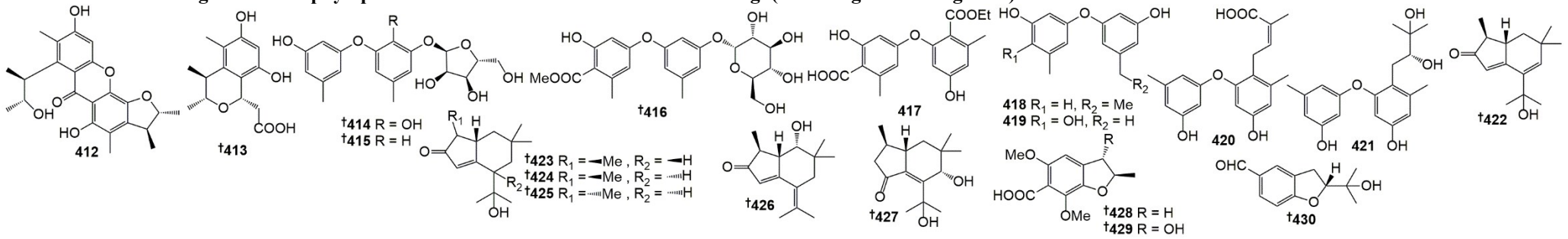
182 Ascomycota *Aspergillus ochraceopetaliformis* // (sponge, *Reniochalina* sp.) Xisha Is., S. China Sea // Trienic a-pyrone and ochratoxin deriv. from a sponge-derived fungus *Aspergillus ochraceopetaliformis*
396 // N // asteltoxin G // Sig. inhib. IL-6 and TNF-α. // *
397 // N // ochratoxin A1 // Sig. inhib. IL-6 and TNF-α. // *

183 Ascomycota *Aspergillus ochraceus* // (soft coral, *Dichotella gemmacea*) Lingao, Hainan, China // Pyrazinone deriv. from the coral-derived *Aspergillus ochraceus* LCJ11-102 under high iodide salt
398 // N // ochramide A // IA vs. 3 HTCLs, 5 bact. and 1 fungus // *
399 // N // ochramide B // Weak AB vs. 1 strain. IA vs. 3 HTCLs, 4 further bact. and 1 fungus // *
400 // N // ochramide C // IA vs. 3 HTCLs, 5 bact. and 1 fungus // *
401 // N // ochramide D // IA vs. 3 HTCLs, 5 bact. and 1 fungus // *
402 // N // ochralate A // Weak AB vs. 1 strain. IA vs. 3 HTCLs, 4 further bact. and 1 fungus // *

184 Ascomycota *Aspergillus ochraceus* // (red alga, *Coelarthrum* sp.) Paracel Is., S. China Sea // Nitrobenzoyl sesquiterpenoids with cytotox. activ. from a marine-derived *Aspergillus ochraceus* fungus
403 // N // insulicolide B // Weak cytotox. vs. 3 HTCLs // *
404 // M // 14-O-acetylinsulicolide A // potent cytotox. vs. 3 HTCLs // *
405 // N // insulicolide C // Weak cytotox. vs. 3 HTCLs // *

185 Ascomycota *Aspergillus oryzae* // (sponge, *Hymeniacidon perleve*) Bohai Sea, Lingshuiqiao, Dalian, China // Characterization and abolishment of the cyclopiazonic acids produced by *Aspergillus oryzae* HMP-F28
406 // N // 3-hydroxysperadine A // NT //

186 Ascomycota *Aspergillus sulphureus*, *Isaria felina*, *Beauveria felina* // (sediment) (*Aspergillus* and *Isaria*) // Prenylated indole alkaloids from co-culture of marine-derived fungi *Aspergillus sulphureus* and *Isaria felina*
407 // N // 17-hydroxynotoamide D // IA vs. 2 HTCLs and 2 NCLs. // *
408 // N // 17-*O*-ethylnotoamide M // Inhib. colony formation in 1 HTCL IA vs. 1 further HTCL and 2 NCLs. // *
409 // N // 10-*O*-acetylsclerotiamide // NT //
410 // N // 10-*O*-ethylsclerotiamide // NT //
411 // N // 10-*O*-ethylnotoamide R // IA vs. 2 HTCLs and 2 NCLs. // *

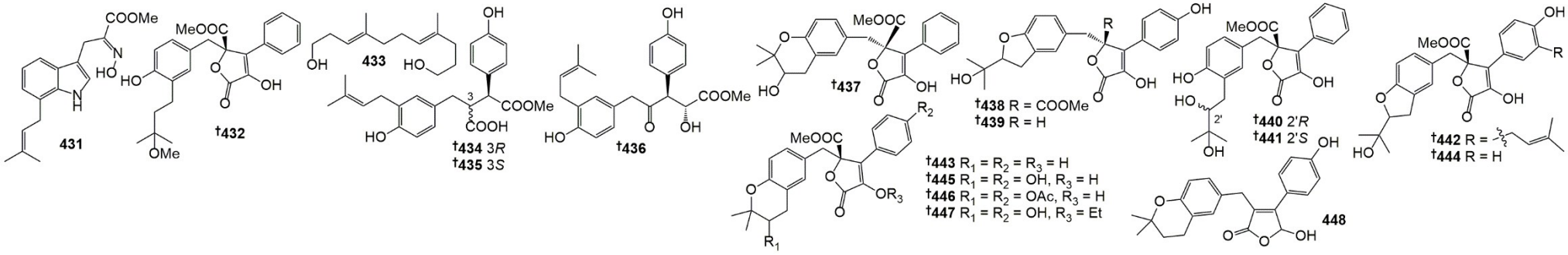


187 Ascomycota *Aspergillus sydowii*, *Penicillium citrinum* // (red alga, *Laurenica okamurai*) Qingdao, China // New citrinin analogues produced by coculture of the marine algal-derived endophytic fungal strain *Aspergillus sydowii* EN-534 and *Penicillium citrinum* EN-535
412 // N // seco-penicitrinol A // Weak AB vs. 2 strain. Weak AV vs. 1 virus. // *
413 // N // penicitrinol L // Weak AB vs. 3 strain. Weak AV vs. 1 virus. // *

188 Ascomycota *Aspergillus sydowii* // (seawater) Xiamen, China // Diphenyl ethers from a marine-derived *Aspergillus sydowii*
414 // N // cordyol C-3-*O*-α-*D*-ribofuranoside // Mod. selective cytotox. vs. 2 HTCLs // *
415 // N // diorcinol-3-*O*-α-*D*-ribofuranoside // IA vs. 8 HTCLs // *
416 // N // 4-methoxycarbonyl diorcinol-3-*O*-α-*D*-glucoside // IA vs. 8 HTCLs // *
417 // N // 2-(ethoxycarbonyl)-4'-carboxydiorcinal // IA vs. 8 HTCLs // *
418 // N // 7-ethyldiorcinol // Weak selective cytotox. vs. 1 HTCL // *
419 // N // 3-hydroxydiorcinol // Weak selective cytotox. vs. 2 HTCLs // *

189 Ascomycota *Aspergillus tennesseensis* // (unidentified marine alga) Qingdao, China // Prenylated diphenyl ethers from the marine algal-derived endophytic fungus *Aspergillus tennesseensis*
420 // N // diorcinol L // Weak AB vs. 3 strain, weak AF vs 4 strain. // *
421 // N // (*R*)-diorcinol B // Weak-mod. AB vs. 4 strain, weak-mod. AF vs 6 strain. // *

190 Ascomycota *Aspergillus terreus* // Chines Forestry Culture Collection Center // Brasilane sesquiterpenoids and dihydrobenzofuran deriv. from *Aspergillus terreus* (CFCC 81836)
422 // N // brasilanone A // IA vs. 5 HTCLs Mod. inhib. NO prod. // *
423 // N // brasilanone B // IA vs. 5 HTCLs No inhib. NO prod. // *
424 // N // brasilanone C // IA vs. 5 HTCLs No inhib. NO prod. // *
425 // N // brasilanone D // IA vs. 5 HTCLs No inhib. NO prod. // *
426 // N // brasilanone E // IA vs. 5 HTCLs Mod. inhib. NO prod. // *
427 // N // brasilanone F // IA vs. 5 HTCLs No inhib. NO prod. // *
428 // N // asperterreusine A // Weak cytotox. vs. 2 HTCLs No inhib. NO prod. // *
429 // N // asperterreusine B // IA vs. 5 HTCLs No inhib. NO prod. // *
430 // N // asperterreusine C // IA vs. 5 HTCLs No inhib. NO prod. // *



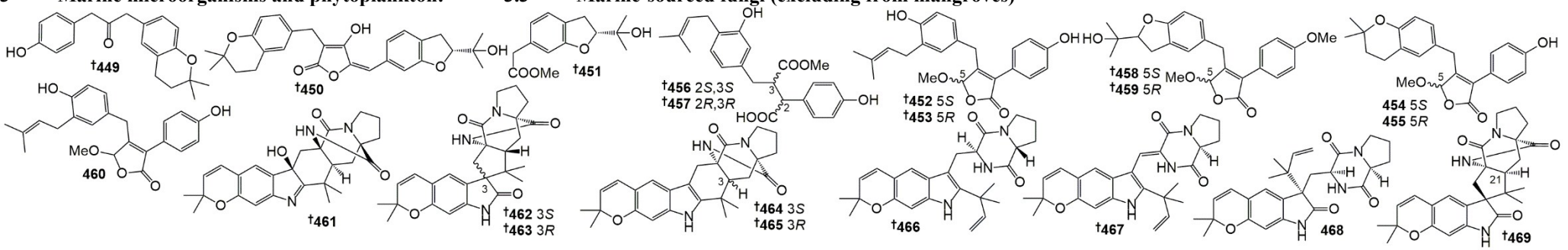
191 Ascomycota *Aspergillus terreus* // (soft coral, *Sarcophyton viride*) Xisha Is., S. China Sea. // Bioactive secondary metabolites from the marine-associated fungus *Aspergillus terreus*
431 // N // luteoride E // Mod. inhib. NO prod. IA vs. 3 bact. and α-glucosidase // *
432 // N // versicolactone G // Mod. inhib. NO prod. IA vs. 3 bact. and α-glucosidase // *
433 // N // (3*E*,7*E*)-4,8-dimethyl-undecane-3,7-diene-1,11-diol // potent inhib. α-glucosidase. Mod. inhib. NO prod. IA vs. 3 bact. // *

192 Ascomycota *Aspergillus terreus* // (sediment) Hainan, China // Open-ring butenolides from a marine-derived anti-neuroinflammatory fungus *Aspergillus terreus* Y10
434 // N // asperteretal G1 // No inhib. TNF-α prod. IA vs. 1 murine NCL. // *
435 // N // asperteretal G2 // No inhib. TNF-α prod. IA vs. 1 murine NCL. // *
436 // N // asperteretal H // No inhib. TNF-α prod. IA vs. 1 murine NCL. // *

193 Ascomycota *Aspergillus terreus* // (sediment) Fengxian Bay, Shanghai, China // Butenolides from a marine-derived fungus *Aspergillus terreus* with antitumor activ. against pancreatic ductal adenocarcinoma cells
437 // N // asperlide A // IA vs. 5 HTCLs // *
438 // N // asperlide B // IA vs. 5 HTCLs // *
439 // N // asperlide C // IA vs. 5 HTCLs // *

194 Ascomycota *Aspergillus terreus* // (soft coral, *Sarcophyton subviride*) Xisha Is., S. China Sea // AI butenolide deriv. from the coral-derived fungus *Aspergillus terreus* and structure revisions of aspernolides D and G, butyrolactone VI and 4',8''-diacetoxy butyrolactone VI
440 // N // 8''*R*,9''-diol versicolactone B // No inhib. NO prod. // *
441 // N // 8''*S*,9''-diol versicolactone B // No inhib. NO prod. // *
442 // N // 3'-isoamylene butyrolactone IV // Mod. inhib. NO prod. // *
443 // N // 4'-dehydroxy aspernolide A // No inhib. NO prod. // *
444 // M // aspernolide D // No inhib. NO prod. // *
445 // M // butyrolactone IV // No inhib. NO prod. // *
446 // M // 4',8''-diacetoxy butyrolactone VI // No inhib. NO prod. // *
447 // M // aspernolide G // No inhib. NO prod. // *

195 Ascomycota *Aspergillus terreus* // (sponge, *Phakellia fusca*) Xisha Is., S. China Sea // New butenolide deriv. from the marine sponge-derived fungus *Aspergillus terreus*
448 // N // asperteretal E // potent α-glucosidase inhib. // *



196 Ascomycota Aspergillus terreus // (green alga, *Enteromorpha prolifera*) Qingdao Shilaoren , Shandong, P. R. China) // Chemical-epigenetic to enhance the chemodiversity of the marine algicolous fungus, *Aspergillus terreus* OUCMDZ-2739

449 // N // 1-(2,2-dimethylchroman-6-yl)-3-(4-hydroxyphenyl)propan-2-one // IA vs. α-glucosidase and 2 HTCLs // *

450 // N // (*R*,*E*)-3-(2,2-dimethylchroman-6-yl)-4-hydroxy-5-((2-(2-hydroxypropan-2-yl)-2,3-dihydrobenzofuran-5-yl)methylene)furan-2(5*H*)-one // potent a-glucosidase inhib. IA vs. 2 HTCLs // *

451 // N // methyl (*R*)-2-(2-(2-hydroxypropan-2-yl)-2,3-dihydrobenzofuran-5-yl) acetate // IA vs. α-glucosidase and 2 HTCLs // *

197 Ascomycota *Aspergillus terreus* // (soft coral, *Sarcophyton subviride*) Xisha Is., S. China Sea // α-Glucosidase inhib. from the coral-associated fungus *Aspergillus terreus*

452 // R // (-)-asperteretone B // potent α-glucosidase inhib. // Structural revision

453 // R // (+)-asperteretone B // potent α-glucosidase inhib. // Structural revision

454 // R // (-)-asperteretone D // potent α-glucosidase inhib. // Structure revised

455 // R // (+)-asperteretone D // potent α-glucosidase inhib. // Structure revised

456 // N // (-)-asperteretone A // potent α-glucosidase inhib. // *

457 // N // (+)-asperteretone A // potent α-glucosidase inhib. // *

458 // N // (-)-asperteretone C // potent α-glucosidase inhib. // *

459 // N // (+)-asperteretone C // potent α-glucosidase inhib. // *

460 // N // (±)-asperteretone E // potent α-glucosidase inhib. // *

198 Ascomycota *Aspergillus versicolor* // (sediment) S. China Sea // Asperversiamides, linearly fused prenylated indole alkaloids from the marine-derived fungus *Aspergillus versicolor*

461 // N // asperversiamide A // No inhib. NO prod. and iNOS. IA vs. NCL. // *

462 // N // asperversiamide B // Mod. inhib. NO prod. and iNOS. IA vs. NCL. // *

463 // N // asperversiamide C // No inhib. NO prod. and iNOS. IA vs. NCL. // *

464 // N // asperversiamide D // No inhib. NO prod. and iNOS. IA vs. NCL. // *

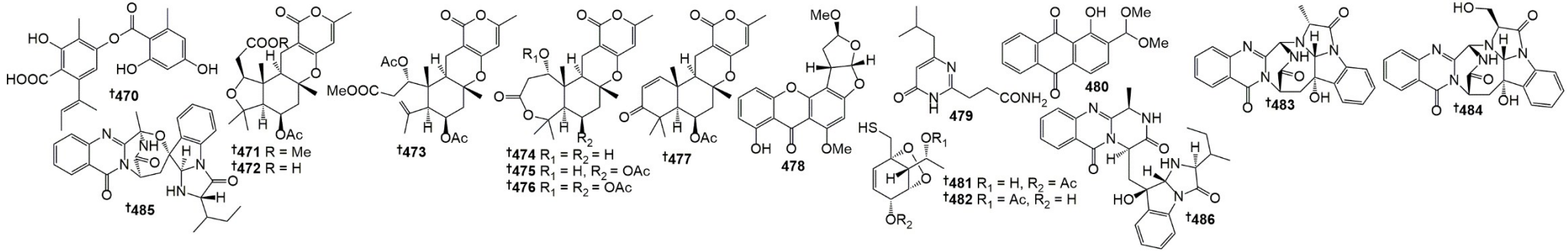
465 // N // asperversiamide E // No inhib. NO prod. and iNOS. IA vs. NCL. // *

466 // N // asperversiamide F // Mod. inhib. NO prod. and iNOS. IA vs. NCL. // *

467 // N // asperversiamide G // Mod. inhib. NO prod. Sig. inhib. iNOS. IA vs. NCL. // *

468 // N // asperversiamide H // No inhib. NO prod. and iNOS. IA vs. NCL. // *

469 // R // iso-notoamide B // No inhib. NO prod. and iNOS. IA vs. NCL. // *



199 Ascomycota *Aspergillus unguis* // (unspecified alga) Dalian, China // Depsidone deriv. and a cyclopeptide produced by marine fungus *Aspergillus unguis* under chemical induc. and by Its plasma induced mutant
470 // N // aspergillusidone G // Mod. AB vs. 3 strain, mod. AF vs. 1 strain. // *

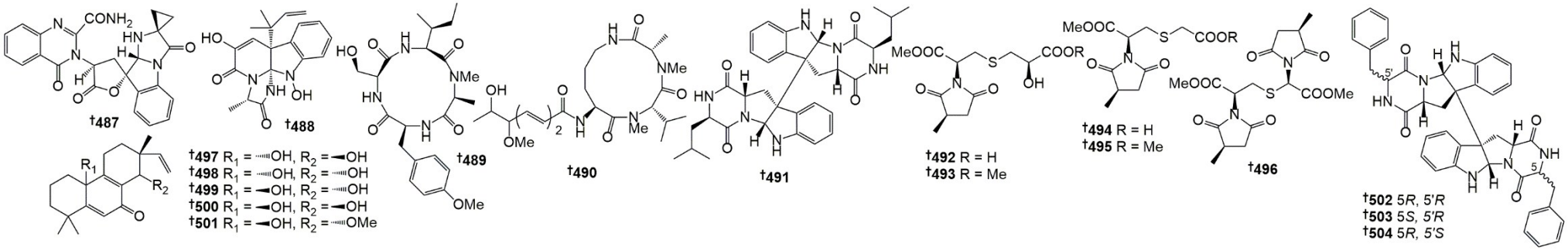
200 Ascomycota *Aspergillus versicolor* // (sediment) S. China Sea // Asperversins A and B, two novel meroterpenoids with an unusual 5/6/6/6 ring from the marine-derived fungus *Aspergillus versicolor*
471 // N // asperversin A // IA vs. 4 HTCLs, 4 bact. and AChE // *
472 // N // asperversin B // IA vs. 4 HTCLs, 4 bact. and AChE // *
473 // N // asperversin C // IA vs. 4 HTCLs, 4 bact. and AChE // *
474 // N // asperversin D // IA vs. 4 HTCLs, 4 bact. and AChE // *
475 // N // asperversin E // IA vs. 4 HTCLs, 4 bact. and AChE // *
476 // N // asperversin F // IA vs. 4 HTCLs, 4 bact. and AChE // *
477 // N // asperversin G // Mod.inhib. AChE. IA vs. 4 HTCLs, and 4 bact. // *

201 Ascomycota *Aspergillus versicolor* // (deep-sea sediment) S. China Sea // Antioxidant xanthones and anthraquinones isol. from a marine-derived fungus *Aspergillus versicolor*
478 // N // oxisterigmatocystin D // Sig. AO (Trolox equivalents). IA vs. 5 HTCLs // *
479 // N // aspergillusine A // NT //

202 Ascomycota *Aspergillus versicolor* // (sediment) West Pacific Ocean // AM activ. and molecular docking studies of a novel anthraquinone from a marine-derived fungus *Aspergillus versicolor*
480 // N // 2-(dimethoxymethyl)-1-hydroxyanthracene-9,10-dione // mod. - potent AB vs 5 strain. // *

203 Ascomycota *Aspergillus versicolor* // (unidentified soft coral) Leizhou Is., Guangdong Province, China // Varicuothiols A and B, new fungal metabolites from *Aspergillus versicolor* with AI activ.
481 // N // varicuothiol A // Signif. inhib. NO prod. and of 3 proinflammatory cytokines. // *
482 // N // varicuothiol B // Signif. inhib. NO prod. and of 3 proinflammatory cytokines. // *

204 Ascomycota *Aspergillus versicolor* // (gorgonian, *Pseudopterogorgia* sp.) S. China Sea // Versiquinazolines L–Q, new polycyclic alkaloids from the marine-derived fungus *Aspergillus versicolor*
483 // N // versiquinazoline L // Weak cytotox. vs. 1 HTCL Weak inhib. thioredoxin reductase (TrxR) // *
484 // N // versiquinazoline M // Weak cytotox. vs. 1 HTCL Weak inhib. thioredoxin reductase (TrxR) // *
485 // N // versiquinazoline N // Weak cytotox. vs. 1 HTCL Weak inhib. thioredoxin reductase (TrxR) // *
486 // N // versiquinazoline O // Weak cytotox. vs. 1 HTCL Weak inhib. thioredoxin reductase (TrxR) // *



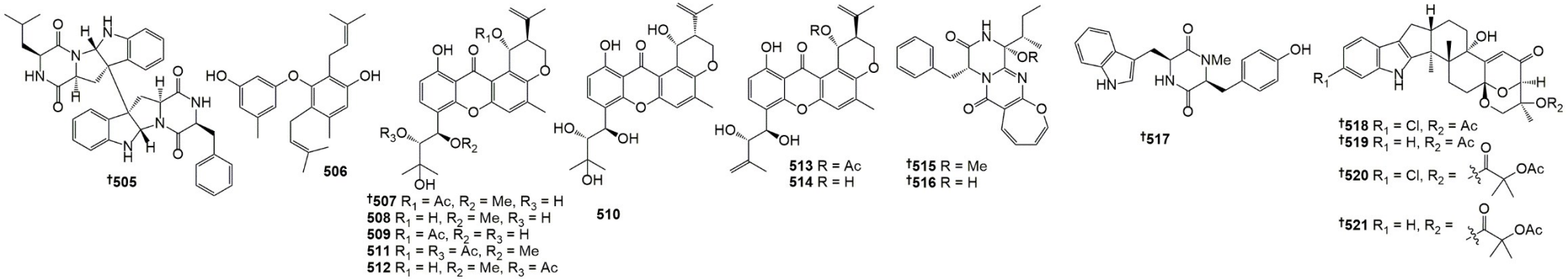
487 // N // versiquinazoline P // Weak cytotox. vs. 1 HTCL potent inhib. thioredoxin reductase (TrxR) // *
488 // N // versiquinazoline Q // Weak cytotox. vs. 1 HTCL potent inhib. thioredoxin reductase (TrxR) // *

205 Ascomycota *Aspergillus violaceofuscus* // (sponge, *Reniochalina* sp.) Xisha Is., S. China Sea // New AI cyclopeptides from a sponge-derived fungus *Aspergillus violaceofuscus*
489 // N // violaceomide A // Sig. inhib. interleukin-10 (IL-10). IA vs. IL-6, monocyte chemoattractant protein 1 (MCP-1) and TNF-α. // *
490 // N // sclerotiotide L // IA vs. IL-6, IL-10, monocyte chemoattractant protein 1 (MCP-1) and TNF-α // *
491 // N // $C_{34}H_{40}N_6O_4$ // Sig. inhib. interleukin-10 (IL-10). IA vs. IL-6, monocyte chemoattractant protein 1 (MCP-1) and TNF-α. // *

206 Ascomycota *Aspergillus violaceus* // (unidentified sponge) S. China Sea // Violaceimides A–E, sulfur-containing metabolites from a sponge-associated fungus *Aspergillus violaceus*
492 // N // violaceimide A // Selective cytotox. vs. 2 HTCLs IA vs. 1 NCL and 1 bact. // *
493 // N // violaceimide B // Selective cytotox. vs. 2 HTCLs IA vs. 1 NCL and 1 bact. // *
494 // N // violaceimide C // IA vs. 3 HTCLs, 1 NCL and 1 bact. // *
495 // N // violaceimide D // IA vs. 3 HTCLs, 1 NCL and 1 bact. // *
496 // N // violaceimide E // Weak cytotox. vs. 1 HTCL IA vs. 1 NCL and 1 bact. // *

207 Ascomycota *Aspergillus wentii* // (deep-sea sediment) S. China Sea // 20-Nor-isopimarane epimers produced by *Aspergillus wentii* SD-310, a fungal strain obtained from deep sea sediment
497 // N // aspewentin I // Weak-mod. AB vs. 4 strain. // *
498 // N // aspewentin J // Weak-mod. AB vs. 4 strain. // *
499 // N // aspewentin K // Weak AB vs. 2 strain. // *
500 // N // aspewentin L // Weak AB vs. 2 strain. // *
501 // N // aspewentin M // potent AB vs. 1, weak AB vs.2 strain. // *

208 Ascomycota *Aspergillus* sp // (shrimp) Dinghai, Zhoushan, Zhejiang Province of China // New asymmetrical bispyrrolidinoindoline diketopiperazines from the marine fungus *Aspergillus* sp. DX4H
502 // N // $C_{40}H_{36}N_6O_4$ // Weak cytotox. vs. 1 HTCL // *
503 // N // $C_{40}H_{36}N_6O_4$ // Weak cytotox. vs. 1 HTCL // *
504 // N // $C_{40}H_{36}N_6O_4$ // Weak cytotox. vs. 1 HTCL // *



209 Ascomycota *Aspergillus* sp // (unidentified sponge) Cheju Is., Korea // Isolation and structure determination of a new diketopiperazine dimer from marine-derived fungus *Aspergillus* sp. SF-5280
505 // N // SF5280-415 // NT // *

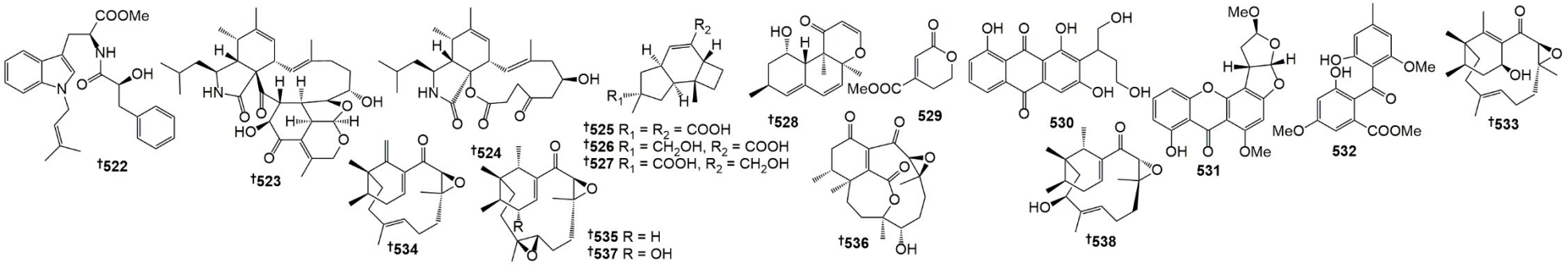
210 Ascomycota *Aspergillus* sp // (sediment) Bohai Sea, Tianjin, China // Diphenyl ethers from a marine-derived isolate of *Aspergillus* sp. CUGB-F046
506 // N // diorcinol K // Mod. AB vs 2 strain. // *

211 Ascomycota *Aspergillus* sp // (sediment) Bohai Sea of Huanghuagang, Hebei Province, China // Absolute config. of 14,15-hydroxylated prenylxanthones from a marine-derived *Aspergillus* sp. fungus by chiroptical methods
507 // N // aspergixanthone A // potent and selective cytotox. vs. 1 HTCL IA vs. 4 bact. // *
508 // N // aspergixanthone B // IA vs. 5 HTCLs and 4 bact. // *
509 // N // aspergixanthone C // Sig. cytotox. vs. 5 HTCLs IA vs. 4 bact. // *
510 // N // aspergixanthone D // IA vs. 5 HTCLs and 4 bact. // *
511 // N // aspergixanthone E // IA vs. 5 HTCLs and 4 bact. // *
512 // N // aspergixanthone F // Sig. cytotox. vs. 5 HTCLs IA vs. 4 bact. // *
513 // N // aspergixanthone G // potent AB vs. 1 strain, mod. AB vs. 3 strain. IA vs. 5 HTCLs // *
514 // N // aspergixanthone H // Mod. AB. vs. 4 strain. IA vs. 5 HTCLs // *

212 Ascomycota *Aspergillus* sp // (sponge, *Callyspongia* sp.) Xuwen County, Guangdong Province, China // Protuboxepin C and protuboxepin D from the sponge-derived fungus *Aspergillus* sp SCSIO XWS02F40
515 // N // protuboxepin C // Weak cytotox. vs. 1 HTCL // *
516 // N // protuboxepin D // Weak cytotox. vs. 1 HTCL // *

213 Ascomycota *Aspergillus* sp // (deep-sea annelid, *Osedax* sp.) São Paulo Ridge // Quellenin, a new anti-*Saprolegnia* cpd isol. from the deep-sea fungus, *Aspergillus* sp. YK-76
517 // N // quellenin // Weak anti-saprolegniasis activ. IA vs. 3 bact. and 1 fungus // *

214 Ascomycota *Aspergillus* sp // (unidentified coloinial ascidian) Shikotan Is., Pacific Ocean // Asperindoles A–D and a *p*-terphenyl deriv. from the ascidian-derived fungus *Aspergillus* sp. KMM 4676
518 // N // asperindole A // Weak-mod. cytotox. vs. 3 HTCLs // *
519 // N // asperindole B // NT // *
520 // N // asperindole C // IA vs. 3 HTCLs // *
521 // N // asperindole D // NT // *



215 Ascomycota *Aspergillus* sp // (unidentified sponge) Xuwen County, Guangdong Province, China // Isolation and synth. of misszrtine A: a novel indole alkaloid from marine sponge-associated *Aspergillus* sp. SCSIO XWS03F03

522 // N // misszrtine A // Mod. Cytotox. vs. 2 HTCLs IA vs. COX-1, COX-2, 1 virus and TB. // *

216 Ascomycota *Aspergillus* sp // (isopod, *Ligia oceanica*) Dinghai, Zhoushan, Zhejiang Province, China // Two novel aspochalasins from the gut fungus *Aspergillus* sp. Z4

523 // N // tricochalasin A // IA vs. 1 HTCL // *

524 // N // aspochalasin A2 // IA vs. 1 HTCL // *

217 Ascomycota *Aspergillus* sp // (bivalve mollusc, *Sanguinolaria chinensis*) Haikou Bay, Hainan province, China // Chemical constituents of the marine-derived fungus *Aspergillus* sp. SCS-KFD66

525 // N // asperpene A // IA vs. 4 bact., AchE and α-glucosidase. Weak AO (DPPH assay). // *

526 // N // asperpene B // IA vs. 4 bact., AchE and α-glucosidase. No AO (DPPH assay). // *

527 // N // asperpene C // IA vs. 4 bact., AchE and α-glucosidase. Weak AO (DPPH assay). // *

528 // N // 12,13-dedihydroversiol // IA vs. 4 bact., AchE and α-glucosidase. Weak AO (DPPH assay). // *

529 // N // methyl 6-oxo-3, 6-dihydro-2*H*-pyran-4-carboxylate // IA vs. 4 bact., AchE and α-glucosidase. No AO (DPPH assay). // *

218 Ascomycota *Aspergillus* sp // (sponge, *Callyspongi*a sp.) Xuwen County, Guangdong Province, China // Polyketide-derived metabolites from the sponge-derived fungus *Aspergillus* sp. F40

530 // N // versiconol B // Weak AB vs. 2 strain. // *

531 // N // oxisterigmatocystin I // IA vs. 2 bact. // *

219 Ascomycota *Aspergillus* sp // (hydrothermal vent sediment) Kueishantao, Taiwan // Bioactive metabolites from a hydrothermal vent fungus *Aspergillus* sp YQ-13

532 // N // 3-hydroxy-2-(2-hydroxy-6-methoxy-4-methylbenzoyl)-5-methoxy-benzoic acid methyl ester // Weak AB vs. 1 strain. Mod. AO via DPPH and Ferric Reducing Antioxidant Power (FRAP) assays. // *

220 Ascomycota *Biatriospora* sp // (sponge, *Dragmacidon reticulatum*) Búzios Is., Brazil // Isolation, synth. and bioactiv. studies of phomactin terpenoids

533 // N // phomactin Q // NT // *

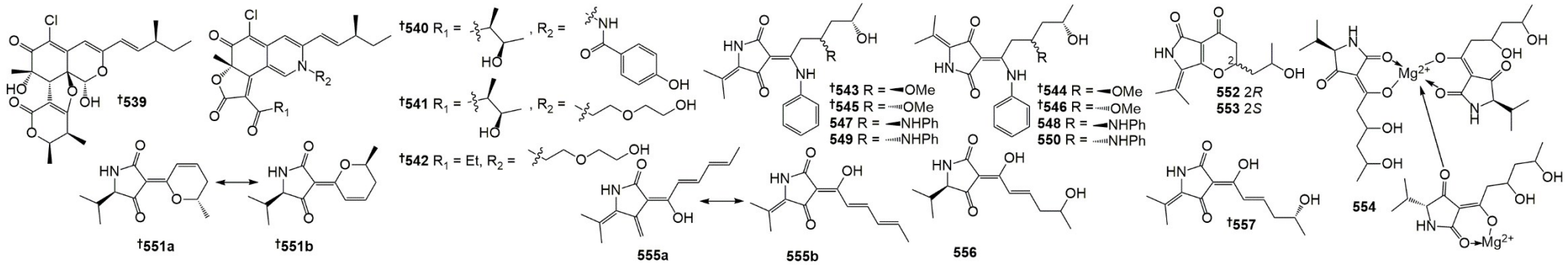
534 // N // phomactin R // potent inhib. platelet activating factor receptor (PAFR). potent inhib. tumour cell repopulation. // *

535 // N // phomactin S // potent inhib. platelet activating factor receptor (PAFR). potent inhib. tumour cell repopulation. // *

536 // N // phomactin T // NT // *

537 // N // phomactin U // Mod. inhib. platelet activating factor receptor (PAFR). Mod. inhib. tumour cell repopulation. // *

538 // N // phomactin V // potent inhib. platelet activating factor receptor (PAFR). Mod. inhib. tumour cell repopulation. // *



221 Ascomycota *Chaetomium* sp // (seawater) West Pacific Ocean // Chlorinated azaphilone pigments with AM and cytotox. activ. isol. from the deep sea derived fungus *Chaetomium* sp. NA-S01-R1

539 // N // chaephilone C // Weak cytotox. vs. 3 HTCLs Signif. AB vs. 2 MRSA strain, weak AB vs. 2 strain. // *

540 // N // chaetoviridide A // Sig. cytotox. vs. 1 HTCL, weak cytotox. vs. 2 HTCLs Mod. AB vs. 2 MRSA strain, Sig. AB vs. 1 strain. // *

541 // N // chaetoviridide B // Weak cytotox. vs. 3 HTCLs Signif. AB vs. 2 MRSA strain, mod. AB vs. 2 strain. // *

542 // N // chaetoviridide C // Weak cytotox. vs. 3 HTCLs Signif. AB vs. 2 MRSA strain, mod. AB vs. 2 strain. // *

222 Ascomycota *Cladosporium sphaerospermum* // (sediment) Mariana Trench, Pacific Ocean // Aniline-tetramic acids from the deep-sea-derived fungus *Cladosporium sphaerospermum* L3P3 cultured with the HDAC inhib. SAHA

543 // N // (*E*)-cladosin H // IA vs. 6 HTCLs // Tested as mixt.

544 // N // (*Z*)-cladosin H // IA vs. 6 HTCLs // Tested as mixt.

545 // N // (*E*)-cladosin I // Mod.-sig. cytotox. vs.6 HTCLs // Tested as mixt.

546 // N // (*Z*)-cladosin I // Mod.-sig. cytotox. vs.6 HTCLs // Tested as mixt.

547 // N // (*E*)-cladosin J // Sig. cytotox. vs.2 HTCLs // Tested as mixt.

548 // N // (*Z*)-cladosin J // Sig. cytotox. vs.2 HTCLs // Tested as mixt.

549 // N // (*E*)-cladosin K // Mod.-sig. cytotox. vs. 4 HTCLs // Tested as mixt.

550 // N // (*Z*)-cladosin K // Mod.-sig. cytotox. vs. 4 HTCLs // Tested as mixt.

223 Ascomycota *Cladosporium sphaerospermum* // (sediment) East Indian Ocean // Unstable tetramic acid deriv. from the deep-sea-derived fungus *Cladosporium sphaerospermum* EIODSF 008

551a // N // cladosporiumin I // IA vs. 3 HTCLs and 3 bact. // 2 versions (exchangeable isomers)

551b // N // cladosporiumin I // IA vs. 3 HTCLs and 3 bact. // 2 versions (exchangeable isomers)

552 // N // cladosporiumin J // IA vs. 3 HTCLs and 3 bact. // *

553 // N // cladosporiumin K // IA vs. 3 HTCLs and 3 bact. // *

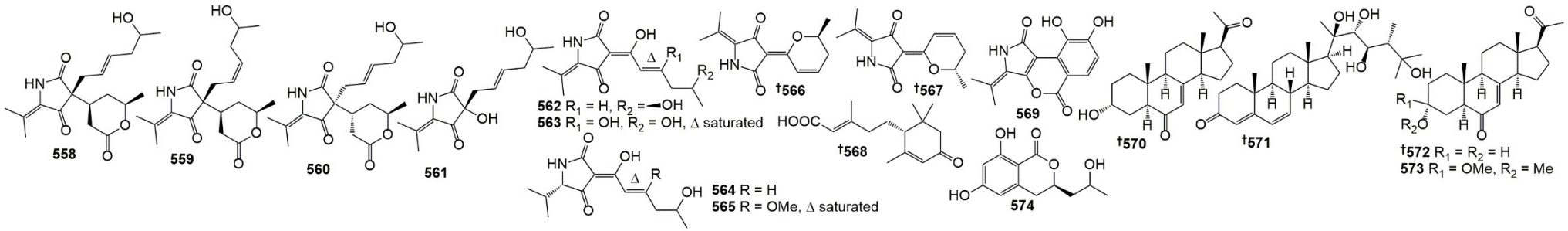
554 // N // cladosporiumin L // IA vs. 3 HTCLs and 3 bact. // *

555a // N // cladosporiumin M // IA vs. 3 HTCLs and 3 bact. // 2 versions (exchangeable isomers)

555b // N // cladosporiumin M // IA vs. 3 HTCLs and 3 bact. // 2 versions (exchangeable isomers)

556 // N // cladosporiumin N // IA vs. 3 HTCLs and 3 bact. // *

557 // N // cladosporiumin O // IA vs. 3 HTCLs and 3 bact. // *



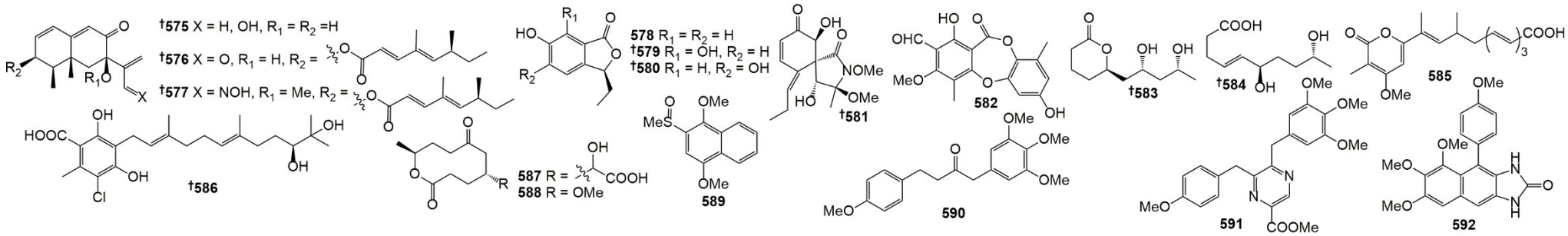
224 Ascomycota *Cladosporium* sp // (deep-sea sediment) Okinawa Trough, Japan // New tetramic acid deriv. from the deep-sea-derived fungus *Cladosporium* sp. SCSIO z0025
558 // N // cladosporiumin A // IA vs. 3 HTCLS, 3 bact., 1 fungus and AChE. // *
559 // N // cladosporiumin B // IA vs. 3 HTCLS, 3 bact., 1 fungus and AChE. // *
560 // N // cladosporiumin C // IA vs. 3 HTCLS, 3 bact., 1 fungus and AChE. // *
561 // N // cladosporiumin D // IA vs. 3 HTCLS, 3 bact., 1 fungus and AChE. // *
562 // N // cladosporiumin E // IA vs. 3 HTCLS, 3 bact., 1 fungus and AChE. // *
563 // N // cladosporiumin F // IA vs. 3 HTCLS, 3 bact., 1 fungus and AChE. // *
564 // N // cladosporiumin G // IA vs. 3 HTCLS, 3 bact., 1 fungus and AChE. // *
565 // N // cladosporiumin H // IA vs. 3 HTCLS, 3 bact., 1 fungus and AChE. // *

225 Ascomycota *Cladosporium* sp // (unidentified sponge) Xisha Is., P.R. China // Cladodionen, a cytotox. hybrid polyketide from the marine-derived *Cladosporium* sp. OUCMDZ-1635
566 // N // (*E*)-cladodionen // Weak-mod. cytotox. vs. 4 HTCLs IA vs. 4 bact. and 1 fungus // *
567 // N // (*Z*)-cladodionen // Weak-mod. cytotox. vs. 4 HTCLs IA vs. 4 bact. and 1 fungus // *
568 // N // cladosacid // IA vs. 6 HTCLs, 4 bact. and 1 fungus // *

226 Ascomycota *Cladosporium* sp // (unidentified sponge) Manado, Indonesia // Cladosporamide A, a new protein tyrosine phosphatase 1B inhib., produced by an Indonesian marine sponge-derived *Cladosporium* sp.
569 // N // cladosporamide A // Weak inhib. PTP1B and T-cell PTP. // *

227 Ascomycota *Cladosporium* sp // (gorgonian, *Dichotella gemmacea*) Weizhou Is. coral reef, S. China Sea // A new AV pregnane from a gorgonian-derived *Cladosporium* sp. fungus
570 // N // 3a-hydroxy-7-ene-6,20-dione // potent AV vs. 1 strain, Weak AchE inhib. IA vs. 8 bact. // *

228 Ascomycota *Cladosporium* sp // (sponge, Callyspongia sp.) Xuwen County, Guangdong Province, China // Three new highly oxygenated sterols and one new dihydroisocoumarin from the marine sponge-derived fungus *Cladosporium* sp . SCSIO41007
571 // N // cladosporisteroid A // NT //
572 // N // cladosporisteroid B // Weak AV vs. 1 strain. IA vs. 3 HTCLs // *
573 // N // cladosporisteroid C // IA vs. 1 virus and 3 HTCLs // *
574 // N // (3*R*)-3-(2-hydroxypropyl)-6,8-dihydroxy-3,4-dihydroisocoumarin // NT // *



229 Ascomycota *Cochliobolus lunatus*, *Curvularia lunata* // (red alga, *Coelarthrum* sp.) Yongxing Is., S. China Sea // Cytotox. and AB eremophilane sesquiterpenes from the marine-derived fungus *Cochliobolus lunatus* SCSIO41401

575 // N // dendryphiellin H // IA vs. 5 HTCLs and 4 bact. // *

576 // N // dendryphiellin I // Sig. cytotox. vs. 5 HTCLs, potent AB vs. 1 strain, mod. AB vs. 2 strain. // *

577 // N // dendryphiellin J // Sig. cytotox. vs. 2 HTCLs, mod. cytotox. vs. 2 HTCLs, IA AB vs. 4 strain. // *

578 // M // (*S*)-3-ethyl-6-hydroxyphthalide // IA vs. 5 HTCLs and 4 bact. // *

579 // N // *(S)*-3-ethyl-6,7-dihydroxyphthalide // IA vs. 5 HTCLs and 4 bact. // *

580 // N // (*S*)-3-ethyl-5,6-dihydroxyphthalide // Weak cytotox. vs. 2 HTCLs IA AB vs. 4 strain. // *

230 Ascomycota *Cochliobolus lunatus* // (unspecified alga) Yongxing Is., S. China Sea // Spirostaphylotrichin X from a marine-derived fungus as an anti-influenza agent targeting RNA polymerase PB2

581 // N // spirostaphylotrichin X // Sig. inhib. 5 strain influenza A (IAV). IA vs. 5 HTCLs, 4 bact. and germination inhib. 2 plant seeds. // *

231 Ascomycota *Curvularia* sp // (fish, white croaker) unspecified location. // Curdepsidone A, a depsidone from the marine-derived endophytic fungus *Curvularia* sp. IFB-Z10

582 // N // curdepsidone A // Sig. cytotox. vs. 2 HTCLs // *

232 Ascomycota *Cylindrocarpo*n sp // (driftwood) Shonai, Yamagata Prefecture, Japan // Spectroscopic characterisation of two polyketide metabolites from *Cylindrocarpon* sp. from driftwood

583 // N // (5*R*,7*R*,9*R*)-7,9-dihydroxy-5-decanolide // IA vs. several bact. and fungi // *

584 // N // (4*E*,6*R*,9*R*)-dihydroxydec-4-enoic acid // Weak AB vs. 1 strain, weak AF vs 1 strain. // *

233 Ascomycota *Cylindrocarpon* sp // (driftwood) Shonai, Yamagata Prefecture, Japan // New metabolites produced by *Cylindrocarpon* sp. SY-39 from a driftwood

585 // N // cylindropyrone A // IA vs. 2 HTCLs, 3 bact. and 1 fungus No phytotoxicity to seed germination or lettuce radicles. // *

586 // N // 10'-hydroxyilicicolinic acid D // IA vs. 2 HTCLs and 1 fung Mod. AB vs. 1 strain. No phytotoxicity to seed germination or lettuce radicles // *

587 // N // cylindrolactone A // IA vs. 2 HTCLs, 3 bact. and 1 fungus No phytotoxicity to seed germination or lettuce radicles. // *

588 // N // cylindrolactone B // IA vs. 2 HTCLs, 3 bact. and 1 fungus No phytotoxicity to seed germination or lettuce radicles. // *

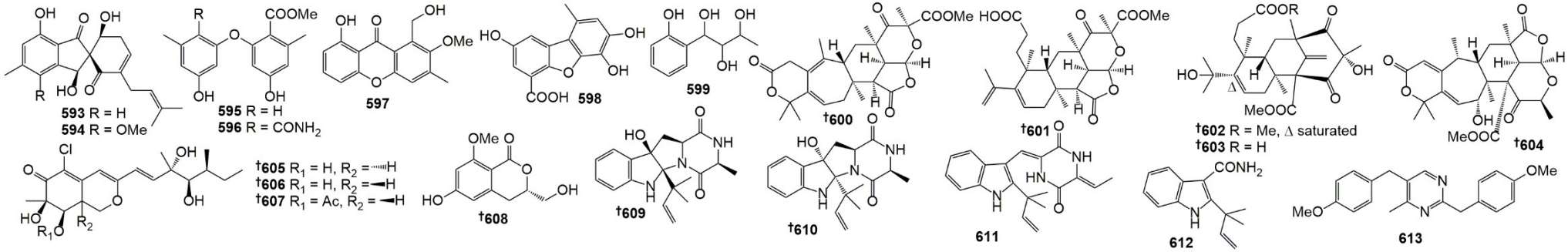
234 Ascomycota *Dichotomomyces cejpii*, *Aspergillus cejpii* // (soft coral, *Lobophytum crassum*) Hainan Sanya National Coral Reef Reserve, P. R. China // Polyketides and alkaloids from the marine-derived fungus *Dichotomomyces cejpii* F31-1 and the AV activ. of scequinadoline A against dengue virus

589 // N // dichocetide B // NT // *

590 // N // dichocetide C // NT // *

591 // N // dichotomocej E // NT // *

592 // N // dichotomocej F // NT // *

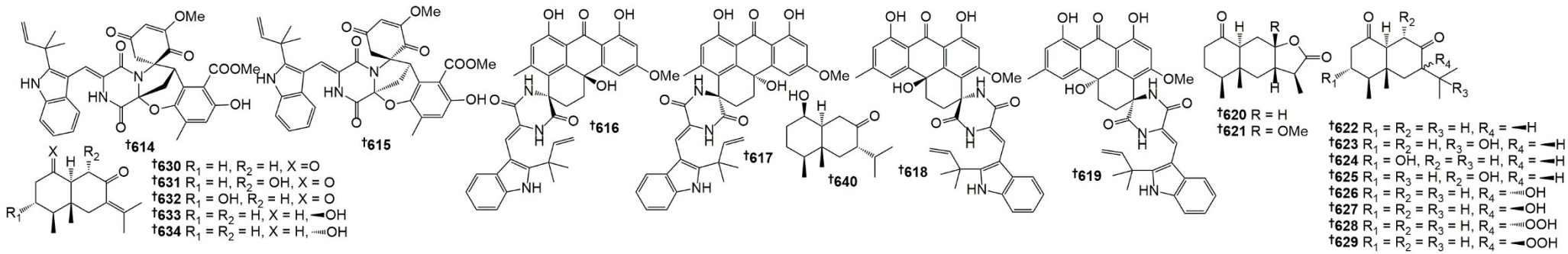


235 Ascomycota // (sponge, *Callyspongia* sp.) Xuwen County, Guangdong Province, China // Phenol deriv. from the sponge-derived fungus *Didymellaceae* sp. SCSIO F46
593 // N // coleophomone E // IA vs. 10 HTCLs No inhib. COX-2. // *
594 // N // coleophomone F // IA vs. 10 HTCLs No inhib. COX-2. // *
595 // N // diorcinol L // Weak - mod. cytotox. vs. 9 HTCLs No inhib. COX-2. // *
596 // N // diorcinol M // IA vs. 10 HTCLs No inhib. COX-2. // *
597 // N // 1-hydroxy-6-methyl-11-methoxy-8-hydroxymethylxanthone // IA vs. 10 HTCLs No inhib. COX-2. // *
598 // N // porric acid E // IA vs. 10 HTCLs Sig. inhib. COX-2. // *
599 // N // 7-(2-hydroxyphenyl) butane-7,8,9-triol // IA vs. 10 HTCLs No inhib. COX-2. // *

236 Ascomycota *Eupenicillium* sp // (sponge, *Plakortis simplex*) Yongxing Is., China // 3,5-Dimethylorsellinic acid derived meroterpenoids from *Eupenicillium* sp. 6A-9, a fungus isol. from the marine sponge *Plakortis simplex*
600 // N // eupeniacetal A // Signif. TNF-α inhib. IA vs. 4 HTCLs and 3 bact. // *
601 // N // eupeniacetal B // Signif. TNF-α inhib. IA vs. 4 HTCLs and 3 bact. // *
602 // N // 1-methoxy-hydropreaustinoid A1 // Signif. TNF-α inhib. IA vs. 4 HTCLs and 3 bact. // *
603 // N // hydroberkeleyone B // Signif. TNF-α inhib. IA vs. 4 HTCLs and 3 bact. // *
604 // N // 22-deoxy-10-oxominiolutelide B // NT // Exists in equilibrium with known cpd 22-deoxy-miniolutelide B.

237 Ascomycota *Eupenicillium* sp // (sponge, *Plakortis simplex*) Yongxing Is., China // Azaphilone and isocoumarin deriv. from the sponge-derived fungus *Eupenicillium* sp. 6A-9
605 // N // eupenicilazaphilone A // Weak cytotox. vs. 2 HTCLs IA vs 3 bact. // *
606 // N // eupenicilazaphilone B // Weak cytotox. vs. 2 HTCLs IA vs 3 bact. // *
607 // N // eupenicilazaphilone C // Weak cytotox. vs. 2 HTCLs IA vs 3 bact. // *
608 // N // eupenicillin A // Weak cytotox. vs. 2 HTCLs IA vs 3 bact. // *

238 Ascomycota *Eurotium* sp // (sediment) S. China Sea // Eurotiumins A–E, five new alkaloids from the marine-derived fungus *Eurotium* sp. SCSIO F452
609 // N // eurotiumin A // Mod. AO activ. in DPPH assay // *
610 // N // eurotiumin B // Mod. AO activ. in DPPH assay // *
611 // N // eurotiumin C // Signif. AO activ. in DPPH assay // *
612 // N // eurotiumin D // IA AO in DPPH assay // *
613 // N // eurotiumin E // IA AO in DPPH assay // *



239 Ascomycota *Eurotium* sp // (sediment) S. China Sea // Variecolortins A–C, three pairs of spirocyclic diketopiperazine enantiomers from the marine-derived fungus *Eurotium* sp. SCSIO F452

614 // N // (+)-variecolortin A // IA vs. 2 HTCLs Sig. AO in DPPH assay // *

615 // N // (–)-variecolortin A // IA. vs. 2 HTCLs Weak AO in DPPH assay // *

616 // N // (+)-variecolortin B // Mod. cytotox. vs. 2 HTCLs No AO in DPPH assay // *

617 // N // (–)-variecolortin B // IA vs. 2 HTCLs No AO in DPPH assay // *

618 // N // (+)-variecolortin C // Weak cytotox. vs. 2 HTCLs No AO in DPPH assay // *

619 // N // (–)-variecolortin C // IA vs. 2 HTCLs No AO in DPPH assay // *

240 Ascomycota *Eutypella* sp // (deep-sea sediment) S. Atlantic Ocean // Eremophilane-type sesquiterpenoids in a deep-sea fungus *Eutypella* sp. activated by chemical epigenetic manipulation

620 // N // eutyperemophilane A // No inhib. NO prod. // *

621 // N // eutyperemophilane B // Mod. inhib. NO prod. // *

622 // N // eutyperemophilane C // No inhib. NO prod. // *

623 // N // eutyperemophilane D // No inhib. NO prod. // *

624 // N // eutyperemophilane E // No inhib. NO prod. // *

625 // N // eutyperemophilane F // No inhib. NO prod. // *

626 // N // eutyperemophilane G // No inhib. NO prod. // *

627 // N // eutyperemophilane H // No inhib. NO prod. // *

628 // N // eutyperemophilane I // Sig. inhib. NO prod. // *

629 // N // eutyperemophilane J // Sig. inhib. NO prod. // *

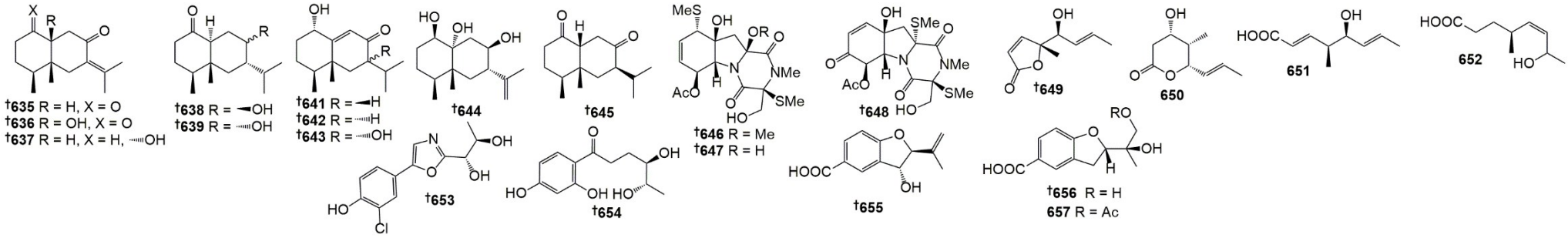
630 // N // eutyperemophilane K // No inhib. NO prod. // *

631 // N // eutyperemophilane L // No inhib. NO prod. // *

632 // N // eutyperemophilane M // No inhib. NO prod. // *

633 // N // eutyperemophilane N // No inhib. NO prod. // *

634 // N // eutyperemophilane O // No inhib. NO prod. // *

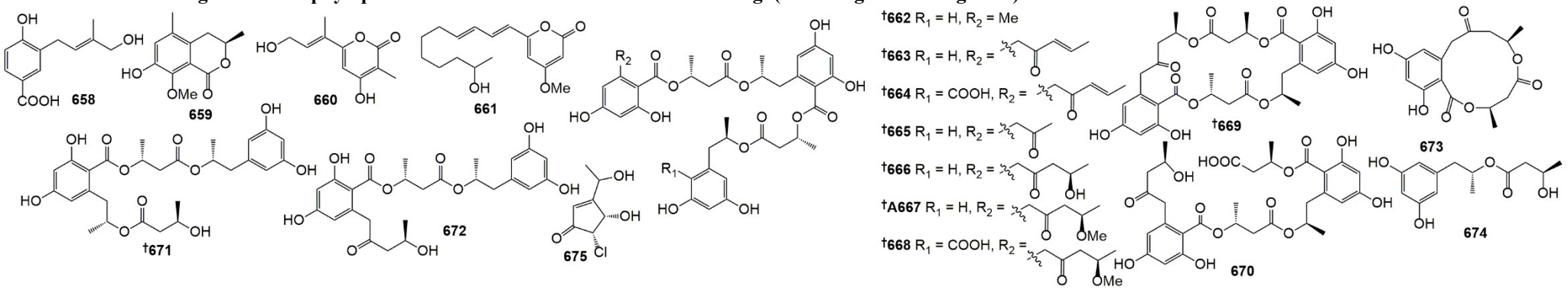


635 // N // eutyperemophilane P // Weak inhib. NO prod. // *
636 // N // eutyperemophilane Q // Weak inhib. NO prod. // *
637 // N // eutyperemophilane R // No inhib. NO prod. // *
638 // N // eutyperemophilane S // Weak inhib. NO prod. // *
639 // N // eutyperemophilane T // No inhib. NO prod. // *
640 // N // eutyperemophilane U // No inhib. NO prod. // *
641 // N // eutyperemophilane V // No inhib. NO prod. // *
642 // N // eutyperemophilane W // Mod. inhib. NO prod. // *
643 // N // eutyperemophilane X // Weak inhib. NO prod. // *
644 // N // eutyperemophilane Y // No inhib. NO prod. // *
645 // N // eutyperemophilane Z // No inhib. NO prod. // *

241 Ascomycota *Geosmithia pallida* // (deep-sea sediment) S. China Sea // Geospallins A–C: new thiodiketopiperazines with inhib. activ. against angiotensin-converting enzyme from a deep-sea-derived fungus *Geosmithia pallida* FS140
646 // N // geospallin A // Mod. inhib. angiotensin converting enzyme (ACE). IA vs. α-glucosidase. // *
647 // N // geospallin B // Mod. inhib. angiotensin converting enzyme (ACE). IA vs. α-glucosidase. // *
648 // N // geospallin C // Mod. inhib. angiotensin converting enzyme (ACE). IA vs. α-glucosidase. // *

242 Ascomycota *Gliomastix* sp // (sponge, *Phakellia fusca*) Xisha Is., S. China Sea // Four new C9 metabolites from the sponge-associated fungus *Gliomastix* sp. ZSDS1-F7-2
649 // N // gliomasolide F // Mod. antifoul. vs. barnacle larvae. IA vs. 1 HTCL // *
650 // N // gliomasolide G // IA vs. barnacle larvae and 1 HTCL // *
651 // N // gliomacid A // IA vs. barnacle larvae and 1 HTCL // *
652 // N // gliomacid B // IA vs. barnacle larvae and 1 HTCL // *

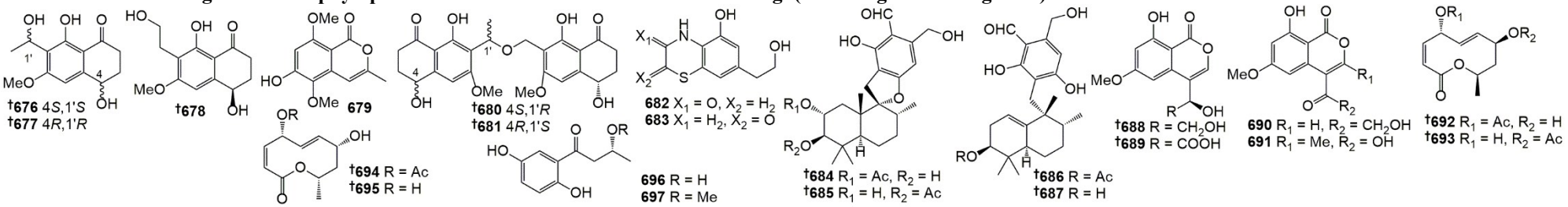
243 Ascomycota *Graphostroma* sp // (deep-sea sediment) Atlantic Ocean // Polyketides from the deep-sea-derived fungus *Graphostroma* sp. MCCC 3A00421 showed potent antifood allergic activ.
653 // N // graphostrin A // IA in RBL-2H3 cell degranulation antiallergy assay // *
654 // N // graphostrin B // IA in RBL-2H3 cell degranulation antiallergy assay // *
655 // N // graphostrin C // IA in RBL-2H3 cell degranulation antiallergy assay // *
656 // N // graphostrin D // IA in RBL-2H3 cell degranulation antiallergy assay // *
657 // N // graphostrin E // IA in RBL-2H3 cell degranulation antiallergy assay // *



658 // N // graphostrin F // IA in RBL-2H3 cell degranulation antiallergy assay // *
659 // N // graphostrin G // IA in RBL-2H3 cell degranulation antiallergy assay // *
660 // N // graphostrin H // IA in RBL-2H3 cell degranulation antiallergy assay // *
661 // N // graphostrin I // IA in RBL-2H3 cell degranulation antiallergy assay // *

244 Ascomycota *Hansfordia sinuosae*, *Ascotricha sinuosa* // (sponge, *Niphates* sp.) S. China Sea // Hansforesters A–M, polyesters from the sponge-associated fungus *Hansfordia sinuosae* with AB activ.
690 // N // hansforester A // Sig. AB vs. 7 strain. // *
663 // N // hansforester B // Weak AB vs. 7 strain. // *
664 // N // hansforester C // Weak AB vs. 1 strain. // *
665 // N // hansforester D // Mod. AB vs. 6 strain, weak AB vs. 1 strain. // *
666 // N // hansforester E // Weak AB vs. 7 strain. // *
667 // N // hansforester F // Weak AB vs. 6 strain. // *
668 // N // hansforester G // Weak AB vs. 1 strain. // *
669 // N // hansforester H // NT // *
670 // N // hansforester I // NT // *
671 // N // hansforester J // NT // *
672 // N // hansforester K // NT // *
673 // N // hansforester L // NT // *
674 // N // hansforester M // NT // *

245 Ascomycota *Trichoderma koningii, Hypocrea koningii* // (sponge, *Haliclona* sp.) Sanya, Hainan Is., China // A new cyclopentenone deriv. from the sponge-associated fungus *Hypocrea koningii*
675 // N // hypocnone A // NT // *



246 Ascomycota *Leptosphaerulina chartarum*, *Pseudopithomyces chartarum* // (unidentified crinoid) Xuwen, Zhanjiang City, Guangdong Province, China // Mono- and dimeric naphthalenones from the marine-derived fungus *Leptosphaerulina chartarum* 3608

676 // N // (+)-leptothalenone A // No inhib. NO prod. IA vs. 3 HTCLs // *

677 // N // (-)-leptothalenone A // No inhib. NO prod. IA vs. 3 HTCLs // *

678 // N // (-)-4,8-dihydroxy-7-(2-hydroxy-ethyl)-6-methoxy-3,4-dihydro-2H-naphthalen-1-one // No inhib. NO prod. IA vs. 3 HTCLs // *

679 // N // 6-hydroxy-5,8-dimethoxy-3-methyl-1H-isochromen-1-one // No inhib. NO prod. IA vs. 3 HTCLs // *

680 // N // (4*S*, 10*R*, 4'*S*)-leptothalenone B // No inhib. NO prod. IA vs. 3 HTCLs // *

681 // N // (4*R*, 10*S*, 4'*S*)-leptothalenone B // Mod. inhib. NO prod. IA vs. 3 HTCLs // *

247 Ascomycota Leptosphaerulina chartarum, *Pseudopithomyces chartarum* // (unidentified crinoid) Xuwen, Zhanjiang City, Guangdong Province, China // Leptothiazinones A and B, two new benzothiazinones from a marine-derived fungus *Leptosphaerulina chartarum* 3608

682 // N // leptothiazinone A // IA vs. 3 HTCLs and 4 bact. No inhib. NO prod. // *

683 // N // leptothiazinone B // IA vs. 3 HTCLs and 4 bact. No inhib. NO prod. // *

248 Ascomycota *Myrothecium* sp // (salt resistant plant, *Apocynum venetum*) Yellow River estuary, Dongying, China // Meroterpenoids and isocoumarinoids from a *Myrothecium* fungus associated with *Apocynum venetum*

684 // N // myrothecisin A // Weak inhib. α-glucosidase. // *

685 // N // myrothecisin B // Weak inhib. α-glucosidase. // *

686 // N // myrothecisin C // Weak inhib. α-glucosidase. // *

687 // N // myrothecisin D // Weak inhib. α-glucosidase. // *

688 // N // myrothelactone A // Weak inhib. α-glucosidase. // *

689 // N // myrothelactone B // IA vs. α-glucosidase. // *

690 // N // myrothelactone C // Weak inhib. α-glucosidase. // *

691 // N // myrothelactone D // IA vs. α-glucosidase. // *

249 Ascomycota *Paraconiothyrium* sp // (unidentified sea cucumber) Cu Lao Cham Is., Hoi An city, Quang Nam province, Vietnam // Macrolide and phenolic metabolites from the marine-derived fungus *Paraconiothyrium* sp. VK-13 with AI activ.

692 // N // modiolide D // No inhib. NO prod. // *

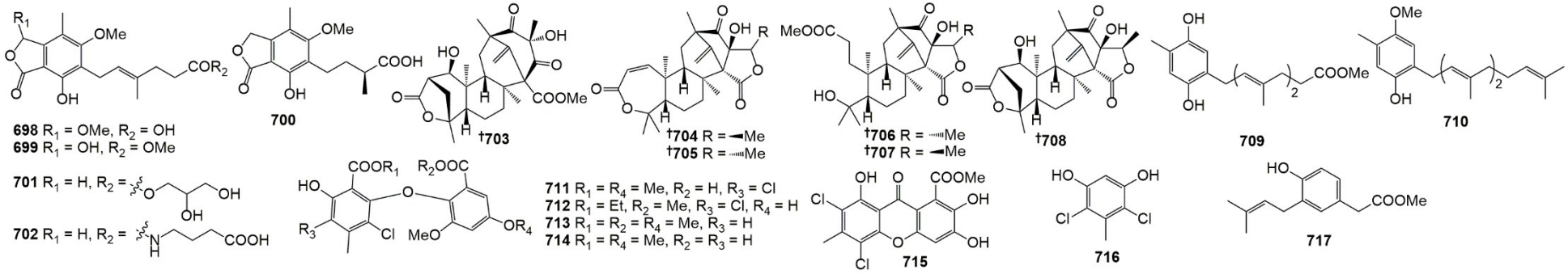
693 // N // modiolide E // No inhib. NO prod. // *

694 // N // modiolide F // No inhib. NO prod. // *

695 // N // modiolide G // No inhib. NO prod. // *

696 // M // 1-(2,5-dihydroxyphenyl)-3-hydroxybutan-1-one // Sig. inhib. NO prod. and other pro-inflammatory cytokines. // *

697 // N // 1-(2,5-dihydroxyphenyl)-3-methoxy-butan-1-one // No inhib. NO prod. // *



250 Ascomycota *Penicillium bialowiezense* // (soft coral, *Sarcophyton subviride*) Xisha Is., S. China Sea // Mycophenolic acid deriv. with immunosuppressive activ. from the coral-derived fungus *Penicillium bialowiezense*

698 // N // 6-(5-carboxy-3-methylpent-2-enyl)-7-hydroxy-3,5-dimethoxy-4-methylphthalan-1-one // potent IMPDH inhib. // *

699 // N // 6-(5-methoxycarbonyl-3-methylpent-2-enyl)-3,7-dihydroxy-5-methoxy-4-methylphthalan-1-one // Sig. IMPDH inhib. // *

700 // N // 6-(3-carboxybutyl)-7-hydroxy-5-methoxy-4-methylphthalan-1-one // Sig. IMPDH inhib. // *

701 // N // 6-[5-(2,3-dihydroxy-1-carboxyglyceride)-3-methylpent-2-enyl]-7-hydroxy-5-methoxy-4-methylphthalan-1-one // Sig. IMPDH inhib. // *

702 // N // 6-[5-(1-carboxy-4-*N*-carboxylate)-3-methylpent-2-enyl]-7-hydroxy-5-methoxy-4-methylphthalan-1-one // Sig. IMPDH inhib. // *

251 Ascomycota *Penicillium brasilianum* // (unidentified sponge) Weizhou Is. // Brasilianoids A–F, new meroterpenoids from the sponge-associated fungus *Penicillium brasilianum*

703 // N // brasilianoid A // Stimulates filaggrin and caspase-14 expression. IA vs. 3 HTCLs No inhib. NO prod. // *

704 // N // brasilianoid B // Mod. inhib. NO prod. IA vs. 3 HTCLs // *

705 // N // brasilianoid C // Mod. inhib. NO prod. IA vs. 3 HTCLs // *

706 // N // brasilianoid D // IA vs 3 HTCLs No inhib. NO prod. // *

707 // N // brasilianoid E // IA vs 3 HTCLs No inhib. NO prod. // *

708 // N // brasilianoid F // IA vs 3 HTCLs No inhib. NO prod. // *

252 Ascomycota *Penicllium chrysogenum* // (jellyfish, *Nemopilema nomurai*) S. Korea // An AI PPAR-? agonist from the jellyfish-derived fungus *Penicillium chrysogenum* J08NF-4

709 // N // chrysogenester // AI via peroxidase proliferator-activated receptor (PPAR-γ) agonism. // *

710 // N // 5-farnesyl-2-methyl-1-*O*-methylhydroquinone // No PPAR-γ activ. // *

253 Ascomycota *Pencillium chrysogenum* // (deep-sea sediment) Indian Ocean // New chlorinated diphenyl ethers and xanthones from a deep-sea-derived fungus *Penicillium chrysogenum* SCSIO 41001

711 // N // chrysine A // IA vs. α-glucosidase. // *

712 // N // chrysine B // potent inhib. α-glucosidase. // *

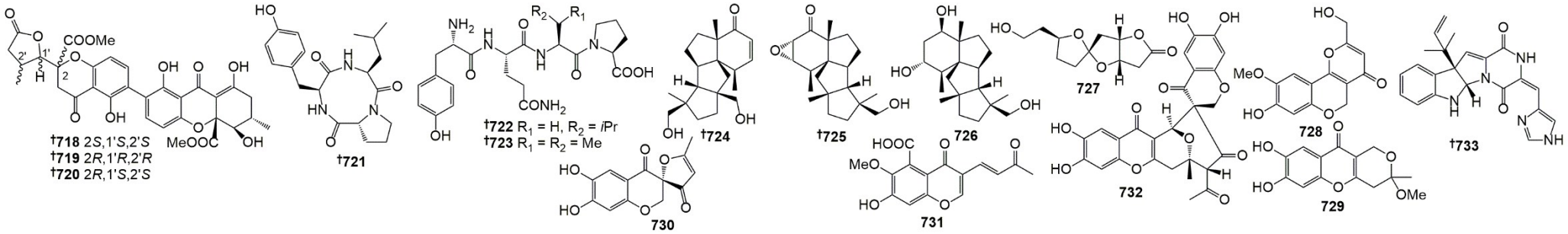
713 // N // chrysine C // potent inhib. α-glucosidase. // *

714 // N // chrysine D // IA vs. α-glucosidase. // *

715 // N // chrysoxanthone // potent inhib. α-glucosidase. // *

716 // M // dichloroorcinol // potent inhib. α-glucosidase. // *

717 // N // 3-isopentyl-4-hydroxy phenylacetic acid methyl ester // IA vs. α-glucosidase. // *



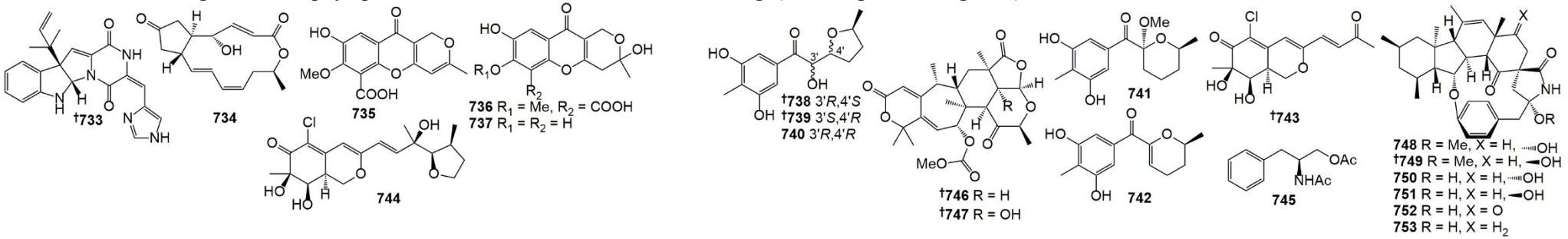
254 Ascomycota *Penicillium chrysogenum* // (sponge, *Gelliodes carnosa*) Lingshui Bay, Hainan Province, China // Chrysoxanthones A–C, three new xanthone–chromanone heterdimers from sponge-associated *Penicillium chrysogenum* HLS111 treated with histone deacetylase inhib.
718 // N // chrysoxanthone A // Mod. AB vs. 1 strain, weak AB. vs. 2 strain. // *
719 // N // chrysoxanthone B // Mod. AB vs. 1 strain. // *
720 // N // chrysoxanthone C // Weak AB vs. 3 strain. // *

255 Ascomycota *Penicillium citrinum* // (sponge, *Petrosia* sp.) unspecified location // Activated prod of silent metabolites from marine-derived fungus *Penicillium citrinum*
721 // N // cyclo-[*L*-Tyr-*L*-Leu-*D*-Pro] // Weak AB vs. 1 strain. IA vs. 5 HTCLs // *
722 // N // $C_{25}H_{37}N_5O_7$ // Weak selective cytotox. vs. 2 HTCLs, IA vs. 1 bact. // *
723 // N // $C_{24}H_{35}N_5O_7$ // Weak selective cytotox. vs. 2 HTCLs, IA vs. 1 bact. // *

256 Ascomycota *Penicillium commune* // (deep-sea sediment) E. Pacific Ocean // Cyclopiane-type diterpenes from the deep-sea-derived fungus *Penicillium commune* MCCC 3A00940
724 // N // conidiogenone J // IA in immunoglobulin E (IgE)-mediated mast cell allergy test. // *
725 // N // conidiogenone K // IA in immunoglobulin E (IgE)-mediated mast cell allergy test. // *
726 // N // conidiogenol B // IA in immunoglobulin E (IgE)-mediated mast cell allergy test. // *
727 // N // cephalosporolide J but this name taken // IA in immunoglobulin E (IgE)-mediated mast cell allergy test. // *

257 Ascomycota *Penicillium erubescens* // (sponge, *Neopetrosia* sp.) Samaesan Is., Thailand // Chromone deriv. and other constituents from cultures of the marine sponge-associated fungus *Penicillium erubescens* KUFA0220 and their AB activ.
728 // N // 1-hydroxy-12-methoxycitromycin // potent AB vs. 1 bact., IA vs. 3 further bact. // *
729 // N // pyanochromone // NT // *
730 // N // erubescenschromone A // potent AB vs. 1 bact., IA vs. 3 further bact. // *
731 // N // 7-hydroxy-6-methoxy-4-oxo-3-[(1*E*)-3-oxobut-1-en-1-yl]-4*H*-chromene-5-carboxylic acid // NT // *
732 // N // erubescenschromone B // NT // *

258 Ascomycota *Penicllium granulatum* // (deep-sea sediment) Prydz Bay, Antarctica // Roquefortine J, a novel roquefortine alkaloid, from the deep-sea-derived fungus *Penicillium granulatum* MCCC 3A00475
733 // N // roquefortine J // Weak cytotox. vs. 1 HTCL // *



259 Ascomycota *Pencillium janthinellum*, *P. simplicissimum* // (sediment) Dongtou County, Zhejiang, China // New brefeldins and penialidins from marine fungus *Penicillium janthinellum* DT-F29

734 // N // brefeldin D // No activation latent HIV. No inhib. bromodomain-containing protein (BRD4). // *

735 // N // penialidin D // No activation latent HIV. No inhib. bromodomain-containing protein (BRD4). // *

736 // N // penialidin E // No activation latent HIV. No inhib. bromodomain-containing protein (BRD4). // *

737 // N // penialidin F // No activation latent HIV. No inhib. bromodomain-containing protein (BRD4). // *

260 Ascomycota *Penicillium raistrickii* // (sediment) Bohai Bay, China // Raistrickiones A-E from a highly productive strain of *Penicillium raistrickii* generated through thermo change

738 // N // raistrickione A // Mod. AO in DPPH assay // *

739 // N // raistrickione B // Mod. AO in DPPH assay // *

740 // N // raistrickione C // Mod. AO in DPPH assay // *

741 // N // raistrickione D // Mod. AO in DPPH assay // *

742 // N // raistrickione E // Mod. AO in DPPH assay // *

261 Ascomycota *Penicillium sclerotiorum* // (unidentified sponge) Shantou, Guangdong Province, China // Penicilazaphilones D and E: two new azaphilones from a sponge-derived strain of the fungus *Penicillium sclerotiorum*

743 // N // penicilazaphilone D // IA vs. 6 bact. and 4 viruses. // *

744 // N // peniciazaphilone E // IA vs. 6 bact. and 4 viruses. // *

262 Ascomycota *Penicillium thomii* // (brown alga, *Sargassum pallidum*) Novik Bay, Russki Is., Sea of Japan // 2(*S*)-Acetamido-3-phenylpropylacetate from marine isolate of the fungus *Penicillium thomii* KMM 4675

745 // M // 2(*S*)-acetamido-3-phenylpropylacetate // IA vs. 2 norm. HCLs. // New NP but known synth.

263 Ascomycota *Penicillium ubiquetum* // (mussel, *Mytilus edulis*) Port Giraud, France // Metabolomics-driven discovery of meroterpenoids from a mussel-derived *Penicillium ubiquetum*

746 // N // 22-deoxyminiolutelide A // IA vs. 2 HTCLs // *

747 // N // 4*S*-hydroxy-22-deoxyminiolutelide B // IA vs. 2 HTCLs // *

264 Ascomycota *Pencillium* sp // (crab, *Pachygrapsus crassipes*) Puto mountain, China // New bioactive pyrrospirones C-I from a marine-derived fungus *Penicillium* sp. ZZ380

748 // N // pyrrospirone C // Weak cytotox. vs. 4 HTCLs Signif. AB vs. 2 strain. // *

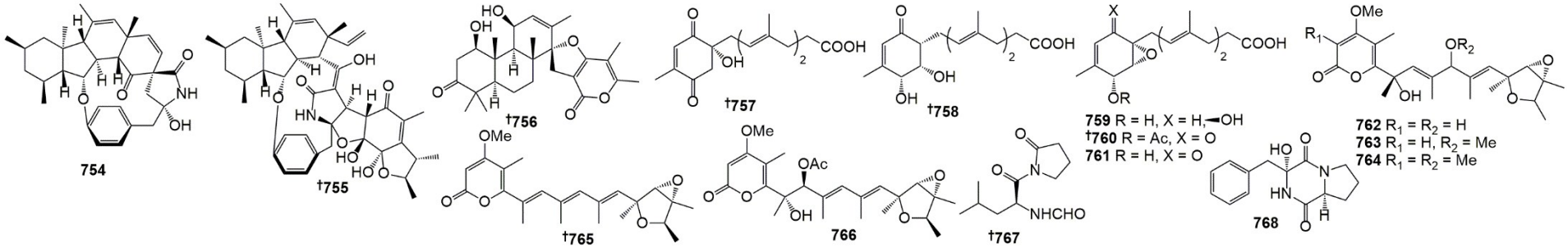
749 // N // pyrrospirone D // Weak cytotox. vs. 4 HTCLs Signif. AB vs. 1 strain, weak AB vs. 1 strain. // *

750 // N // pyrrospirone E // Weak cytotox. vs. 4 HTCLs Weak AB vs. 2 strain. // *

751 // N // pyrrospirone F // Weak cytotox. vs. 4 HTCLs Signif. AB vs. 2 strain. // *

752 // N // pyrrospirone G // potent cytotox. vs. 4 HTCLs IA vs. 2 bact. // *

753 // N // pyrrospirone H // Weak cytotox. vs. 4 HTCLs Signif. AB vs. 1 strain, weak AB vs. 1 strain. // *



754 // N // pyrrospirone I // Weak cytotox. vs. 4 HTCLs Signif. AB vs. 2 strain. // *

265 Ascomycota *Penicllium* sp // (crab, *Pachygrapsus crassipes*) Puto mountain, Zhuoshan, China // Bioactive penicipyrrodiether A, an adduct of GKK1032 analogue and phenol A deriv., from a marine-sourced fungus *Penicillium* sp. ZZ380

755 // N // penicipyrrodiether A // Sig. AB vs. MRSA, weak AB. vs. 1 further strain. Mod. cytotox. vs. 3 HTCLs and 1 murine TCL. // *

266 Ascomycota *Penicillium* sp // (soft coral, *Alcyonium* sp.) Sanya Bay, Hainan Is., China // A new breviane spiroditerpenoid from the marine-derived fungus *Penicillium* sp. TJ403-1

756 // N // brevione O // IA vs. 6 HTCLs and isocitrate dehydrogenase. // *

267 Ascomycota *Penicillium* sp // (seawater) Yap Trench // Peniginsengins B–E, new farnesylcyclohexenones from the deep sea-derived fungus *Penicillium* sp. YPGA11

757 // N // peniginsengin B // IA vs. 2 bact. // *

758 // N // peniginsengin C // Weak AB vs. 2 strain. // *

759 // N // peniginsengin D // Weak AB vs. 1 strain. // *

760 // N // peniginsengin E // Weak AB vs. 2 strain. // *

761 // M // peniginsengin A // NT // *

268 Ascomycota *Penicillium* sp // (hydrothermal vent sediment) Kueishantao, Taiwan // Four verrucosidin deriv. isol. from the hydrothermal vent sulfur-derived fungus *Penicillium* sp. Y-50-10

762 // N // norpenicyrone // Weak AB vs. 1 strain. // *

763 // N // methyl norpenicyrone // Weak AB vs. 1 strain. // *

764 // N // methylpenicyrone // Weak AB vs. 1 strain. // *

269 Ascomycota *Penicillium* sp // (unspecified source) Bohai Sea // New verrucosidin deriv. from the marine-derived fungus *Penicillium* sp. XL-01

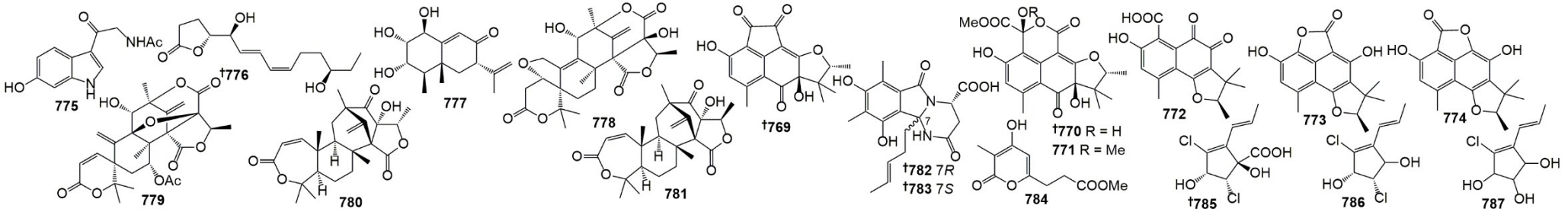
765 // N // nordeoxyverrucosidin // potent cytotox. vs. 3 HTCLs // *

766 // N // norverrucosidinol acetate // IA vs. 5 HTCLs // *

270 Ascomycota *Penicillium* sp // (tunicate, *Didemnum* sp.) Suez Canal, Egypt // Cytotox. and AM cpds from the marine-derived fungus, *Penicillium* species

767 // N // penicillatide A // NT // *

768 // N // penicillatide B // Signif. AB vs. 2 strain, mod. AF vs. 1 strain. Weak cytotox. vs. 1 HTCL // *



271 Ascomycota *Penicillium* sp // (bivalve, S*capharca broughtonii*) East China Sea // Peniciphenalenins A-F from the culture of a marine-associated fungus *Penicillium* sp. ZZ901
769 // N // peniciphenalenin A // IA vs. 2 HTCLs and 2 bact. // *
770 // N // peniciphenalenin B // IA vs. 2 HTCLs and 2 bact. // *
771 // N // peniciphenalenin C // IA vs. 2 HTCLs and 2 bact. // *
772 // N // peniciphenalenin D // IA vs. 2 HTCLs and 2 bact. // *
773 // N // peniciphenalenin E // IA vs. 2 HTCLs and 2 bact. // Enantiomer of known cpd.
774 // N // peniciphenalenin F // IA vs. 2 HTCLs and 2 bact. // *

272 Ascomycota *Penicillium* sp // (unidentified ascidian) Van Phong Bay, S. China Sea, Vietnam // Neuroprotective activ. of some marine fungal metabolites in the 6-hydroxydopamin- and paraquat-induced Parkinson's disease models
775 // N // 6-hydroxy-*N*-acetyl-ß-oxotryptamine // Mod. AO in DPPH assay Neuroprotective in 6-hydroxydopamine and paraquat-induced Parkinson's disease models. IA vs. 1 murine TCL. // *

273 Ascomycota/Penicillium/sp // (deep-sea sediment) Antarctic Latitude : -62.05 Longitude : -47.09 // Furanone deriv. and sesquiterpene from Antarctic marine-derived fungus Penicillium sp. S-1-18
776 // N // butanolide A // Mod. inhib. PTP1B. // *
777 // N // guignarderemophilane F // No inhib. PTP1B. // *

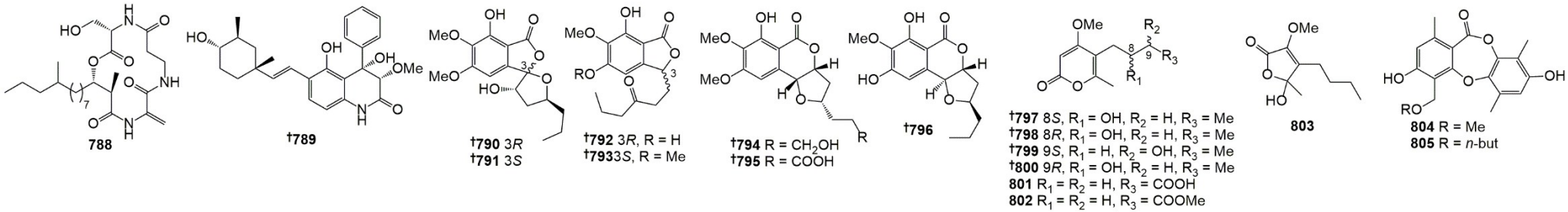
274 Ascomycota Penicillium sp // (sand) Gijang-gun, Busan, Korea // Furanoaustinol and 7-acetoxydehydroaustinol: new meroterpenoids from a marine-derived fungal strain *Penicillium* sp. SF-5497
778 // N // furanoaustinol // Weak PTP1B inhib. No inhib. NO prod. // *
779 // N // 7-acetoxydehydroaustinol // Weak inhib. NO prod. No inhib. PTP1B. // *

275 Ascomycota Penicillium sp // (sediment) Chuja-do, Korea // New meroterpenoids from a Penicillium sp. Fungus
780 // N // preaustinoid E // IA vs. various HTCLs, bact. and fungi. No inhib. isocitrate lyase, Na^+/K^+ ATPase or sortase A. // *
781 // N // preaustinoid F // IA vs. various HTCLs, bact. and fungi. No inhib. isocitrate lyase, Na^+/K^+ ATPase or sortase A. // *

276 Ascomycota *Phialocephala* sp // (deep-sea sediment) Pacific Ocean // Sorbicillasins A–B and scirpyrone K from a deep-sea-derived fungus, *Phialocephala* sp. FL30r
782 // N // sorbicillasin A // No AO in DPPH assay IA vs. 2 HTCLs // *
783 // N // sorbicillasin B // No AO in DPPH assay IA vs. 2 HTCLs // *
784 // N // scirpyrone K // Weak AO in DPPH assay IA vs. 2 HTCLs // *

277 Ascomycota *Phoma* sp // (sponge, *Ectyplasia perox*) Lauro Club Reef, Dominica // New bioactive chlorinated cyclopentene deriv. from the marine-derived fungus *Phoma* sp
785 // N // cryptophomic acid // Mod. AB vs. 4 strain. No cytotox. to brine shrimp. // *
786 // N // cryptodiol // Mod. AB vs. 4 strain. No cytotox. to brine shrimp. // *

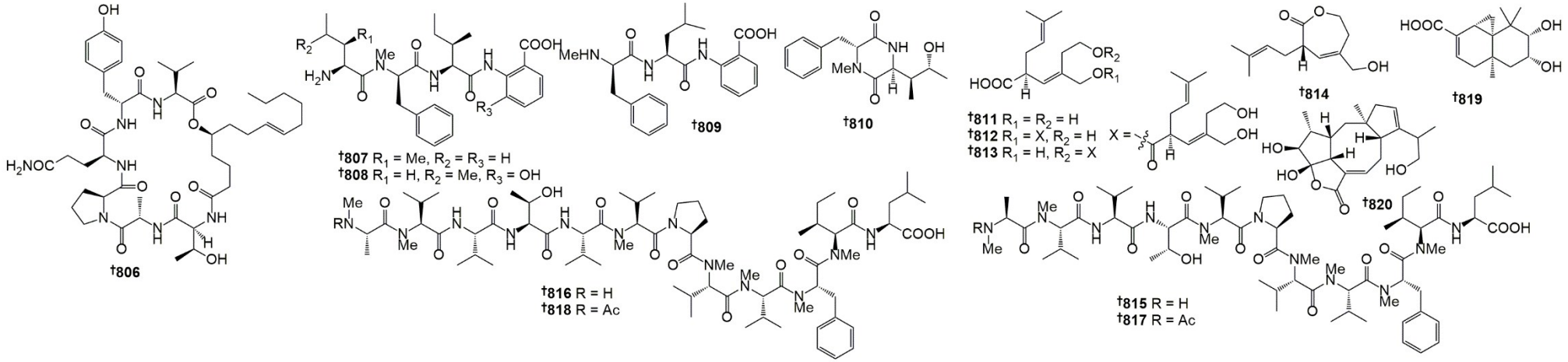
787 // N // cryptotriol // Mod. AB vs. 4 strain. No cytotox. to brine shrimp. // *



278 Ascomycota *Pithomyces* sp // (soft coral, *Eunicea fusca*) Crab Cove, S. Florida, USA // Fusaristatin C, a cyclic lipodepsipeptide from *Pithomyces* sp. RKDO 1698
788 // N // fusaristatin C // IA vs. 3 HTCLs, 3 NCLs, 6 bact. and 1 fungus // *

279 Ascomycota *Scopulariopsis* sp // (gorgonian, *Carijoa* sp.) unspecified location // Scopuquinolone B, a new monoterpenoid dihydroquinolin-2(1*H*)-one isol. from the coral-derived *Scopulariopsis* sp. fungus
789 // N // scopuquinolone B // Weak cytotox. vs. 1 HTCL // *

280 Ascomycota *Setosphaeria* sp // (sponge *Callyspongia* sp.) Xuwen County, Guangdong Province, China // Spiro-phthalides and isocoumarins isol. from the marine-sponge-derived fungus *Setosphaeria* sp. SCSIO41009
790 // N // setosphalide A // IA vs. 1 bact., 5 fung and various viruses. IA in DPPH assay No MptpB inhib. // *
791 // N // setosphalide B // IA vs. 1 bact., 5 fung and various viruses. IA in DPPH assay No MptpB inhib. // *
792 // N // 5-*O*-desmethylcolletotrialide // IA vs. 1 bact., 5 fung and various viruses. IA in DPPH assay No MptpB inhib. // *
793 // N // (*S*)-colletotrialide // IA vs. 1 bact., 5 fung and various viruses. IA in DPPH assay No MptpB inhib. // *
794 // N // exserolide I // IA vs. 1 bact., 5 fungi and various viruses. IA in DPPH assay No MptpB inhib. // *
795 // N // exserolide J // IA vs. 1 bact., 5 fung and various viruses. IA in DPPH assay No MptpB inhib. // *
796 // N // exserolide K // IA vs. 1 bact., 5 fung and various viruses. IA in DPPH assay No MptpB inhib. // *
797 // N // setosphapyrone A // IA vs. 1 bact., 5 fung and various viruses. IA in DPPH assay No MptpB inhib. // Occurs as racemate but sep. unclear if tested individually or as mixt.
798 // N // setosphapyrone A // IA vs. 1 bact., 5 fung and various viruses. IA in DPPH assay No MptpB inhib. // Occurs as racemate but was sep. unclear if tested individually or as mixt
799 // N // setosphapyrone B // IA vs. 1 bact., 5 fung and various viruses. IA in DPPH assay No MptpB inhib. // Occurs as racemate but was sep. unclear if tested individually or as mixt
800 // N // setosphapyrone B // IA vs. 1 bact., 5 fung and various viruses. IA in DPPH assay No MptpB inhib. // Occurs as racemate but was sep. unclear if tested individually or as mixt
801 // N // setosphapyrone C // IA vs. 1 bact., 5 fung and various viruses. IA in DPPH assay No MptpB inhib. // *
802 // N // setosphapyrone D // IA vs. 1 bact., 5 fung and various viruses. IA in DPPH assay No MptpB inhib. // *
803 // N // 5-hydroxy-3-methoxy-5-methyl-4-butylfuran-2(5*H*)-one // IA vs. 1 bact., 5 fungus and viruses. IA in DPPH assay No MptpB inhib. //
804 // N // botryorhodine I // Mod. AF vs. 2 strain. IA vs. 1 bact. and various viruses. IA in DPPH assay No MptpB inhib. // *
805 // N // botryorhodine J // Mod. AF vs. 2 strain. IA vs. 1 bact. and various viruses. IA in DPPH assay No MptpB inhib. // *

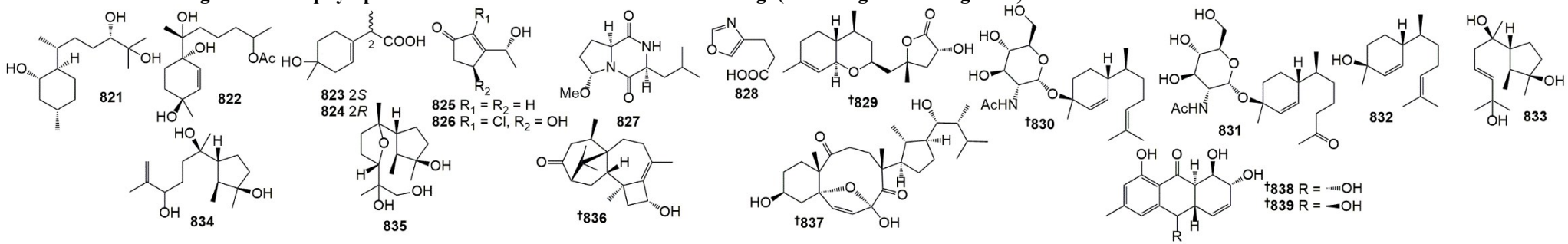


281 Ascomycota *Simplicillium* sp // (soft coral, *Sinularia* sp.) Yongxing Is., S. China Sea // Peptides from the soft coral-associated fungus *Simplicillium* sp. SCSIO41209
806 // N // sinulariapeptide A // Sig. AF vs. 1 strain. IA vs. protein tyrosine phosphatase MptpB. // *
807 // N // sinulariapeptide B // NT // *
808 // N // sinulariapeptide C // NT // *
809 // N // sinulariapeptide D // NT // *
810 // N // sinulariapeptide E // IA vs.5 fungi and protein tyrosine phosphatase MptpB. // *

282 Basidiomycota *Stereum* sp // (brown alga, *Undaria pinnatifida*) Osaka bay, Japan // Sterepinic acids A–C, new carboxylic acids produced by a marine alga-derived fungus
811 // N // sterepinic acid A // IA vs. 2 murine cell lines and 1 HTCL // *
812 // N // sterepinic acid B // IA vs. 2 murine cell lines and 1 HTCL // *
813 // N // sterepinic acid C // IA vs. 2 murine cell lines and 1 HTCL // *
814 // N // dihydro-1,5-secovibralactone // IA vs. 2 murine cell lines and 1 HTCL // *

283 Ascomycota *Talaromyces* sp // (unidentified tunicate) Tweed Heads, NSW, Australia // Talaropeptides A-D: structure and biosynth. of extensively *N*-methylated linear peptides from an Australian marine tunicate-derived *Talaromyces* sp.
815 // N // talaropeptide A // Mod. AB vs. 1 strain. IA vs. 2 HTCLs and 1 fungus // *
816 // N // talaropeptide B // Mod. AB vs. 1 strain. IA vs. 2 HTCLs and 1 fungus // *
817 // N // talaropeptide C // IA vs. 2 HTCLs, 5 bact. and 1 fungus // *
818 // N // talaropeptide D // IA vs. 2 HTCLs, 5 bact. and 1 fungus // *

284 Ascomycota *Talaromyces purpureogenus* // (sediment) Qinghuangdao County, Hebei Province, China // Two new terpenoids from *Talaromyces purpurogenus*
819 // N // 9,10-diolhinokiic acid // Weak cytotox. vs. 2 HTCLs // *
820 // N // roussoellol C // Weak cytotox. vs. 3 HTCLs, mod. cytotox. vs. 1 HTCL // *

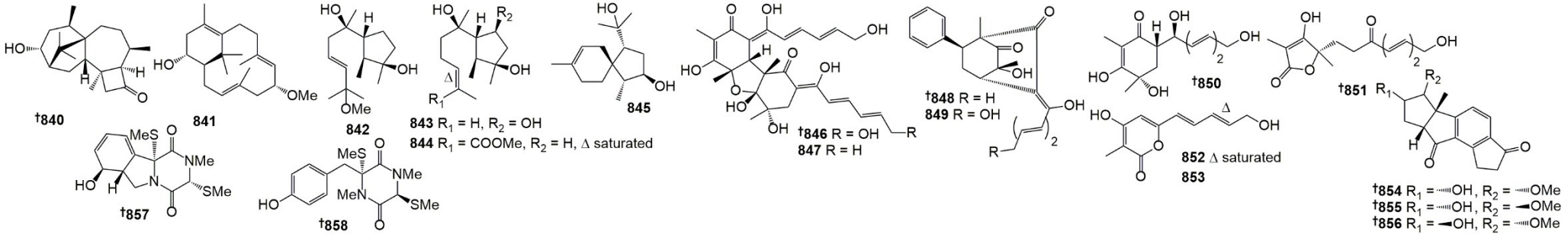


285 Ascomycota *Trichoderma asperellum* // (brown alga, Sargassum sp.) Zhoushan Is., China // Halogenated and nonhalogenated metabolites from the marine-alga-endophytic fungus *Trichoderma asperellum* cf44-2
821 // N // isabolan-1,10,11-triol // Weak AB vs. 4 strain. Weak. inhib. 2 phytoplankton. // *
822 // N // 12-nor-11-acetoxybisabolen-3,6,7-triol // Weak AB vs. 4 strain. Mod. inhib. 4 phytoplankton. // *
823 // N // (7*S*)-1-hydroxy-3-p-menthen-9-oic acid // NT // *
824 // N // (7*R*)-1-hydroxy-3-p-menthen-9-oic acid // NT // *
825 // N // dechlorotrichodenone C // Weak AB vs. 4 strain. Mod. inhib. 4 phytoplankton. // *
826 // N // 3-hydroxytrichodenone C // Weak AB vs. 4 strain. Weak inhib. 4 phytoplankton. // *
827 // N // methylcordysinin A // NT // *
828 // N // 4-oxazolepropanoic acid // NT // *

286 Ascomycota *Trichoderma asperellum* // (brown alga, *Sargassum* sp.) Zhoushan Is., China // Bisabolane, cyclonerane, and harziane deriv. from the marine-alga-endophytic fungus *Trichoderma asperellum* cf44-2
829 // N // trichaspin // IA vs. 5 bact. Weak-mod. cytotox. brine shrimp. // *
830 // N // trichaspside A // potent AB vs. 4 bact. Weak-mod. cytotox. brine shrimp. // *
831 // N // trichaspside B // potent AB vs. 4 bact. Weak-mod. cytotox. brine shrimp. // *
832 // M // (3*S*,6*R*,7*S*)-zingiberenol // IA vs. 5 bact. Weak-mod. cytotox. brine shrimp. // *
833 // N // 9-cycloneren-3,7,11-triol // IA vs. 2 bact. Weak-mod. cytotox. brine shrimp. // *
834 // N // 11-cycloneren-3,7,10-triol // IA vs. 2 bact. Weak-mod. cytotox. brine shrimp. // *
835 // N // 7,10-epoxycycloneran-3,11,12-triol // potent AB vs. 1 strain. Weak-mod. cytotox. brine shrimp. // *
836 // N // 11-hydroxy-9-harzien-3-one // potent AB vs. 1 strain. Weak-mod. cytotox. brine shrimp. // *

287 Ascomycota *Trichoderma asperellum* // (brown alga, *Sargassu*m sp.) Zhoushan Is., China // Tricholumin A, a highly transformed ergosterol deriv. from the alga-endophytic fungus *Trichoderma asperellum*
837 // N // tricholumin A // potent inhib. 4 phytoplankton. Weak AB vs. 3 strain. Mod. AF vs. 1 strain. // *

288 Ascomycota Trichoderma harzianum // (unidentified soft coral) Xisha Is., S. China Sea // Harzianumnones A and B: two hydroxyanthraquinones from the coral-derived fungus *Trichoderma harzianum*
838 // N // harzianumnone A // IA vs. 3 bact., topoisomerase I and AChE. // *
839 // N // harzianumnone B // IA vs. 3 bact., topoisomerase I and AChE. // *



289 Ascomycota *Trichoderma harzianum* // (brown alga, *Laminaria japonica*) Chang Is., China // Diterpenes and sesquiterpenes from the marine algicolous fungus *Trichoderma harzianum* X-5

840 // N // 3*R*-hydroxy-9*R*,10*R*-dihydroharzianone // potent AB vs. 2 strain, IA vs. 2 further strain. Weak-mod. inhib. 4 phytoplankton. // *

841 // N // 11*R*-methoxy-5,9,13-proharzitrien-3-ol // potent AB vs. 1 strain, IA vs. 3 further strain. potent inhib. 4 phytoplankton. // *

842 // N // 11-methoxy-9-cycloneren-3,7-diol // potent AB vs. 1 strain, IA vs. 3 further strain. potent inhib. 3 phytoplankton, weak inhib. 1 further phytoplankton. // *

843 // N // 10-cycloneren-3,5,7-triol // potent AB vs. 1 strain, IA vs. 3 further strain. Weak-mod. inhib. 4 phytoplankton. // *

844 // N // methyl 3,7-dihydroxy-15-cycloneranate // potent AB vs. 1 strain, IA vs. 3 further strain. Weak-mod. inhib. 4 phytoplankton. // *

845 // N // 8-acoren-3,11-diol // potent AB vs. 2 strain, IA vs. 2 further strain. potent inhib. 1 phytoplankton, weak inhib. 3 further phytoplankton.// *

290 Ascomycota *Trichoderma saturnisporum* // (sponge, *Dictyonella incisa*) Seferihisar bay, Turkey // Sorbicillinoid-based metabolites from a sponge-derived fungus *Trichoderma saturnisporum*

846 // N // saturnispol A // IA vs. 5 bact. // *

847 // N // saturnispol B // IA vs. 5 bact. // *

848 // N // saturnispol C // IA vs. 5 bact. // *

849 // N // saturnispol D // IA vs. 5 bact. // *

850 // N // saturnispol E // IA vs. 5 bact. // *

851 // N // saturnispol F // Sig. AB vs. 1 bact., mod. AB vs. 3 strain. // *

852 // N // saturnispol G // IA vs. 5 bact. // *

853 // N // saturnispol H // Mod. AB vs. 1 bact., weak. AB vs. 1 strain. // *

291 Ascomycota *Trichoderma virens* // (red alga, *Gracilaria vermiculophylla*) Yangma Is., China // Trichorenins A–C, algicidal tetracyclic metabolites from the marine-alga-epiphytic fungus *Trichoderma virens* Y13-3

854 // N // trichorenin A // potent inhib. vs. 2 phytoplankton strain. IA vs. 2 further phytoplankton, 1 zooplankton and 5 bact. // *

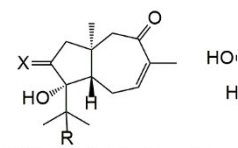
855 // N // trichorenin B // potent inhib. vs. 2 phytoplankton strain. IA vs. 2 further phytoplankton, 1 zooplankton and 5 bact. // *

856 // N // trichorenin C // potent inhib. vs. 2 phytoplankton strain. IA vs. 2 further phytoplankton, 1 zooplankton and 5 bact. // *

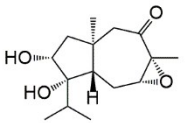
292 Ascomycota *Trichoderma virens* // (red alga, *Gracilaria vermiculophylla*) Yangma Is., Shandong, China. // Sulfurated diketopiperazines from an algicolous isolate of *Trichoderma virens*

857 // N // dehydroxymethylbis(dethio)bis(methylthio)gliotoxin // IA vs. 5 bact., 4 phytoplankton and 1 zooplankton. // *

858 // N // (3*S*,6R)-6-(*para*-hydroxybenzyl)-1,4-dimethyl-3,6-bis(methylthio)piperazine-2,5-dione // IA vs. 5 bact., 4 phytoplankton and 1 zooplankton. // *



†859 R = H, X = H, ⋯OH
†860 R = OH, X = H, ⋯OH
861 R = H, X = O



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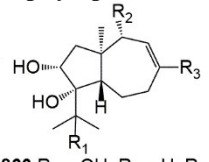
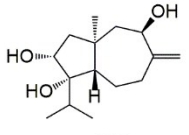


863 R_1 = OH, R_2 = H, R_3 = Me
864 R_1 = H, R_2 = OH, R_3 =Me
865 R_1 = R_2 = H, R_3 = COOH



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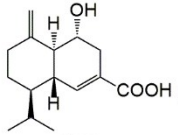

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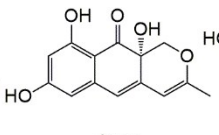

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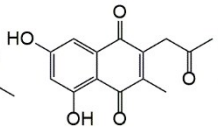

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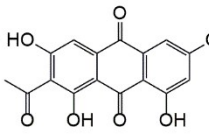

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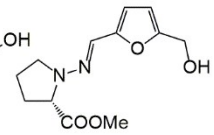

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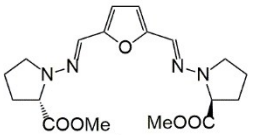

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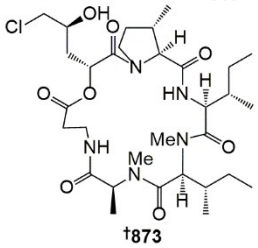

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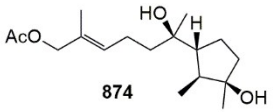

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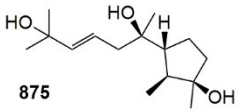


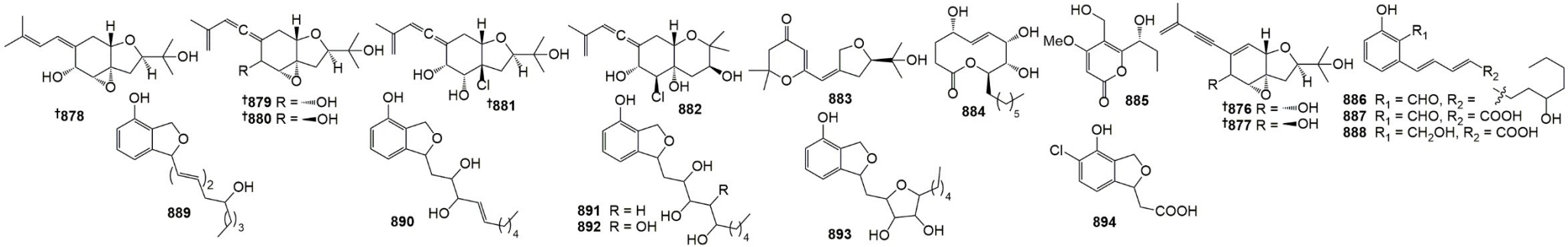
875

293 Ascomycota *Trichoderma virens* // (red alga, *Gracilaria vermiculophylla*) Yangma Is., Yantai, China // Trichocarotins A–H and trichocadinin A, nine sesquiterpenes from the marine-alga-epiphytic fungus *Trichoderma virens*
859 // N // trichocarotin A // IA vs. 5 bact., 4 phytoplankton and 1 zooplankton. // *
860 // N // trichocarotin B // IA vs. 5 bact., 4 phytoplankton and 1 zooplankton. // *
861 // N // trichocarotin C // IA vs. 5 bact. potent inhib. 4 phytoplankton, weak inhib. 1 zooplankton. // *
862 // N // trichocarotin D // IA vs. 5 bact. and 1 zooplankton. potent inhib. 4 phytoplankton. // *
863 // N // trichocarotin E // IA vs. 5 bact. and 1 zooplankton. potent inhib. 4 phytoplankton. // *
864 // N // trichocarotin F // IA vs. 5 bact., 4 phytoplankton and 1 zooplankton. // *
865 // N // trichocarotin G // IA vs. 5 bact., 4 phytoplankton and 1 zooplankton. // *
866 // N // trichocarotin H // IA vs. 5 bact.Mod. - potent inhib. 4 phytoplankton, weak inhib. 1 zooplankton. // *
867 // N // trichocadinin A // IA vs. 5 bact. and 4 phytoplankton. Mod.inhib. 1 zooplankton. // *

294 Ascomycota *Trichoderma* sp // (sponge, *Callyspongia* sp.) Xuwen County, Guangdong Province, China // Three new polyketides from the marine sponge-derived fungus *Trichoderma* sp. SCSIO41004
868 // N // trichbenzoisochromen A // IA vs 3 HTCLs and 2 viruses. // *
869 // N // 5,7-dihydroxy-3-methyl-2-(2-oxopropyl)-naphthalene-1,4-dione // IA vs. 3 HTCLs and 2 viruses. // *
870 // N // 7-acetyl-1,3,6-trihydroxyanthracene-9,10-dione // NT //

295 Ascomycota *Trichoderma* sp // (fish, *Mugil* sp.) fish market, Brisbane, Australia // Prolinimines: *N*-amino-L-Pro-methyl ester (hydrazine) Schiff bases from a fish gastrointestinal tract-derived fungus, *Trichoderma* sp. CMB-F563
871 // N // prolinimine A // NT // Acid labile.
872 // N // prolinimine B // NT // *

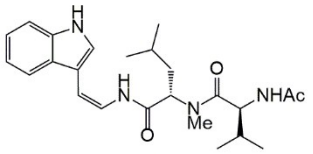
296 Ascomycota *Trichothecium roseum* // (driftwood) Lingshan Is., Qingdao, China // Cyclodepsipeptides and sesquiterpenes from marine-derived fungus *Trichothecium roseum* and their biological functions
873 // N // trichomide D // potent, selective cytotox. vs. 3 HTCLs Sig. brine shrimp lethality. Mod. nematocidal inhib. // *
874 // N // cyclonerodiol C // IA vs. 3 HTCLs, brine shrimp and nematodes. // *
875 // N // cyclonerodiol D // IA vs. 3 HTCLs, brine shrimp and nematodes. // *



297 Ascomycota *Truncatella angustata* // (sponge, *Amphimedon* sp.) Yongxing Is., Hainan Province, China // Truncateols O-V, further isoprenylated cyclohexanols from the sponge-associated fungus *Truncatella angustata* with AV activ.
876 // N // truncateol O // potent inhib. H1N1, weak inhib. HIV. // *
877 // N // truncateol P // IA vs. H1N1, weak inhib. HIV. // *
878 // N // truncateol Q // IA vs. H1N1 and HIV. // *
879 // N // truncateol R // IA vs. H1N1 and HIV. // *
880 // N // truncateol S // IA vs. H1N1 and HIV. // *
881 // N // truncateol T // IA vs. H1N1 and HIV. // *
882 // N // truncateol U // IA vs. H1N1 and HIV. // *
883 // N // truncateol V // IA vs. H1N1 and HIV. // *

298 Ascomycota *Xylaria feejeensis* // (sponge, *Stylissa massa*) Beijiao, Dongsha // Osteoclastogenesis inhib. polyketides from the sponge-associated fungus *Xylaria feejeensis*
884 // M // $C_{16}H_{28}O_5$ // Sig. downregulation osteroclast cell differentiation. // *
885 // N // (-)-annularin C // No inhib. osteroclast cell differentiation. // *

299 Ascomycota *Zopfiella marina* // (sediment) Taiwan // Salicylaldehyde and dihydroisobenzofuran deriv. from the marine fungus *Zopfiella marina*
886 // N // 2-hydroxy-6-((1*E*,3*E*)-7-hydroxyundeca-1,3-dienyl)benzaldehyde // Weak AB vs. 1 strain, weak cytotox. vs. 1 primate NCL, weak anti-TB vs. 1 strain. IA antimal. vs. 1 strain. // *
887 // N // (2*E*,4*E*)-5-(2-formyl-3-hydroxyphenyl)penta-2,4-dienoic acid // NT // *
888 // N // (2*E*,4*E*)-5-(3-hydroxy-2-(hydroxymethyl)phenyl)penta-2,4-dienoic acid // NT // *
889 // N // 1-((1*E*,3*E*)-6-hydroxydeca-1,3-dienyl)-1,3-dihydroisobenzofuran-4-ol // NT // *
890 // N // (*E*)-1-(4-hydroxy-1,3-dihydroisobenzofuran-1-yl)dec-4-ene-2,3-diol // NT // *
891 // N // 1-(4-hydroxy-1,3-dihydroisobenzofuran-1-yl)decane-2,3,5-triol // NT // *
892 // N // 1-(4-hydroxy-1,3-dihydroisobenzofuran-1-yl)decane-2,3,4,5-tetraol // NT // *
893 // N // 2-((4-hydroxy-1,3-dihydroisobenzofuran-1-yl)methyl)-5-pentyl-tetrahydrofuran-3,4-diol // NT // *
894 // N // 2-(5-chloro-4-hydroxy-1,3-dihydroisobenzofuran-1-yl)acetic acid // NT // *



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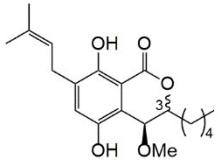
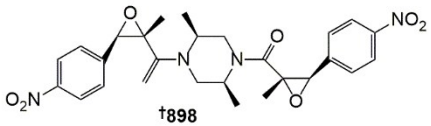


†896 3*S*
†897 3*R*



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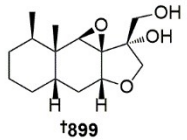

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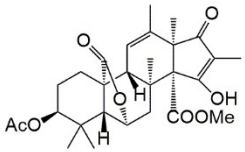


†900

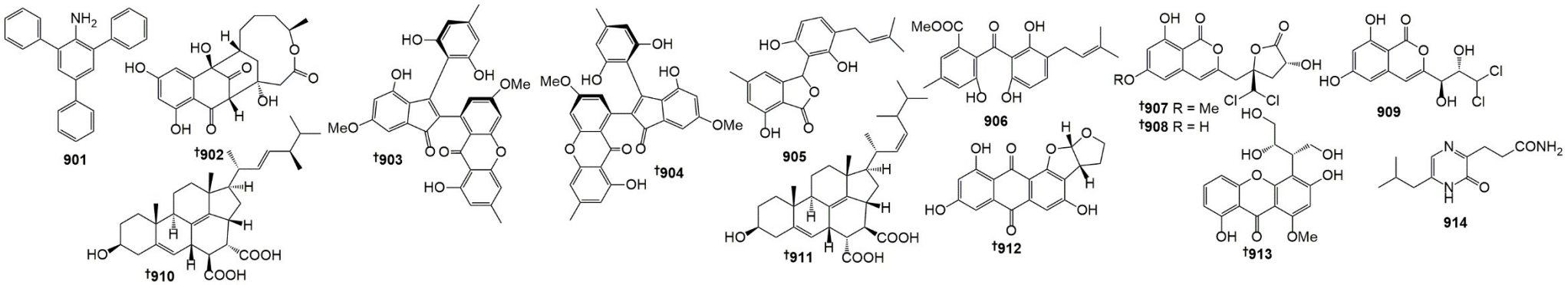
306 Ascomycota *Aspergillus* sp // * // Synth. and stereochem. of JBIR-81, a peptide enamide derived from aspergilli
895 // R // JBIR-81 // NT // *

307 * // * // Asymmetric total syntheses and structure revisions of eurotiumide A and eurotiumide B, and their evaluation as natural fluorescent probes
896 // R // (-)-eurotiumide A // NT // *
897 // R // (+)-eurotiumide B // NT // *

308 * // * // Total synth. and structure revision of chrysamide B
898 // R // chrysamide B // NT // *

309 * // * // Total synth. and biological evaluation of cell adhesion inhib. peribysin A and B: structural revision of peribysin B
899 // R // peribysin B // // *

310 * // * // Isolation and X-ray structure anal. of citreohybridonol from marine-derived Penicillium atrovenetum
900 // R // citreohybridonol // // *



329 Ascomycota *Alternaria longipes* // (leaf and stem, *Avicennia officinalis*) Parangipettai, Chidambaram, India // Secondary metabolite as therapeutic agent from endophytic fungi Alternaria longipes strain VITN14G of mangrove plant Avicennia officinalis
901 // M // 2,4,6-triphenylalanine // significant α-glucosidase inhib. // *

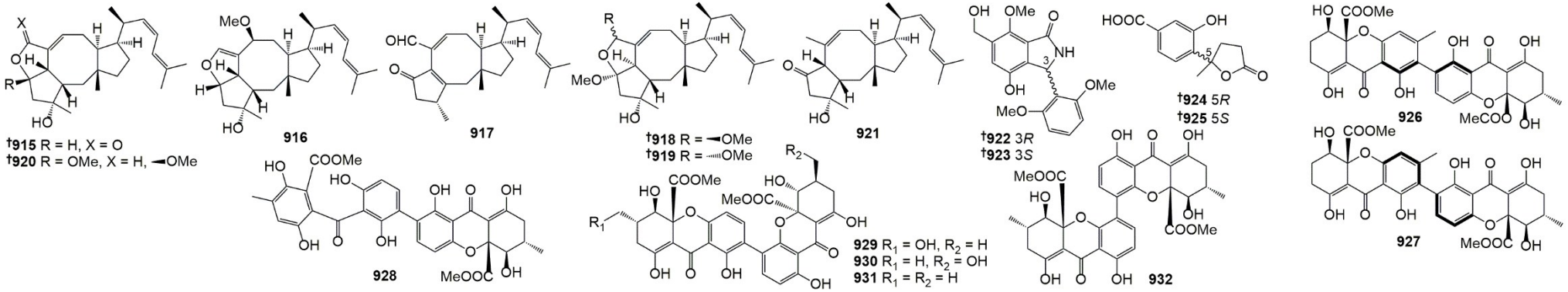
330 Ascomycota *Annulohypoxylon* sp // (fruit, *Rhizophora racemosa*) Cameroon // A novel 10-membered macrocyclic lactone from the mangrove-derived endophytic fungus *Annulohypoxylon* sp.
902 // N // hypoxylide // NT // *

331 Ascomycota *Ascomycota* sp. // (leaf, *Kandelia candel*) Shankou Mangrove Nature Reserve, Guangxi, China // AI polyketides from the mangrove-derived fungus *Ascomycota* sp. SK2YWS-L
903 // N // (+)-ascomindone D // Sig. inhib. NO prod. with low cytotox. // *
904 // N // (–)-ascomindone D // Sig. inhib. NO prod. with no cytotox. // *
905 // N // ascomfuran C // No inhib. NO prod. // *
906 // N // ascomarugosin A // Weak inhib. NO prod. with no cytotox. // *

332 Ascomycota // (branch, *Pluchea indica*) Shankou Mangrove Nature Reserve, Guangxi Province, China // Dichloroisocoumarins with potential AI activ. from the mangrove endophytic fungus *Ascomycota* sp. CYSK-4
907 // N // dichlorodiaportintone // Weak inhib. NO prod. with no cytotox. Weak AB vs. 3 strain. // *
908 // N // desmethyldichlorodiaportintone // Sig. inhib. NO prod. with no cytotox. IA vs. 3 bact. // *
909 // N // desmethyldichlorodiaportinol // No inhib. NO prod. IA vs 5 bact. // *

333 Ascomycota *Aspergillus* sp // (rhizosphere soil, *Aegiceras corniculatum*) Thailand // Two new bioactive steroids from a mangrove-derived fungus *Aspergillus* sp.
910 // N // ergosterdiacid A // potent inhib. NO prod. Sig. inhib. MptpB. // *
911 // N // ergosterdiacid B // potent inhib. NO prod. Sig. inhib. MptpB. // *

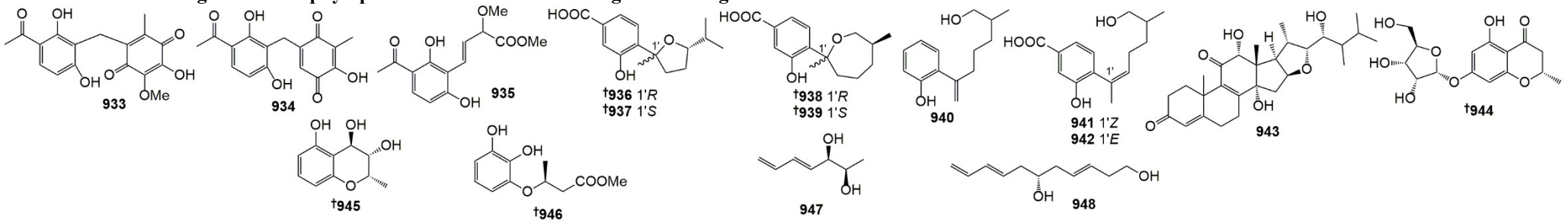
334 Ascomycota *Aspergillus nidulans* // (leaves, *Rhizophora stylosa*) unspecified location // AB anthraquinone deriv. isol. from a mangrove-derived endophytic fungus *Aspergillus nidulans* by ethanol stress strategy
912 // N // isoversicolorin C // potent AB vs. 2 strain, weak vs. 4 strain, IA vs. 1 strain // *
913 // N // isosecosterigmatocystin // Weak AB vs. 1 strain, IA vs. 6 strain. // *
914 // N // glulisine A // Weak AB vs. 1 strain, IA vs. 6 strain. // Also in 2018 patent



335 Ascomycota *Aspergillus ustus* // (rhizospehre soil, Bruguiera gymnorrhiza) Wenchang, Hainan Province, China // Ophiobolins from the mangrove fungus *Aspergillus ustus*
915 // N // ophiobolin X // IA vs. 6 HTCLs, NT vs. 1. // *
916 // N // ophiobolin Y // IA vs. 4 HTCLs, NT vs. 3. // *
917 // N // 21-dehydroophiobolin U // IA vs. 4 HTCLs, NT vs. 3. // *
918 // N // ophiobolin Z // Mod. cytotox. vs. 1 HTCL, weak cytotox. vs. 2, IA vs. 2, NT vs. 2. // *
919 // N // 21-epi-ophiobolin Z // Sig. cytotox. vs. 1 HTCL, weak cytotox. vs. 3, IA vs. 1, NT vs. 2. // *
920 // N // 21-epi-ophiobolin O // potent cytotox. vs. 2 HTCLs, NT vs. 5. // *
921 // N // 21-deoxyophiobolin K // Weak cytotox. vs. 2 HTCLs, NT vs. 5. // *

336 Ascomycota *Aspergillus versicolor* // (branch, *Excoecaria agallocha*) Shankou, Guangxi Province of China // 3-Arylisoindolinone and sesquiterpene deriv. from the mangrove endophytic fungi *Aspergillus versicolor* SYSU-SKS025
922 // N // (+)-asperglactam A // Mod. inhib. α-glucosidase. No inhib. NO prod. // *
923 // N // (–)-asperglactam A // Mod. inhib. α-glucosidase. No inhib. NO prod. // *
924 // N // (+)-1-hydroxyboivinianic acid // Mod. inhib. α-glucosidase. No inhib. NO prod. // *
925 // N // (–)-1-hydroxyboivinianic acid // Mod. inhib. α-glucosidase. No inhib. NO prod. // *

337 Ascomycota *Aspergillus versicolor* // (sediment, unspecified mangrove) Guangzhou, China // Structure-based discovery of cytotox. dimeric tetrahydroxanthones as potential topoisomerase I inhib. from a marine-derived fungus
926 // N // versixanthone G // Mod-sig. cytotox. vs. 7 HTCLs Sig. inhib. topoisomerase I (via necrosis). // *
927 // N // versixanthone H // Mod-sig. cytotox. vs. 7 HTCLs Mod. inhib. topoisomerase I. // *
928 // N // versixanthone I // Weak cytotox. vs. 1 HTCL NT vs topoisomerase I // *
929 // N // versixanthone J // Weak cytotox. vs. 1 HTCL NT vs topoisomerase I // *
930 // N // versixanthone K // Weak cytotox. vs. 2 HTCLs Mod. inhib. topoisomerase I. // *
931 // M // versixanthone L // potent cytotox. vs. 6 HTCLs NT vs. topoisomerase I. // *
932 // M // versixanthone M // potent cytotox. vs. 6 HTCLs, weak cytotox. vs. 1 HTCL NT vs. topoisomerase I. // *

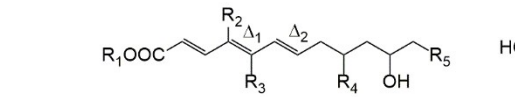


338 Ascomycota *Aspergillus* sp // (unidentified mangrove) Hainan Is., China // New AB phenone deriv. asperphenone A–C from mangrove-derived fungus *Aspergillus* sp. YHZ-1
933 // N // asperphenone A // Weak AB vs. 4 strain. // *
934 // N // asperphenone B // Weak AB vs. 4 strain. // *
935 // N // asperphenone C // NT // *

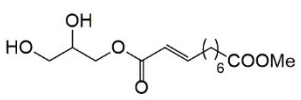
339 Ascomycota *Aspergillus* sp // (leaves, *Xylocarpus moluccensis*) Trang Province, Thailand // Phenolic bisabolane sesquiterpenoids from a Thai mangrove endophytic fungus, *Aspergillus* sp. xy02
936 // N // (7*R*,10*S*)-7,10-epoxysydonic acid // IA vs. 4 bact., 1 fungus and AChE. No AO (DPPH assay). // *
937 // N // (7*S*,10*S*)-7,10-epoxysydonic acid // Weak AB vs. 1 strain. IA vs. 1 fungus and AChE. No AO (DPPH assay). // *
938 // N // (7*R*,11*S*)-7,12-epoxysydonic acid // Weak AB vs. 1 strain. IA vs. 1 fungus and AChE. No AO (DPPH assay). // *
939 // N // (7*S*,11*S*)-7,12-epoxysydonic acid // IA vs. 4 bact., 1 fungus and AChE. No AO (DPPH assay). // *
940 // N // 7-deoxy-7,14-didehydro-12-hydroxysydonic acid // Weak AB vs. 1 strain. IA vs. 1 fungus and AChE. No AO (DPPH assay). // *
941 // N // (*Z*)-7-deoxy-7,8-didehydro-12-hydroxysydonic acid // IA vs. 4 bact., 1 fungus and AChE. No AO (DPPH assay). // *
942 // N // (*E*)-7-deoxy-7,8-didehydro-12-hydroxysydonic acid // Weak AB vs. 1 strain. IA vs. 1 fungus and AChE. No AO (DPPH assay). // *

340 Ascomycota Aspergillus sp // (sediment, unspecified mangrove) unspecified location // A new pentacyclic ergosteroid from fungus Aspergillus sp. SCSIO41211 derived of mangrove sediment sample
943 // N // (22S,23R)-12α,14α,23α-trihydroxy-16,22-epoxy-ergosta-4,8-dien-3,11-dione // IA vs. 10 HTCLs, 2 viruses and mycobact. // *

341 Ascomycota *Cladosporium* sp // (stems, *Excoecaria agallocha*) Wenchang, Hainan, China // Polyketides from the endophytic fungus *Cladosporium* sp. isol. from the mangrove plant *Excoecaria agallocha*
944 // N // (2*S*)-7-*O*-α-*D*-ribofuranosyl-5-hydroxy-2-methylchroman-4-one // IA vs. 6 HTCLs, 4 bact. and 1 fungus No AO (DPPH assay). // *
945 // N // (2*S*,3*S*,4*R*)-2-methylchroman-3,4,5-triol // IA vs. 6 HTCLs, 4 bact. and 1 fungus No AO (DPPH assay). // *
946 // N // methyl (3*S*)-3-(2,3-dihydroxyphenyloxy)butanoate // Sig. AO (DPPH assay). IA vs. 6 HTCLs, 4 bact. and 1 fungus // *
947 // N // (2*S*,3*S*,4*E*)-hepta-4,6-diene-2,3-diol // IA vs. 6 HTCLs, 4 bact. and 1 fungus No AO (DPPH assay). // *
948 // N // (3*E*,8*E*,6*S*)-undeca-3,8,10-trien-1,6-diol // Weak cytotox. vs. 1 HTCL IA vs. 5 HTCLs, 4 bact. and 1 fungus No AO (DPPH assay). // *



949 R_1 = Me, R_2 = R_4 = R_5 = H, R_3 = OH, Δ_1 = Δ_2 saturated
950 R_1 = Me, R_2 = OH, R_3 = R_4 = R_5 = H, Δ_1 = Δ_2 saturated
952 R_1 = R_2 = R_4 = R_5 = H, R_3 = OH, Δ_1 = Δ_2 saturated
953 R_1 = R_2 = R_3 = R_5 = H, R_4 = OH, Δ_1 = Δ_2 saturated
955 R_1 = R_2 = R_5 = H, R_3 = R_4 = OH, Δ_1 saturated
956 R_1 = R_2 = R_3 = R_4 = H, R_5 = OH



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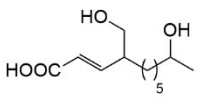

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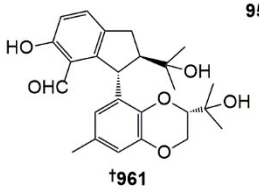
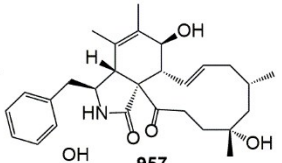


†**961**



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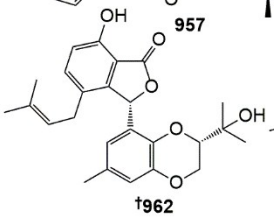
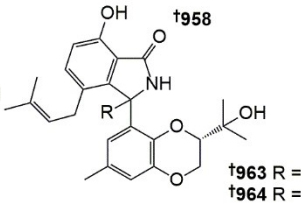
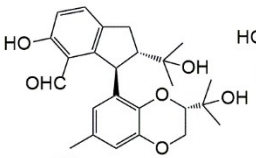


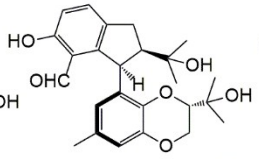
†**962**



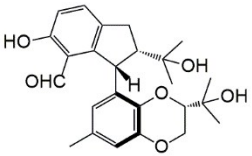
†**963** R = OMe
†**964** R = OMe



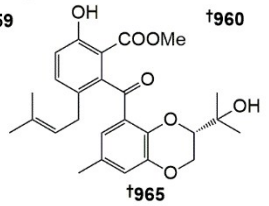
†**958**



†**959**



†**960**

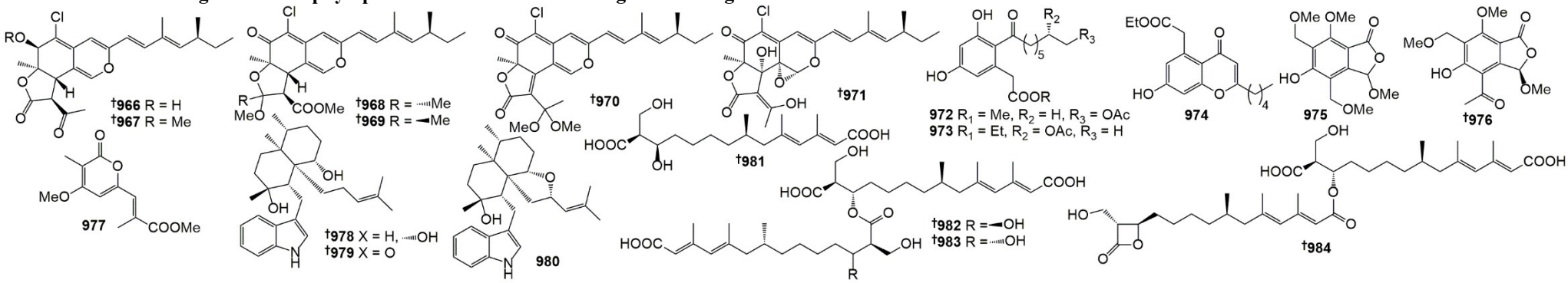


†**965**

342 Ascomycota *Cladosporium cladosporioides* // (root, *Rhizophora stylosa*) Shankou, Guangxi Province of China // Fatty acid deriv. from the halotolerant fungus *Cladosporium cladosporioides*
949 // N // cladosporester A // IA vs. 3 HTCLs, 5 bact. and 1 fungus // *
950 // N // cladosporester B // IA vs. 3 HTCLs, 5 bact. and 1 fungus // *
951 // N // cladosporester C // IA vs. 3 HTCLs, 5 bact. and 1 fungus // *
952 // N // cladosporacid A // IA vs. 3 HTCLs, 5 bact. and 1 fungus // *
953 // N // cladosporacid B // IA vs. 3 HTCLs, 5 bact. and 1 fungus // *
954 // N // cladosporacid C // IA vs. 3 HTCLs, 5 bact. and 1 fungus // *
955 // N // cladosporacid D // IA vs. 3 HTCLs, 5 bact. and 1 fungus // *
956 // N // cladosporacid E // IA vs. 3 HTCLs, 5 bact. and 1 fungus // *

343 Ascomycota *Daldinia eschscholtzii* // (*Bruguiera sexangula* var. *rhynchopetala*) S. China Sea // One new cytochalasin metabolite isol. from a mangrove-derived fungus *Daldinia eschscholtzii* HJ001
957 // N // $C_{28}H_{37}NO_4$ // Weak AB vs. 5 strain. IA vs. 3 HTCLs // *

344 Ascomycota *Diaporthe abdita* // (branches, *Excoecaria agallocha*) Zhuhai, Guangdong Province, China // Diaporindenes A–D: four unusual 2,3-dihydro-1*H*-indene analogues with AI activ. from the mangrove endophytic fungus *Diaporthe* sp. SYSU-HQ3
958 // N // diaporindene A // Sig. inhib. NO prod. IA vs. MptpB. // *
959 // N // diaporindene B // Sig. inhib. NO prod. IA vs. MptpB. // *
960 // N // diaporindene C // Sig. inhib. NO prod. IA vs. MptpB. // *
961 // N // diaporindene D // Sig. inhib. NO prod. IA vs. MptpB. // *
962 // N // isoprenylisobenzofuran A // Sig. inhib. NO prod. IA vs. MptpB. // *
963 // N // diaporisoindole D // No inhib. NO prod. or MptpB. // *
964 // N // diaporisoindole E // No inhib. NO prod. or MptpB. // *
965 // N // tenellone D // No inhib. NO prod. or MptpB. // *



345 Ascomycota *Diaporthe* sp // (*Rhizophora stylosa*) Sanya city, Hainan Province, China // Isochromophilones A–F, cytotox. chloroazaphilones from the marine mangrove endophytic fungus *Diaporthe* sp. SCSIO 41011

966 // N // isochromophilone A // Weak cytotox. vs. 3 HTCLs // *

967 // N // isochromophilone B // NT // *

968 // N // isochromophilone C // Weak cytotox. vs. 2 HTCLs // *

969 // N // isochromophilone D // Mod. cytotox. vs. 3 HTCLs // *

970 // N // isochromophilone E // NT // *

971 // N // isochromophilone F // Weak-mod. cytotox. vs. 3 HTCLs // *

346 Ascomycota *Diaporthe* sp // Sanya city, Hainan Province, China // Structurally diverse polyketides from the mangrove-derived fungus *Diaporthe* sp. SCSIO 41011 with their anti-influenza A virus activ.

972 // N // dothiorelone O // IA vs. 3 viruses. // *

973 // N // (15*R*)-acetoxydothiorelone A // IA vs. 3 viruses. // *

974 // N // pestalotiopsone H // IA vs. 3 viruses. // *

975 // N // (±)-microsphaerophthalide H // IA vs. 3 viruses. // *

976 // N // microsphaerophthalide I // IA vs. 3 viruses. // *

977 // N // methyl convolvulopyrone // IA vs. 3 viruses. // *

347 Ascomycota *Eupenicillium* sp // (*Xylocarpus granatum* Koenig) S. China Sea // Penicilindoles A–C, cytotox. indole diterpenes from the mangrove-derived fungus *Eupenicillium* sp. HJ002

978 // N // penicilindole A // Sig. cytotox. vs. 2 HTCLs, weak-mod. cytotox. vs. 1 HTCL IA vs 6 bact. // *

979 // N // penicilindole B // Weak-mod. cytotox. vs. 3 HTCLs IA vs 6 bact. // *

980 // N // penicilindole C // NT // *

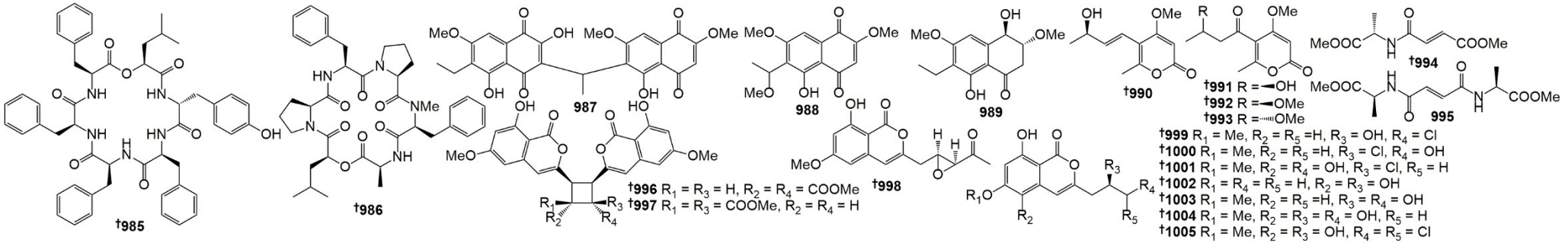
348 Ascomycota *Fusarium solani* // (mangrove sediment, unspecified species) Zhangjiangkou Mangrove National Nature Reserve, Fujian, China // New *bis*-alkenoic acid deriv. from a marine-derived fungus *Fusarium solani* H915

981 // N // fusaridioic acid A // IA vs. 2 fungi, zebrafish, eggs, embryos and larvae. // *

982 // N // fusariumester A1 // IA vs. 2 fungi, zebrafish, eggs, embryos and larvae. // *

983 // N // fusariumester A2 // IA vs. 2 fungi, zebrafish, eggs, embryos and larvae. // *

984 // N // fusariumester B // Mod. inhib. 1 fungus IA vs. zebrafish, eggs, embryos and larvae. // *



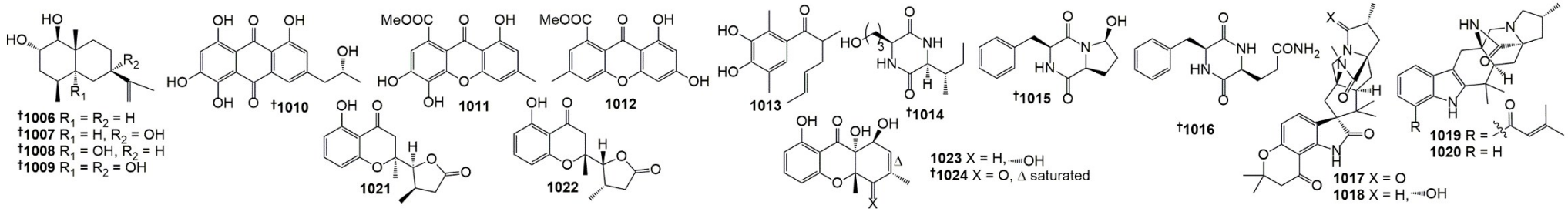
349 Ascomycota *Fusarium* sp // (unspecified mangrove) Leizhou, China // Fusarihexins A and B: novel cyclic hexadepsipeptides from the mangrove endophytic fungus *Fusarium* sp. R5
985 // N // fusarihexin A // potent AF vs. 3 strain. // *
986 // N // fusarihexin B // potent AF vs. 2 strain. // *

350 Ascomycota *Neofusicoccum australe* // Shankou, Guangxi province, China // Ethylnaphthoquinone deriv. as inhib. of indoleamine-2, 3-dioxygenase from the mangrove endophytic fungus *Neofusicoccum austral* SYSU-SKS024
987 // N // neofusnaphthoquinone A // potent IDO inhib. // *
988 // N // 6-(1-methoxylethy1)-2,7-dimethoxyjuglone // Sig. IDO inhib. // *
989 // N // (3*R*,4*R*)-3-methoxyl-botryosphaerone D // Sig. IDO inhib. // *

351 Ascomycota *Penicillium camemberti* // (*Rhizophora apiculata*) // *a*-Pyronoids with quorum sensing inhib. activ. from the mangrove fungus *Penicillium camemberti* OUCMDZ-1492
990 // N // (*R*,*E*)-5-(3-hydroxybut-1-en-1-yl)-4-methoxy-6-methyl-2*H*-pyran-2-one // No inhib. quorum sensing. // *
991 // M // (*R*)-pyrenocine B // potent QS inhib. // *
992 // R // (*R*)-(–)-pyrenocine E // Sig. QS inhib. // *
993 // R // (*S*)-(+)-pyrenocine E // * // *

352 Ascomycota *Penicillium chrysogenum* // (*Myoporum bontioides*) Leizhou Peninsula, China // A new L-alanine deriv. from the mangrove fungus *Penicillium chrysogenum* V11
994 // N // *N*-fumaryl-*L*-alanine dimethyl ester // IA vs. 2 fungi. // *
995 // M // *N*,*N*'-bis[(*S*)-1-methoxycarbonylethyl]fumaric diamide // NT // Known synth.

353 Ascomycota *Penicillium commune* // (fruit, *Kandelia candel*) Zhuhai Mangrove Nature Reserve, Guangdong Province, China // Peniisocoumarins A–J: isocoumarins from *Penicillium commune* QQF-3, an endophytic fungus of the mangrove plant *Kandelia candel*
996 // N // peniisocoumarin A // IA vs. 5 HTCLs, α-glucosidase and MptpB. // *
997 // N // peniisocoumarin B // IA vs. 5 HTCLs, α-glucosidase and MptpB. // *
998 // N // peniisocoumarin C // potent inhib. α-glucosidase. IA vs. 5 HTCLs and MptpB. // *
999 // N // peniisocoumarin D // IA vs. 5 HTCLs, α-glucosidase and MptpB. // *
1000 // N // peniisocoumarin E // Mod. inhib. α-glucosidase. IA vs. 5 HTCLs and MptpB. // *
1001 // N // peniisocoumarin F // Mod. inhib. α-glucosidase. IA vs. 5 HTCLs and MptpB. // *
1002 // N // peniisocoumarin G // potent inhib. α-glucosidase. Sig. inhib. MptpB. IA vs. 5 HTCLs // *
1003 // N // peniisocoumarin H // IA vs. 5 HTCLs, α-glucosidase and MptpB. // *
1004 // N // peniisocoumarin I // potent inhib. a-glucosidase. IA vs. 5 HTCLs and MptpB. // *
1005 // N // peniisocoumarin J // potent inhib. a-glucosidase. IA vs. 5 HTCLs and MptpB. // *



354 Ascomycota *Penicillium* sp // (leaves, *Ceriops tagal*) Dong Zhai Gang Mangrove Reserve, Hainan Province, China // New eudesmane-type sesquiterpenoids from the mangrove-derived endophytic fungus *Penicillium* sp. J-54

1006 // N // penicieudesmol A // IA vs. 3 HTCLs, 1 bact. and 1 fungus // *

1007 // N // penicieudesmol B // Weak cytotox. vs. 1 HTCL IA vs. 1 bact. and 1 fungus // *

1008 // N // penicieudesmol C // IA vs. 3 HTCLs, 1 bact. and 1 fungus // *

1009 // N // penicieudesmol D // IA vs. 3 HTCLs, 1 bact. and 1 fungus // *

355 Ascomycota *Penicillium* sp // (root sediment, *Acanthus ilicifolius*) Wenchang, Hainan, China // An anti-HBV anthraquinone from aciduric fungus *Penicillium* sp. OUCMDZ-4736 under low pH stress

1010 // N // (-)-2′*R*-1-hydroxyisorhodoptilometrin // potent AV vs 1 virus. IA vs 1 HTCL // *

1011 // N // 3-hydroxy microxanthone // NT // *

1012 // N // methyl 6,8-dihydroxy-3-methyl-9-oxo-9H-xanthene-1-carboxylate // Sig. AV vs 1 virus. IA vs 1 HTCL // *

356 Ascomycota *Penicillium* sp // (stem bark, *Bruguiera gymnorrhiza*) Zhanjiang, China // AB sorbicillin and diketopiperazines from the endogenous fungus *Penicillium* sp. GD6 associated Chinese mangrove *Bruguiera gymnorrhiza*

1013 // N // 2-deoxy-sohirnone C // Weak AB vs. 1 strain. // *

1014 // N // 5S-hydroxynorvaline-*S*-Ile // IA vs. 1 bact. // *

1015 // M // 3*S*-hydroxycyclo(*S*-Pro-*S*-Phe) // IA vs. 1 bact. // *

1016 // M // cyclo(*S*-Phe-*S*-Gln) // IA vs. 1 bact. // *

357 Ascomycota *Penicillium* sp // (sediment, unidentified mangrove) Sanya, China // Prenylated indole alkaloids and chromone deriv. from the fungus *Penicillium* sp. SCSIO041218

1017 // N // mangrovamide D // IA anti-allergy assay // *

1018 // N // mangrovamide E // IA anti-allergy assay // *

1019 // N // mangrovamide F // IA anti-allergy assay // *

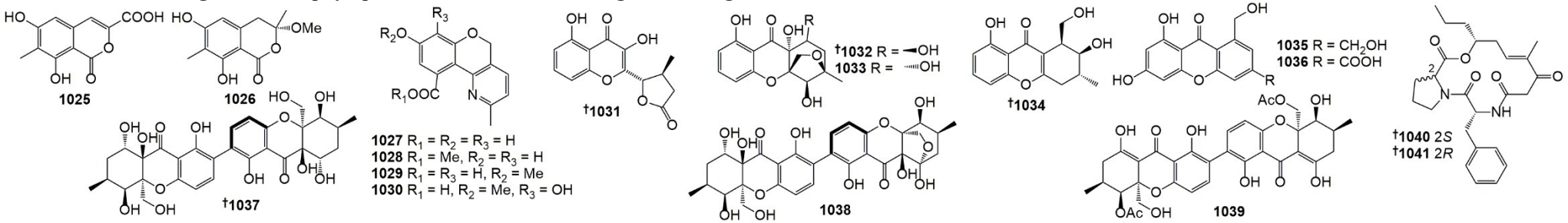
1020 // N // mangrovamide G // IA anti-allergy assay // *

1021 // N // mangrovamide H // IA anti-allergy assay // *

1022 // N // mangrovamide I // IA anti-allergy assay // *

1023 // N // mangrovamide J // IA anti-allergy assay // *

1024 // N // mangrovamide K // IA anti-allergy assay // *



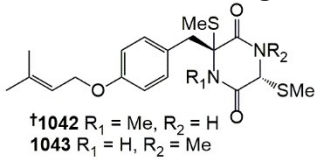
358 Ascomycota *Pestalotiopsis coffeae* // (fishtail palm) Xinglong, Hainan, China // Two new isocoumarin deriv. from an endophytic fungi *Pestalotiopsis coffeae* isol. from a mangrove fishtail palm
1025 // N // 6,8-dihydroxy-7-methyl-1-oxo-1*H*-isochromene-3-carboxylic acid // NT // *
1026 // N // 6,8-dihydroxy-3-,7-dimethyl-isochroman-1-one // NT // *

359 Ascomycota *Phomopsis* sp // (bark, *Rhizophora stylosa*) S. China Sea // Phochrodines A–D, first naturally occurring new chromenopyridines from mangrove entophytic fungus *Phomopsis* sp. 33#
1027 // N // phochrodine A // No inhib. NO prod. IA vs. 1 HTCL No AI (DPPH assay). // *
1028 // N // phochrodine B // No inhib. NO prod. IA vs. 1 HTCL No AI (DPPH assay). // *
1029 // N // phochrodine C // Mod. inhib. NO prod. IA vs. 1 HTCL No AI (DPPH assay). // *
1030 // N // phochrodine D // Mod. inhib. NO prod. Mod. AI (DPPH assay). IA vs. 1 HTCL // *

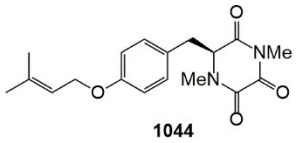
360 Ascomycota *Phomopsis* sp // (leaves, *Xylocarpus granatum*) Trang Provience, Thailand // Xanthone-derived polyketides from the Thai mangrove endophytic fungus *Phomopsis* sp. xy21
1031 // N // phomoxanthone F // Weak inhib, HIV-1. IA vs. 8 HTCLs // *
1032 // N // phomoxanthone G // IA vs. 8 HTCLs and HIV-1. // *
1033 // N // phomoxanthone H // IA vs. 8 HTCLs and HIV-1. // *
1034 // N // phomoxanthone I // IA vs. 8 HTCLs NT vs. HIV-1. // *
1035 // N // phomoxanthone J // IA vs. 8 HTCLs NT vs. HIV-1. // *
1036 // N // phomoxanthone K // IA vs. 8 HTCLs and HIV-1. // *

361 Ascomycota *Phomopsis* sp // (leaves, *Xylocarpus granatum*) Trang Province, Thailand // Three xanthone dimers from the Thai mangrove endophytic fungus *Phomopsis* sp. xy21
1037 // N // phomoxanthone C // IA vs. 8 HTCLs // *
1038 // N // phomoxanthone D // IA vs. 8 HTCLs // *
1039 // N // phomoxanthone E // IA vs. 8 HTCLs // *

362 Ascomycota *Sarocladium kiliense* // (rhizospeher soil, *Aricenna marina*) Pritz Bay, Antarctica // Saroclides A and B, cyclic depsipeptides from the mangrove-derived fungus *Sarocladium kiliense* HDN11-112
1040 // N // saroclide A // Sig. lipid lowering (oleic acid-induced lipid accumulation asssay). IA vs. 5 HTCLs, 3 bact. and 1 fungus // *
1041 // N // saroclide B // IA vs. 5 HTCLs, 3 bact. and 1 fungus No lipid lowering activ. or NT (unspecified). // *



†1042 R_1 = Me, R_2 = H
1043 R_1 = H, R_2 = Me



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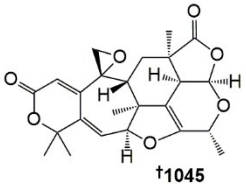
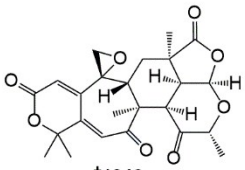
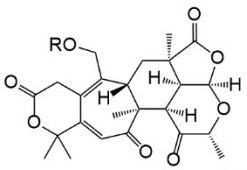


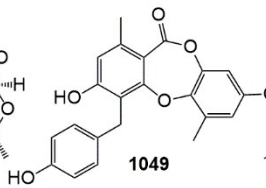
†1045



†1046



†1047 R = Ac
1048 R = CO*i*-but



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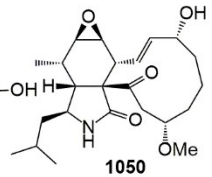

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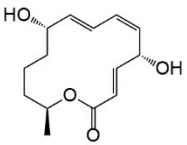


†1051

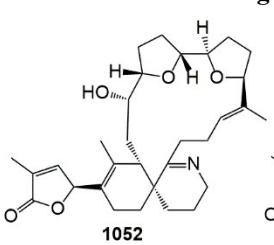
363 Ascomycota *Sarocladium kiliense* // (rhizosphere soil, *Thespesia populnea*) Guangxi Province, China // Saroclazines A–C, thio-diketopiperazines from mangrove-derived fungi *Sarocladium kiliense* HDN11-84
1042 // N // saroclazine A // IA vs. 1 HTCL // *
1043 // N // saroclazine B // Mod. cytotox. vs. 1 HTCL // *
1044 // N // saroclazine C // IA vs. 1 HTCL // *

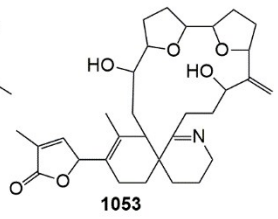
364 Ascomycota *Talaromyces amestolkiae* // (leaves, *Kandelia obovata*) Zhanjiang Mangrove Nature Reserve, Guangdong Province, China // AI meroterpenoids from the mangrove endophytic fungus *Talaromyces amestolkiae* YX1
1045 // N // amestolkolide A // Weak inhib. NO prod. // *
1046 // N // amestolkolide B // potent inhib. NO prod. // *
1047 // N // amestolkolide C // No inhib. NO prod. // *
1048 // N // amestolkolide D // No inhib. NO prod. // *

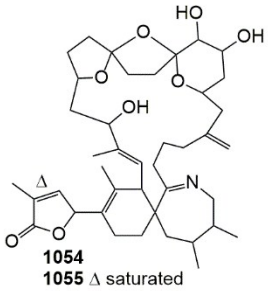
365 Ascomycota/Trichoderma/sp // (stem bark, *Clerodendrum inerme*) Near Zhanjiang Mangrove National Nature Reserve, Guangdong Province, China Latitude : 21.107697 Longitude : 110.314470 // α-Glucosidase inhib. and cytotox. botryorhodines from mangrove endophytic fungus Trichoderma sp. 307
1049 // N // botryorhodine H // potent inhib. α-glucosidase. potent cytotox. vs. 2 murine TCLs. IA vs. 4 bact. // *

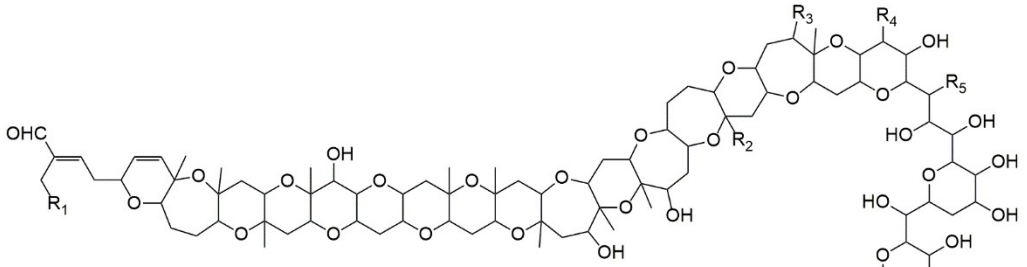
366 Ascomycota/Xylaria/sp // (stem, *Xylocarpus granatum*) Near Dong Zhai Gang Mangrove Reserve, Hainan province, China Latitude : 19.949117 Longitude : 110.581265 // A new cytochalasin deriv. from the mangrove-derived endophytic fungus Xylaria sp. HNWSW-2
1050 // N // xylarisin B // IA vs. α-glucosidase and AChE. // *

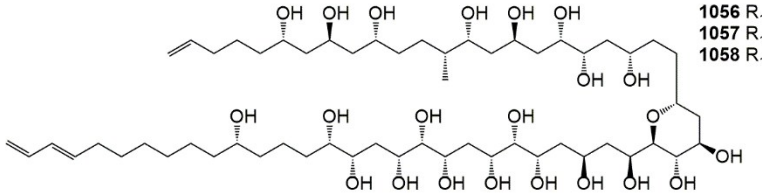
367 Ascomycota *Pestalotiopsis microspora* // // Total synth. of pestalotioprolide E and structural revision of pestalotioprolide F
1051 // R // pestalotioprolide F // // *

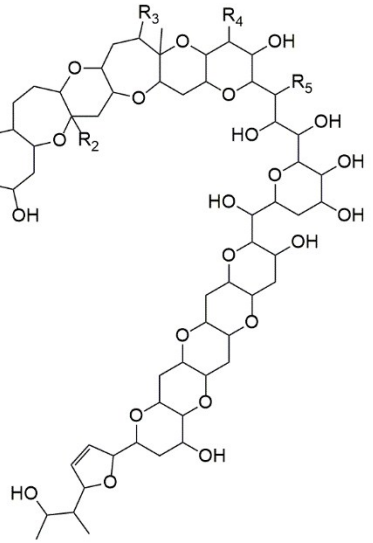








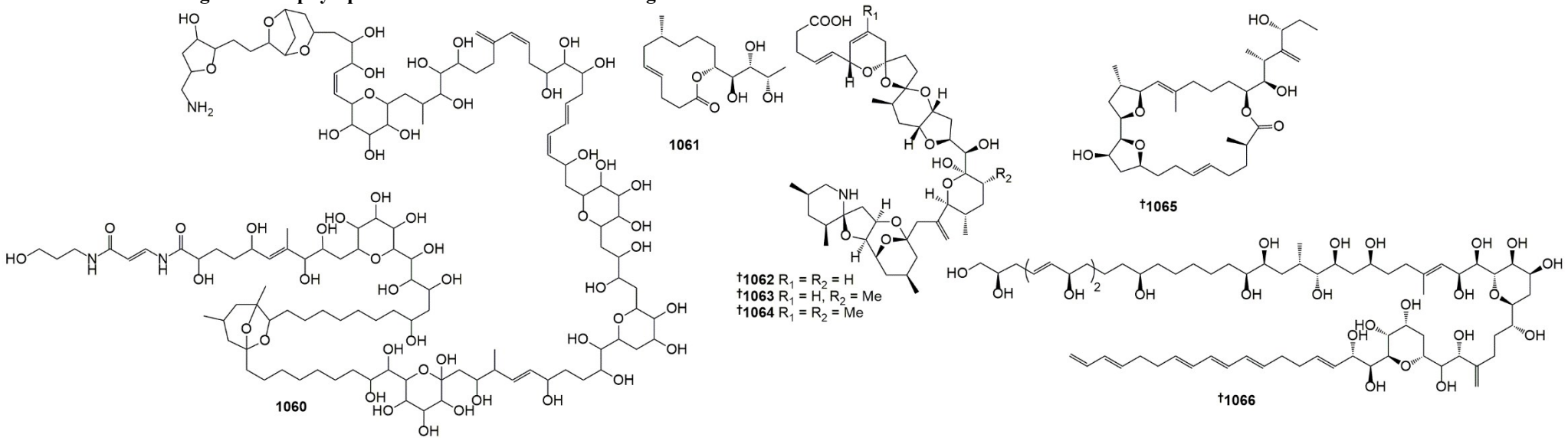




368 Miozoa *Alexandrium ostenfeldii* // Ouwerkerkse Kreek, The Netherlands // Identification of novel gymnodimines and spirolides from the marine dinoflagellate *Alexandrium ostenfeldii*
1052 // N // 16-desmethylgymnodimine D // NT // *
1053 // N // gymnodimine E // NT // *
1054 // N // 20-hydroxy-13,19-didesmethyl-spirolide C // NT // *
1055 // N // 20-Hydroxy-13,19-didesmethyl-spirolide D // NT // *

369 Miozoa *Karenia brevisulcata* // Near Wellington Harbour, New Zealand Latitude : -41.261300 Longitude : 174.842715 // Brevisulcenal-G, -H, and –I, Polycyclic Ether Marine Toxins from the Dinoflagellate Karenia brevisulcata
1056 // N // brevisulcenal-G // potent activ. vs murine P388 cells // *
1057 // N // brevisulcenal-H // potent activ. vs murine P388 cells // *
1058 // N // brevisulcenal-I // potent activ. vs murine P388 cells // *

370 Miozoa *Ostreopsis* sp // S. Korea // Determination of the Absolute configuration of polyhydroxy cpd ostreol B isol. from the dinoflagellate *Ostreopsis* cf. *ovata*
1059 // N // ostreol B // Mod. activ. vs 3 HTCLs // Abs. config. est. by Mosher's method , J-based config. anal. and Kishi's Universal NMR database.



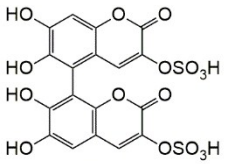
371 Miozoa *Ostreopsis siamensis* // Aka Is., Okinawa, Japan // Simple structural elucidation of ostreocin-B, a new palytoxin congener isol. from the marine dinoflagellate *Ostreopsis siamensis*, using complementary positive and negative ion liquid chromatography/quadrupole time-of-flight mass spectrometry
1060 // N // ostreocin B // NT // Structure prop. based upon QTOF LC-MS/MS data relative to the known ostreocin-D

372 Miozoa *Symbiodinium* sp // Ishigaki Is., Okinawa , Japan // Symbiodinolactone A, a new 12-membered macrolide from symbiotic marine dinoflagellate *Symbiodinium* sp.
1061 // N // symbiodinolactone A // NT // DFT NMR calc.s used to identify rel. config.

378 * // * // Stereochemical definition of the natural product (6*R*, 10*R*, 13*R*, 14*R*, 16*R*, 17*R*, 19*S*, 20*S*, 21*R*, 24*S*, 25*S*, 28*S*, 30*S*, 32*R*, 33*R*, 34*R*, 36*S*, 37*S*, 39*R*)-azaspiracid-3 by total synth. and comparative analyses
1062 // R // azaspiracid-3 // * // Structure revised following total synth.
1063 // R // azaspiracid-1 // * // Structure revised following total synth.
1064 // R // azaspiracid-2 // * // Structure revised following total synth.

379 * // * // Total synth. and stereochemical revision of iriomoteolide-2a
1065 // R // iriomoteolide-2a // * // Structure revised following total synth.

380 * // * // Synth. and stereochemical revision of the C31-C67 fragment of amphidinol 3
1066 // R // Amphidinol-3 // * // Structure revised following synth. of model cpd.



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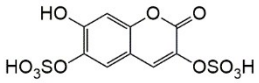

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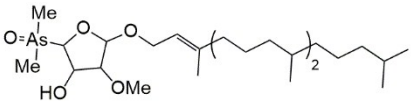
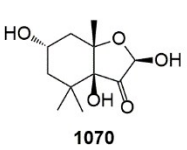


1069

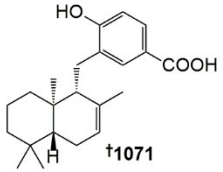
385 Chlorophyta *Dasycladus vermicularis* // Cabo de Gata-Nijar Natural Park, Almeria, S. Spain // Phytochemical and analytical characterization of novel sulfated coumarins in the marine green macroalga *Dasycladus vermicularis* (Scopoli) Krasser
1067 // N // dasycladin A // * // *
1068 // N // dasycladin B // * // *

386 Chlorophyta *Dunaliella tertiolecta* // // Arsenolipid biosynth. by the unicellular alga *Dunaliella tertiolecta* is influenced by As/P ratio in culture exper.
1069 // N // AsSugPhytol546 // * // *

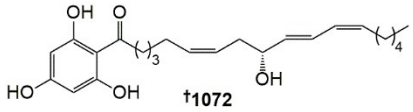
5 Brown algae



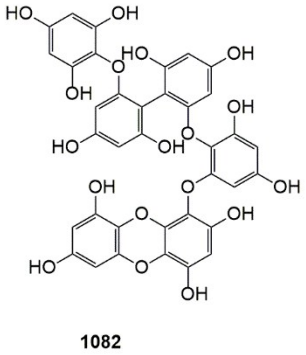
1070



†1071



†1072



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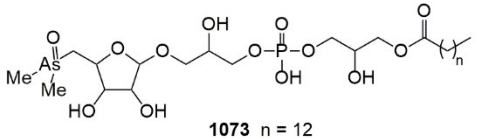
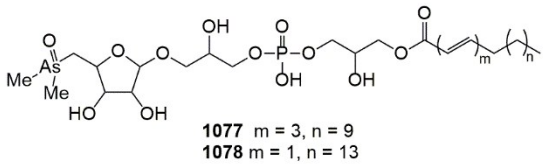
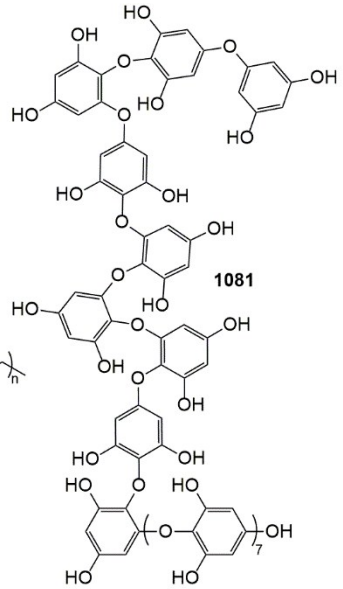


1073 n = 12
1074 n = 13
1075 n = 14
1076 n = 15
1079 n = 16
1080 n = 18



1077 m = 3, n = 9
1078 m = 1, n = 13



1081

388 Ochrophyta *Sargassum naozhouense* // Leizhou peninsula, Guangdong Province, China // Norisoprenoids from the brown alga *Sargassum naozhouense* Tseng et Lu
1070 // N // sargassumone // * // absol config by comp of TDDFT calc ECD with exper ECD

389 Ochrophyta *Dictyopteris undulata* // Chichi-jima Is., Japan // Antioxidants from the brown alga *Dictyopteris undulata*
1071 // R // isozonaroic acid // NA in DPPH assay // absol config by OR compar. of synth.ed deriv.

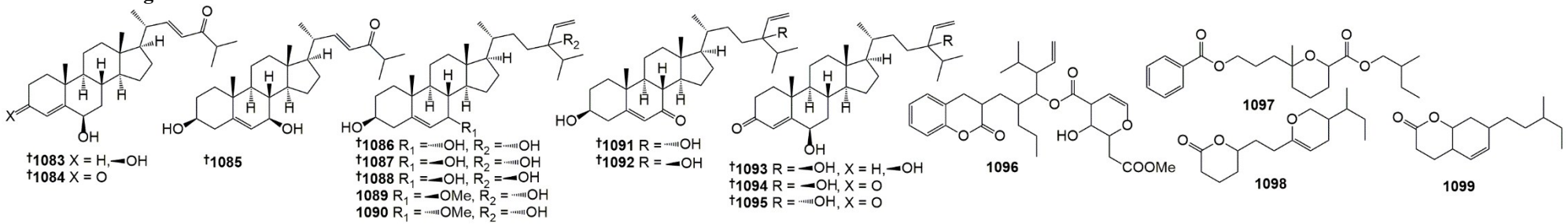
390 Ochrophyta *Cystophora retroflexa* // // Absolute configuration determination of retroflexanone using the advanced Mosher's method method and application of HPLC-NMR
1072 // R // retroflexanone // * // absolut config by advanced Mosher's method

391 Ochrophyta *Saccharina japonica* // Taohua Is., China // Mono-acyl arsenosugar phospholipids in the edible brown alga Kombu (*Saccharina japonica*)
1073 // N // AsSugPL 692 // * // structure only tentatively assigned by LCMS fragmentation
1074 // N // AsSugPL 706 // * // structure only tentatively assigned by LCMS fragmentation
1075 // N // AsSugPL 720 // * // structure only tentatively assigned by LCMS fragmentation
1076 // N // AsSugPL 734 // * // structure only tentatively assigned by LCMS fragmentation
1077 // N // AsSugPL 742 // * // structure only tentatively assigned by LCMS fragmentation
1078 // N // AsSugPL 746 // * // structure only tentatively assigned by LCMS fragmentation
1079 // N // AsSugPL 748 // * // structure only tentatively assigned by LCMS fragmentation
1080 // N // AsSugPL 776 // * // structure only tentatively assigned by LCMS fragmentation

392 Ochrophyta *Ishige okamurae* // Seongsan, Jeju, S. Korea // Ishophloroglucin A, a novel phlorotannin for standardizing the anti-a-glucosidase activ. of *Ishige okamurae*
1081 // N // ishophloroglucin A // α-glucosidase inhib. activ. IC_{50} = 54 μM // *

393 Ochrophyta Ecklonia maxima // In the region of South Africa // Eckmaxol, a phlorotannin extracted from Ecklonia maxima, produces anti-β-amyloid oligomer neuroprotective effects possibly via directly acting on glycogen synthase kinase 3β
1082 // N // eckmaxol // 20 μM preincubation of eckmaxol with Aβ oligomer prevented cell toxicty in SH-SY5Y cells. // *

5 Brown algae



394 Ochrophyta *Dictyopteris undulata* // Zhanjiang, China // Dictyoptesterols A–C, Δ^{22}-24-oxo cholestane-type sterols with potent PTP1B inhib. activ. from the brown alga *Dictyopteris undulata* Holmes

1083 // N // dictyoptesterol A // PTP1B IC_{50} =7.92 μM // abs. config. assigned based upon biosynth. grounds

1084 // N // dictyoptesterol B // PTP1B IC_{50} = 7.78 μM // abs. config. assigned based upon biosynth. grounds

1085 // N // dictyoptesterol C // PTP1B IC_{50} = 3.03 μM // abs. config. assigned based upon biosynth. grounds

395 Ochrophyta *Dicytopteris undulata* // Zhanjiang, Guangdong Province, China // PTP1B inhib. and cytotox. C-24 epimers of ?^{28}-24-hydroxy stigmastane-type steroids from the brown alga *Dictyopteris undulata* Holmes

1086 // N // dictyopterisin A // PTP1B NA, NA to two HTCL // abs. config by

1087 // N // dictyopterisin B // PTP1B NA, NA to two HTCL // abs. config by Mosher's method

1088 // N // dictyopterisin C // PTP1B IC_{50} = 35 μM, NA to two HTCL // Abs. config at C-24 by NMR compar

1089 // N // dictyopterisin D // PTP1B IC_{50} = 1.88 μM,mod. activ. towards two HTCL // isol. as mixt. with dictyoptensin E

1090 // N // dictyopterisin E // PTP1B IC_{50} = 1.88 μM,mod. activ. towards two HTCL // isol. as mixt. with dictyoptensin D

1091 // N // dictyopterisin F // PTP1B NA, mod. activ. towards two HTCL // abs. config at C-24 by NMR compar.

1092 // N // dictyopterisin G // PTP1B IC_{50} = 38.5 uM,mod. activ. towards two HTCL // abs. config at C-24 by NMR compar.

1093 // N // dictyopterisin H // PTP1B IC_{50} = 48.2 μM,mod. activ. towards two HTCL // abs. config by Mosher's method

1094 // N // dictyopterisin I // PTP1B IC_{50} = 3.47 μM,mod. activ. towards two HTCL // abs. config at C-24 by NMR compar.

1095 // N // dictyopterisin J // PTP1B IC_{50} = 16.3 μM,mod. activ. towards two HTCL // abs. config at C-24 by NMR compar.

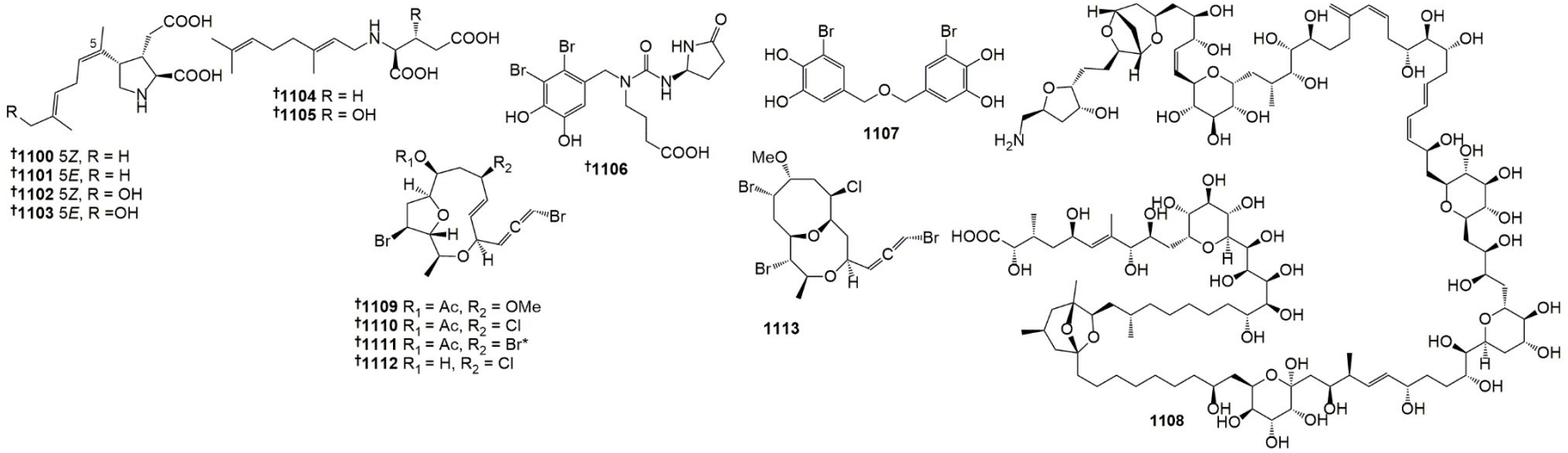
396 Ochrophyta *Sargassum wightii* // Gulf of Mannar, India // Previously undescribed antioxidative *O*-heterocyclic angiotensin converting enzyme inhib. from the intertidal seaweed *Sargassum wightii* as potential antihypertensives

1096 // N // 3''-isopropyl-3c-{3b-[(2-oxo-3,4-dihydro-2H-chromen-3-yl)methyl]butyl}-2''-butenyl-3'-hydroxy-2'-(2'b-methoxy-2'-oxoethyl)-3',4'-dihydro-2*H*-pyran-4'-carboxylate // very weak antiox activ. // struct. not supported spect. data

1097 // N // 2c-methylbutyl-6-[6c-(benzoyloxy)propyl]-6-methyl-tetrahydro-2*H*-pyran-2-carboxylate // * // struct. not supported spect. data

1098 // N // 6-{6b-[3'-(5'a-methyl propyl)-3',4'-dihydro-2*H*-pyran-6'-yl]ethyl}-tetrahydro-2*H*-pyran-2-one // * // struct. not supported spect. data

1099 // N // 7-(7c-methylpentyl)-3,4,6,7,8,8a-hexahydro-2*H*-chromen-2-one // // struct. not supported spect. data



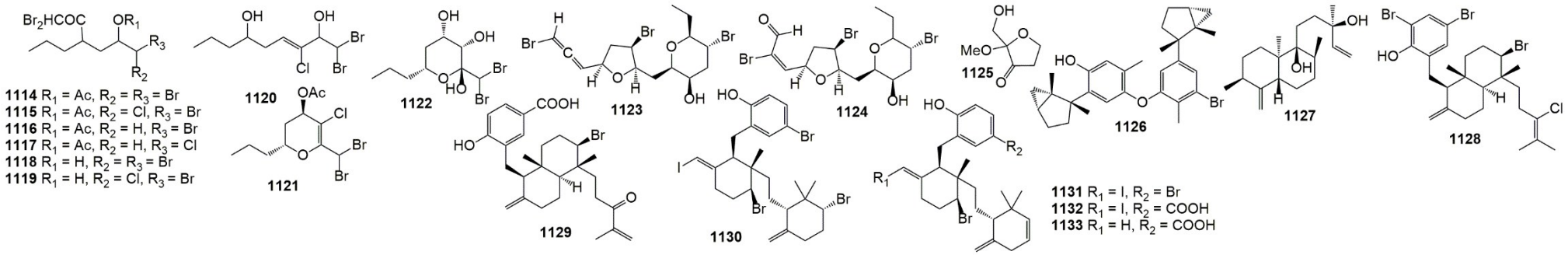
400 Rhodophyta *Chondria armata* // Hanasezaki, Ibusuki, Kagoshima Prefecture, Japan // Six domoic acid related cpds from the red alga, *Chondria armata*, and domoic acid biosynth. by the diatom, *Pseudo-nitzschia multiseries*
1100 // N // 7'-methyl-isodomoic acid A // * // *
1101 // N // 7'-methyl-isodomoic acid B // * // *
1102 // N // 7'-hydroxymethyl-isodomoic acid A // * // *
1103 // N // 7'-hydroxymethyl-isodomoic acid B // * // *
1104 // N // *N*-geranyl-*L*-glutamic acid // * // confirmed by total synth., biosynth. precusor to domoic acid confirmed by ^{15}N/D feeding exper.
1105 // N // *N*-geranyl-3(*R*)-hydroxy-*L*-glutamic acid // * // confirmed by total synth.

401 Rhodophyta *Rhodomela confervoides* // Dalian, Liaoning Province, China // Isolation, synth., and radical-scavenging activ. of rhodomelin A, a ureidobromophenol from the marine red alga *Rhodomela confervoides*
1106 // N // rhodomelin A // mod. radical scavenger in DPPH and ABTS assays // structure confirmed by total synth.

402 Rhodophyta *Polysiphonia morrowii* // Jeju Is., S. Korea // Bis (3-bromo-4,5-dihydroxybenzyl) ether, a novel bromophenol from the marine red alga *Polysiphonia morrowii* that suppresses LPS-induced inflammatory response by inhibiting ROS-mediated ERK signaling pathway in RAW 264.7 macrophages
1107 // N // bis (3-bromo-4,5-dihydroxybenzyl) ether // inhibits LPS induced inflamm. by inhib. ROS-mediated ERK signaling pathway at 2 μM // *

403 Rhodophyta *Chondria armata* // Yakushima Is., Japan // A truncated palytoxin analogue, palytoxin carboxylic acid, isol. as an insecticidal cpd from the red alga, *Chondria armata*
1108 // N // palytoxin carboxylic acid // * // sect. compar. with authentic sample from *P. tuberculosa* confirmed them to be the same cpd

405 Rhodophyta *Laurenciella* sp // Sanguinaires Road, Ajaccio, Corsica, France // Halogenated C_{15} acetogenin analogues of obtusallene III from a *Laurenciella* sp. collected in Corsica
1109 // N // (-)-(aS,4*R*,7*S*,9*R*,10*R*,12*R*,13*S*,14*R*)-12-bromo-7-methoxy-obtusallenyl acetate III // * // Abs conf X-ray
1110 // N // (-)-(a*S*,4*R*,7*S*,9*R*,10*R*,12*R*,13*S*,14*R*)-12-bromo-7-chloro-obtusallenyl acetate III // * // Abs config ECD comp
1111 // N // (-)-(aS,4*R*,7*S*,9*R*,10*R*,12*R*,13*S*,14*R*)-7,12-dibromo-obtusallenyl acetate III // * // Abs config ECD comp
1112 // N // (-)-(a*S*,4*R*,7*S*,9*R*,10*R*,12*R*,13*S*,14*R*)-12-bromo-7-chloro-obtusallene III // * // Abs config ECD comp
1113 // N // 12-bromo-9-methoxymarilzabicycloallene C // * // *



406 Rhodophyta *Ptilonia magellanica* // Fuerte Bulnes, Punta Arenas, Chile // A set of biogenetically interesting polyhalogenated acetogenins from *Ptilonia magellanica*
1114 // N // ptilonine A // IA against K. pneumoniae // *
1115 // N // ptilonine B // IA against K. pneumoniae // *
1116 // N // ptilonine C // IA against K. pneumoniae // *
1117 // N // ptilonine D // IA against K. pneumoniae // *
1118 // N // ptilonine E // * // *
1119 // N // ptilonine F // * // *
1120 // N // magellenediol // * // *
1121 // N // pyranosylmagellanicus D // * // *
1122 // M // pyranosylmagellanicus E // * // *

407 Rhodophyta *Laurencia obtusa* // Erbalunga, Corsica // New metabolites isol. from a *Laurencia obtusa* population collected in Corsica
1123 // N // $C_{15}H_{21}Br_3O_3$ // * // *
1124 // N // $C_{15}H_{21}Br_3O_4$ // * // *

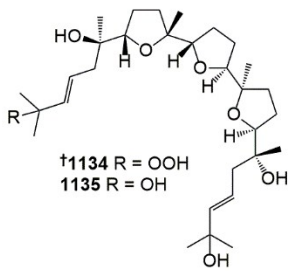
408 Rhodophyta *Neodilsea yendoana* // Hakodate, Japan // Isogloiosiphone B, a novel acetal, and hydrophobic cpds as ß-glucuronidase inhib. derived from the red alga *Neodilsea yendoana*
1125 // N // isogloiosiphone B // weak B-glucosidase activ. 57 µM // *

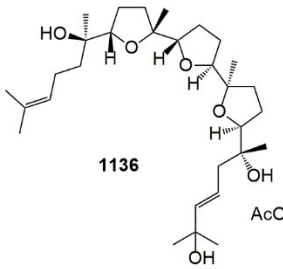
409 Rhodophyta *Laurencia okamurae* // Nanji Is., Zhejiang Province, China // A new dimeric sesquiterpene and other related deriv. from the marine red alga *Laurencia okamurai*
1126 // N // nanji A // * // *

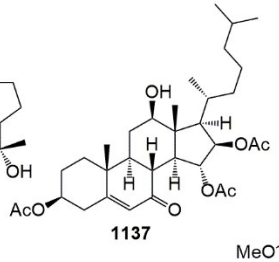
407 Rhodophyta *Laurencia obtusa* // Erbalunga, Corsica // New metabolites isol. from a *Laurencia obtusa* population collected in Corsica
1127 // N // $C_{20}H_{34}O_2$ // * // *

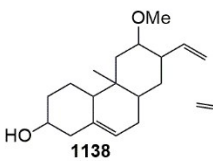
410 Rhodophyta *Callophycus serratus* // Deep Resort Beach, 'Eua, Tonga // Halogenated meroditerpenoids from a South Pacific collection of the red alga *Callophycus serratus*
1128 // N // callophycol C // * // *
1129 // N // callophycoic acid I // * // *
1130 // N // iodocallophycol E // mod. Cytotox to HL-60 IC50 5.1 µM // *
1131 // N // iodocallophycol F // non-cytotox to HL-60 cells // *
1132 // N // iodocallophycoic acid B // * // *
1133 // N // callophycoic acid J // * // *

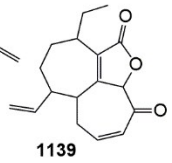
6 Red algae

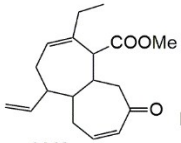


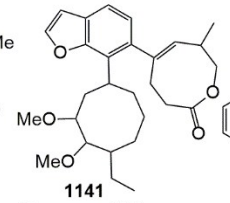


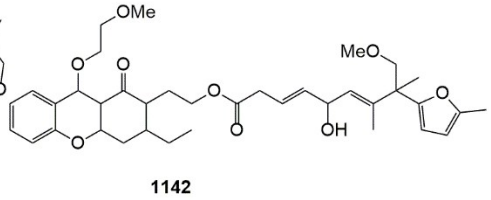


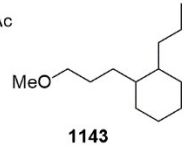


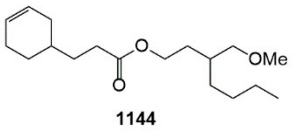


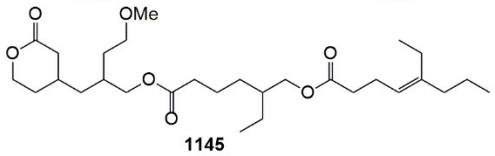












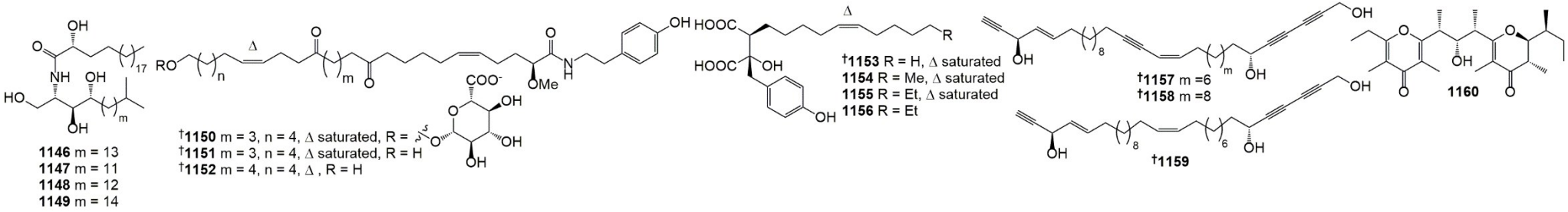
412 Rhodophyta *Laurencia viridis* // Paraiso Floral, Tenerife, Canary Is. // Marine longilenes, oxasqualenoids with Ser-Thr protein phosphatase 2A inhib. activ.
1134 // N // (+)-longilene peroxide // PP2A inhib. IC_{50} 11.3 µM // *
1135 // N // longilene // * // *
1136 // N // (+)-prelongilene // IA @ 100 µM to PP2A // *

413 Rhodophyta *Neodilsea yendoana* // Ade, Ratnagiri, India // Isolation and structure elucidation of halymeniaol, a new antimalarial sterol deriv. from the red alga *Halymenia floresii*
1137 // N // halymeniaol // Antimalarial, IC50 = 3 µM against 3D7 *Plasmodium flaciparum* // *

414 Rhodophyta *Jania rubens*, *Kappaphycus alvarezii* // Gulf of Mannar, India // *In vitro* bioactive anal. and antioxidant activ. of two species of seaweeds from the Gulf of Mannar
1138 // N // $C_{18}H_{28}O_2$ // low DPPH radical scav. activ. IC_{50} = 810 µM // no ^{1}H NMR provided in supp file, struct. inconsistent with NMR/MS data
1139 // N // $C_{17}H_{20}O_3$ // low DPPH radical scav. activ. IC_{50} = 2 µM // no ^{1}H NMR provided in supp file, struct. inconsistent with NMR/MS data
1140 // N // $C_{18}H_{24}O_3$ // * // no ^{1}H NMR provided in supp file, struct. inconsistent with NMR/MS data

415 Rhodophyta *Gracilaria opuntia* // Gulf of Mannar, India // Novel furanyl deriv. from the red seaweed *Gracilaria opuntia* with pharmacological activ. using different *in vitro* models
1141 // N // $C_{18}H_{38}O_5$ // * // supp file suggests isolate is a mixt. of fatty acid and phthalate esters
1142 // N // $C_{37}H_{50}O_9$ // * // supp file suggests isolate is a mixt. of fatty acid and phthalate esters

416 Rhodophyta *Kappaphycus alvarezii* // Gulf of Mannar // Antioxidant and AI oxygenated meroterpenoids from the thalli of red seaweed *Kappaphycus alvarezii*
1143 // N // $C_{13}H_{26}O$ // * // supp file suggests isolate is a mixt. of fatty acid and phthalate esters
1144 // N // $C_{18}H_{32}O_3$ // * // supp file suggests isolate is a mixt. of fatty acid and phthalate esters
1145 // N // $C_{29}H_{50}O_7$ // * // supp file
suggests isolate is a mixt. of fatty acid and phthalate esters



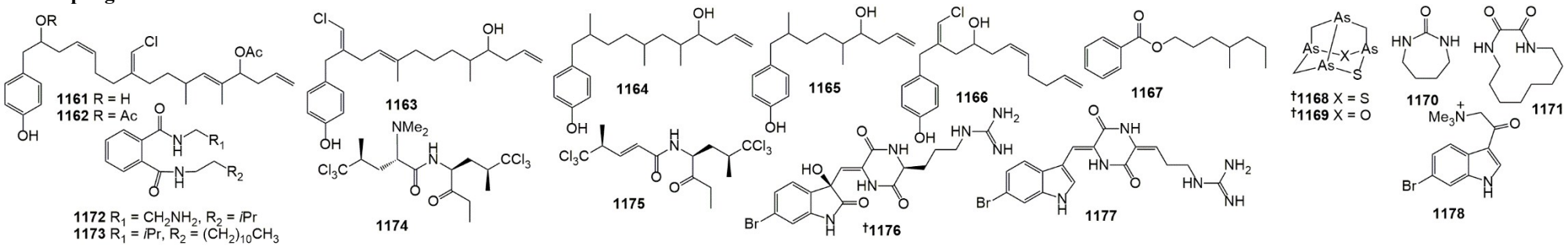
429 Porifera *Monanchora clathrata* // Philippine Is. // Monanchoramides A–D, ceramides from the marine sponge *Monanchora clathrata* with cytotox. activ.
1146 // N // monanchoramide A // Mod. activ. vs 3HTCLs // Structure confirmed by degrad. studies
1147 // N // monanchoramide B // Weak activ. vs 3HTCLs // *
1148 // N // monanchoramide C // Weak activ. vs 3HTCLs // *
1149 // N // monanchoramide D // Weak activ. vs 3HTCLs // *

430 Porifera *Melonanchora kobjakovae* // Dredge (121 m), Urup Is., Sea of Okhotsk // Melonoside B and melonosins A and B, lipids containing multifunctionalized ?-hydroxy fatty acid amides from the Far Eastern marine sponge *Melonanchora kobjakovae*
1150 // N // melonoside B // IA // Abs. config. by compar. of expt. and calcd. ECD, and chemical degrad.
1151 // N // melonosin B // Inhibited oncogenic AP-1 and NF-κB transciptional activ. at non-toxic concentrations (IC_{50} 25-37 μM) // Abs. config. by compar. of expt. and calcd. ECD
1152 // N // melonosin A // Inhib. oncogenic AP-1/NF-κB transcript. activ. at non-tox. conc (IC_{50} 6-12 μM) // Abs. config. by expt./calcd. ECD compar.

431 Porifera *Callyspongia* sp // Marine Protected Area "El Pelado", Ecuador // Callyspongidic acids: amphiphilic diacids from the tropical Eastern Pacific sponge *Callyspongia* cf. *californica*
1153 // N // callyspongidic acid C12:0 // IA vs 6 bact., 2 fungi and 7 HTCLs // Abs. config. by compar. of expt. and calcd. ECD
1154 // N // callyspongidic acid 13:0 // Mod. activ. vs 1 HTCL, IA vs 6 bact., 2 fungi and 6 HTCLs //
1155 // N // callyspongidic acid 14:0 // IA vs 6 bact., 2 fungi and 7 HTCLs //
1156 // N // callyspongidic acid 14:1 // IA vs 6 bact., 2 fungi and 7 HTCLs //

432 Porifera *Niphates* sp // Yongxing Is., China // Pellynols M-O, cytotox. polyacetylenic alcohols from a *Niphates* sp. marine sponge
1157 // N // pellynol M // Mod. activ. vs 3 HTCLs // Abs. config. by Mosher's method
1158 // N // pellynol N // * // Abs. config. by Mosher's method
1159 // N // pellynol O // NT // Abs. config. by Mosher's method

433 Porifera *Smenospongia aurea* // Great Inagua, Bahamas // Isolation of smenopyrone, a bis-?-pyrone polypropionate from the Caribbean sponge *Smenospongia aurea*
1160 // N // smenopyrone // NT // First sponge-derived polypropionate-based pyrone with a putative role in sponge/symbiont communication.



434 Porifera *Hyrtios erectus* // Similian Is., Phangnga Province, Thailand // Sesterterpenes and phenolic alkenes from the Thai sponge *Hyrtios erectus*
1161 // N // erectuseneol A // NT // *
1162 // N // erectuseneol B // Weak activ. vs 6 HTCLs // *
1163 // N // erectuseneol C // NT // *
1164 // N // erectuseneol D // NT // *
1165 // N // erectuseneol E // NT // *
1166 // N // erectuseneol F // IA // *

435 Porifera *Hyrtios erectus* // Jeddah, Saudi Arabia // Cytotox. activ. of alkyl benzoate and fatty acids from the red sea sponge *Hyrtios erectus*
1167 // N // 4-methylheptyl benzoate // Mod. activ. vs 1 of 3 HTCLs // *

436 Porifera *Echinochalina bargibanti* // New Caledonia // New sulfur-containing polyarsenicals from the New Caledonian sponge *Echinochalina bargibanti*
1168 // M // arsenicin B // potent AB and AF activ. // Abs. config. by expt./calcd. ECD compar., calc./exp NMR data ^{75}As, $^{13}C/^{1}H$ compar, known synth.
1169 // N // arsenicin C // potent AB and AF activ. // Abs. config. by expt./calcd. ECD compar., calc./exp NMR data 75As, $^{13}C/^{1}H$ compar

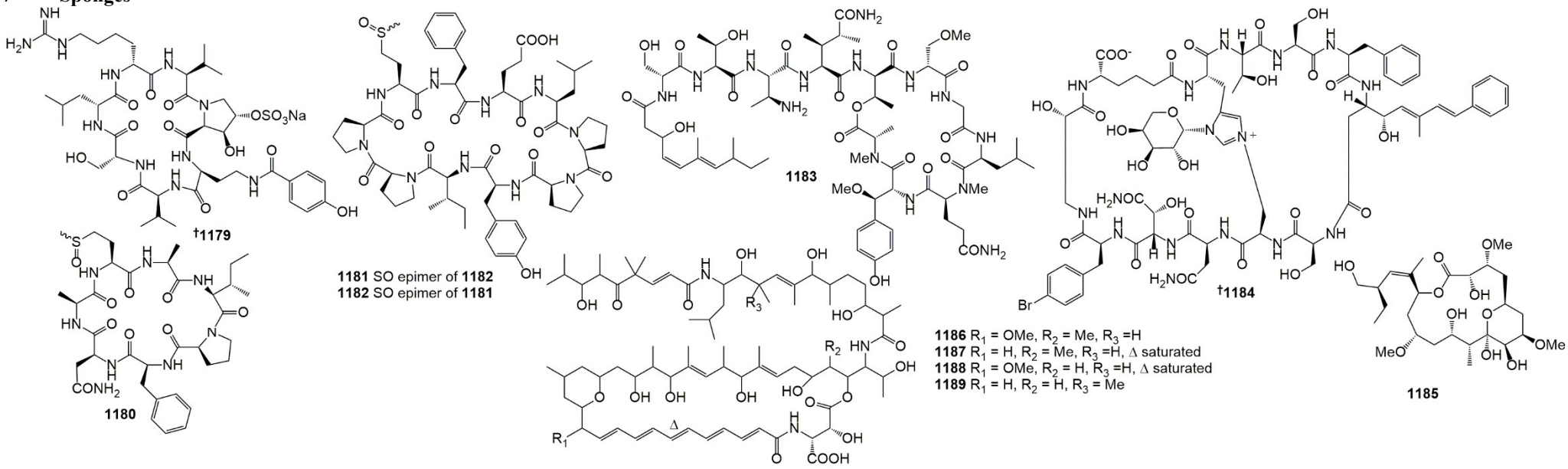
437 Porifera *Hemimycale* sp // El-Gouna, Hurghada, Egypt // Naturally bioactive cpds from *Hemimycale aff arabica*: AM, antiglycation, cytotox., and molecular docking studies
1170 // N // [1,3]-diazepan-2-one // Weak activ. vs 3 HTCLs, weak antiglycation (anti-diabetic) activ. // *
1171 // N // (*S*)-1,4-diaza-cyclododecane-2,3-dion // Weak activ. vs 3 HTCLs, IA in antiglycation assay // *

438 Porifera *Haliclona* sp // Hainan Is., China // Two new phthalate deriv. from the marine sponge *Haliclona* sp.
1172 // N // *N* 1-(2-aminoethyl)-*N*2-isopentylphthalamide // NT // *
1173 // N // *N* 1-isobuty-*N*2-tridecylphthalamide // NT // *

439 Porifera *Callyspongia* sp // Manado, North Sulawesi, Indonesia // Callyspongiamides A and B, sterol *O*-acyltransferase inhib., from the Indonesian marine sponge *Callyspongia* sp.
1174 // N // callyspongiamide A // potent inhib. of sterol-O-acyltransferases 1 and 2 in cell and enzyme assays // Biosynth. prop from chlor. L-leucine
1175 // N // callyspongiamide B // Mod. inhib. of sterol-O-acyltransferases 1 and 2 in cell and enzyme assays // Biosynth. prop from chlor. L-leucine

440 Porifera *Geodia barretti* // Western Iceland (388 m depth) // 6-bromoindole deriv. from the Icelandic marine sponge *Geodia barretti*: isolation and AI activ.
1176 // N // geobarrettin A // IA // Abs. config. by Marfey's and ECD spectroscopy.
1177 // N // geobarrettin B // Mod. AI, inhbiting IL-12p40 secretion from dendritic cells //
1178 // N // geobarrettin C // Mod. AI, inhbiting IL-12p40 secretion from dendritic cells //

441 Porifera *Theonella cupola* // Manado, North Sulawesi, Indonesia // Cupolamide B, a cyclic heptapeptide from *Theonella cupola*
1179 // N // cupolamide B // NT // Abs. config. of amino acids by Marfey's .



442 Porifera *Stylissa flabelliformis* // Chuuk Is., Federated States of Micronesia // Cyclopeptides from the sponge *Stylissa flabelliformis*
1180 // N // phakellistatin 20 // Mod. activ. vs 6 HTCLs // Isol. as mix of methionine sulfoxide epimers, abs. config. of amino acids by Marfey's method.
1181 // N // phakellistatin 21 // potent activ. vs 6 HTCLs // Abs. config. of amino acids by Marfey's method, sulfoxide config. not known.
1182 // N // phakellistatin 22 // potent activ. vs 6 HTCLs // Abs. config. of amino acids by Marfey's method, sulfoxide config. not known.

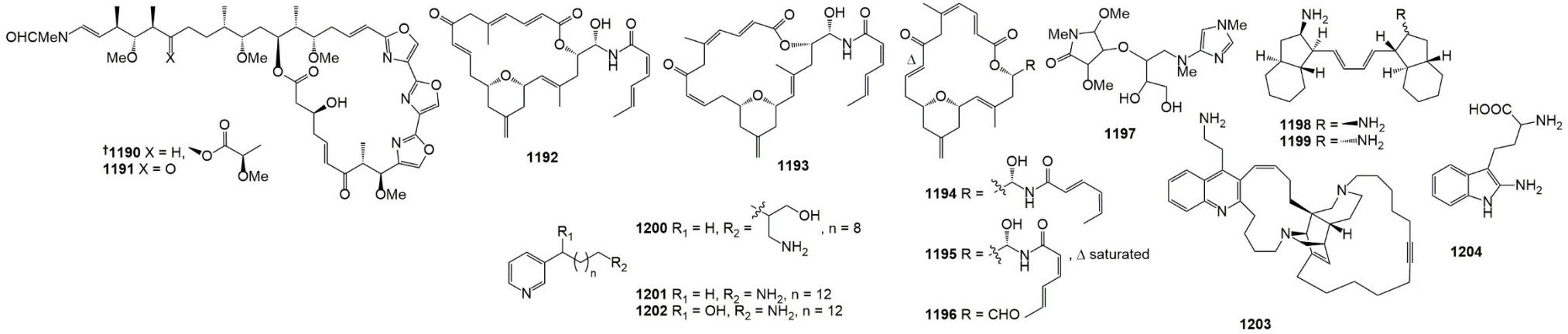
443 Porifera *Discodermia* sp // Dredge (310 m), East China Sea // Stellatolide H, a cytotox. peptide lactone from a deep-sea sponge *Discodermia* sp.
1183 // N // stellatolide H // potent activ. vs 1 HTCL // Abs. config. of amino acids by Marfey's anal.

444 Porifera *Theonella swinhoei* // Hachijo Is., Japan // Colony-wise anal. of a *Theonella swinhoei* marine sponge with a yellow interior permitted the isolation of theonellamide I
1184 // N // theonellamide I // Mod. activ. vs P388 murine leukaemia cells // Abs. config. by Marfey's method. Likely produced by bact. symbiont.

445 Porifera *Mycale hentscheli* // Pelorus Sound, New Zealand // Peloruside E (22-norpeloruside A), a pelorusane macrolide from the New Zealand marine sponge *Mycale hentscheli,* retains microtubule-stabilizing properties
1185 // N // peloruside E // potent activ. vs 1 HTCL, causes tubulin polymerization // *

446 Porifera *Poecillastra* sp // Dredge (430 m), Miyako sea knoll, Japan // Poecillastrin E, F, and G, cytotox. chondropsin-type macrolides from a marine sponge *Poecillastra* sp.
1186 // N // poecillastrin E // Extremely potent activ. vs 1 HTCL // *
1187 // N // poecillastrin F // Extremely potent activ. vs 1 HTCL // *
1188 // N // poecillastrin G // Extremely potent activ. vs 1 HTCL // *

447 Porifera *Characella* sp // Dredge (191 m) Yaku-Shinsone seamount, Japan // Poecillastrin H, a chondropsin-type macrolide with a conjugated pentaene moiety, from a *Characella* sp. marine sponge
1189 // N // poecillastrin H // Extremely potent activ. vs 1 HTCL // Extremely light sensitive



448 Porifera *Mycale* sp // Aburatsubo Bay, Miura Peninsula, Kanagawa, Japan // Miuramides A and B, trisoxazole macrolides from a *Mycale* sp. marine sponge that induce a protrusion phenotype in cultured mammalian cells
1190 // N // miuramide A // Extrem. potent activ. vs 1 HTCL, via actin polymerization // Abs. config. by comb. of degrad., interconversion and Mosher's method
1191 // N // miuramide B // Extremely potent activ. vs 1 HTCL, causes actin polymerization // *

449 Porifera *Cacospongia mycofijiensis* // Cathedral Cave, 'Eua, Tonga // Zampanolides B–E from the marine sponge *Cacospongia mycofijiensis*: potent cytotox. macrolides with microtubule-stabilizing activ.
1192 // N // zampanolide B // Extremely potent activ. vs 1 HTCL, causes tubulin polymerization // *
1193 // N // zampanolide C // Extremely potent activ. vs 1 HTCL, causes tubulin polymerization // *
1194 // N // zampanolide D // Extremely potent activ. vs 1 HTCL, causes tubulin polymerization // *
1195 // N // zampanolide E // potent activ. vs 1 HTCL, causes tubulin polymerization // *
1196 // M // (–)-dactylolide // potent activ. vs 1 HTCL, causes tubulin polymerization // Same config. as zampanolide, and opposite to that prop. for previously isol. dactylolide.

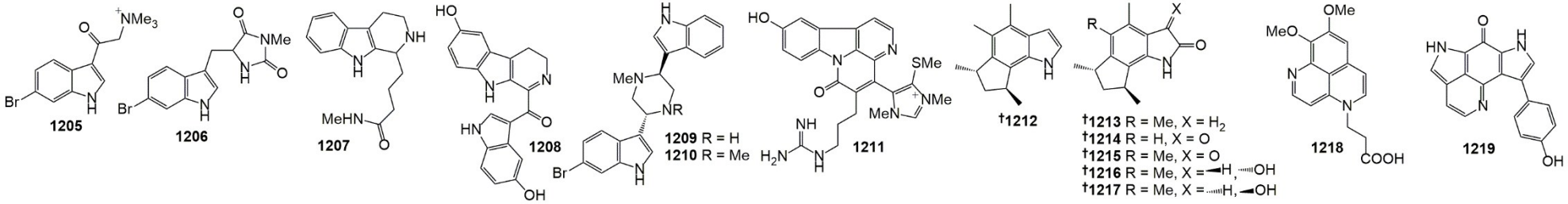
450 Porifera *Ircinia fusca* // Bagwatibandhan, India // A new AB imidazole from the marine sponge *Iricinia fusca*
1197 // N // $C_{16}H_{28}N_4O_6$ // Very weak activ. vs *Staphylococcus aureus* // *

451 Porifera *Haliclona* sp // Iriomote Is., Okinawa, Japan // Anti-mycobact. haliclonadiamine alkaloids from the Okinawan marine sponge *Haliclona* sp. collected at Iriomote Is.
1198 // N // halichondriamine C // Moderare antimycobact. activ. vs four species // *
1199 // N // 1-epi-halichondriamine C // Moderare antimycobact. activ. vs four species // *

452 Porifera *Callyspongia crassa* // Jeddah, Saudi Arabia // Functionalized alkylated pyridines from the Red Sea sponge *Callyspongia crassa* (Porifera, Callyspongiidae) as antitumor agents
1200 // N // callyspongine A // Very weak activ. vs 1 HTCL // *
1201 // N // callyspongine B // Very weak activ. vs 1 HTCL // *
1202 // N // callyspongine C // Very weak activ. vs 1 HTCL // *

453 Porifera *Haliclona* sp // Okuza Is., Tanzania // Njaoamine I, a cytotox. polycyclic alkaloid from the Haplosclerida sponge *Haliclona* (*Reniera*) sp.
1203 // N // njaoamine I // Mod. activ. vs 3 HTCLs // *

454 Porifera *Hyrtios* sp // Sharm el-Sheikh, Egypt // A new antitrypanosomal alkaloid from the Red Sea marine sponge *Hyrtios* sp.
1204 // N // hyrtiodoline A // Mod. antitrypanosomal activ., IA vs J774.1 macrophages. // *



455 Porifera *Oceanapia* sp // Sulawesi Indonesia // The potential of achiral sponge-derived and synth. bromoindoles as selective cytotoxins against PANC-1 tumor cells
1205 // N // 6-bromo-8-keto-conicamin A // Mod. activ. vs 5 HTCLs // Total synth. also achieved

456 Porifera *Hyritos erectus* // Red Sea, Egypt // New bromoindole alkaloid isol. from the marine sponge *Hyrtios erectus*
1206 // N // 5'-[(6-bromo-1*H*-indol-3-yl)methyl]-3'-methylimidazolidine-2',4'-dione // Weak antinbact. activ. // Isol. as a racemic mixt.

457 Porifera *Acanthostrongylophora ingens* // Sulawesi Is., Indonesia // Ingenine F: a new cytotox. tetrahydro carboline alkaloid from the Indonesian marine sponge *Acanthostrongylophora ingens*
1207 // N // ingenine F // Mod. activ. vs 3 of 5 HTCLs // *

458 Porifera *Hyrtios* sp // Weno Is., Chuuk Atoll, Federated States of Micronesia // Indole alkaloids from tropical sponge *Hyrtios* sp. as isocitrate lyase inhib.
1208 // N // 3,4-dihydrohyrtiosulawesine // Inhibits isocitrate lyase // *

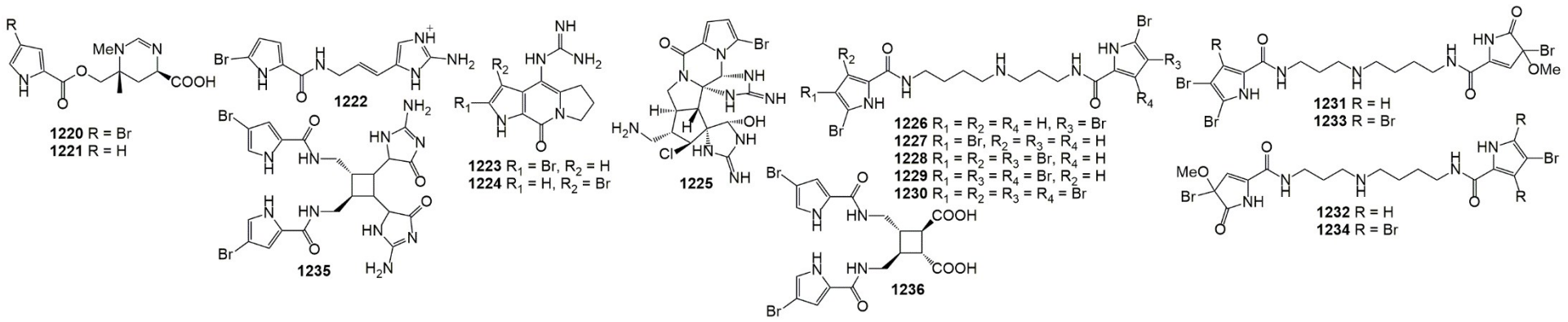
459 Porifera *Dragmacidon* sp // Kashani Is., Tanzania // On the mechanism of action of dragmacidins I and J, two new representatives of a new class of protein phosphatase 1 and 2A inhib.
1209 // N // dragmacidin I // Mod. cytostatic activ. vs 3 HTCLs, mode of action via inhib. of protein phosphatase 1 // Sponge collected using re-breather SCUBA at 80 m depth
1210 // N // dragmacidin J // Mod. cytostatic activ. vs 3 HTCLs, mode of action via inhib. of protein phosphatase 1 // Sponge collected using re-breather SCUBA at 80 m depth

460 Porifera *Hyrtios* sp // Ishigaki Is., Okinawa // Ishigadine A, a new canthin-6-one alkaloid from an Okinawan marine sponge *Hyrtios* sp.
1211 // N // ishigadine A // Mod. activ. vs 1 of 2 HTCLs // Biogenesis most likely from serotonin, arginine and erticulatin A

461 Porifera *Trikentrion flabelliforme* // Bundegi beach, Exmouth Gulf, Western Australia // Six trikentrin-like cyclopentanoindoles from *Trikentrion flabelliforme*. abs. structural assignment by NMR and ECD
1212 // N // (+)-*trans*-herbindole A // NT // Abs. config. by compar. of expt. and calcd. ECD and chemical interconversion
1213 // N // (+)-trikentramide E // NT // Abs. config. by compar. of expt. and calcd. ECD and chemical interconversion
1214 // N // trikentramide F // NT // Abs. config. by compar. of expt. and calcd. ECD and chemical interconversion
1215 // N // (-)-trikentramide G // NT // Abs. config. by compar. of expt. and calcd. ECD and chemical interconversion
1216 // N // (+)-trikentramide H // NT // Abs. config. by compar. of expt. and calcd. ECD and chemical interconversion
1217 // N // (+)-trikentramide I // NT // Abs. config. by compar. of expt. and calcd. ECD and chemical interconversion

462 Porifera *Aaptos lobata* // North Sulawesi, Indonesia // Isolation of aaptic acid from the marine sponge *Aaptos Lobata* and inhib. effect of aaptamines on rankl-induced formation of multinuclear osteoclasts
1218 // N // aaptic acid // IA // *

463 Porifera *Latrunculia biformis* // Dredge (303 m depth), Weddel Sea, Antarctica // Targeted isolation of tsitsikammamines from the Antarctic deep-sea sponge *Latrunculia biformis* by molecular networking and anticancer activ.
1219 // N // 16,17-dehydrotsitsikammamine A // Mol. docking study suggests potential topoisomerase activ. // Sponge selected based upon GNPS-MS/MS molecular networking.



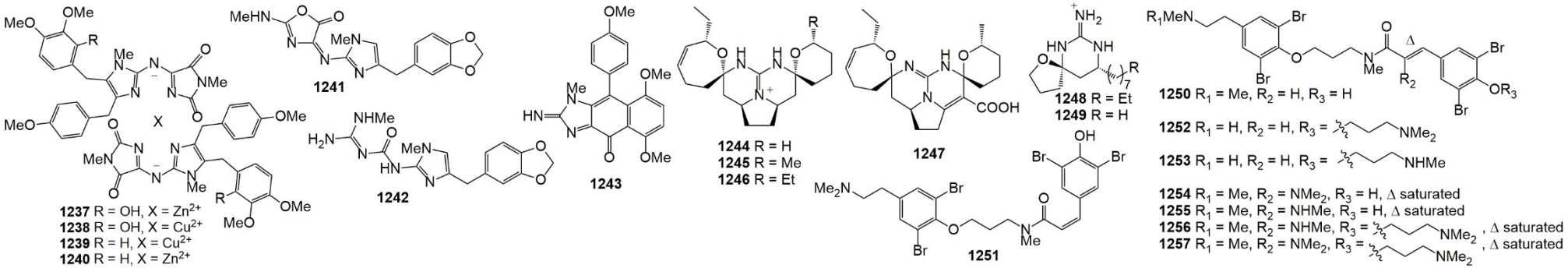
464 Porifera *Clathria prolifera* // Taung-pan-gyi Is., Kyun Su Township, Taninthargi Region, Myanmar // Two new pyrrolo-2-aminoimidazoles from a Myanmarese marine sponge, *Clathria prolifera*
1220 // N // clathrirole A // IA // *
1221 // N // clathrirole B // IA // *

465 Porifera *Dictyonella* sp // Amazon River mouth, Pará State, Brazil // Bromopyrrole alkaloid inhib. of the proteasome isol. from a *Dictyonella* sp. marine sponge collected at the Amazon River mouth
1222 // N // 4-debromooroidin // Weak inhib. of yeast 20*S* proteasome (IC_{50} = 27 μM) // *
1223 // N // 4-debromougibohlin // Weak inhib. of yeast 20*S* proteasome (IC_{50} = 23 μM) // *
1224 // N // 5-debromougibohlin // IA // *
1225 // N // 5-bromopalau'amine // Mod. inhib. of yeast 20*S* proteasome (IC_{50} = 9.2 μM) // *

466 Porifera *Tedania brasiliensis* // Cabo Frio, Rio de Janeiro state, Brazil // Isolation, deriv. synth., and structure–activ. relationships of antiparasitic bromopyrrole alkaloids from the marine sponge *Tedania brasiliensis*
1226 // N // 3-debromopseudoceratidine // Mixt. IA // Isol. as inseperable isomer with **1227**
1227 // N // 20-debromopseudoceratidine // Mixt. IA // Isol. as inseperable isomer with **1226**
1228 // N // 4-bromopseudoceratidine // Mixt. IA // Isol. as inseperable isomer with **1229**
1229 // N // 19-bromopseudoceratidine // Mixt. IA // Isol. as inseperable isomer with **1228**
1230 // N // 4,19-dibromopseudoceratidine // //
1231 // N // tedamide A // Mixt. IA // Isol. as inseperable isomer with **1232**, contains unprecedented structural motif
1232 // N // tedamide B // Mixt. IA // Isol. as inseperable isomer with **1231**, contains unprecedented structural motif
1233 // N // tedamide C // Mixt. IA // Isol. as inseperable isomer with **1234**
1234 // N // tedamide D // Mixt. IA // Isol. as inseperable isomer with **1233**

467 Porifera *Agelas kosrae* // Kosrae Is., Federated States of Micronesia // Bromopyrrole alkaloids from the sponge *Agelas kosrae*
1235 // N // dioxysceptrin // Mod. activ. vs. 6 HTCLs, IA vs. imicrob.s // Isol. as mix of epimiers
1236 // N // ageleste C // Weak activ. vs. 6 HTCLs, IA vs. imicrob.s // *

7 Sponges



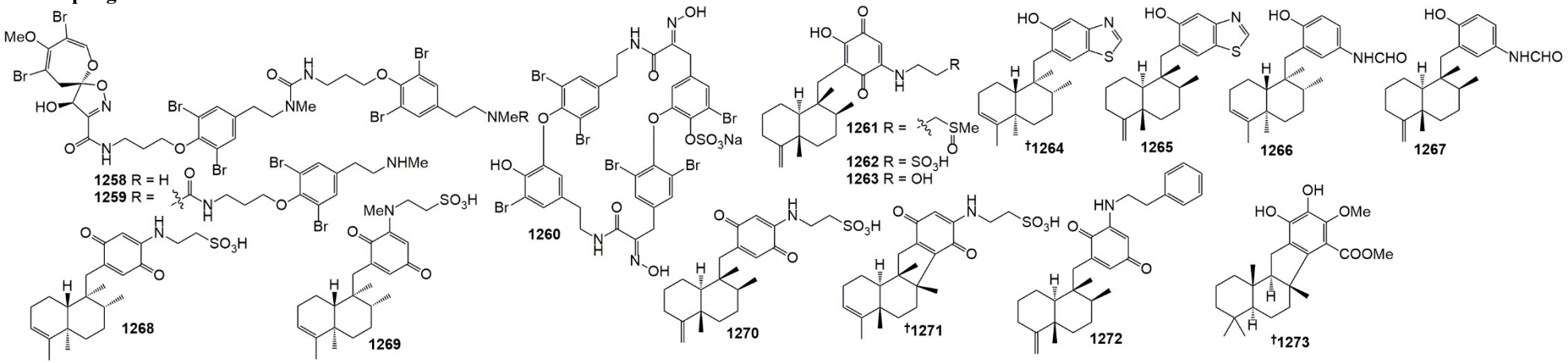
468 Porifera *Leucetta chagosensis* // S. China Sea // Chagosendines A – C, new metal complexes of imidazole alkaloids from the calcareous sponge *Leucetta chagosensis*
1237 // N // chagosendine A // IA // Zn containing complex, X-ray structure obtained
1238 // N // chagosendine B // potent activ. against 3 of 4 HTCLs // Cu containing complex, X-ray structure obtained
1239 // N // chagosendine C // potent activ. against 3 of 4 HTCLs // Cu containing complex

469 Porifera *Leucetta chagosensis* // Yongxing Is., S China Sea // Imidazole alkaloids and their zinc complexes from the calcareous marine sponge *Leucetta chagosensis*
1240 // N // bis(naamidine J)zinc // IA // Rare Zn containing dimeric complex
1241 // N // leuchagodine A // IA // Has unprecedented oxazole linked via N atom to imidazole ring
1242 // N // leuchagodine B // IA vs 3 HTCLs, weakly inhibits TNF-α and IL-6 prod in LPS-stimulated THP-1 cells //
1243 // N // kealiinine D // IA // *
1237 // N // bis(pyronaamidine)zinc // IA vs 3 HTCLs, weakly inhibits TNF-α and IL-6 prod in LPS-stimulated THP-1 cells // Rare Zn containing dimeric complex

470 Porifera *Clathria bulbotoxa* // Samalona Is., South Sulawesi Sea, Indonesia // New crambescidin-type alkaloids from the Indonesian marine sponge *Clathria bulbotoxa*
1244 // N // crambescidin 345 // Mod. activ. vs 1 HTCL, active as anti-oomycete agent vs. *Phytophthora capsici* // *
1245 // N // crambescidin 361 // Mod. activ. vs 1 HTCL, active as anti-oomycete agent vs. *Phytophthora capsici* // *
1246 // N // crambescidin 373 // potent activ. vs 1 HTCL, active as anti-oomycete agent vs. *Phytophthora capsici* // *

471 Porifera *Crambe crambe* // La Caleta de Salobreña, Granada, Spain // Innovative approach to sustainable marine invertebrate chemistry and a scale-up technology for open marine ecosystems
1247 // N // crambescidin 401 // NT // Extracted from aquarium seawater using a novel *in situ* sampling device
1248 // N // crambescin B 281 // NT // Extracted from aquarium seawater using a novel *in situ* sampling device
1249 // N // crambescin B 253 // NT // Extracted from aquarium seawater using a novel *in situ* sampling device

473 Porifera *Suberea ianthelliformis* // Nuku Hiva, Marquesas Is.s, French Polynesia // Bioactive bromotyrosine-derived alkaloids from the Polynesian sponge *Suberea ianthelliformis*
1250 // N // psammaplysene F // Mod activ. vs 1 HTCL // *
1251 // N // psammaplysene G // Mod activ. vs 1 HTCL // *
1252 // N // psammaplysene H // NT // *
1253 // N // psammaplysene I // Weak activ. vs 1 HTCL // *
1254 // N // anomoian C // Weak activ. vs 1 HTCL // *
1255 // N // anomoian D // Weak activ. vs 1 HTCL // *
1256 // N // anomoian E // Weak activ. vs 1 HTCL // *
1257 // N // anomoian F // * // *

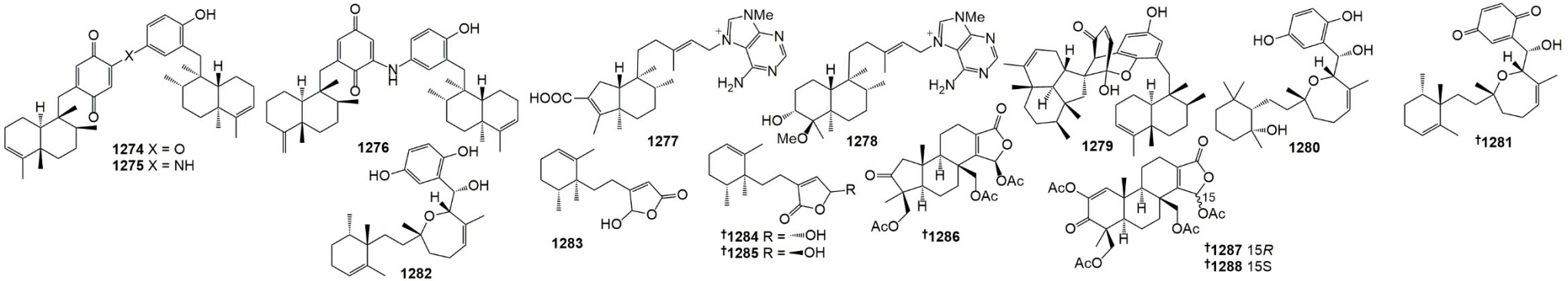


474 Porifera *Pseudoceratina* sp // Okinawa, Japan // Ceratinadins D and E, new bromotyrosine alkaloids from an Okinawan marine sponge *Pseudoceratina* sp.
1258 // N // ceratinadin E // potent antimalarial activ. against two *P. falciparum* strain, mod. cyotoxicity, selectivity index 15.5 // *
1259 // N // ceratinadin F // Mod. antimalarial activ. against one *P. falciparum* strain, weak cyotoxicity, selectivity index >4 // *

475 Porifera *Ianthella basta* // Guam // Isolation of bastadin-6-*O*-sulfate and expedient purifications of bastadins-4, -5 and -6 from extracts of *Ianthella basta*
1260 // N // bastadin-6-*O*-sulfate // NT // *

476 Porifera *Spongia* sp // Son Cha, Lang Co, Tha Thien-Hue City, Vietnam // Three new sesquiterpene aminoquinones from a Vietnamese *Spongia* sp. and their biological activ.
1261 // N // langcoquinone D // Moderatve activ. vs. Gram positive bact., mod. activ. vs 4 HTCLs // *
1262 // N // langcoquinone E // IA // *
1263 // N // langcoquinone F // IA // *

477 Porifera *Dactylospongia* sp // Xisha Is., S China Sea // Unusual AI meroterpenoids from the marine sponge *Dactylospongia* sp.
1264 // N // dactylospongin A // Mod. inhibiton of cytokine prod in LPS stimulated THP-1 cells // First benzothiazole MNPs known, abs. config. by compar. of expt. and calcd. ECD
1265 // N // dactylospongin B // Mod. inhibiton of cytokine prod in LPS stimulated THP-1 cells // First benzothiazole MNPs known
1266 // N // dactylospongin C // IA // *
1267 // N // dactylospongin D // Mod. inhibiton of cytokine prod in LPS stimulated THP-1 cells // *
1268 // N // *ent*-melemeleone B // Mod. inhibiton of cytokine prod in LPS stimulated THP-1 cells // *
1269 // N // melemeleone C // IA // *
1270 // N // melemeleone D // IA // *
1271 // N // melemeleone E // IA // Abs. config. by compar. of expt. and calcd. ECD
1272 // N // dysidaminone N // Mod. inhibiton of cytokine prod in LPS stimulated THP-1 cells // *
1273 // N // 19-O-methylpelorol // Weak activ. vs 1 of 5 HTCLs, mod. inhibiton of cytokine prod in LPS stimulated THP-1 cells // Abs. config. by compar. of expt. and calcd. ECD



478 Porifera *Dactylospongia elegans* // Xisha Is., S China Sea. // Popolohuanones G - I, dimeric sesquiterpene quinones with IL-6 inhib. activ. from the marine sponge *Dactylospongia elegans*
1274 // N // popolohuanone G // IA vs 5 HTCLs // *
1275 // N // popolohuanone H // IA vs 5 HTCLs, inhibited IL-6 prod in LPS-stimulated THP-1 cells // *
1276 // N // popolohuanone I // IA vs 5 HTCLs // *

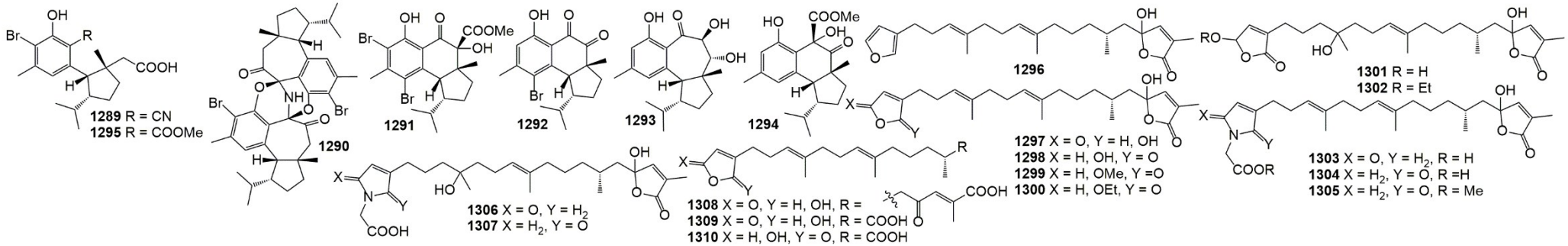
479 Porifera *Agelas* sp // Kerama Is., Okinawa // Agelamasines A and B, diterpene alkaloids from an Okinawan marine sponge *Agelas* sp.
1277 // N // agelamasine A // NT // First MNP with the (4 → 2)-*abeo*-clerodane skeleton
1278 // N // agelamasine B // NT // *

480 Porifera *Dysidea arenaria* // Xisha Is., S China Sea // Dysiarenone, a dimeric C_{21} meroterpenoid with inhib. of COX-2 expression from the marine sponge *Dysidea arenaria*
1279 // N // dysiarenone // Inhibits COX-2 expression in LPS-stimulated RAW264.7 macrophages in dose dependent manner; 10x more active than avarol // Unique avarol/avarone dimer.

481 Porifera *Haliclona* sp // Tunumanu, Indonesia, Mapia anchorage, Indonesia // Can stereoclusters sep. by two methylene groups be related by DFT studies? The case of the cytotox. meroditerpenes halioxepines
1280 // N // halioxepine B // Mod. activ. vs 3 HTCLs // Rel. config. Estab. using DFT calc. and J-based conform. anal., abs. config.by Mosher's method
1281 // N // halioxepine C // Mod. activ. vs 3 HTCLs // Rel. config. Estab. using DFT calc. and J-based conform. anal., abs. config.by Mosher's method
1282 // R // halioxepine A // Mod. activ. vs 3 HTCLs // Structure revised based on DFT and J-based conform. Anal.

482 Porifera *Lamellodysidea* sp // Manado, North Sulawesi, Indonesia // Protein tyrosine phosphatase 1B inhib. polybromobiphenyl ethers and monocyclofarnesol-type sesquiterpenes from the Indonesian marine sponge *Lamellodysidea* cf. *herbacea*
1283 // N // lamellolactone A // IA // *
1284 // N // lamellolactone B1 // IA // Sep. by chiral chromatography, abs. config. by compar. of expt. and calcd. ECD.
1285 // N // lamellolactone B2 // IA // Sep. by chiral chromatography, abs. config. by compar. of expt. and calcd. ECD.

483 Porifera *Spongia officinalis* // Weizhou Is., China // Spongian diterpenes from Chinese marine sponge *Spongia officinalis*
1286 // N // 3-nor-spongiolide A // IA // Abs. config. by compar. of expt. and calcd. ECD
1287 // N // spongiolide A // IA // Abs. config. by compar. of expt. and calcd. ECD
1288 // N // spongiolide B // IA // Abs. config. by compar. of expt. and calcd. ECD

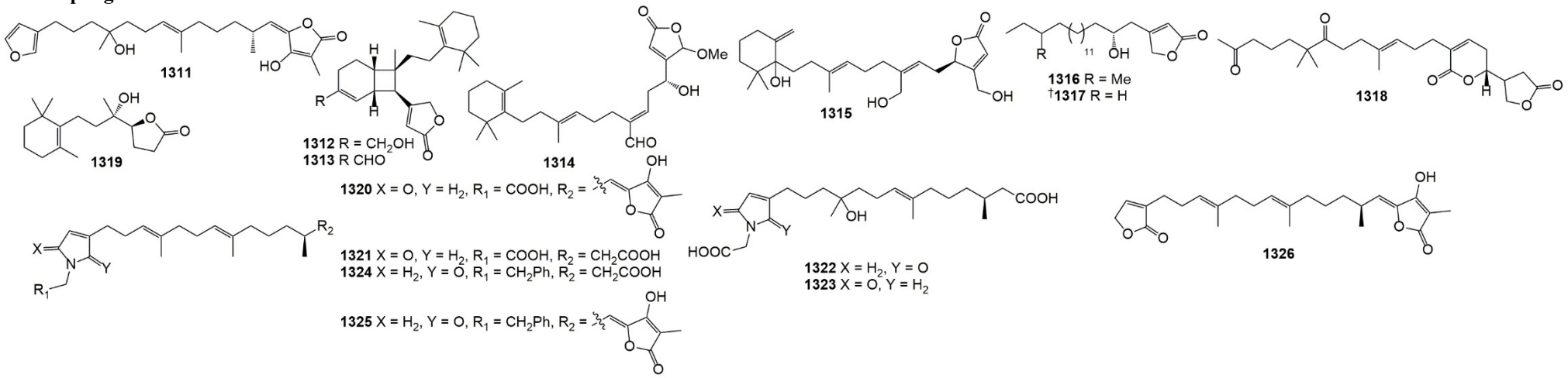


484 Porifera *Hamigera tarangaensis* // Taheke Reef, Cavalli Is., New Zealand // Hamigerans R and S: nitrogenous diterpenoids from the New Zealand marine sponge *Hamigera tarangaensis*

1289 // N // hamigeran R // IA // Possibly first MNP nitrile where the C is not of inorganic origin
1290 // N // hamigeran S // IA // Dimer
1291 // N // 4-bromohamigeran A // IA // *
1292 // N // debromohamigeran B // IA // *
1293 // N // debromohamigeran I // IA // *
1294 // N // debromohamigeran J // IA // *
1295 // N // hamigeran *L* 12-*O*-methyl ester // IA // *

485 Porifera *Cacospongia* sp // Trawl, Great Australian Bight // Cacolides: sesterterpene butenolides from a Southern Australian marine sponge, *Cacospongia* sp.

1296 // N // cacolide A // IA vs 2 bact., 1 fungus and 1 HTCL // *
1297 // N // cacolide B // IA vs 2 bact., 1 fungus and 1 HTCL // *
1298 // N // cacolide C // IA vs 2 bact., 1 fungus and 1 HTCL // *
1299 // N // cacolide D // IA vs 2 bact., 1 fungus and 1 HTCL // *
1300 // N // cacolide E // IA vs 2 bact., 1 fungus and 1 HTCL // Likely artefact from storage in EtOH
1301 // N // cacolide F // IA vs 2 bact., 1 fungus and 1 HTCL // *
1302 // N // cacolide G // IA vs 2 bact., 1 fungus and 1 HTCL // Likely artefact from storage in EtOH
1303 // N // cacolide H // IA vs 2 bact., 1 fungus and 1 HTCL // *
1304 // N // cacolide I // IA vs 2 bact., 1 fungus and 1 HTCL // *
1305 // N // cacolide J // IA vs 2 bact., 1 fungus and 1 HTCL // *
1306 // N // cacolide K // IA vs 2 bact., 1 fungus and 1 HTCL // *
1307 // N // cacolide L // IA vs 2 bact., 1 fungus and 1 HTCL // *
1308 // N // cacolic acid A // IA vs 2 bact., 1 fungus and 1 HTCL // *
1309 // N // cacolic acid B // IA vs 2 bact., 1 fungus and 1 HTCL // *
1310 // N // cacolic acid C // IA vs 2 bact., 1 fungus and 1 HTCL // *

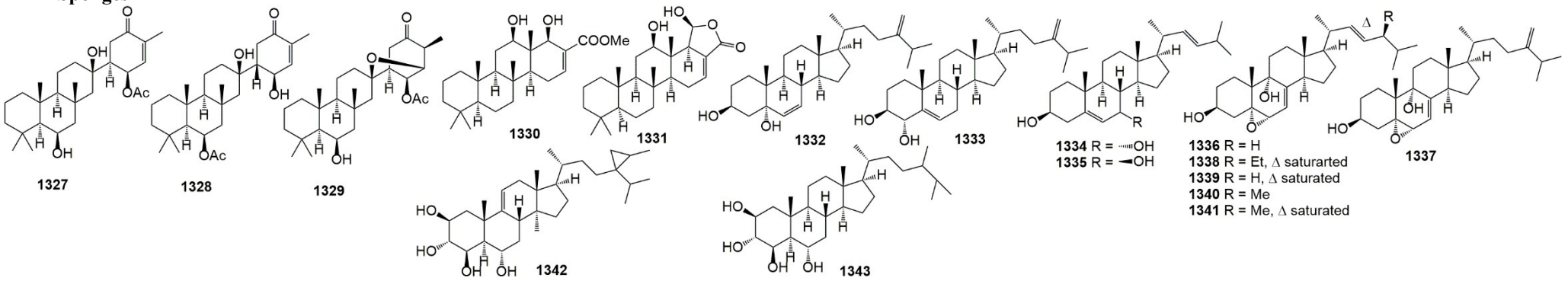


486 Porifera *Biemna fortis* // Weizhou Is., Guangxi Autonomous Region, China // Furanosesterterpenes from the Guangxi sponge *Biemna fortis* Topsent
1311 // N // (12*E*,18*R*,20*E*)-8-hydroxyvariabilin // NT // *

487 Porifera *Hyritos erectus* // Similan Is., Andaman Sea, Phangnga province, Thailand // Cytotox. sesterterpenes from Thai marine sponge *Hyrtios erectus*
1312 // N // erectusolide B // NT // Likely formed by photochemical [2+2] cycloaddition
1313 // N // erectusolide C // NT // Likely formed by photochemical [2+2] cycloaddition
1314 // N // seco-manoalide-25-methyl ether // Weak activ. vs. 6 HTCLs // *
1315 // N // erectusolide D // NT // *
1316 // N // erectusfuranone A // Weak activ. vs. 6 HTCLs // *
1317 // N // erectusfuranone B // NT // Abs. config. by Mosher's method

434 Porifera *Hyrtios erectus* // Similian Is., Phangnga Province, Thailand // Sesterterpenes and phenolic alkenes from the Thai sponge *Hyrtios erectus*
1318 // N // erectusolide A // NT // *
1319 // M // *threo*-cavernosine // Weak activ. vs 6 HTCLs // Known synth.ally

488 Porifera *Sarcotragus* sp, *Psammocinia* sp // Durras, New S. Wales, Australia // Pursuing sesterterpene lactams in Australian Irciniidae sponges
1320 // N // ircinialactam B // NT // *
1321 // N // ircinialactam G // NT // *
1322 // N // 8-hydroxyircinialactam C // NT // *
1323 // N // 8-hydroxyircinialactam G // NT // *
1324 // N // ircinialactam H // NT // *
1325 // N // ircinialactam I // NT // *
1326 // N // ircinialactone A // NT // *



489 Porifera *Phorbas areolatus* // Whalers Bay, Deception Is. (South Shetland Is.s), Antarctica // Suberitane sesterterpenoids from the Antarctic sponge *Phorbas areolatus* (Thiele, 1905)
1327 // N // isosuberitenone B // Mod. activ. vs 5 HTCLs // First MNPs from this species
1328 // N // 19-episuberitenone B // Mod. activ. vs 5 HTCLs // First MNPs from this species
1329 // N // isoxaspirosuberitenone // Weak activ. vs 5 HTCLs // First MNPs from this species

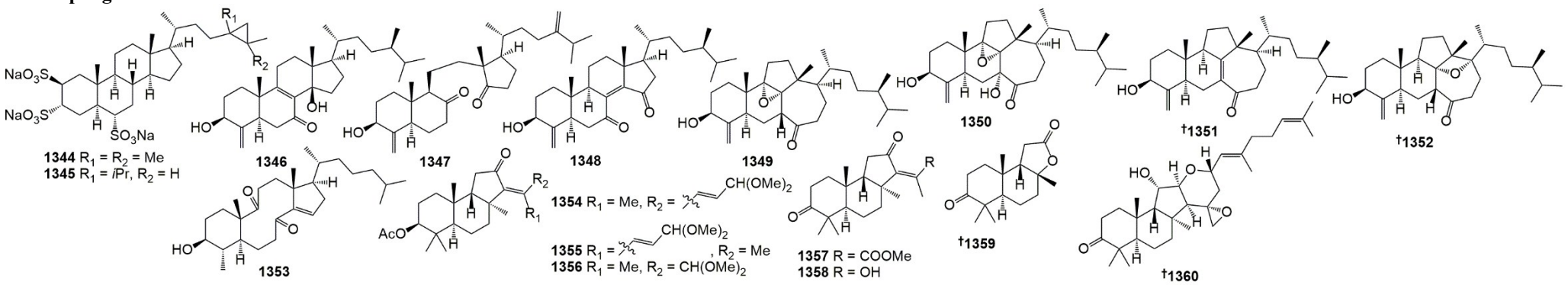
490 Porifera *Spongia* sp // Mengalum Is., Sabah, Malaysia // Cytotox. sesterterpenoids from Bornean sponge *Spongia* sp.
1330 // R // methyl 18-hydroxy-19-norscalar-16-en-20-carboxylate // NT // *

491 Porifera *Hyrtios erectus* // Red Sea, Egypt // Anti-*Helicobacter*, antitubercular and cytotox. activ. of scalaranes from the Red Sea sponge *Hyrtios erectus*
1331 // N // 12-*O*-deacetyl-12,19-di-epi-scalarin // Weak anti-tubucular activ. // *

492 Porifera *Inflatella* sp // Dredge (214-197 m), Kashevarov Bank, Sea of Okhotsk // Oxysterols from a marine sponge *Inflatella* sp. and their action in 6-hydroxydopamine-induced cell model of Parkinson's disease
1332 // N // 24-methylcholesta-6,24(28)-diene-3ß,5α-diol // Weak activ. vs 1 HTCL // *
1333 // N // 24-methylcholesta-5,24(28)-diene-3ß,4α-diol // Weak activ. vs 1 HTCL // *
1334 // N // (22*E*)-24-nor-cholesta-5,22-diene-3ß,7α-diol // Weak activ. vs 1 HTCL // *
1335 // N // (22*E*)-24-nor-cholesta-5,22-diene-3ß,7ß-diol // Weak activ. vs 1 HTCL // *

493 Porifera *Ircinia echinata* // Bai Tu Long, Quang Ninh, Vietnam // New 9a-hydroxy-5a,6a-epoxysterols from the Vietnamese marine sponge *Ircinia echinata*
1336 // N // 5α,6α-epoxycholesta-7,22(*E*)-dien-3ß,9α-diol // IA // *
1337 // N // 5α,6α-epoxycholesta-7,24(28)-dien-3ß,9α-diol // IA // *
1338 // N // (24*R*)-5α,6α-epoxy-24-ethyl-cholesta-7-en-3ß,9α-diol // Weak activ. vs 3 HTCLs // *
1339 // M // 5α,6α-epoxycholesta-7-en-3ß,9α-diol // Weak activ. vs 3 HTCLs // Previously synth.ed from free radical chain oxidation syntheses
1340 // N // (24*S*)-5α,6α-epoxyergosta-7,22-dien-3ß,9α-diol // IA // *
1341 // N // (24*R*)-5α,6α epoxy-24-methyl-cholesta-7-en-3ß,9α-diol // IA // *

494 Porifera *Topsentia sp* // Xuwen, Guangdong Province, China // Two new polyhydroxylated sterol deriv. from the sponge *Topsentia* sp. collected from the S China Sea
1342 // N // topsensterol D // IA // *
1343 // N // 4ß-hydroxyhalistanol // IA // *



495 Porifera *Halicondria* sp // Sokodo, Hachijo-jima Is., Japan // Halistanol sulfates I and J, new SIRT1–3 inhib. steroid sulfates from a marine sponge of the genus *Halichondria*
1344 // N // halistanol I // * // *
1345 // N // halistanol J // * // *

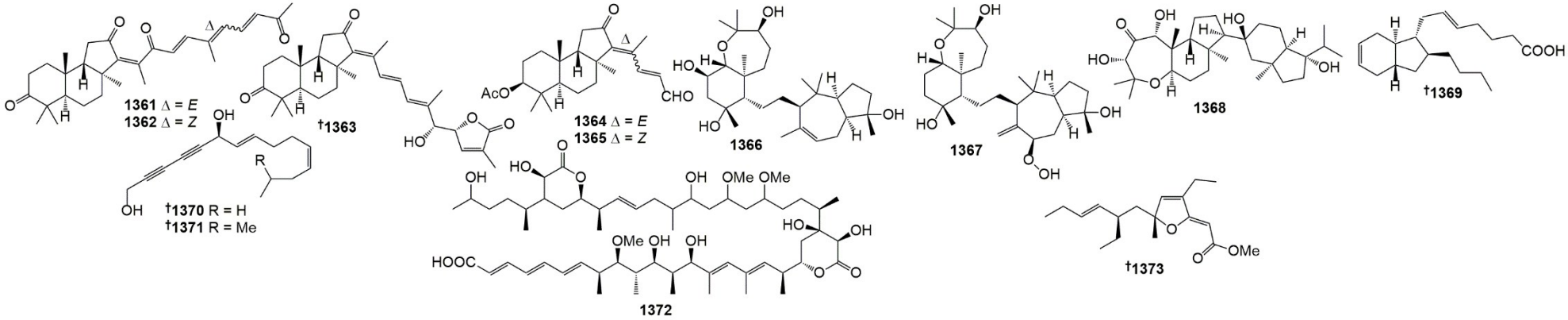
496 Porifera *Theonella swinhoei* // Yongxing Is., China // New 4-methylidene sterols from the marine sponge *Theonella swinhoei*
1346 // N // conicasterol L // IA // 4-methylidene containing sterol
1347 // N // dehydroswinhosterol B // IA // 4-methylidene containing sterol
1348 // N // 7,15-oxoconicasterol // Mod. activ. vs 3 HTCls, causes ROS-induced apoptosis // 4-methylidene containing sterol

497 Porifera *Theonella swinhoei* // Xisha Is., S China Sea // Swinhoeisterols from the S China Sea sponge *Theonella swinhoei*
1349 // N // swinhoeisterol C // Inhibited histone acetyltransferase (H)p300 (IC_{50} = 8.8 μM) // *
1350 // N // swinhoeisterol D // IA // *
1351 // N // swinhoeisterol E // IA // Abs. config. by compar. of expt. and calcd. ECD
1352 // N // swinhoeisterol F // IA // Abs. config. by compar. of expt. and calcd. ECD

498 Porifera *Dictyonella* sp // Gageo-do, Korea // Dictyoneolone, a B/C ring juncture-defused steroid from a *Dictyonella* sp. sponge
1353 // N // dictyoneolone // Weak activ. vs 2 HTCLs, IA vs various bact. and fungi // Unusual ring B/C "defused" seco-sterol

499 Porifera *Rhabdastrella providentiae* // Con Co, Quang Tri, Vietnam // New acetylated terpenoids from sponge *Rhabdastrella providentiae* inhibit NO prod in LPS stimulated BV2 cells
1354 // N // rhabdaprovidine A // Weak inhib. of NO prod in LPS stimulated BV2 cells // *
1355 // N // rhabdaprovidine B // Weak inhib. of NO prod in LPS stimulated BV2 cells // *
1356 // N // rhabdaprovidine C // Weak inhib. of NO prod in LPS stimulated BV2 cells // *

500 Porifera *Rhabdastrella providentiae* // Con Co, Quango Tri, Vietnam // Rhabdaprovidines D-G, four new 6,6,5-tricyclic terpenoids from the Vietnamese sponge *Rhabdastrella providentiae*
1357 // N // rhabdaprovidine D // NT // *
1358 // N // rhabdaprovidine E // NT // *
1359 // N // rhabdaprovidine F // NT // Abs. config. by compar. of expt. and calcd. ECD
1360 // N // rhabdaprovidine G // NT // Abs. config. by compar. of expt. and calcd. ECD



501 Porifera *Rhabdastrella providentiae* // Con Co, Quang Tri, Vietnam // New isomalabaricane analogues from the sponge *Rhabdastrella providentiae* and their cytotox. activ.
1361 // N // rhabdastrellin G // Weak activ. vs 5 HTCLs // *
1362 // N // rhabdastrellin H // Mod. activ. vs 5 HTCLs // *
1363 // N // rhabdastrellin I // Weak activ. vs 5 HTCLs // Abs. config. by compar. of expt. and calcd. ECD
1364 // N // rhabdastrellin J // IA // *
1365 // N // rhabdastrellin K // IA // *

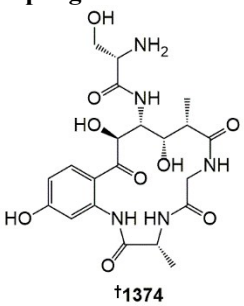
502 Porifera *Siphonochalina siphonella*, *Callyspongia siphonella* // Hurghada, Egypt // New inhib. of RANKL-induced osteoclastogenesis from the marine sponge *Siphonochalina siphonella*
1366 // N // sipholenol N // IA // *
1367 // N // sipholenol O // IA // *
1368 // N // neviotine D // Inhibited RANKL-induced differentiation of RAW264 cells into osteoclasts (IC_{50} = 12.8 μM) // *

511 * // * // Total synth. of (-)-mucosin and revision of structure
1369 // R // mucosin // * // Structure revised following total synth.

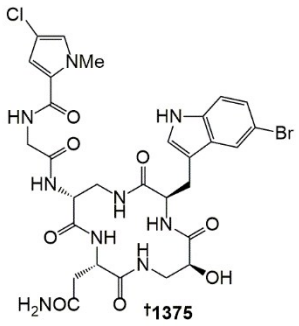
512 * // * // Stereoselective total synth. and structural revision of the diacetylenic diol natural products strongylodiols H and I
1370 // R // strongylodiol H // * // Abs. config. revised following total synth.
1371 // R // strongylodiol I // * // Abs. config. revised following total synth.

513 * // * // A synth.-enabled relative stereochemical assignment of the C1–C28 region of hemicalide
1372 // R // hemicalide // * // Rel. config. revised following model synth.

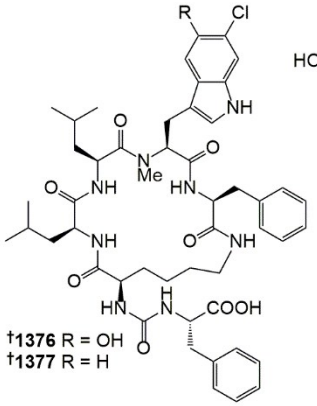
515 * // * // Total synth. and structural elucidation of spongosoritin A
1373 // R // spongosoritin A // * // Structure determ.d following total synth.



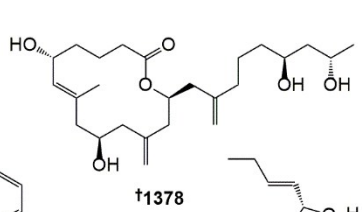
†1374



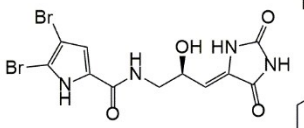
†1375



†1376 R = OH
†1377 R = H



†1378



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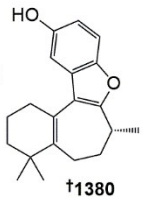
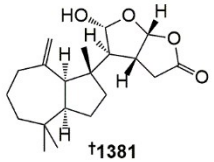
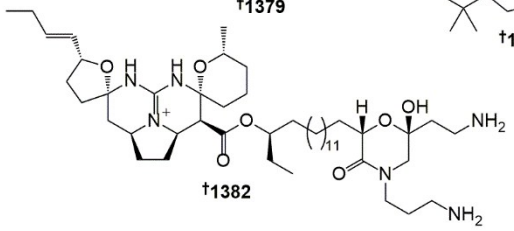


†1380

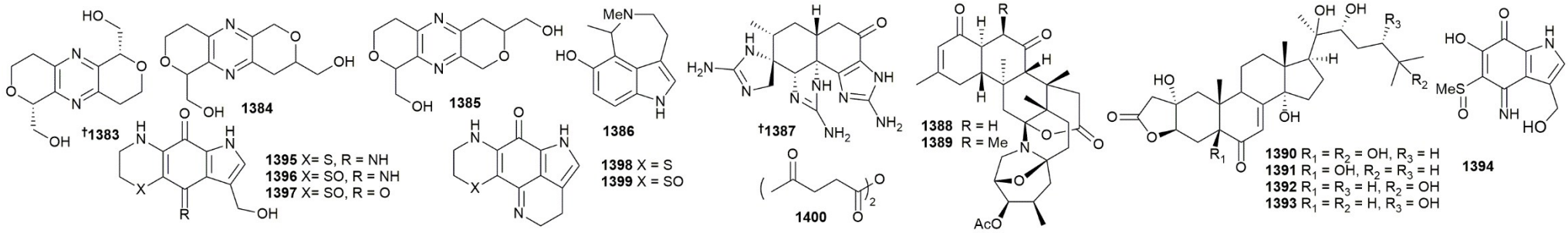


†1381



†1382

517 * // * // Total synth. of the potent AI natural product solomonamide A along with structural revision and biological activ. evaluation
1374 // R // solomonamide A // * // Structure revised following total synth. Synth. guided by QM calc.s.
518 * // * // Application of the DP4 probability to flexible cyclic peptides with multiple independent stereocenters: the true structure of cyclocinamide A
1375 // R // cyclocinamide A // * // Structure revised following total synth.
519 * // * // Total synth. of keramamides A and L from a common precursor by late-stage indole synth. and config.al revision
1376 // R // keramamide A // * // Structure revised following total synth.
1377 // R // keramamide L // * // Structure revised following total synth.
524 * // * // Synth. and stereochemical assignment of arenolide
1378 // R // arenolide // * // Structure revised following total synth.
529 * // * // Synth. and abs. stereochemical reassignment of mukanadin F: a study of isomerization of bromopyrrole alkaloids with implications on marine natural product isolation
1379 // R // mukanadin F // * // Structure revised following total synth.
533 * // * // Beyond optical rot.: what's left is not always right in total synth.
1380 // R // (+)-frondosin B // * // Structure revised and discrepanices in spec. rot. rationalised following total synth.
535 * // * // Short enantioselective total syntheses of cheloviolenes A and B and dendrillolide C via convergent fragment coupling using a tertiary carbon radical
1381 // R // chelioviolene B // * // Structure revised following total synth.
536 * // * // abs. config. of the cytotox. marine alkaloid monanchocidin A
1382 // R // monanchocidin A // * // Abs. config. of entire compund by extensive degrad. studies and Mosher's method .



541 Cnidaria *Palythoa tuberculosa* // Taitung County, Taiwan // Anti-lymphangiogenesis components from zoanthid *Palythoa tuberculosa*
1383 // N // tuberazine A // Anti-lymphangiogenic // Abs. config. by calc. ECD
1384 // N // tuberazine B // Anti-lymphangiogenic // *
1385 // N // tuberazine C // Anti-lymphangiogenic // *
1386 // M // 3,4,5,6-tetrahydro-7-hydroxy-5,6- dimethyl-1H-azepino[5,4,3-cd]indole // Not cytotox. // *

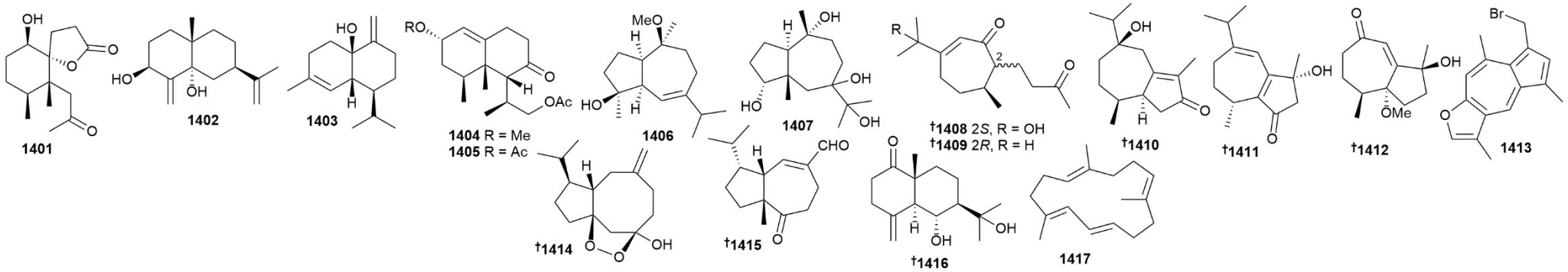
542 Cnidaria *Epizoanthus illoricatus* // Siaes Tunnel, Palau // KB343, a cyclic tris-guanidine alkaloid from Palauan zoantharian *Epizoanthus illoricatus*
1387 // N // KB343 // Mod. in vitro cytotox. and induces slow death in vivo. // Abs. config. by calc. ECD

543 Cnidaria *Zoanthus* cf *pulchellus* // San Pedro, Santa Elena Peninsula, Ecuador // Zoanthamine alkaloids from the zoantharian *Zoanthus* cf. *pulchellus* and their effects in neuroinflammation
1388 // N // 3-acetoxynorzoanthamine // AI in various assays // *
1389 // N // 3-acetoxyzoanthamine // AI in various assays // *

544 Cnidaria *Antipathozoanthus hickmani* // Marine Protected Area El Pelado La Pared), Peninsula of Santa Elena, Ecuador // Ecdysonelactones, ecdysteroids from the tropical Eastern Pacific zoantharian *Antipathozoanthus hickmani*
1390 // N // ecdysonelactone A // Not AM or cytotox. // *
1391 // N // ecdysonelactone B // Not AM or cytotox. // *
1392 // N // ecdysonelactone C // Not AM or cytotox. // *
1393 // N // ecdysonelactone D // Not AM or cytotox. // *

545 Cnidaria *Macrorhynchia philippina* // Northwestern Australia // Macrophilones from the marine hydroid *Macrorhynchia philippina* can inhibit ERK cascade signaling
1394 // N // macrophilone B // Inhib. protein sumoylation // *
1395 // N // macrophilone C // Inhib. protein sumoylation and cytotox. // *
1396 // N // macrophilone D // Inhib. protein sumoylation and cytotox. // *
1397 // N // macrophilone E // Inhib. protein sumoylation // *
1398 // N // macrophilone F // Inhib. protein sumoylation // *
1399 // N // macrophilone G // Inhib. protein sumoylation // *

546 Cnidaria *Sarcophyton glaucum* // Hurghada, Egypt // Diverse bioactive cpds from *Sarcophtyton glaucom*: structure elucidation and cytotox. activ. studies
1400 // N // 4-oxo-1,1'-pentanoic acid anhydride // NT // *



547 Cnidaria *Paralemnalia thyrsoides* // S. Taiwan // (+)-Pathylactone A, a new natural nor-sesquiterpenoid from the octocoral *paralemnalia thyrsoides*
1401 // N // (+)-pathylactone A // Inhib. expression iNOS // *

548 Cnidaria *Sinularia erecta* // Cu Lao Cham Is., Quang Nam, Vietnam // Eudesmane and aromadendrane sesquiterpenoids from the Vietnamese soft coral *Sinularia erecta*
1402 // N // 3ß,5a-dihydroxyeudesma-4(15),11-diene // Mod. cytotox. to A549 cell line // *

549 Cnidaria *Sinularia flexibilis* // Mengalum Is., Sabah, Malaysia // Cytotox. and AF terpenoids from Bornean soft coral, *Sinularia flexibilis*
1403 // M // muurola-4,10(14)-dien-1-ol // Weak AF and cytotox. to T-cell leukemia // *

550 Cnidaria *Lemnalia* sp // Mengalum Is., Sabah, Malaysia // Paralemnolins V and W, new nardosinane-type sesquiterpenoids from a Bornean soft coral, *Lemnalia* sp.
1404 // N // paralemnolin V // Fungistatic // *
1405 // N // paralemnolin W // Weakly fungistatic // *

551 Cnidaria *Xenia stellifera* // Mengalum Is., Sabah, Malaysia // A new guaiane-type sesquiterpenoid from a Bornean soft coral, *Xenia stellifera*
1406 // N // 10ß-*O*-methyl-1a*H*,5a*H*-guaia-6-en-4ß-ol // Weak cytotox. to T-cell leukemia // *

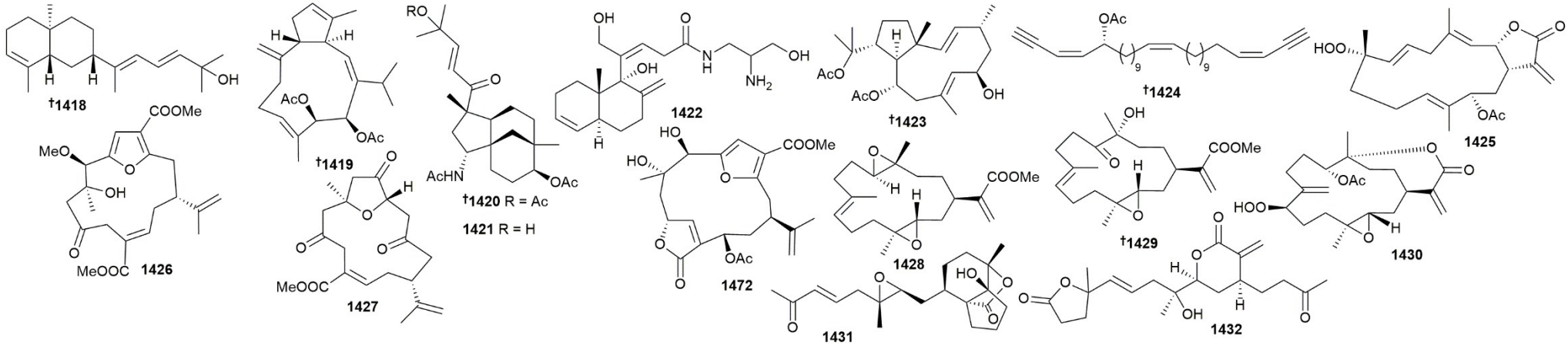
552 Cnidaria *Litophyton arboreum* // Jeddah, Saudi Arabia // Sesquiterpenes from the Saudi Red Sea: *Litophyton arboreum* with cytotox. and AM activ.
1407 // N // litopharbol // Mod. AB to *Bacillus cereus* // *

553 Cnidaria *Sinularia* cf *molesta* // Paracel Is., S. China Sea // Metabolites from the Paracel Is.s soft coral *Sinularia* cf. *molesta*
1408 // N // molestin A // Not cytotox. // Abs. config. by calc. ECD
1409 // N // epi-gibberodione // Not cytotox. // Abs. config. by calc. ECD
1410 // N // molestin B // Not cytotox. // Abs. config. by calc. ECD
1411 // N // molestin C // Weak inhib. PTP1B // Abs. config. by calc. ECD
1412 // N // molestin D // Weak inhib. PTP1B // Abs. config. by calc. ECD

554 Cnidaria *Acanthogorgia laxa* // S. Shetland Is. // Isolation and antifoul. activ. of azulene deriv. from the Antarctic gorgonian *Acanthogorgia laxa*
1413 // N // 7-(bromomethyl)-3,5,8-trimethylazuleno[6,5-b]furan // NT // *

555 Cnidaria *Sinularia* sp // Yongxing Is., China // Terpenoids from the soft coral *Sinularia* sp. collected in Yongxing Is.
1414 // N // sinuketal // Weakly antimalarial and cytotox. // Abs. config. by calc. ECD
1415 // N // sinulin A // IA // Abs. config. by calc. ECD
1416 // N // sinulin B // IA // Abs. config. by calc. ECD

556 Cnidaria *Nephthea* sp // Mantanani Is., Sabah, Borneo // Chabrolene, a novel norditerpene from the Bornean soft coral *Nephthea* sp.
1417 // N // chabrolene // Repellent to maize weevil // *



557 Cnidaria *Sinularia polydactyla* // Xisha Is., Hainan province, People's Republic of China // Further new diterpenoids as PTP1B inhib. from the Xisha soft coral *Sinularia polydactyla*
1418 // N // sinupol // Weak inhib. PTP1B // Abs. config. by calc. ECD
1419 // N // sinulacetate // Weak inhib. PTP1B // Abs. config. by calc. ECD

558 Cnidaria *Sarcophyton infundibuliforme* // Ximao Is., Hainan province, People's Republic of China // Sarinfacetamides A and B, nitrogenous diterpenoids with tricyclo[6.3.1.$0^{1,5}$]dodecane scaffold from the S China Sea soft coral *Sarcophyton infundibuliforme*
1420 // N // sarinfacetamide A // Weak promoter of concanavalin A-induced T lymphocyte prolif. // Abs. config. by calc. ECD
1421 // N // sarinfacetamide B // Weak promoter of concanavalin A-induced T lymphocyte prolif. // *

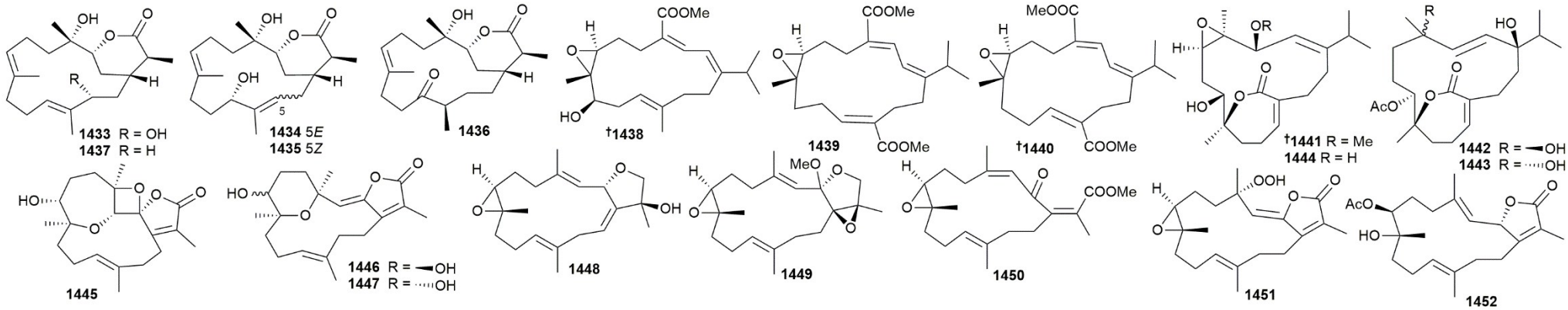
559 Cnidaria *Menella kanisa* // Xieyang Is., China // A new antifoul. naphthalene deriv. from gorgonian coral *Menella kanisa*
1422 // N // kanaphthalene A // Mod. inhib. settlement of *Balanus* cyprids // *

560 Cnidaria *Clavularia viridis* // Dongshan Is., Fujian Province, PR China // A new dolabellane diterpene and a new polyacetylene from the soft coral *Clavularia viridis*
1423 // N // $C_{24}H_{38}O_5$ // Mod. cytotox. to 2 HTCL // Abs. config. by NOESY and Mosher's method
1424 // N // $C_{34}H_{54}O_2$ // Weak or not cytotox. To 2 HTCL // Abs. config. by calc. ECD

561 Cnidaria *Sinularia* sp // Mantanani Is., Sabah, Malaysia // Bioactive cembranoids from the soft coral genus *Sinularia* sp. in Borneo
1425 // N // sinulariolide F // Inhibit. NO prod. in stimulated macrophages, induces apoptosis in HL60 cells // *

555 Cnidaria *Sinularia* sp // Yongxing Is., China // Terpenoids from the soft coral *Sinularia* sp. collected in Yongxing Is.
1426 // N // sinulin C // IA // *
1427 // N // sinulin D // Mild inhib. PTP1B // *

562 Cnidaria *Sinularia flexibilis* // Liuqiu, Taiwan // Cembranoid-related metabolites and biological activ. from the soft coral *Sinularia flexibilis*
1428 // N // flexibilisin D // Not cytotox. or AI // *
1429 // N // flexibilisin E // Not cytotox. or AI // Abs. config. by hydrolysis and compar. with known MNP
1430 // N // flexibilisolide H // Not cytotox. or AI // *
1431 // N // secoflexibilisolide A // NT // *
1432 // N // secoflexibilisolide B // Not cytotox. or AI // *

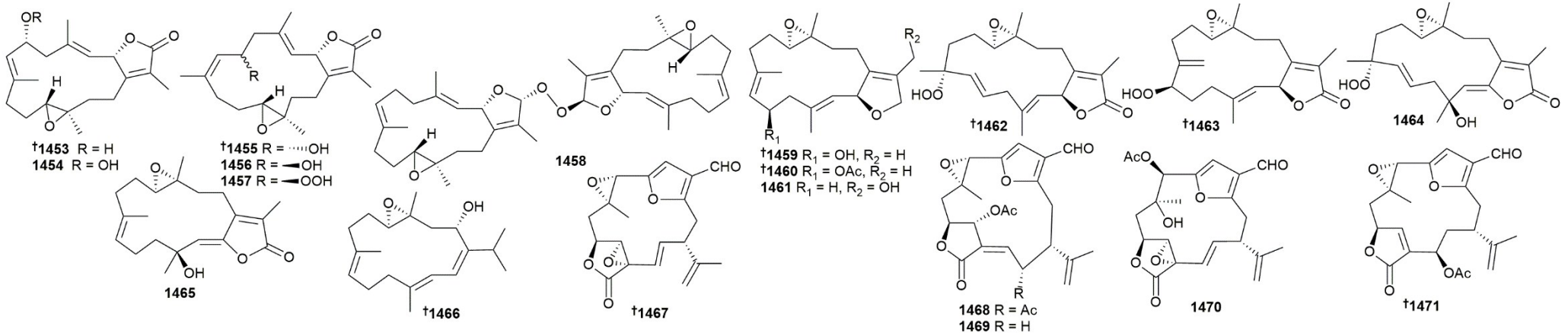


563 Cnidaria *Sinularia flexibilis* // Yalong bay, Sanya, Hainan Province, China // Five new cembrane diterpenoids from the S China Sea soft coral *Sinularia flexibilis*
1433 // N // sinulaflexiolide L // Weak inhib. NO prod. and TNF-*a* in macrophages // *
1434 // N // sinulaflexiolide M // Weak inhib. NO prod. and TNF-*a* in macrophages // *
1435 // N // sinulaflexiolide N // Weak inhib. NO prod. and TNF-*a* in macrophages // *
1436 // N // sinulaflexiolide O // Weak inhib. NO prod. and TNF-*a* in macrophages // *
1437 // N // *ent*-sinuflexibilin D // Weak inhib. NO prod. and TNF-*a* in macrophages // *

549 Cnidaria *Sinularia flexibilis* // Mengalum Is., Sabah, Malaysia // Cytotox. and AF terpenoids from Bornean soft coral, *Sinularia flexibilis*
1437 // N // ent-sinuflexibilin D // AF and cytotox. to T-cell leukemia // *

564 Cnidaria *Sarcophyton trocheliophorum* // Yalong Bay, Hainan Province, China // Structural, stereochemical, and bioactive studies of cembranoids from Chinese soft coral *Sarcophyton trocheliophorum*
1438 // N // sarcophytonolide S // IA PTP1B // Abs. config. by NOESY and calc. ECD
1439 // N // sarcophytonolide T // IA PTP1B // *
1440 // N // sarcophytonolide U // IA PTP1B // Abs. config. by calc. ECD and spec. rot.
1441 // N // sartrolide H // Mod. inhib. PTP1B // Abs. config. by calc. ECD
1442 // N // sartrolide I // IA PTP1B // *
1443 // N // sartrolide J // IA PTP1B // *
1444 // R // sartrolide C // NT // revised stereochem at allylic alcohol

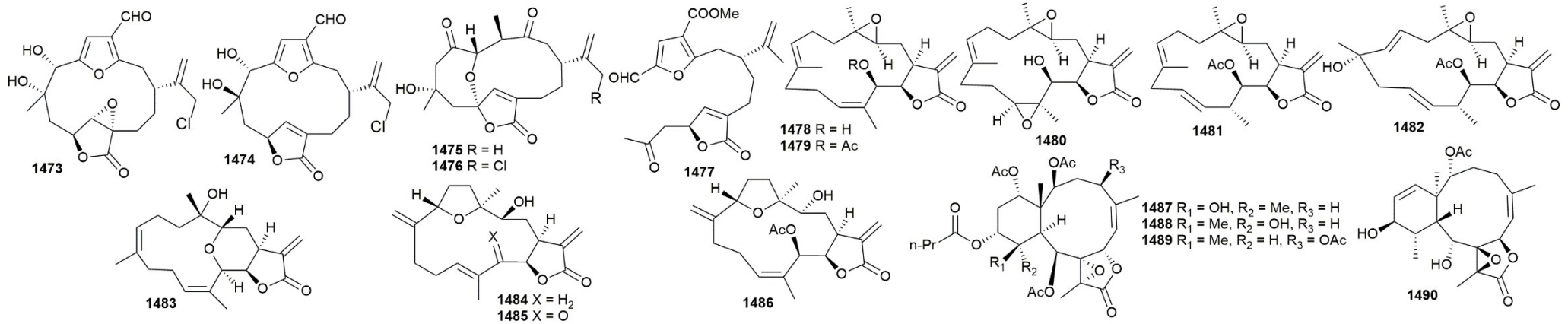
565 Cnidaria *Sarcophyton stellatum* // Dongsha Atoll, Taiwan // Isolation and structure elucidation of cembranoids from a Dongsha atoll soft coral *Sarcophyton stellatum*
1445 // N // stellatumolide A // Not cytotox. to 3 HTCLs // *
1446 // N // stellatumolide B // Not cytotox. to 3 HTCLs // *
1447 // N // stellatumolide C // Not cytotox. to 3 HTCLs // *
1448 // N // stellatumonin A // Not cytotox. to 3 HTCLs // *
1449 // N // stellatumonin B // Not cytotox. to 3 HTCLs // *
1450 // N // stellatumonone // Not cytotox. to 3 HTCLs // *
1451 // M // $C_{21}H_{28}O_5$ // Not cytotox. to 3 HTCLs // *
1452 // M // 7ß-acetoxy-8a-hydroxydeepoxysarcophine // Not cytotox. to 3 HTCLs // *



566 Cnidaria *Sarcophyton cherbonnieri* // Jihui Fish Port, Taiwan // New cembranoids and a biscembranoid peroxide from the soft coral *Sarcophyton cherbonnieri*
1453 // N // cherbonnolide A // Weak to low activ. for superoxide and elastase release // Abs. config. by NOESY and Mosher's method
1454 // N // cherbonnolide B // Weak to low activ. for superoxide and elastase release // *
1455 // N // cherbonnolide C // Weak to low activ. for superoxide and elastase release // Abs. config. by NOESY and Mosher's method
1456 // N // cherbonnolide D // Weak to low activ. for superoxide and elastase release // *
1457 // N // cherbonnolide E // Weak to low activ. for superoxide and elastase release // *
1458 // N // bischerbolide peroxide // Mod. inhib. release superoxide and elastase in stim. neutrophils // *

567 Cnidaria *Sarcophyton mililatensis* // Weizhou Is., Beihai, Guangxi Autonomous Region, China // Cembrane-type diterpenoids from the S China Sea soft coral *Sarcophyton mililatensis*
1459 // N // (+)-(6*R*)-6-hydroxyisosarcophytoxide // Not cytotox. to 2 HTCLs // Abs. config. by Mosher's method
1460 // N // (+)-(6*R*)-6-acetoxyisosarcophytoxide // Not cytotox. to 2 HTCLs // Abs. config. by acetylation to give **1459**. Structure is *ent*-sarcophytonoxide A
1461 // N // (+)-17-hydroxyisosarcophytoxide // Not cytotox. to 2 HTCLs // *
1462 // N // sarcomililatin A // Not cytotox. to 2 HTCLs // Abs. config. by ECD
1463 // N // sarcomililatin B // Not cytotox. to 2 HTCLs // Abs. config. by ECD. Structure is *ent*-trocheliolide A
1464 // N // sarcomililatin C // Not cytotox. to 2 HTCLs // *
1465 // N // sarcomililatin D // Not cytotox. to 2 HTCLs // *
1466 // N // sarcomililatol // Not cytotox. to 2 HTCLs // Abs. config. by calc. ECD

568 Cnidaria *Plumarella delicatissima* // Plateau of Fascination // Keikipukalides, furanocembrane diterpenes from the Antarctic deep sea octocoral *Plumarella delicatissima*
1467 // N // keikipukalide A // IA // Abs. config. by X-ray anal.
1468 // N // keikipukalide B // Mod. anti-leishmanial activ. // *
1469 // N // keikipukalide C // Mod. anti-leishmanial activ. // *
1470 // N // keikipukalide D // Mod. anti-leishmanial activ. // *
1471 // N // keikipukalide E // Mod. anti-leishmanial activ. // Abs. config. by X-ray anal.

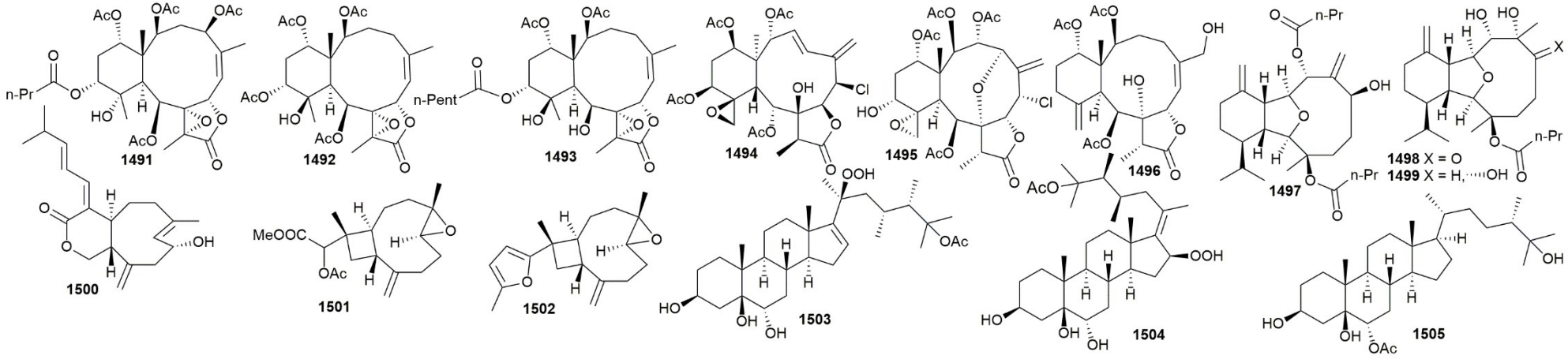


553 Cnidaria *Sinularia* cf *molesta* // Paracel Is., S. China Sea // Metabolites from the Paracel Is.s soft coral *Sinularia* cf. *molesta*
1472 // N // molestin E // Mod. cytotox. to 2 HTCL // *

569 Cnidaria *Leptogorgia* sp // Aleta, Panama // Chloro-furanocembranolides from *Leptogorgia* sp. improve pancreatic beta-cell proliferation
1473 // N // $C_{20}H_{23}ClO_7$ // Enhanced beta-cell prolif. // *
1474 // N // $C_{20}H_{23}ClO_6$ // Enhanced beta-cell prolif. // *
1475 // N // $C_{20}H_{26}O_6$ // NT // *
1476 // N // $C_{20}H_{25}ClO_6$ // NT // *
1477 // N // $C_{21}H_{24}O_7$ // NT // *

570 Cnidaria *Eunicea* sp // Panama, Caribbean Sea // Cembranoids from *Eunicea* sp. enhance insulin-producing cells proliferation
1478 // N // $C_{20}H_{28}O_4$ // NT // *
1479 // N // $C_{22}H_{30}O_5$ // Enhanced beta-cell prolif. // *
1480 // N // $C_{20}H_{28}O_5$ // NT // *
1481 // N // $C_{22}H_{30}O_5$ // NT // *
1482 // N // $C_{22}H_{30}O_6$ // NT // *
1483 // N // $C_{20}H_{28}O_4$ // NT // *
1484 // N // $C_{20}H_{28}O_4$ // NT // *
1485 // N // $C_{20}H_{26}O_5$ // NT // *
1486 // N // $C_{22}H_{30}O_6$ // NT // *

571 Cnidaria *Briareum violaceum* // Tank cultured specimens, Taiwan // Briaviolides K–N, new briarane-type diterpenoids from cultured octocoral *Briareum violaceum*
1487 // N // briaviolide K // IA // *
1488 // N // briaviolide L // Inhib. expression iNOS and COX-2 // *
1489 // N // briaviolide M // IA // *
1490 // N // briaviolide N // IA // *



572 Cnidaria *Briareum violaceum* // Tank cultured specimens, Taiwan // Briaviolides O and P, new briaranes from a cultured octocoral *Briareum violaceum*
1491 // N // briaviolide O // Inhib. expression iNOS, but not COX-2 // *
1492 // N // briaviolide P // IA // *

573 Cnidaria *Briareum violaceum* // Tank cultured specimens, Taiwan // Briaviolide Q, a new briarane from the cultured *Briareum violaceum*
1493 // N // briaviolide Q // Inhib. expression iNOS, but not COX-2 // *

574 Cnidaria *Junceella fragilis* // S. Taiwan // (+)-12-*epi*-Fragilide G, a new chlorinated briarane from the sea whip gorgonian coral *Junceella fragilis*
1494 // N // (+)-12-epi-fragilide G // Inhib. Express. iNOS, but not COX-2 // Ent-fragilide G with ident. NMR, opposite spec. rot but not opposite ECD

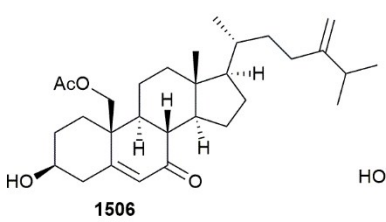
575 Cnidaria *Junceella fragilis* // S. Taiwan // Fragilides K and L, new briaranes from the gorgonian coral *Junceella fragilis*
1495 // N // fragilide K // Inhib. expression iNOS, but not COX-2 or β-actin // *
1496 // N // fragilide L // Inhib. expression iNOS, but not COX-2 or β-actin // *

576 Cnidaria *Cladiella krempfi* // Weizhou Is., Guangxi Zhuang Autonomous Region, China // Further new eunicellin-based diterpenoids from the Guangxi Weizhou soft coral *Cladiella krempfi*
1497 // N // 8-*n*-butyryl-litophynol A // Mod. inhib. TNF-α // *
1498 // N // 6-keto-litophynol B // Mod. inhib. TNF-α // *
1499 // N // 6-epi-litophynol B // Mod. inhib. TNF-α // *

577 Cnidaria *Xenia* sp // Mantanani Is., Sabah, Malaysia // 15-deoxy-isoxeniolide-A, new diterpenoid from a Bornean soft coral, *Xenia* sp.
1500 // N // 15-deoxy-isoxeniolide-A // Not cytotox. or AB // *

578 Cnidaria *Sinularia nanolobata* // San-Shin-Tai, Taitong County, Taiwan // Xeniaphyllane-derived terpenoids from soft coral *Sinularia nanolobata*
1501 // N // sinubatin A // Not cytotox. or AV // *
1502 // N // sinubatin B // Not cytotox. or AV // *

579 Cnidaria *Lobophytum michaelae* // Jihui Fishing Port, Taitung County, Taiwan // AI polyoxygenated steroids from the soft coral *Lobophytum michaelae*
1503 // N // michosterol A // Cytotox. to 1 HTCL, inhib. superoxide generation and elastase release // *
1504 // N // michosterol B // IA // *
1505 // N // michosterol C // Inhib. elastase release // *



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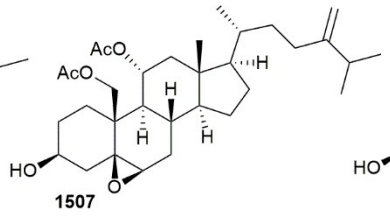

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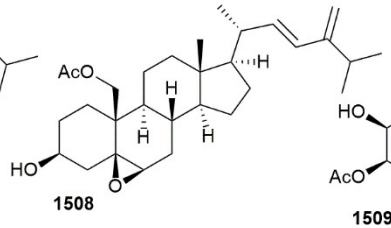

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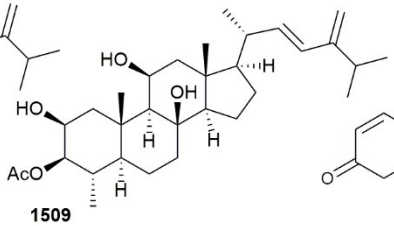

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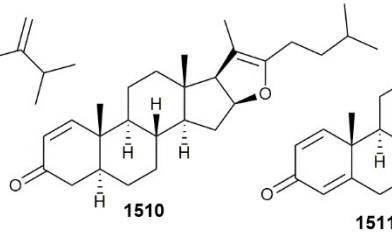

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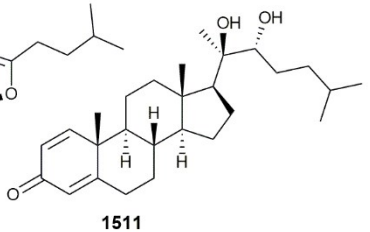
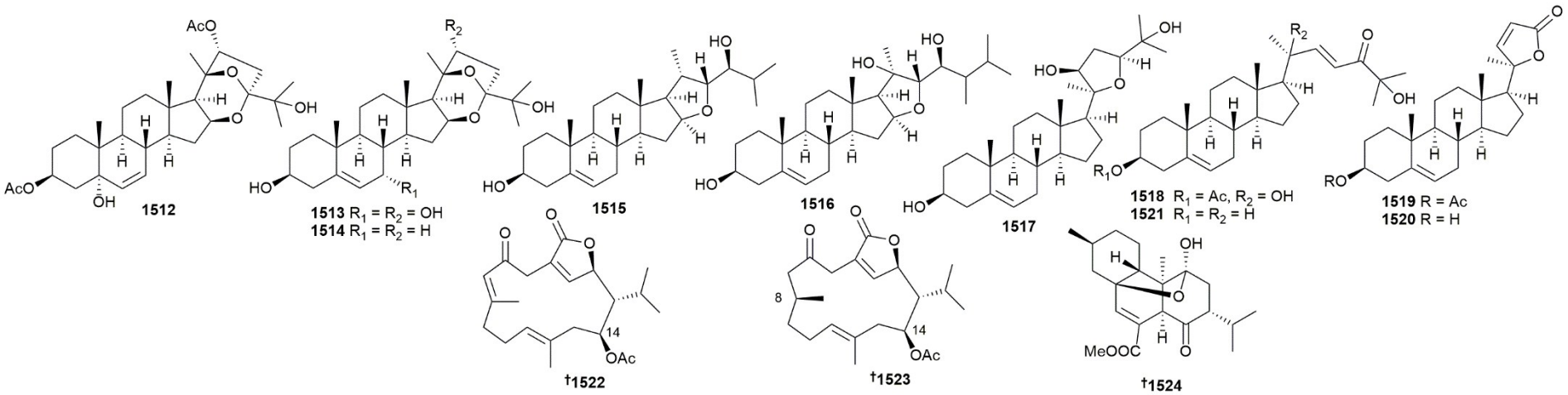


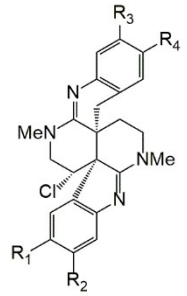
1511

580 Cnidaria *Dendronephthya gigantea* // Meishan, Hainan Province, China // A steroid-type antioxidant targeting the Keap1/Nrf2/ARE signaling pathway from the soft coral *Dendronephthya gigantea*
1506 // N // 7-dehydroerectasteroid F // Cytoprotective of oxidative damage to PC12 cells // *
1507 // N // 11a-acetoxyarmatinol A // IA // *
1508 // N // 22,23-didehydroarmatinol A // IA // *
1509 // N // 3-*O*-acetylhyrtiosterol // IA // *

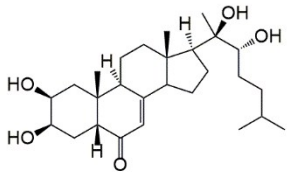
581 Cnidaria *Sinularia* sp // Ximao Is., Hainan Province, China // Two new cytotox. steroids from the Chinese soft coral *Sinularia* sp.
1510 // N // ximaosteroid E // Mod. cytotox. to HL-60 CL // *
1511 // N // ximaosteroid F // Mod. cytotox. to HL-60 CL // Secondary alcohol abs. config. by Mosher's method



582 Cnidaria *Verrucella corona* // Vinh Moc, Quang Tri province, Vietnam // Cytotox. steroids from the Vietnamese gorgonian *Verrucella corona*
1512 // N // verrucorosteroid A // Weakly cytotox. to 8 HTCL // *
1513 // N // verrucorosteroid B // Not cytotox. // *
1514 // N // verrucorosteroid C // Weakly cytotox. to 8 HTCL // *
1515 // N // verrucorosteroid D // Not cytotox. // *
1516 // N // verrucorosteroid E // Weakly cytotox. to 8 HTCL // *
1517 // N // verrucorosteroid F // Weakly cytotox. to 8 HTCL // *
1518 // N // verrucorosterone // Modest cytotox. to 8 HTCL // *
1519 // R // reticulatic acid // Weakly cytotox. to 8 HTCL // Revised to embody a g-lactone
1520 // M // 3ß,20R-dihydroxycholest-5,22-dien-24-oic acid γ-lactone // Weakly cytotox. to 8 HTCL // *
1521 // M // (22*E*)-3ß,25-dihydroxycholest-5,22-dien-24-one // Weakly cytotox. to 8 HTCL // *
583 Cnidaria // * // Unified total synth., stereostructural elucidation, and biological evaluation of sarcophytonolides
1522 // R // isosarcophytonolide D // NT // Revised at C-14 acetate
1523 // R // sarcophytonolide J // Antifoul. activ. to *Balanus* cyprids confirmed // Stereochem. C-8 defined and C-14 acetate revised
584 Cnidaria // * // Total synth. of (+)-sarcophytin
1524 // R // (+)-sarcophytin // NT // Abs. config. estab. by total synth.



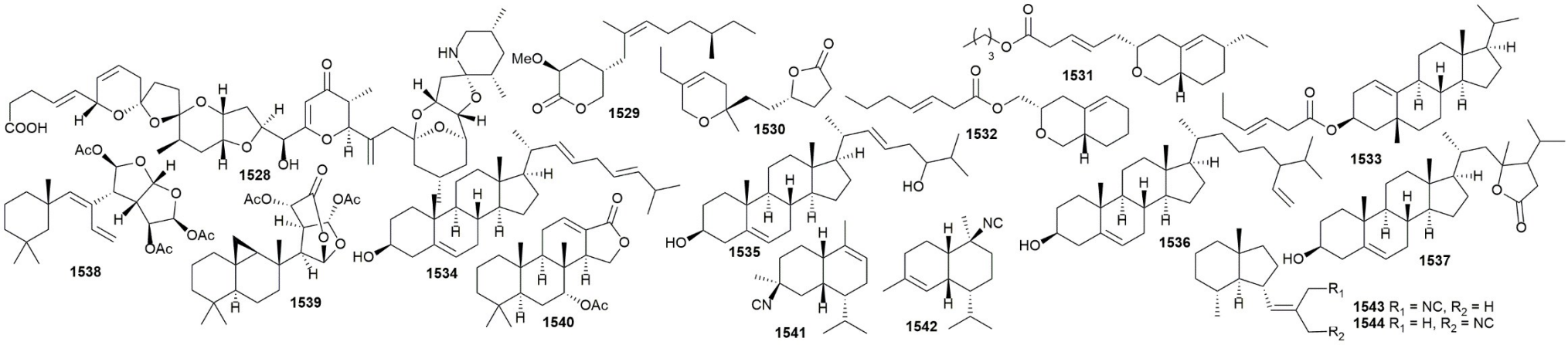
†**1525** R_1 = Cl, R_2 = H
†**1526** R_1 = H, R_2 = Br



1527

611 Bryozoa *Caulibugula inermis* // Palau // Unequivocal determination of caulamidines A and B: application and validation of new tools in the structure elucidation tool box
1525 // N // caulamidine A // Sig.inhib. vs. 2 strain *P. falciparum*. Mod. cytotox. small subset NCI-60 panel HTCLs // *
1526 // N // caulamidine B // Sig.inhib. vs. 2 strain *P. falciparum*. // *

612 Bryozoa *Alcyonidium gelatinosum* // Hopenbanken, Svalbard // Ponasterone A and F, ecdysteroids from the Arctic bryozoan *Alcyonidium gelatinosum*
1527 // N // ponasterone F // IA vs. 1 HTCL, 1 norm. HCL and 5 bact. // *



616 Mollusca *Mytilus edulis* // * // Identification of 21,22-dehydroazaspiracids in mussels (*Mytilus edulis*) and in vitro toxicity of azaspiracid-26
1528 // N // azaspiracid-26 // Weakly cytotox. T lymphocytes. // *

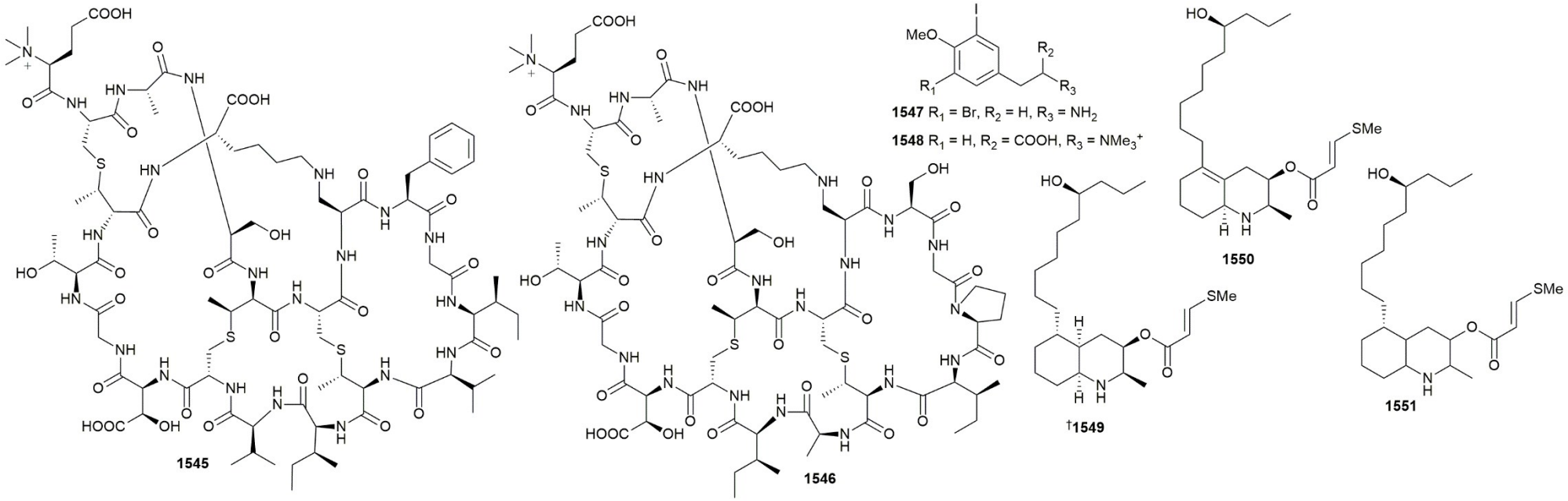
619 Mollusca *Villorita cyprinoides* // Vembanad Lake, Kerala, India // Antioxidative and AI pyranoids and isochromenyl analogues from Corbiculid bivalve clam, *Villorita cyprinoides*
1529 // N // tetrahydro-3-methoxy-5-((*E*)-8,12-dimethyloct-8-enyl)-pyran-2-one // Weakly antioxid. and COX-1/2 inhib. // *
1530 // N // dihydro-5-(8-(9,12-dihydro-8-methyl-11-propyl-2H-pyran-8-yl)ethyl)-furan-2(3*H*)-one // Weakly antioxid. and COX-1/2 inhib. // *
1531 // N // (10*E*)-butyl-9-(6-ethyl-3,4,6,7,8,8a-hexahydro-1H-isochromen-3-yl)-pent-10-enoate // Weakly antioxid. and COX-1/2 inhib. // *
1532 // N // (12*E*)-(3,4,6,7,8,8a-hexahydro-1*H*-isochromen-3-yl)-methyl-hept-12-enoate // Weakly antioxid. and COX-1/2 inhib. // *

620 Mollusca *Villorita cyprinoides* // Vembanad Lake, Kerala, India // Previously undisclosed bioactive sterols from corbiculid bivalve clam *Villorita cyprinoides* with AI and antioxidant potentials
1533 // N // 19(10->5)abeo-20-methyl-pregn-10-en-3ß-yl-hex-(3'*E*)-enoate // Weakly antioxid. and COX-1/2 inhib. // *
1534 // N // (22*E*),(24^1*E*)-241,242-dihomocholesta-5,22,24^1-trien-3ß-ol // Weakly antioxid. and COX-1/2 inhib. // *
1535 // N // (22*E*)-24^1-homocholesta-5,22-dien-(3ß,24^1ß)-diol // Weakly antioxid. and COX-1/2 inhib. // *

622 Mollusca *Chicoreus ramosus* // Tuticorin, Tamil Nadu, India // First report of bioactive sterols from the muricid gastropod *Chicoreus ramosus*
1536 // N // 5(*Z*)-24a-homo-cholesta-5,$24a^1$($24a^2$)-dien-3ß-ol // Weakly antioxid. and 5-LOX inhib. // *
1537 // N // 27(25->23)-abeo-(5*Z*)-3ß-hydroxy-24-isopropyl cholesteno-26,23-lactone // Weakly antioxid. and 5-LOX inhib. // *

623 Mollusca *Goniobranchus splendidus*, *G. collingwoodi* // Mackay region, Queensland and Sydney, NSW and Nelson Bay, NSW Australia // Oxygenated terpenes from the Indo-Pacific nudibranchs *Goniobranchus splendidus* and *Goniobranchus collingwoodi*
1538 // N // spongionellin-2 // NT // *
1539 // N // 12-acetoxypolyrhaphin C // NT // *
1540 // N // 7a-acetoxyisagatholactone // NT // *

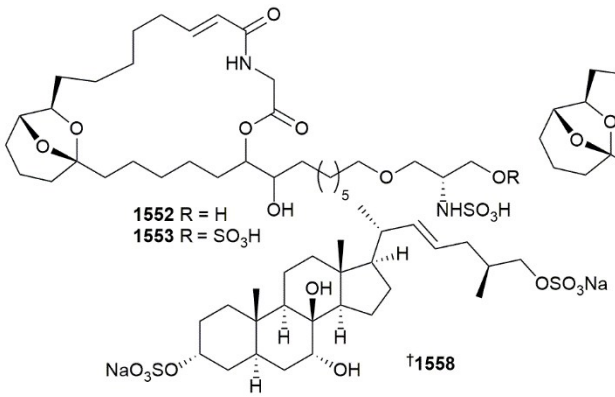
624 Mollusca *Phyllidiella pustulosa, Phyllidia ocellata* // Mooloolaba, Australia // New sesquiterpenoid isonitriles from three species of phyllidid nudibranchs
1541 // N // 4-isocyano-9-amorphene // NT // *
1542 // N // 10-isocyano-4-amorphene // NT // *
1543 // N // pictaisonitrile-1 // NT // *
1544 // N // pictaisonitrile-2 // NT // *

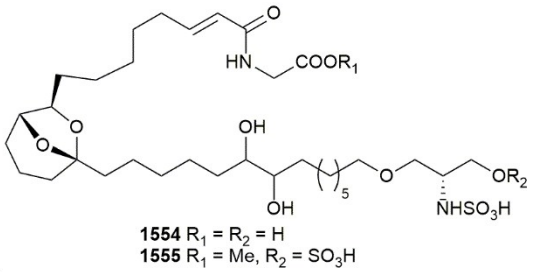


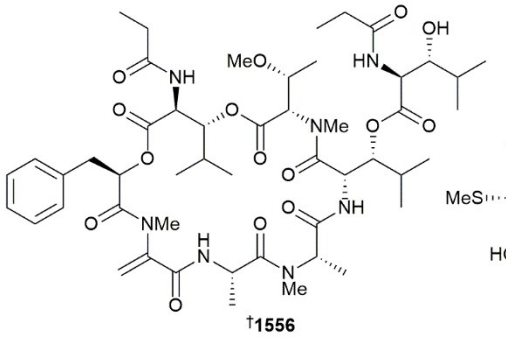
647 Chordata *Didemnum molle* // Eastern Fields of Papua New Guinea // Accessing chemical diversity from the uncultivated symbionts of small marine animals
1545 // N // divamide A // Anti-HIV-1 IC_{50} 0.225 μM, cytotox. CC_{50} 2.63 μM // Abs. config.for all except N-terminal aa.
1546 // N // divamide B // NT // *

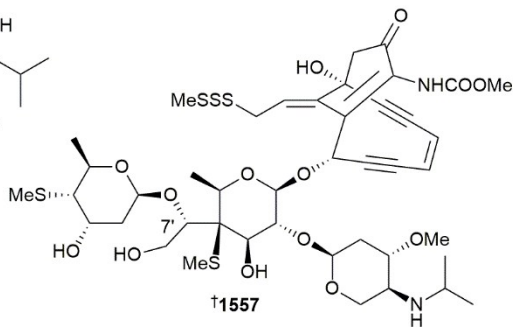
648 Chordata *Aplidium monile*, *Didemnum* sp // Algoa Bay, S. Africa // Hyphenated LC-ICP-MS/ESI-MS identification of halogenated metabolites in South African marine ascidian extracts
1547 // N // 3-bromo-5-iodo-4-methoxyphenethylamine // NT // *
1548 // N // 3-iodotetramethyltyrosine // NT // *

649 Chordata *Didemnum* sp // Stirrup Cay, The Bahamas // Lepadins I–K, 3-*O*-(3'-methylthio)acryloyloxy-decahydroquinoline esters from a Bahamian ascidian *Didemnum* sp. assignment of absolute stereostructures
1549 // N // lepadin I // Inhib. BuChE (IC50 3.1 μM), IA to AChE. // Abs. config. ECCD and Mosher's method
1550 // N // lepadin J // NT // *
1551 // N // lepadin K // NT // *







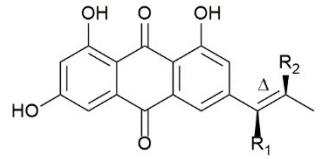


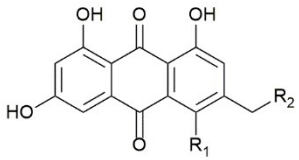
650 Chordata *Didemnum* sp // Indonesia // Siladenoserinols M–P, sulfonated serinol deriv. from a tunicate
1552 // N // siladenoserinol M // IA p53-Hdm2 (50 µM) // *
1553 // N // siladenoserinol N // IA p53-Hdm2 (50 µM) // *
1554 // N // siladenoserinol O // IA p53-Hdm2 (50 µM) // *
1555 // N // siladenoserinol P // IA p53-Hdm2 (50 µM) // *

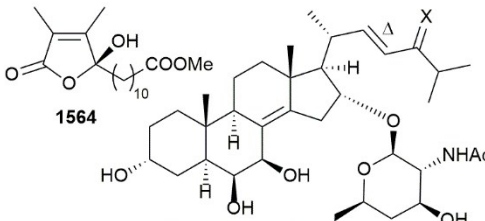
651 Chordata // Sameura Bay, Miyagi prefecture, Japan // Sameuramide A, a new cyclic depsipeptide isol. from an ascidian of the family Didemnidae
1556 // N // sameuramide A // Maintains colony formation of murine embryonic stem cells // Abs. config. Marfey's

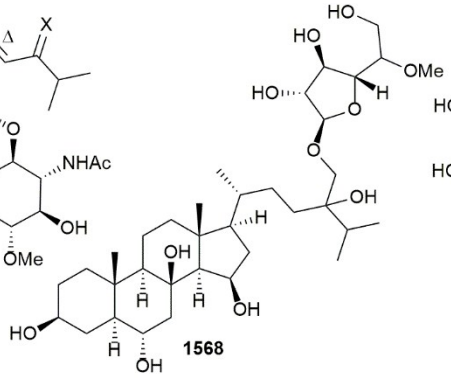
652 * // * // Total synth. and full structural assignment of namenamicin
1557 // R // namenamicin // * // Total synth.

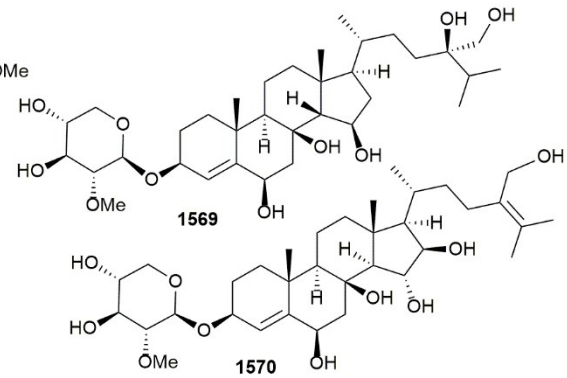
653 * // * // Synth. and complete structure determination of a sperm-activating and -attracting factor isol. from the ascidian *Ascidia sydneiensis*
1558 // R // Assydn-SAAF // * // Total synth.

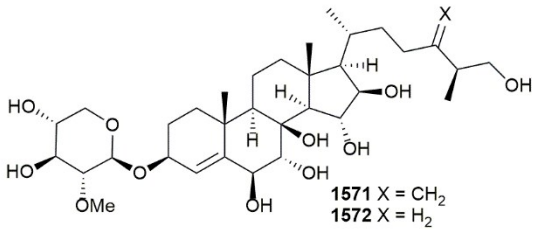












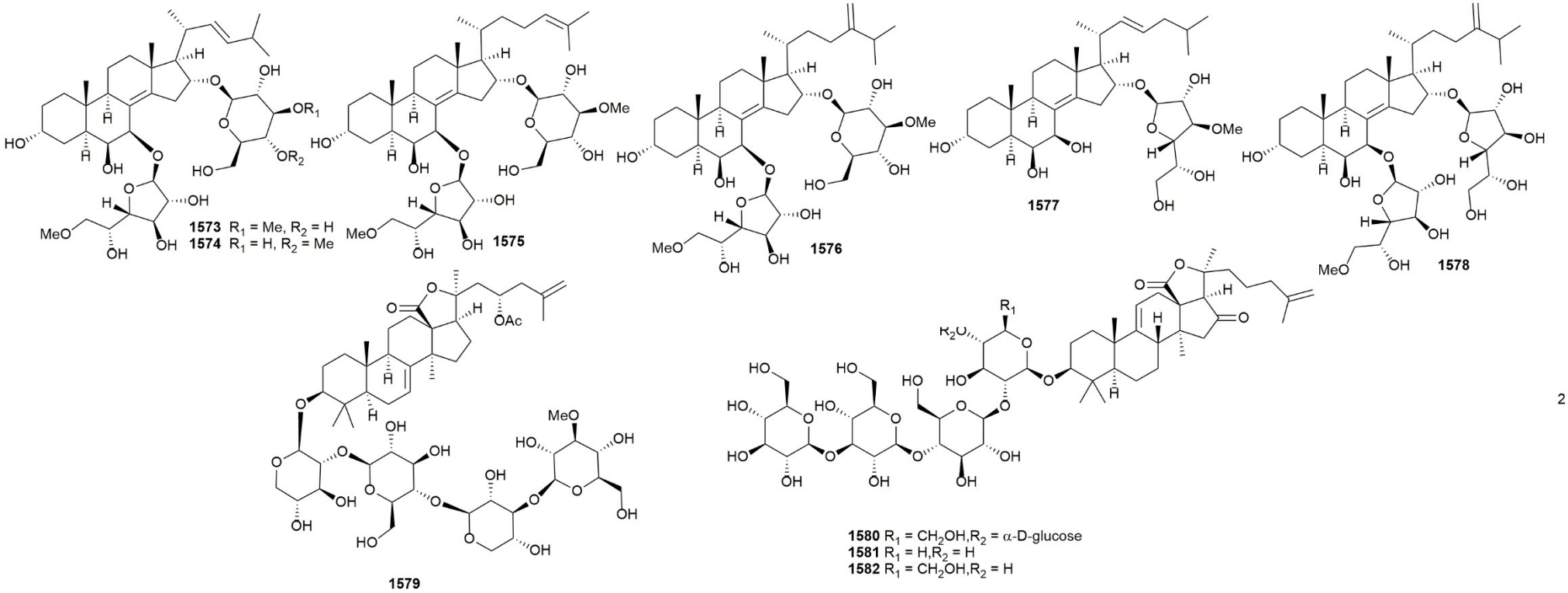
659 Echinodermata *Pterometra venusta* // Philippines // Harnessing natural product diversity for fluorophore discovery: naturally occurring fluorescent hydroxyanthraquinones from the marine crinoid *Pterometra venusta*
1559 // N // 1,3,8-trihydroxy-6-(2'-acetoxypropyl)anthracene-9,10-dione // Fluorescent, endosomal/lysosomal accum. // Abs. config. by hydrol./Mosher's method
1560 // N // 1,3,8-trihydroxy-6-(1'-acetoxypropyl)anthracene-9,10-dione // Fluorescent, endosomal/lysosomal accum. // Abs. config. by hydrol./Mosher's method
1561 // M // (*E*)-1,3,8-trihydroxy-6-(prop-1'-enyl)anthracene-9,10-dione // Fluorescent, endosomal/lysosomal accum. // *

660 Echinodermata *Capillaster multiradiatus* // Son Tra, Da Nang, Vietnam // Anthraquinone and butenolide constituents from the crinoid *Capillaster multiradiatus*
1562 // N // capillasterquinone A // Inhib. NO prodn in RAW264.7 cells, inhib. expression of iNOS and COX-2. // *
1563 // N // capillasterquinone B // Inhib. NO prodn in RAW264.7 cells // *
1564 // N // capillasterolide // IA // *

661 Echinodermata Anthenea aspera // Tu Long Bay, Vietnam // Two new steroidal monoglycosides, anthenosides A1 and A2, and revision of the structure of known anthenoside A with unusual monosaccharide residue from the starfish *Anthenea aspera*
1565 // N // anthenoside A1 // * // *
1566 // N // anthenoside A2 // Inhib. colony formn breast tumor T-47D cells. // *
1567 // R // anthenoside A // * // Revised to 3a and from galactopyranose to glucopyranose.

662 Echinodermata *Astropecten polyacanthus* // Nhat Le, Quang Binh, Vietnam // Polar steroid deriv. from the Vietnamese starfish *Astropecten polyacanthus*
1568 // N // polyacanthoside A // Not cytotox. 5 HTCLs // *

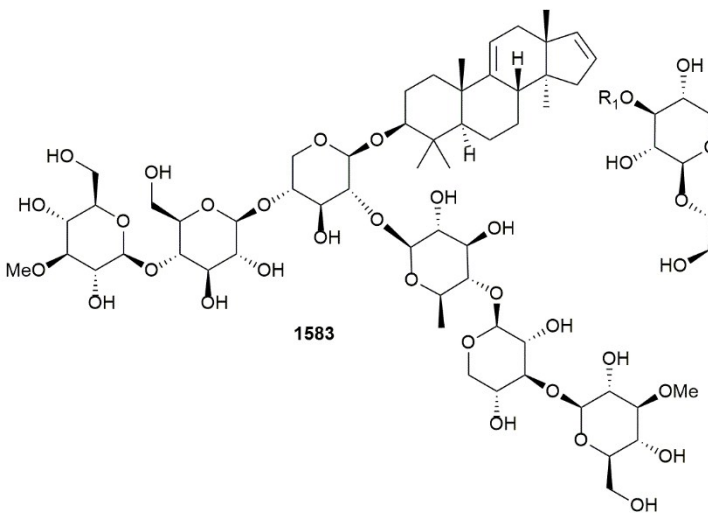
663 Echinodermata *Culcita novaeguineae* // Xisha Is. // Cytotox. polyhydroxysteroidal glycosides from starfish *Culcita novaeguineae*
1569 // N // culcinoside A // Cytotox. 3 HTCLs // *
1570 // N // culcinoside B // mod. cytotox. 3 HTCLs // *
1571 // N // culcinoside C // mod. cytotox. 3 HTCLs // *
1572 // N // culcinoside D // mod. cytotox. 3 HTCLs // *



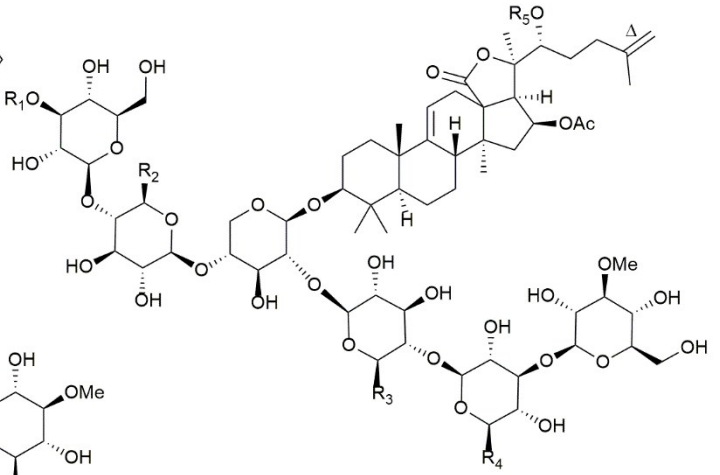
664 Echinodermata *Anthenea sibogae* // Hon Da Den Is., Bai Tu Long Bay, Vietnam // Six new polyhydroxysteroidal glycosides, anthenosides S1 – S6, from the starfish *Anthenea sibogae*
1573 // N // anthenoside S1 // Not cytotox. or tumour colony inhib. // *
1574 // N // anthenoside S2 // Not cytotox. or tumour colony inhib. // *
1575 // N // anthenoside S3 // NT // *
1576 // N // anthenoside S4 // Not cytotox. or tumour colony inhib. // *
1577 // N // anthenoside S5 // NT // *
1578 // N // anthenoside S6 // NT // *

665 Echinodermata *Stichopus horrens* // Hai Van – Son Cha, Hue, Vietnam // Triterpene tetraglycosides from the sea cucumber *Stichopus horrens*
1579 // N // stichorrenoside E // Cytotox. 5 HTCLs // *

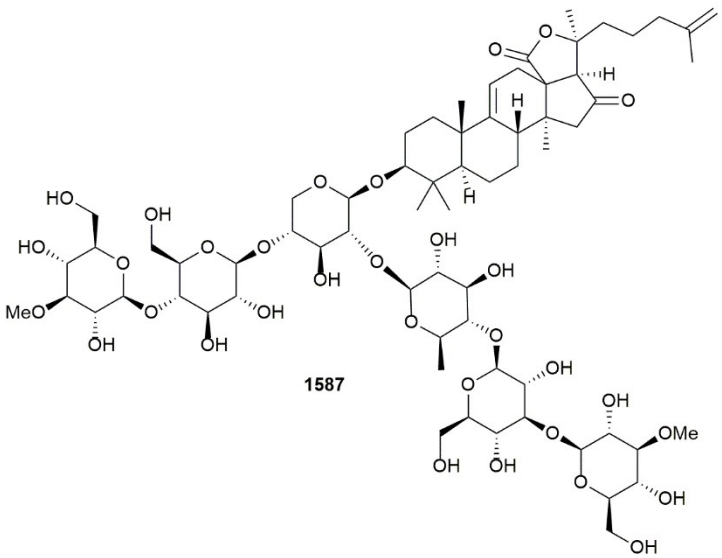
666 Echinodermata *Apostichopus japonicus* // Penglai-Changdao, China // LC-MS/MS identification of novel saponins from the viscera of sea cucumber *Apostichopus japonicus*
1580 // N // apostichoposide A // NT // Structure by MS/MS. NMR data reported but not analysed.
1581 // N // apostichoposide B // NT // Structure by MS/MS. NMR data reported but not analysed.
1582 // N // apostichoposide C // NT // Structure by MS/MS. NMR data reported but not analysed.



1583



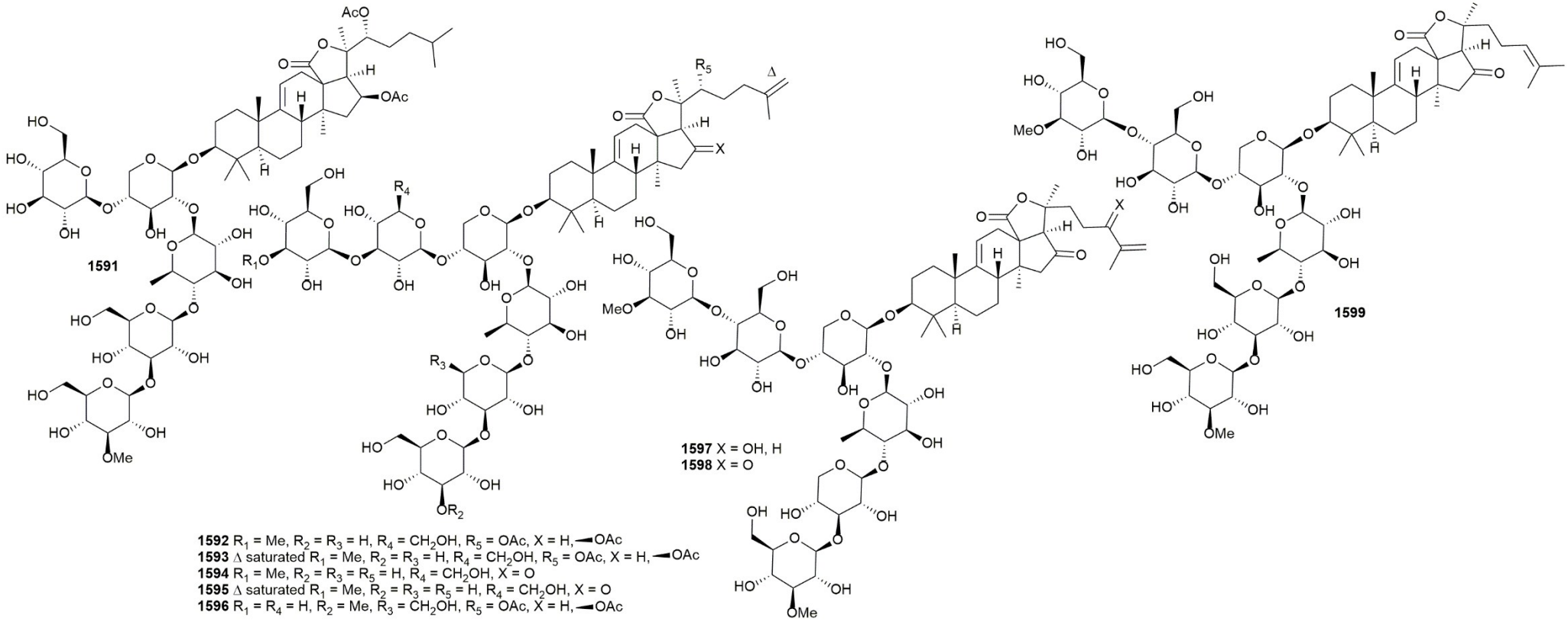
1584 $R_1 = R_2 = R_4 = H$, $R_3 = Me$, $R_5 = Ac$, Δ saturated
1585 $R_1 = R_2 = R_4 = R_5 = H$, $R_3 = Me$
1586 $R_1 = R_3 = Me$, $R_2 = R_4 = CH_2OH$, $R_5 = Ac$, Δ saturated
1588 $R_1 = R_3 = Me$, $R_2 = R_4 = CH_2OH$, $R_5 = Ac$
1589 $R_1 = Me$, $R_2 = CH_2OH$, $R_3 = R_4 = H$, $R_5 = Ac$
1590 $R_1 = H$, $R_2 = CH_2OH$, $R_3 = Me$, $R_4 = H$, $R_5 = Ac$



1587

667 Echinodermata *Cladolabes schmeltzii* // Nha Trang Gulf // Cladolosides C_4, D_1, D_2, M, M_1, M_2, N and Q, new triterpene glycosides with diverse carbohydrate chains from sea cucumber *Cladolabes schmeltzii*. An uncommon 20,21,22,23,24,25,26,27-okta-*nor*-lanostane aglycone. The synergism of inhib. action of non-toxic dose of the glycosides and radioactive irradiation on colony formation of HT-29 cancer cells

1583 // N // cladoloside C4 // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *
1584 // N // cladoloside D1 // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *
1585 // N // cladoloside D2 // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *
1586 // N // cladoloside M // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *
1587 // N // cladoloside M1 // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *
1588 // N // cladoloside M2 // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *
1589 // N // cladoloside N // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *
1590 // N // cladoloside Q // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *



668 Echinodermata *Cladolabes schmeltzii* // Nha Trang Gulf // Cladolosides O, P, P_1-P_3 and R, triterpene glycosides with two novel types of carbohydrate chains from the sea cucumber *Cladolabes schmeltzii*. Inhib. of cancer cells colony formation and its synergy with radioactive irradiation

1591 // N // cladoloside O // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *

1592 // N // cladoloside P // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *

1593 // N // cladoloside P1 // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *

1594 // N // cladoloside P2 // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *

1595 // N // cladoloside P3 // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *

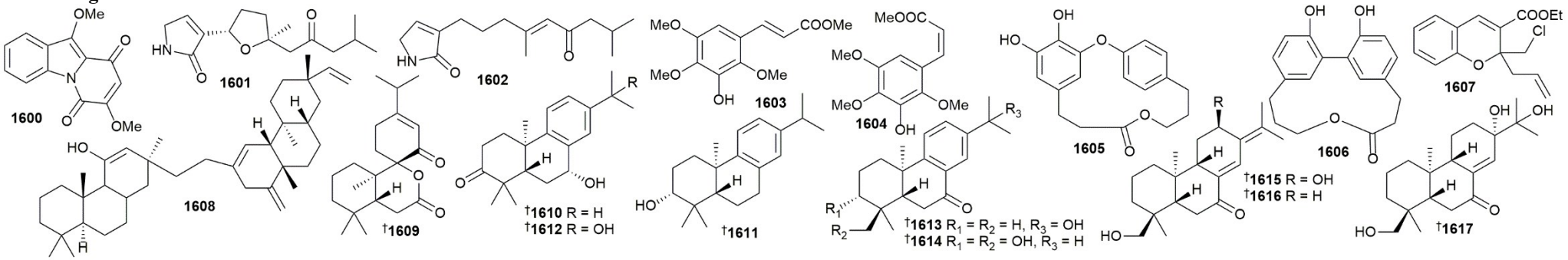
1596 // N // cladoloside R // Cytotox. Ehrlich, haemolytic, synergist with radiation against HT-29. // *

669 Echinodermata Psolus fabricii // Near Onekotan Is. (Kurile Is.s), Sea of Okhotsk // Psolusosides C1, C2, and D1, novel triterpene hexaosides from the sea cucumber Psolus fabricii (Psolidae, Dendrochirotida)

1597 // N // psolusoside C1 // NT // *

1598 // N // psolusoside C2 // NT // *

1599 // N // psolusoside D1 // NT // *



684 Tracheophyta *Acanthus ilicifolius* // Near Zhanjiang mangrove national nature reserve, Guangdong Province, China // Acanthiline A, a pyrido[1,2-a]indole alkaloid from Chinese mangrove *Acanthus ilicifolius*
1600 // N // acanthiline A // Not cytotox. to 2 HTCL // *

685 Tracheophyta *Bontia bontioides*, *Myoporum bontioides* // Leizhou Peninsula, Guangdong province, China // Anti-MRSA sesquiterpenes from the semi-mangrove plant *Myoporum bontioides* A. Gray
1601 // N // myoporumine A // MRSA MIC 6.25 μg/mL // *
1602 // N // myoporumine B // MRSA MIC 6.25 μg/mL // *

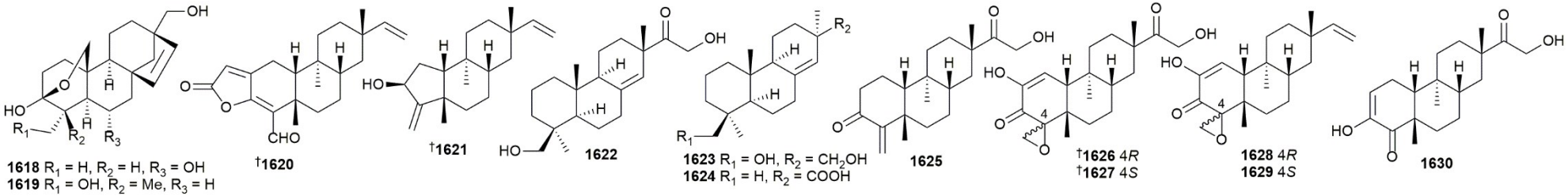
686 Tracheophyta *Ceriops tagal* // Hainan Is., China // Two new phenylpropanoids from the Chinese mangrove *Ceriops tagal*
1603 // N // tagalphenylpropanoidin A // Not cytotox. to 2 HTCL // *
1604 // N // tagalphenylpropanoidin B // Not cytotox. to 2 HTCL // *

687 Tracheophyta *Lumnitzera littorea* // Trang Province, Thailand // 12-Hydroxycorniculatolide A from the mangrove tree, *Lumnitzera littorea*
1605 // N // 12-hydroxycorniculatolide A // *S. aureus* MIC 64 μg/mL // *

688 Tracheophyta *Lumnitzera racemosa* // S. Taiwan // Components from the leaves and twigs of mangrove *Lumnitzera racemosa* with anti-angiogenic and AI effects
1606 // N // racelactone A // Anti-angiogenic, inhib. superoxide prod. by stim. neutrophils // *

689 Tracheophyta *Ceriops tagal* // Nizampatnam sea coast // Two new cerioptins (A-B) from the mangrove *Ceriops tagal*
1607 // N // cerioptin A // NT // *
1608 // N // cerioptin B // NT // *

690 Tracheophyta *Ceriops decandra* // Godavari estuary, Andhra Pradesh, India // *Ent*-abietanes from the Godavari mangrove, *Ceriops decandra*: abs. configuration and NF- κβ inhib. activ.
1609 // N // decandrol A // NT // Abs. config. by ECD
1610 // N // decandrol B // IA in activation of NF-κβ by LPS // Abs. config. by calc. ECD
1611 // N // decandrol C // Inhib. activation NF-κβ by LPS // Abs. config. by ECD
1612 // N // decandrol D // NT // Abs. config. by ECD
1613 // N // decandrol E // Inhib. activation NF-κβ by LPS // Abs. config. by calc. ECD
1614 // N // decandrol F // NT // Abs. config. by ECD
1615 // N // decandrol G // NT // Abs. config. by calc. ECD
1616 // N // decandrol H // NT // Abs. config. by ECD
1617 // N // decandrol I // NT // Abs. config. by ECD

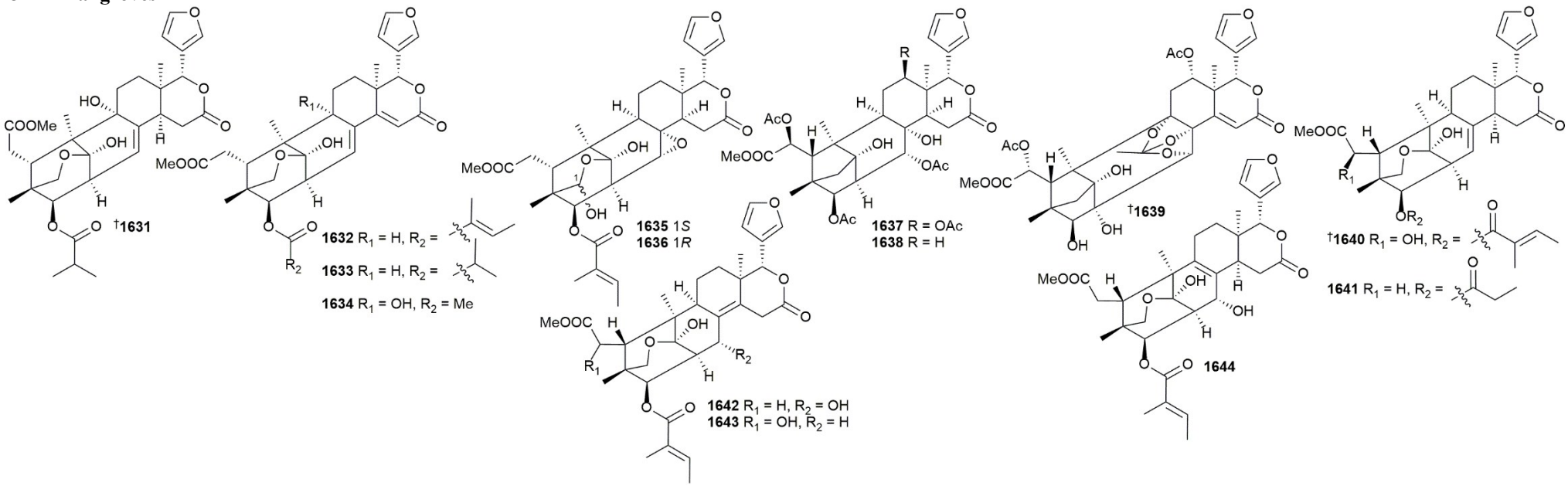


691 Tracheophyta *Excoecaria agallocha* // Xuan Thuy National Park, Nam Dinh, Vietnam // Excoecarins L and O from the mangrove plant *Excoecaria agallocha* L.
1618 // N // excoecarin L // Not cytotox. to 2 HTCL // *
1619 // N // excoecarin O // Not cytotox. to 2 HTCL // *

692 Tracheophyta *Ceriops tagal* // Hainan Is., China // Tagalide A and tagalol A, naturally occurring 5/6/6/6- and 5/6/6-fused cyclic dolabrane-type diterpenes: a new insight into the anti-breast cancer activ. of the dolabrane scaffold
1620 // N // tagalide A // Cytotox. to 6 HTCL // Abs. config. by calc. ECD
1621 // N // tagalol A // Not cytotox. // Abs. config. by calc. ECD

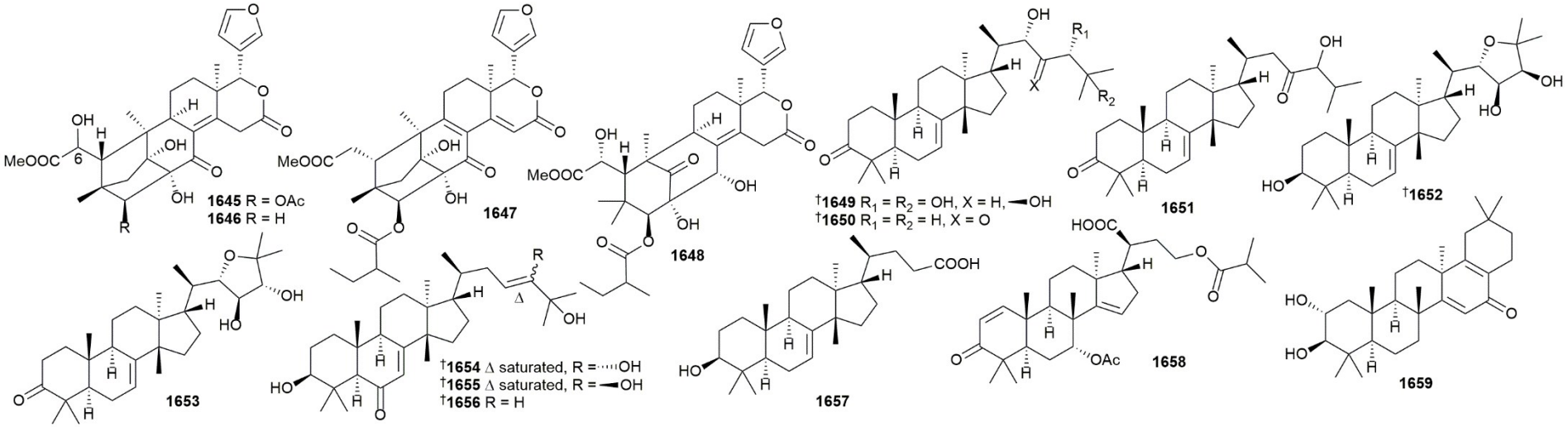
693 Tracheophyta *Ceriops tagal* // Hainan Is., China // Four new diterpenes from the mangrove *Ceriops tagal* and structure revision of four dolabranes with a 4,18-epoxy group
1622 // N // tagalon A // Not cytotox. to 5 HTCLs // *
1623 // N // tagalon B // Not cytotox. to 5 HTCLs // Abs. config. by X-ray
1624 // N // tagalon C // Cytotox. to 6 hum. breast cancer cell lines // *
1625 // N // tagalon D // Cytotox. to 6 hum. breast cancer cell lines // Structure identical to tagalene K (ref **694**)
1626 // R // tagalene I // Cytotox. to 6 hum. breast cancer cell lines // Revised 4-epimer, abs. config. by X-ray
1627 // R // 4-epi-tagalene I // NT // Revised 4-epimer
1628 // R // tagalsin A // NT // Revised 4-epimer
1629 // R // tagalsin B // NT // Revised 4-epimer

694 Tracheophyta *Ceriops tagal* // Hainan Is., P. R. China // Two new dolabrane diterpenes from the Chinese mangrove *Ceriops tagal*
1630 // N // tagalene J // Not cytotox. // *
1625 // N // tagalene K // Not cytotox. // Structure identical to tagalon D **1625**



695 Tracheophyta *Xylocarpus granatum* // Krishna estuary, Andhra Pradesh, India // Krishnagranatins A–I: new limonoids from mangrove, *Xylocarpus granatum*, and NF- κβ inhib. activity
1631 // N // krishnagranatin A // NT // Abs. config. by X-ray
1632 // N // krishnagranatin B // NT // *
1633 // N // krishnagranatin C // NT // *
1634 // N // krishnagranatin D // NT // *
1635 // N // krishnagranatin E // NT // *
1636 // N // krishnagranatin F // NT // *
1637 // N // krishnagranatin G // Inhib. activation NF-κβ by LPS // *
1638 // N // krishnagranatin H // Inhib. activation NF-κβ by LPS // *
1639 // N // krishnagranatin I // Inhib. activation NF-κβ by LPS // Abs. config. by X-ray

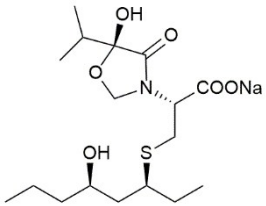
696 Tracheophyta *Xylocarpus granatum* // Trang Province, Thailand // Limonoids containing a C1–O–C29 moiety: isolation, structural modification, and antiviral activity
1640 // N // thaigranatin A // NT // Abs. config. by X-ray
1641 // N // thaigranatin B // NT // Abs. config. by ECD
1642 // N // thaigranatin C // NT // *
1643 // N // thaigranatin D // NT // *
1644 // N // thaigranatin E // NT // *



697 Tracheophyta *Xylocarpus moluccensis* // Godavari estuary, Andhra Pradesh, India // New 30-ketophragmalins with anti-breast cancer activ. against MDA-MB-453 cells from the Godavari mangrove, *Xylocarpus moluccensis* (Lam.) M. Roem
1645 // N // godavarin L // Cytotox. to triple-negative breast cancer cell line // Abs. config. except C-6 by calc. ECD
1646 // N // godavarin M // Anti-HIV-1 activ., weakly cytotox. // Abs. config. except C-6 by ECD
1647 // N // godavarin N // Cytotox. to triple-negative breast cancer cell line // *
1648 // N // godavarin O // Anti-HIV-1 activ., weakly cytotox. //

698 Tracheophyta *Xylocarpus granatum*, *X. moluccensis*, Excoecaria agallocha // Krishna estuary, Andhra Pradesh, India // Mangrove tirucallane- and apotirucallane-type triterpenoids: structure diversity of the C-17 side-chain and natural agonists of hum. farnesoid/pregnane–X–receptor
1649 // N // xylocarpol A // FXR agonist // Abs. config. by X-ray
1650 // N // xylocarpol B // IA // Abs. config. by X-ray
1651 // N // xylocarpol C // IA // *
1652 // N // xylocarpol D // IA // Abs. config. by Mosher's method and ECD
1653 // N // xylocarpol E // FXR agonist // *
1654 // N // agallochol A // FXR agonist // Abs. config. by Mosher's method and ECD
1655 // N // agallochol B // FXR agonist // Abs. config. by Mosher's method and ECD
1656 // N // agallochol C // IA // Abs. config. by Mosher's method and ECD
1657 // N // agallochol D // FXR agonist // *
1658 // N // 25-dehydroxy protoxylogranatin B // PXR agonist // *

699 Tracheophyta *Excoecaria agallocha* // Hainan Is., China // A new 28-nor-oleanane triterpene from *Excoecaria agallocha*
1659 // N // 28-nor-olean-2a,3ß-dihydroxy-14,17-diene-16-one // NT // *



1660

702 Miscellaneous // * // Synth. of thelepamide via catalyst-controlled 1,4-addition of cysteine deriv. and structure revision of thelepamide ***1660*** // R // (–)-thelepamide // Non-cytotox. (CCRF-CEM) at 100 mM // Corrected by total synth.

450 Srinu Meesala, Ruby Singh, Milind G Watve, Dattatraya G. Naik, Indian *J. Nat. Prod. Resour*., 2018, **9**, 75-78
452 Hajer Saeed Alorfi, *J. Chem. Soc. Pak*., 2018, **40**, 1119–1124.