Electronic supplementary information (ESI) for *Natural Product Reports*

SUPPORTING INFORMATION

Xanthone Dimers: A Compound Family which is both Common and Privileged.

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The 'Supporting Information' is a supplementary data illustrating the structural features of biaryl linked xanthones, the natural sources from which the di- and trimeric xanthones have been extracted and a summary of all the available biological activities for the discussed xanthones.

The 'Supporting Information' was composed of three parts:

Table S1: Structural Features of Biaryl Linked Xanthones

Compound	Number	Linkage	Methylation Positions	Additional Comments
Ascherxanthone A, B	**78/79**	C2,2′-	C3,3′,10a,10a′	Methoxylated at positions C7,7′
TMC 315-A_1, B_1	**80/82**	C2,2′-	C3,10a,10a′	Methoxylated at positions C3′,7,7′
TMC 315-A_2, B_2	**81/83**	C2,2′-	C3,3′,10a,10a′	Methoxylated at positions C7,7′
Dicerandrols A, B, C	**84-86**	C2,2′-	*C*6,6′	Acylation of hydroxyl moieties
Ergochromes Secalonic Acids A-G	**87/21/88/89/90/91/24**	C2,2′-	*C*6,6′	C6,6′-methyl/C10a,10a′-carboxy,*trans*-configured
Ergochromes AD, BD	**92/93**	C2,2′-	C6,6′	8a Hydroxylated
Ergochrome CD	**98**	C2,2′-	C6,6′	8a, 8a′ Hydroxylated
Ergochrome DD	**94**	C2,2′-	C6,6′	8a Hydroxylated, lactone bridge
Ergoflavin	**95**	C2,2′-	C6,6′	2 x Lactone bridge
Ergochrysin A, B	**96/97**	C2,2′-	C6,6′	Lactone bridge
Ergoxanthin	**99**	C2,2′-	C6,6′	Lactone bridge, C-ring rearranged
Eumitrins	**116-119**	C2,2′-	C6,3′	Unusual methylation pattern
Globulixanthone E	**55**	C4,2′-	-	Prenylated and extra ring
Hirtusneanoside	**85**	C2,4′-	C3,6,7,3′,6′	Unusual degree of methylation
Hyperidixanthone	**60**	C4,4′-	-	8,8′-Hydroxylated, methoxylated at positions C2,3,2′,3′
Neosartorin	**100**	C2,4′-	C3,6	Highly unsymmetrical
Penexanthone	**101**	C2,4′-	C6,6′	C10a,10a′-carbinols, acylated hydroxyls
Penicillixanthone	**102**	C2,4′-	C6,6′	Ergochrome isomer
Phomalevone A, C	**103-105**	C2,2′-	C3,3′,10,10′	Unusual degree of methylation
Phomolactonexanthone A	**111**	C2,4′-	C6	C-ring rearranged to lactone
Phomolactonexanthone B	**112**	C2,2′-	C6	C-ring rearranged to lactone
Phomoxanthone A	**106**	C4,4′-	C6,6′	C10a,10a′-carbinols, acylated hydroxyls
Phomoxanthone B	**109/110**	C2,4′-	C6,6′	C10a,10a′-carbinols, acylated hydroxyls
Ploiarixanthone	**68**	C8,8′-	-	2, 8, 2′, 8′ Hydroxylated,
Rugulotrosin A	**113**	C2,2′-	C3,3′	
Rugulotrosin B	**114**	C2,4′-	C3,3′	
Talaroxanthone	**25**	C4,4′-	C6,6′	
Xanthonol	**115**	C2,2′-	C6,6′	C5-hydroxy benzoylated, C10a′-carbinol

Table S2: Dimeric and Trimeric Xanthones and their natural sources

CAS	Number	Compound Name	Isolated From	Reference
Plants				
1073496-49-7	**45**	Bigarcinenone A	*Garcinia xanthochymus*	1
1309101-14-1	**46**	Bigarcinenone B	*Garcinia xanthochymus*	1
219797-92-9	**41**	Bijaponicaxanthone	*Hypericum japonicum*	2-4
872409-35-3	**42**	Bijaponicaxanthone C	*Hypericum japonicum* *Hypericum riparium*	5, 6
879480-49-6	**43**	Bixanthone C	*Hypericum japonicum*	7
879480-50-9	**44**	Bixanthone D	*Hypericum japonicum*	7
109237-38-9	**8**	Chiratanin	*Swertia chirata*	8
164672-51-9	**47**	Cratoxyxanthone	*Cratoxylum cochinchinense,* *Garcinia mangostana*	9, 10
136364-57-3	**51**	Garcilivin A	*Garcinia livingstonei*	11
136364-56-2	**52**	Garcilivin B	*Garcinia livingstonei*	11
145107-56-8	**53**	Garcilivin C	*Garcinia livingstonei*	11
1466519-37-8	**54**	Garciobioxanthone	*Garcina oblongifolia*	12
478688-19-6	**55**	Globulixanthone E	*Symphonia globulifera*	13
219649-95-3	**59**	Griffipavixanthone	*Garcinia pavifolia and G. griffithi,* *G. maingayii, G. virgate* *G. oblongifolia*	12, 14-16
1257216-83-3	**60**	Hyperidixanthone	*Hypericum chinense*	17
1422538-87-1	**74**	Isopuniceaside D	*Swertia punicea*	18, 19
1422538-81-5	**69c**	Isoswertiabisxanthone I	*Swertia punicea*	18, 19
1422538-85-9	**71b**	Isoswertipunidimer A 2-*C*-glucopyranoside	*Swertia punicea*	18, 19
1422538-77-9	**71a**	Isopuniceaside B	*Swertia punicea*	18, 19
452295-99-7	**61**	Jacarelhyperol A	*Hypericum japonicum*	20
452296-00-3	**62**	Jacarelhyperol B	*Hypericum japonicum*	20
945463-64-9	**63**	Jacarelhyperol D	*Hypericum japonicum*	21
154992-33-3	**64**	Mesuabixanthone A	*Mesua ferrea*	22
154992-34-4	**65**	Mesuabixanthone B	*Mesua ferrea*	22
182420-54-8	**66**	Mesuferrol A	*Mesua ferrea*	23
182420-59-3	**67**	Mesuferrol B	*Mesua ferrea*	23
127506-71-2	**68**	Ploiarixanthone	*Ploiarium alternifolium*	24
1240812-56-9	**69a**	Puniceaside A	*Swertia punicea*	19
1240812-57-0	**70a**	Puniceaside B	*Swertia punicea*	19
1240812-59-2	**72a**	Puniceaside C	*Swertia punicea*	19
1240812-59-2	**75a**	Puniceaside D	*Swertia punicea*	19
1240812-61-6	**76a**	Puniceaside E	*Swertia punicea*	19
126622-60-4	**73a**	Swertiabisxanthone I	*Swertia macrosperm, Swertia punicea*	19, 25
1161026-29-4	**73b**	Swertiabisxanthone I 8′-O-β-D-glucopyranoside	*Gentianella amarella ssp. acuta,* *Swertia punicea*	18, 19, 26
Unassigned	**73e**	Swertiabisxanthone diglucopyranoside	*Swertia punicea*	18, 19
1422538-89-3	**76b**	Swertiatrixanthone	*Swertia punicea*	18
137570-21-9	**77a**	Swertipunicoside	*Swertia punicea*	27
145772-59-4	**77b**	3-*O*-demethylswertipunicoside	*Swertia punicea*	27
1422538-88-2	**72b**	3-Methylpuniceaside C	*Swertia punicea*	18, 19
1422538-86-0	**70c**	3-Methylpuniceaside B	*Swertia punicea*	18, 19
1422538-84-8	**75b**	3-Methylswertipunitrimer I	*Swertia punicea*	18, 19

CAS	Number	Compound Name	Isolated From	Reference
1422538-83-7	**73d**	3-Methylswertiabisxanthone I	*Swertia punicea*	18, 19
1422538-82-6	**69d**	3-Methylisoswertiabisxanthone I	*Swertia punicea*	18, 19
1422538-80-4	**69b**	3-methylpuniceaside A	*Swertia punicea*	18, 19
1422538-79-1	**73c**	3-methylswertiabisxanthone I 8-O-b-D-glucopyranoside	*Swertia punicea*	18, 19
1422538-78-0	**70b**	5,6,7,8-tetrahydroswertiabisxanthone I	*Swertia punicea*	18, 19
not assigned	**77c**	3-glucosylpuniceaside A	*Swertia punicea*	18, 19
Fungi				
859510-81-9	**78**	Ascherxanthone A	*Aschersonia* sp. BCC 8401	28
1265898-29-0	**79**	Ascherxanthone B	*Aschersonia luteola* BCC 8774	29
1179357-60-8	**22**	Chrysoxanthone	ascomycete IBWF11-95A	30
1509949-67-0	**107**	12-deacetylphomoxanthone A	*Phomopsis longicolla*	31
1015078-60-0	**110**	Deacetylphomoxanthone B	*Phomopsis* sp. BCC 1323, *Phomopsis* sp. HNY29-2B	32, 33
not yet assigned	**108**	Deacetylphomoxanthone C	*Phomopsis* sp. HNY29-2B	33
361445-53-6	**84**	Dicerandrol A	*Phomopsis longicolla, Penicillium* CR1642D, *Phomopsis* sp. PSU-D15, *Phomopsis* sp. HNY29-2B, *Phomopsis longicolla* S1B4	32-35
361445-54-7	**85**	Dicerandrol B	*Phomopsis longicolla, Phomopsis* sp. PSU-D15, *Penicillium* CR1642D, *Phomopsis* sp. HNY29-2B, *Phomopsis longicolla* S1B4	31-35
361445-55-8	**86**	Dicerandrol C	*Phomopsis longicolla, Penicillium* CR1642D, *Phomopsis* sp. HNY29-2B, *Phomopsis longicolla* S1B4	31, 33-36
14153-18-5	**92**	Ergochrome AD	*Claviceps purpurea*	37
15140-37-1	**93**	Ergochrome BD	*Claviceps purpurea*	37
15589-95-4	**98**	Ergochrome CD	*Claviceps purpurea*	37
14735-38-7	**94**	Ergochrome DD	*Claviceps purpurea*	37
2755-83-1	**96**	Ergochrysin A	*Claviceps purpurea*	37
3187-46-0	**97**	Ergochrysin B	*Claviceps purpurea*	38, 39
3101-51-7	**95**	Ergoflavin	*Claviceps purpurea*	40
32832-31-8	**99**	Ergoxanthin	*Claviceps purpurea*	38, 41, 42
212709-11-0	**100**	Neosartorin	*Neosartorya fischeri, A. lentulus*, *A. fumigatiaffinis* and *A. novofumigatus*	43, 44
1274663-33-0	**101**	Penexanthone A / Monodeacetylphomoxanthone B	*Penicillium* CR1642D, *Phomopsis longicolla, Phomopsis* sp. HNY29-2B, *Phomopsis longicolla* S1B4	33, 35, 45, 46
1196979-49-3	**102**	Penicillixanthone A	*Penicillium thomii* *Paecilomyces sp.* (tree 1-7) *Penicillium* sp. SCSGAF 0023.	47-49
1268118-81-5	**103**	Phomalevone A	*Phoma* sp. (MYC-1734 = NRRL 39060; Cucurbitariaceae	50
1268118-83-7	**104**	Phomalevone B	*Phoma* sp. (MYC-1734 = NRRL	50

CAS	Number	Compound Name	Isolated From	Reference
			39060; Cucurbitariaceae	
1268118-85-9	**105**	Phomalevone C	*Phoma* sp. (MYC-1734 = NRRL 39060; Cucurbitariaceae	50
not yet assigned	**111**	Phomolactonexanthone A	*Phomopsis* sp. HNY29-2B	33
not yet assigned	**112**	Phomolactonexanthone B	*Phomopsis* sp. HNY29-2B	33
359844-69-2	**106**	Phomoxanthone A	*Phomopsis longicolla* , *Phomopsis* sp. BCC 1323	31, 51
359844-70-5	**109**	Phomoxanthone B	*Phomopsis* sp. BCC 1323	51
685135-81-3	**113**	Rugulotrosin A	*Penicillium* sp.	52
685135-82-4	**114**	Rugulotrosin B	*Penicillium* sp.	52
35287-72-0	**87**	Secalonic acid A	*Aspergillus ochraceus, Claviceps purpurea,* *Phoma terrestris, Pyrenochaeta terrestris*	53-61
35287-71-9	**21**	Secalonic acid B	*Aspergillus aculeatus, Claviceps purpurea*	54-59, 62, 63
35287-70-8	**89**	Secalonic acid C	*Claviceps purpurea*	54-59
35287-69-5	**91**	Secalonic acid D	*Aspergillus aculeatus, Claviceps purpurea, Penicillium oxalicum, Paecilomyces sp.*	62-65
51152-25-1	**24**	Secalonic acid E	*Claviceps purpurea, Phoma terrestris, Pyrenochaeta terrestris*	61, 66
60687-07-2	**88**	Secalonic acid F	*Aspergillus aculeatus, Aspergillus japonicas, Claviceps purpurea,*	62, 63, 67
70223-89-1	**90**	Secalonic acid G	*Claviceps purpurea, Pyrenochaeta terrestris*	61
1600504-55-9	**25**	Talaroxanthone	*Talaromyces sp.*	68
666175-67-3	**80**	TMC 315A_1	*Ceuthospora* sp. TMC1678	69
666175-68-4	**81**	TMC 315A_2	*Ceuthospora* sp. TMC1678	69
666175-69-5	**82**	TMC 315B_1	*Ceuthospora* sp. TMC1678	69
666175-70-8	**83**	TMC 315B_2	*Ceuthospora* sp. TMC1678	69
908341-60-6	**115**	Xanthonol	MF6460	68, 70
Lichen				
42893-40-3	**116**	Eumitrin A_1	*Usnea baileyi*	71-73
42893-41-4	**117**	Eumitrin A_2	*Usnea baileyi*	71-73
Structure unknown		Eumitrin A_3	*Usnea baileyi*	74
42893-42-5	**119**	Eumitrin B_1	*Usnea baileyi*	71-73
Structure unknown		Eumitrin B_2	*Usnea baileyi*	74
617712-58-0	**119**	Eumitrin T	*Physconia distort*	75
953814-90-9	**120**	Hirtusneanoside	*Usnea hirta*	76
35287-72-0	**87**	Secalonic acid A	*Physiconia distorta, Parmelia entotheichochroa, Pseudoparmelia hypomiltha, Cetraria ornate, Penicillium atramentosum*	75, 77-80
35287-71-9	**21**	Secalonic acid B	*Diploicia canescens*	81
35287-69-5	**91**	Secalonic acid D	*Diploicia canescens, Gliocladium sp. T31,*	81-83

CAS	Number	Compound Name	Isolated From	Reference
			Penicillium confertum, Penicillium chrysogenum	
60687-07-2	**88**	Secalonic acid F	*Diploicia canescens, P. chrysogenum, P. confertum*	81, 83
Unnamed dimeric xanthones from fungi				
75746-61-1	**121**	(3R,3'R,4S,4'S,4aS,4'aS)- 2,2',3,3',4,4',9,9'-octahydro-1,1',4,4',8,8'-hexahydroxy-3,3'-dimethyl-9,9'-dioxo-[5,7'-bi-4aH-xanthene]-4a,4'a-dicarboxylic acid, dimethyl ester		84, 85
35292-45-6	**122**	2,3,4-tetrahydro-4-hydroxy-8,9-dimethoxy-3-methyl-1-oxo-4aH-Xanthene-4a-carboxylic acid, 5-(1,2,3,4,9,9a-hexahydro-4-hydroxy-8,9a-dimethoxy-3-methyl-9,11-dioxo-1,4a-(epoxymethano)-4aH-xanthen-7-yl)-1 methyl ester		38
35292-49-0	**123**	3,4,9-tetrahydro-1,4,8-trihydroxy-3-methyl-9-oxo-4aH-xanthene-4a-carboxylic acid, 5-(1,2,3,4,9,9a-hexahydro-4-hydroxy-8,9a-dimethoxy-3-methyl-9,11-dioxo-1,4a-(epoxymethano)-4aH-xanthen-7-yl)-2 methyl ester		38
35292-48-9	**124**	3,4,9-tetrahydro-1,4-dihydroxy-8-methoxy-3-methyl-9-oxo-4aH-Xanthene-4a-carboxylic acid, 5-(1,2,3,4,9,9a-hexahydro-4-hydroxy-8,9a-dimethoxy-3-methyl-9,11-dioxo-1,4a-(epoxymethano)-4aH-xanthen-7-yl)-2 methyl ester		38
35292-46-7	**125**	5-(1,2,3,4,9,9a-hexahydro-4-hydroxy-8,9a-dimethoxy-3-methyl-9-oxo-1,4a-(epoxymethano)-4aH-xanthen-7-yl)-2,3,4,9-tetrahydro-4-hydroxy-1,8-dimethoxy-3-methyl-9-oxo-4aH-xanthene-4a-carboxylic acid methyl ester		38

Table S3: Summary of all the available biological activities for the xanthone dimers

Compound name	Number	Biological Target	Activity	Concentration	ref
Bixanthones C and D	**43, 44**	Variety of liver diseases	-	-	[7]
Bixanthones C and D	**43, 44**	Hepatic fibrosis	-	-	[7]
Bigarcinenone A	**45**	DPPH radical scavenging activity assay	Antioxidant	IC_{50}: 9.2 µg/mL	[1]
Bigarcinenone B	**46**	DPPH radical scavenging activity assay	Antioxidant	IC_{50}: 20.14 µM	[86]
Bigarcinenone B	**46**	H_2O_2 assay	Antioxidant	IC_{50}: 2.85 µM	[86]
Cratoxyxanthone	**47**	HT-29 colon cancer cell line	Cytotoxicity	ED_{50}: > 10 µM	[10]
Cratoxyxanthone	**47**	ELISA NF-*κ*B (p65 and p50)	P65 and p50 inhibitory activity	IC_{50}: > 20 µM	[10]
Chrysoxanthone	**22**	*Micrococcus luteus*	Antimicrobial	MIC: 10 µg/mL	[30]
Chrysoxanthone	**22**	*Bacillus brevis*	Antimicrobial	MIC: 5 µg/mL	[30]
Chrysoxanthone	**22**	*Bacillus subtilis*	Antimicrobial	MIC: 10 µg/mL	[30]
Chrysoxanthone	**22**	*Arthrobacter citreus*	Antimicrobial	MIC: 2.5 µg/mL	[30]
Chrysoxanthone	**22**	*Corynebacterium insidiosum*	Antimicrobial	MIC: 5 µg/mL	[30]
Chrysoxanthone	**22**	*Mycobacterium phlei*	Antimicrobial	MIC: 20 µg/mL	[30]
Chrysoxanthone	**22**	*Enterobacter dissolvens*	Antimicrobial	MIC: > 50 µg/mL	[30]
Chrysoxanthone	**22**	*Pseudomonas fluorescens*	Antimicrobial	MIC: 10 µg/mL	[30]
Chrysoxanthone	**22**	*Escherichia coli*	Antimicrobial	MIC: 20 µg/mL	[30]
Chrysoxanthone	**22**	*Absidia glauca* (+)	Antimicrobial	MIC: 20 µg/mL	[30]
Chrysoxanthone	**22**	*Absidia glauca* (-)	Antimicrobial	MIC: 20 µg/mL	[30]
Chrysoxanthone	**22**	*Aspergillus ochraceus*	Antimicrobial	MIC: 5 µg/mL	[30]
Chrysoxanthone	**22**	*Paecilomyces variotii*	Antimicrobial	MIC: 20 µg/mL	[30]
Chrysoxanthone	**22**	*Penicillium notatum*	Antimicrobial	MIC: 2.5 µg/mL	[30]
Chrysoxanthone	**22**	*Mucor miehei*	Antimicrobial	MIC: 20 µg/mL	[30]
Chrysoxanthone	**22**	*Penicillium islandicum*	Antimicrobial	MIC: > 50 µg/mL	[30]
Chrysoxanthone	**22**	*Zygorhynchus moelleri*	Antimicrobial	MIC: > 50 µg/mL	[30]
Chrysoxanthone	**22**	*Ascochyta pisi*	Antimicrobial	MIC: > 50 µg/mL	[30]
Chrysoxanthone	**22**	*Fusarium oxysporum*	Antimicrobial	MIC: > 50 µg/mL	[30]
Chrysoxanthone	**22**	*Fusarium fujikuroi*	Antimicrobial	MIC: > 50 µg/mL	[30]
Chrysoxanthone	**22**	*Rhodotorulaglutinis*	Antimicrobial	MIC: > 50 µg/mL	[30]
Chrysoxanthone	**22**	*Saccharomyces cerevisiae*	Antimicrobial	MIC: > 50 µg/mL	[30]
Chrysoxanthone	**22**	*Nematospora coryli*	Antimicrobial	MIC: > 50 µg/mL	[30]
Chrysoxanthone	**22**	Jurkat cell lines	Cytotoxicity	IC_{50}: 50 µM	[30]
Chrysoxanthone	**22**	L-1210 cell lines	Cytotoxicity	IC_{50}: 50 µM	[30]
Chrysoxanthone	**22**	Colo-320 cell lines	Cytotoxicity	IC_{50}: 50 µM	[30]
Chrysoxanthone	**22**	HeLa-S3 cell lines	Cytotoxicity	IC_{50}: > 50 µM	[30]
Garcilivin A	**51**	MRC-5 cells	Cytotoxicity	IC_{50}: 2.0 µM	[87]
Garcilivin A	**51**	*Trypanosoma brucei brucei*	Antiprotozoal	IC_{50}: 0.4 µM	[87]
Garcilivin A	**51**	*Trypanosoma cruzi*	Antiprotozoal	IC_{50}: 4.0 µM	[87]
Garcilivin A	**51**	*Plasmodium falciparum*	Antiprotozoal	IC_{50}: 6.7 µM	[87]
Garcilivin C	**53**	MRC-5 cells	Cytotoxicity	IC_{50}: 52.3 µM	[87]
Garcilivin C	**53**	*Trypanosoma brucei brucei*	Antiprotozoal	IC_{50}: 7.7 µM	[87]
Garcilivin C	**53**	*Trypanosoma cruzi*	Antiprotozoal	IC_{50}: 39.2 µM	[87]
Garcilivin C	**53**	*Plasmodium falciparum*	Antiprotozoal	IC_{50}: > 64 µM	[87]
Globulixanthone E	**55**	*Staphylococcus aureus*	Antimicrobial	MIC: 4.51 µg/mL	[13]
Globulixanthone E	**55**	*Bacillus subtilis*	Antimicrobial	MIC: 3.21 µg/mL	[13]

Globulixanthone E	**55**	*Vibrio anguillarium*	Antimicrobial	MIC: 5.56 µg/mL	[13]
Globulixanthone E	**55**	*Escherichia coli*	Antimicrobial	MIC: 4.51 µg/mL	[13]
Griffipavixanthone	**59**	DPPH radical scavenging activity assay	Antioxidant	EC_{50} : 11.5 µg/100 mL	[16]
Griffipavixanthone	**59**	P388 cell line	Cytotoxicity	ED_{50} : 3.40 µg/mL	[14]
Griffipavixanthone	**59**	LL/2 cell line	Cytotoxicity	ED_{50} : 6.80 µg/mL	[14]
Griffipavixanthone	**59**	Wehil64 cell line	Cytotoxicity	ED_{50} : 4.60 µg/mL	[14]
Griffipavixanthone	**59**	Human lung, breast, prostatic and intestinal cancer cells, while showing no cytotoxicity to normal kidney epidermal cells. For lung cancer cells H520	Cytotoxicity		[88]
Jacarelhyperol A	**61**	inhibit platelet-activating factor (PAF) induced hypertension	Hypertension	10 mg/kg in mice	[20]
Jacarelhyperol B	**62**	inhibit platelet-activating factor (PAF) induced hypertension	Hypertension	10 mg/kg in mice	[20]
3-*O*-demethyl-swertipunicoside	**77b**	PC12 cells exposed to oxidants	Neuroprotective against oxidative toxicity	25-100 µg/ml	[89]
3-O-demethyl-swertipunicoside	**77b**	PC12 cells exposed to 250 µM hydrogen peroxide.	Neuroprotective against oxidative toxicity	Cell viability (%): 157.8±6.0 at 25 µg/mL	[19]
Puniceaside B	**70a**	PC12 cells exposed to 250 µM hydrogen peroxide.	Neuroprotective against oxidative toxicity	Cell viability (%): 98.1±6.8 at 25 µg/mL	[19]
Swertiabisxanthone I 8'-*O*-β-D-glucopyranoside	**73b**	PC12 cells exposed to 250 µM hydrogen peroxide.	Neuroprotective against oxidative toxicity	Cell viability (%): 123.0±5.6 at 25 µg/mL	[19]
TMC $315A_1$, TMC $315A_2$, TMC $315B_1$ and TMC $315B_2$	**80, 81, 82, 83**	RANKL (Receptor activator of NF-κB ligand) antagonists	Osteoporosis control	"potent"	[69]
Ascherxanthone B	**79**	*Magnaporthe grisea*	Antifungal	IC_{90}: 0.58 µg/mL	[29]
Ascherxanthone A	**78**	*Magnaporthe grisea*	Antifungal	IC_{90}: > 50 µg/mL.	[29]
Ascherxanthone A	**78**	*Plasmodium falciparum* K1	Cytotoxicity	IC_{50}: 0.20 µg/mL	[28]
Ascherxanthone A	**78**	Vero cells	Cytotoxicity	IC_{50}: 0.80 µg/mL	[28]
Ascherxanthone A	**78**	KB cancer cell line	Cytotoxicity	IC_{50}: 1.70 µg/mL	[28]
Ascherxanthone A	**78**	BC cancer cell line	Cytotoxicity	IC_{50}: 1.70 µg/mL	[28]
Ascherxanthone A	**78**	NCIH187 cancer cell line	Cytotoxicity	IC_{50}: 0.16 µg/mL	[28]
Dicerandrol A	**84**	*Bacillus subtilis* - Zones of inhibition	Antimicrobial	11.0 mm at 300 µg/disk.	[34]
Dicerandrol A	**84**	*Staphylococcus aureus*- Zones of inhibition	Antimicrobial	10.8 mm at 300 µg/disk.	[34]
Dicerandrol A	**84**	*Xanthomonas oryzae* KACC 10331	Antimicrobial	MIC: 8 µg/mL	[90]
Dicerandrol A	**84**	A549 (human lung tumor cells)	Cytotoxicity	IC_{100}: 7.0 µg/mL	[34]
Dicerandrol A	**84**	HCT116 (human colon tumor cells)	Cytotoxicity	IC_{100}: 7.0 µg/mL	[34]
Dicerandrol A	**84**	*Staphylococcus aureus* KCTC 1916	Antimicrobial	MIC: 0.25 µg/mL	[90]
Dicerandrol A	**84**	*Bacillus subtilis* KCTC 1021	Antimicrobial	MIC: 0.125 µg/mL	[90]
Dicerandrol A	**84**	*Clavibacter michiganesis* KACC 20122	Antimicrobial	MIC: 1 µg/mL	[90]
Dicerandrol A	**84**	*Xanthomona oryzae* KACC 10859	Antimicrobial	MIC: 64 µg/mL	[90]
Dicerandrol A	**84**	*Xanthomona oryzae* KACC 10874	Antimicrobial	MIC: 8 µg/mL	[90]
Dicerandrol A	**84**	*Xanthomona oryzae* KACC 10875	Antimicrobial	MIC: 8 µg/mL	[90]
Dicerandrol A	**84**	*Xanthomona oryzae* KACC 10876	Antimicrobial	MIC: 2 µg/mL	[90]
Dicerandrol A	**84**	*Xanthomona oryzae* KACC 10882	Antimicrobial	MIC: 64 µg/mL	[90]

Dicerandrol A	**84**	*Xanthomona oryzae* KACC 10884	Antimicrobial	MIC: 16 µg/mL	[90]
Dicerandrol A	**84**	*Xanthomona oryzae* KACC 10885	Antimicrobial	MIC: 16 µg/mL	[90]
Dicerandrol A	**84**	*Escherichia coli* KCTC 1924	Antimicrobial	MIC: > 128 µg/mL	[90]
Dicerandrol A	**84**	*Pseudomonas syringae* KACC 10134	Antimicrobial	MIC: > 128 µg/mL	[90]
Dicerandrol A	**84**	*Salmonella enterica* KACC 10763	Antimicrobial	MIC: > 128 µg/mL	[90]
Dicerandrol A	**84**	*Erwinia amylovora* KACC 10060	Antimicrobial	MIC: 32 µg/mL	[90]
Dicerandrol A	**84**	*Ralstonia solanacearum* KACC 10149	Antimicrobial	MIC: > 128 µg/mL	[90]
Dicerandrol A	**84**	*Candida albicans* KCTC 7965	Antimicrobial	MIC: 2 µg/mL	[90]
Dicerandrol A	**84**	*Aspergillus oryzae* KCTC 6377	Antimicrobial	MIC: > 128 µg/mL	[90]
Dicerandrol A	**84**	*Xanthomona oryzae*	Antimicrobial	MIC: 8 µg/mL	[46]
Dicerandrol A	**84**	Dox40 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 22.8 µM +stroma; IC_{50}: 36.0 µM	[35]
Dicerandrol A	**84**	Farage (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 15.6 µM +stroma; IC_{50}: 14.8 µM	[35]
Dicerandrol A	**84**	H929 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 42.5 µM +stroma; IC_{50}: 22.9 µM	[35]
Dicerandrol A	**84**	KU812F (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 24.6 µM +stroma; IC_{50}: 46.6 µM	[35]
Dicerandrol A	**84**	MDA-MB-231(with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 43.3 µM +stroma; IC_{50}: 38.4 µM	[35]
Dicerandrol A	**84**	MM1S (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 28.9 µM +stroma; IC_{50}: 33.3 µM	[35]
Dicerandrol A	**84**	PC3 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 100 µM +stroma; IC_{50}: 71.7 µM	[35]
Dicerandrol A	**84**	MDA-MB-435	Cytotoxicity	IC_{50}: 3.03 µM	[33]
Dicerandrol A	**84**	HCT-116	Cytotoxicity	IC_{50}: 2.64 µM	[33]
Dicerandrol A	**84**	Calu-3	Cytotoxicity	IC_{50}: 1.76 µM	[33]
Dicerandrol A	**84**	Huh7	Cytotoxicity	IC_{50}: 4.19 µM	[33]
Dicerandrol A	**84**	MCF-10A	Cytotoxicity	IC_{50}: 28.32 µM	[33]
Dicerandrol B	**85**	*Bacillus subtilis* - Zones of inhibition	Antimicrobial	9.5 mm at 300 µg/disk.	[34]
Dicerandrol B	**85**	*Staphylococcus aureus*- Zones of inhibition	Antimicrobial	8.5 mm at 300 µg/disk.	[34]
Dicerandrol B	**85**	*Xanthomonas oryzae* KACC 10331	Antimicrobial	MIC: 16 µg/mL	[90]
Dicerandrol B	**85**	*Xanthomona oryzae*	Antimicrobial	MIC: 16 µg/mL	[46]
Dicerandrol B	**85**	A549 (human lung tumor cells)	Cytotoxicity	IC_{100}: 1.8 µg/mL	[34]
Dicerandrol B	**85**	HCT116 (human colon tumor cells)	Cytotoxicity	IC_{100}: 1.8 µg/mL	[34]
Dicerandrol B	**85**	Dox40 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 2.2 µM +stroma; IC_{50}: 2.3 µM	[35]
Dicerandrol B	**85**	Farage (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 1.6 µM +stroma; IC_{50}: 1.3 µM	[35]
Dicerandrol B	**85**	H929 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 10.2	[35]

				µM +stroma; IC_{50}: 3.4 µM	
Dicerandrol B	**85**	HT (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 1.2 µM +stroma; IC_{50}: 1.3 µM	[35]
Dicerandrol B	**85**	KMS34 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 5.5 µM +stroma; IC_{50}: 9.3 µM	[35]
Dicerandrol B	**85**	KU812F (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 2.7 µM +stroma; IC_{50}: 3.6 µM	[35]
Dicerandrol B	**85**	L363 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 16.7 µM +stroma; IC_{50}: 93 µM	[35]
Dicerandrol B	**85**	MDA-MB-231(with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 8.5 µM +stroma; IC_{50}: 5.5 µM	[35]
Dicerandrol B	**85**	MM1S (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 7.3 µM +stroma; IC_{50}: 8.0 µM	[35]
Dicerandrol B	**85**	OCILY17R (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 4.6 µM +stroma; IC_{50}: 5.2 µM	[35]
Dicerandrol B	**85**	OCIMY5 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 2.8 µM +stroma; IC_{50}: 5.7 µM	[35]
Dicerandrol B	**85**	OPM2 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 1.9 µM +stroma; IC_{50}: 1.5 µM	[35]
Dicerandrol B	**85**	PC3 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 34 µM +stroma; IC_{50}: 14.1 µM	[35]
Dicerandrol B	**85**	RPMI8226 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 2.4 µM +stroma; IC_{50}: 1.2 µM	[35]
Dicerandrol B	**85**	HS-5 bone marrow stromal cells (human immortalised nonmalignant cells)	Cytotoxicity	IC_{50}: 13.0 µM	[35]
Dicerandrol B	**85**	HOBIT osteoblast-like cells (human immortalised nonmalignant cells)	Cytotoxicity	IC_{50}: 9.2 µM	[35]
Dicerandrol B	**85**	THLE-3 hepatocytes (human immortalised nonmalignant cells)	Cytotoxicity	IC_{50}: 10.0 µM	[35]
Dicerandrol B	**85**	SVGp12 astrocytes (human immortalised nonmalignant cells)	Cytotoxicity	IC_{50}: 13.7 µM	[35]
Dicerandrol B	**85**	MDA-MB-435	Cytotoxicity	IC_{50}: 8.65 µM	[33]
Dicerandrol B	**85**	HCT-116	Cytotoxicity	IC_{50}: 3.94 µM	[33]
Dicerandrol B	**85**	Calu-3	Cytotoxicity	IC_{50}: 4.10 µM	[33]
Dicerandrol B	**85**	Huh7	Cytotoxicity	IC_{50}: 30.37 µM	[33]
Dicerandrol B	**85**	MCF-10A	Cytotoxicity	IC_{50}: 8.14 µM	[33]
Dicerandrol B	**85**	L5178Y mouse lymphoma cells	Cytotoxicity	IC_{50}: 10 µM	[31]
Dicerandrol C	**86**	*Bacillus subtilis* - Zones of inhibition	Antimicrobial	8.0 mm at 300 µg/disk.	[34]
Dicerandrol C	**86**	*Staphylococcus aureus*- Zones of inhibition	Antimicrobial	7.0 mm at 300 µg/disk.	[34]
Dicerandrol C	**86**	*Xanthomonas oryzae* KACC 10331	Antimicrobial	MIC: > 16 µg/mL	[90]
Dicerandrol C	**86**	*Xanthomona oryzae*	Antimicrobial	MIC: 16 µg/mL	[46]
Dicerandrol C	**86**	A549 (human lung tumor cells)	Cytotoxicity	IC_{100}: 1.8 µg/mL	[34]
Dicerandrol C	**86**	HCT116 (human colon tumor cells)	Cytotoxicity	IC_{100}: 7.0 µg/mL	[34]
Dicerandrol C	**86**	Dox40 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 10 µM +stroma; IC_{50}: 13.9 µM	[35]
Dicerandrol C	**86**	Farage (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 3.5 µM +stroma; IC_{50}: 3.3 µM	[35]
Dicerandrol C	**86**	H929 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 10.8	[35]

				µM +stroma; IC_{50}: 5.4 µM	
Dicerandrol C	**86**	HT (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 2.1 µM +stroma; IC_{50}: 4.0 µM	[35]
Dicerandrol C	**86**	KU812F (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 7.1 µM +stroma; IC_{50}: 14.3 µM	[35]
Dicerandrol C	**86**	MDA-MB-231(with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 18.1 µM +stroma; IC_{50}: 13.3 µM	[35]
Dicerandrol C	**86**	MM1S (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 14.7 µM +stroma; IC_{50}: 20.8 µM	[35]
Dicerandrol C	**86**	OPM2 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 4.8 µM +stroma; IC_{50}: 7.5 µM	[35]
Dicerandrol C	**86**	PC3 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 121 µM +stroma; IC_{50}: 45.2 µM	[35]
Dicerandrol C	**86**	RPMI8226 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 4.8 µM +stroma; IC_{50}: 2.8 µM	[35]
Dicerandrol C	**86**	MDA-MB-435	Cytotoxicity	IC_{50}: 44.10 µM	[33]
Dicerandrol C	**86**	HCT-116	Cytotoxicity	IC_{50}: 42.63 µM	[33]
Dicerandrol C	**86**	Calu-3	Cytotoxicity	IC_{50}: 36.52 µM	[33]
Dicerandrol C	**86**	Huh7	Cytotoxicity	IC_{50}: > 50 µM	[33]
Dicerandrol C	**86**	MCF-10A	Cytotoxicity	IC_{50}: 33.05 µM	[33]
Dicerandrol C	**86**	L5178Y mouse lymphoma cells	Cytotoxicity	IC_{50}: 1.1 µM	[31]
Dicerandrol C	**86**	hypodiploid apoptotic nuclei in Jurkat T cells	Pro-apoptic	~26% Sub-G1 nuclei at 10 µM	[31]
Neosartorin	**100**	*Staphylococcus aureus* ATCC 29213	Antimicrobial	MIC: 8 µg/mL	[91]
Neosartorin	**100**	*Staphylococcus aureus* Mu50	Antimicrobial	MIC: 8 µg/mL	[91]
Neosartorin	**100**	*Staphylococcus aureus* 25697	Antimicrobial	MIC: 8 µg/mL	[91]
Neosartorin	**100**	*Streptococcus pneumoniae* ATCC 49619	Antimicrobial	MIC: 4 µg/mL	[91]
Neosartorin	**100**	*Streptococcus agalactiae* 013761	Antimicrobial	MIC: 16 µg/mL	[91]
Neosartorin	**100**	*Streptococcus pyogenes* 014327	Antimicrobial	MIC: 4 µg/mL	[91]
Neosartorin	**100**	*Enterococcus faecalis* UW 2689	Antimicrobial	MIC: 16 µg/mL	[91]
Neosartorin	**100**	*Enterococcus faecium* 6011	Antimicrobial	MIC: 32 µg/mL	[91]
Neosartorin	**100**	*Bacillus subtilis* 168 trpC2	Antimicrobial	MIC: 4 µg/mL	[91]
Neosartorin	**100**	*Pseudomonas aeruginosa* B 63230	Antimicrobial	MIC: > 64 µg/mL	[91]
Neosartorin	**100**	*Escherichia coli* ATCC 25922	Antimicrobial	MIC: > 64 µg/mL	[91]
Neosartorin	**100**	*Escherichia coli* WT-3-1 MB2	Antimicrobial	MIC: > 64 µg/mL	[91]
Neosartorin	**100**	*Klebsiella pneumoniae* ATCC 27799	Antimicrobial	MIC: > 64 µg/mL	[91]
Neosartorin	**100**	A2780 sens/CisR	Cytotoxicity	IC_{50}: > 64 µg/mL	[91]
Neosartorin	**100**	K 562	Cytotoxicity	IC_{50}: > 64 µg/mL	[91]
Neosartorin	**100**	THP-1	Cytotoxicity	IC_{50}: 12 µg/mL	[91]
Neosartorin	**100**	HELA	Cytotoxicity	IC_{50}: > 32 µg/mL	[91]
Neosartorin	**100**	BALB/3T3	Cytotoxicity	IC_{50}: > 32 µg/mL	[91]
Penexanthone A	**101**	Dox40 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 15 µM +stroma; IC_{50}: 21.6 µM	[35]
Penexanthone A	**101**	Farage (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 12.4 µM +stroma; IC_{50}: 10.5 µM	[35]

Penexanthone A	**101**	H929 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 54.5 µM +stroma; IC_{50}: 35.2 µM	[35]
Penexanthone A	**101**	HT (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 10.8 µM +stroma; IC_{50}: 9.9 µM	[35]
Penexanthone A	**101**	KMS34 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 22.6 µM +stroma; IC_{50}: 55.6 µM	[35]
Penexanthone A	**101**	KU812F (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 14.6 µM +stroma; IC_{50}: 24.2 µM	[35]
Penexanthone A	**101**	L363 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 66.0 µM +stroma; IC_{50}: 79.4 µM	[35]
Penexanthone A	**101**	MDA-MB-231(with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 43.3µM +stroma; IC_{50}: 34.2 µM	[35]
Penexanthone A	**101**	MM1S (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 37.1 µM +stroma; IC_{50}: 47.1 µM	[35]
Penexanthone A	**101**	OCILY17R (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 31.1µM +stroma; IC_{50}: 47.4 µM	[35]
Penexanthone A	**101**	OCIMY5 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 18.8 µM +stroma; IC_{50}: 47.7 µM	[35]
Penexanthone A	**101**	OPM2 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 12.7 µM +stroma; IC_{50}: 10.5 µM	[35]
Penexanthone A	**101**	PC3 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 122.3 µM +stroma; IC_{50}: 66.3 µM	[35]
Penexanthone A	**101**	RPMI8226 (with and without stromal cells)	Cytotoxicity	-stroma; IC_{50}: 12.9µM +stroma; IC_{50}: 8.9 µM	[35]
Penexanthone A	**101**	MDA-MB-435	Cytotoxicity	IC_{50}: 7.90 µM	[33]
Penexanthone A	**101**	HCT-116	Cytotoxicity	IC_{50}: 6.92 µM	[33]
Penexanthone A	**101**	Calu-3	Cytotoxicity	IC_{50}: 6.44 µM	[33]
Penexanthone A	**101**	Huh7	Cytotoxicity	IC_{50}: 42.82 µM	[33]
Penexanthone A	**101**	MCF-10A	Cytotoxicity	IC_{50}: 16.13 µM	[33]
Penexanthone A	**101**	*Xanthomonas oryzae*	Antimicrobial	MIC: 32 µg/mL	[46]
Deacetylphomoxanthone B	**110**	MDA-MB-435	Cytotoxicity	IC_{50}: 14.4 µM	[33]
Deacetylphomoxanthone B	**110**	HCT-116	Cytotoxicity	IC_{50}: 7.12 µM	[33]
Deacetylphomoxanthone B	**110**	Calu-3	Cytotoxicity	IC_{50}: 4.14 µM	[33]
Deacetylphomoxant	**110**	Huh7	Cytotoxicity	IC_{50}: 29.20 µM	[33]

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Deacetylphomoxanthone B	**110**	MCF-10A	Cytotoxicity	IC_{50}: > 50 µM	[33]
Deacetylphomoxanthone B	**110**	*Xanthomonas oryzae* KACC 10331	Antimicrobial	MIC: > 16 µg/mL	[90]
Deacetylphomoxanthone C	**108**	MDA-MB-435	Cytotoxicity	IC_{50}: > 50 µM	[33]
Deacetylphomoxanthone C	**108**	HCT-116	Cytotoxicity	IC_{50}: 44.06 µM	[33]
Deacetylphomoxanthone C	**108**	Calu-3	Cytotoxicity	IC_{50}: 43.35 µM	[33]
Deacetylphomoxanthone C	**108**	Huh7	Cytotoxicity	IC_{50}: > 50 µM	[33]
Deacetylphomoxanthone C	**108**	MCF-10A	Cytotoxicity	IC_{50}: > 50µM	[33]
12-deacetylphomoxanthone A	**107**	L5178Y mouse lymphoma cells	Cytotoxicity	IC_{50}: 2.8 µM	[31]
12-deacetylphomoxanthone A	**107**	Hypodiploid apoptotic nuclei in Jurkat T cells	Pro-apoptic	~39% Sub-G1 nuclei at 10 µM	[31]
Phomoxanthone A	**106**	L5178Y mouse lymphoma cells	Cytotoxicity	IC_{50}: 0.3 µM	[31]
Phomoxanthone A	**106**	Cal27 (cisplatin sensitive (S) and resistant (R))	Cytotoxicity	(S); IC_{50}: 5.2 µM (R); IC_{50}: 5.6 µM	[31]
Phomoxanthone A	**106**	Kyse510 (cisplatin sensitive (S) and resistant (R))	Cytotoxicity	(S); IC_{50}: 0.8 µM (R); IC_{50}: 0.8 µM	[31]
Phomoxanthone A	**106**	A2780 (cisplatin sensitive (S) and resistant (R))	Cytotoxicity	(S); IC_{50}: 0.7 µM (R); IC_{50}: 0.9 µM	[31]
Phomoxanthone A	**106**	Burkitt's lymphoma cell line DG75	Cytotoxicity	IC_{50}: 0.1 µM	[31]
Phomoxanthone A	**106**	Jurkat T human lymphoma cells	Cytotoxicity	IC_{50}: 0.5 µM	[31]
Phomoxanthone A	**106**	PBMC (human peripheral blood mononuclear cells)	Cytotoxicity	IC_{50}: 61.2 µM	[31]
Phomoxanthone A	**106**	*Plasmodium falciparum* K1 multi drug resistant strain	Antimalarial	IC_{50}: 0.11 µg/mL	[51]
Phomoxanthone A	**106**	*Mycobacterium tuberculosis* H37Ra	Antitubercular	MIC: 0.5 µg/mL	[51]
Phomoxanthone A	**106**	KB cells	Cytotoxicity	IC_{50}: 0.99 µg/mL	[51]
Phomoxanthone A	**106**	BC-1 cells	Cytotoxicity	IC_{50}: 0.51 µg/mL	[51]
Phomoxanthone A	**106**	Vero cells	Cytotoxicity	IC_{50}: 1.4 µg/mL	[51]
Phomoxanthone A	**106**	*Chlorella fusca* – agar diffusion disk test	Antialgal	0.2 cm at 10 µg/disk.	[92]
Phomoxanthone A	**106**	*Bacillus megaterium* – agar diffusion disk test	Antibacterial	3-4 cm at 10 µg/disk.	[92]
Phomoxanthone A	**106**	*Ustilago violacea* – agar diffusion disk test	Antifungal	0.5-0.8 cm at 10 µg/disk.	[92]
Phomoxanthone A	**106**	hypodiploid apoptotic nuclei in Jurkat T cells	Pro-apoptic	~72% Sub-G1 nuclei at 10 µM	[31]
Phomoxanthone B	**109**	*Plasmodium falciparum* K1 multi drug resistant strain	Antimalarial	IC_{50}: 0.33 µg/mL	[51]
Phomoxanthone B	**109**	*Mycobacterium tuberculosis* H37Ra	Antitubercular	MIC: 6.25 µg/mL	[51]
Phomoxanthone B	**109**	KB cells	Cytotoxicity	IC_{50}: 4.1 µg/mL	[51]
Phomoxanthone B	**109**	BC-1 cells	Cytotoxicity	IC_{50}: 0.70 µg/mL	[51]
Phomoxanthone B	**109**	Vero cells	Cytotoxicity	IC_{50}: 1.8 µg/mL	[51]
Phomolactonexanthone A	**111**	MDA-MB-435	Cytotoxicity	IC_{50}: > 50 µM	[33]

Phomolactonexanthone A	**111**	HCT-116	Cytotoxicity	IC_{50}: > 50 µM	[33]
Phomolactonexanthone A	**111**	Calu-3	Cytotoxicity	IC_{50}: 43.45 µM	[33]
Phomolactonexanthone A	**111**	Huh7	Cytotoxicity	IC_{50}: > 50 µM	[33]
Phomolactonexanthone A	**111**	MCF-10A	Cytotoxicity	IC_{50}: > 50 µM	[33]
Phomolactonexanthone B	**112**	MDA-MB-435	Cytotoxicity	IC_{50}: > 50 µM	[33]
Phomolactonexanthone B	**112**	HCT-116	Cytotoxicity	IC_{50}: > 50 µM	[33]
Phomolactonexanthone B	**112**	Calu-3	Cytotoxicity	IC_{50}: > 50 µM	[33]
Phomolactonexanthone B	**112**	Huh7	Cytotoxicity	IC_{50}: > 50 µM	[33]
Phomolactonexanthone B	**112**	MCF-10A	Cytotoxicity	IC_{50}: > 50 µM	[33]
Secalonic Acid D	**91**	Lethal dose when intraperitoneally injected in mice	Toxic	25-50 mg/kg	[93]
Phomalevone A	**103**	*Bacillus subtilis* (ATCC 6051) - Zones of inhibition	Antibacterial	36 mm at 100 µg/disk	[50]
Phomalevone A	**103**	*Staphylococcus aureus* (ATCC 29213)- Zones of inhibition	Antibacterial	23 mm at 100 µg/disk	[50]
Phomalevone B	**104**	*Bacillus subtilis* (ATCC 6051) - Zones of inhibition	Antibacterial	38 mm at 100 µg/disk	[50]
Phomalevone B	**104**	*Staphylococcus aureus* (ATCC 29213)- - Zones of inhibition	Antibacterial	26 mm at 100 µg/disk	[50]
Phomalevone B	**104**	*Candida albicans* (ATCC 14053) - Zones of inhibition	Antibacterial	18 mm at 100 µg/disk	[50]
Phomalevone B	**104**	*Escherichia coli* (ATCC 25922) - Zones of inhibition	Antibacterial	18 mm at 100 µg/disk	[50]
Phomalevone C	**105**	*Bacillus subtilis* (ATCC 6051) - Zones of inhibition	Antibacterial	34 mm at 100 µg/disk	[50]
Phomalevone C	**105**	*Staphylococcus aureus* (ATCC 29213) - Zones of inhibition	Antibacterial	22 mm at 100 µg/disk	[50]
Phomalevone C	**105**	*Aspergillus flavus* (NRRL 6541) - Zones of inhibition	Antifungal	10 mm at 200 µg/disk	[50]
Phomalevone C	**105**	*Fusarium verticillioides* (NRRL 25457) - Zones of inhibition	Antifungal	10 mm at 200 µg/disk	[50]
Phomalevone C	**105**	*Fusarium verticillioides* (NRRL 25457)	Antifungal	MIC: 10 µg/mL	[50]
Phomalevone C	**105**	*Aspergillus flavus* (NRRL6541)	Antifungal	IC_{50}: 4 µg/mL	[50]
Rugulotrosin A	**113**	*Bacillus subtilis*	Antibacterial	LD_{99}: 5.5 µg/mL	[52]
Rugulotrosin A	**113**	*Enterococcus faecalis*	Antibacterial	LD_{99}: 1.6 µg/mL	[52]
Rugulotrosin A	**113**	*Bacillus cereus*	Antibacterial	LD_{99}: 3.1 µg/mL	[52]
Rugulotrosin A	**113**	*Staphylococcus aureus*	Antibacterial	LD_{99}: 200 µg/mL	[52]
Rugulotrosin B	**114**	*Bacillus subtilis*	Antibacterial	LD_{99}: 25 µg/mL	[52]
Xanthonol	**115**	Larvae of *Lucilia sericata*	Anthelmintic	LD_{90}: 33 µg/mL	[70]
Xanthonol	**115**	Larvae of *Aedes aegypti*	Anthelmintic	LD_{90}: 8 µg/mL	[70]
Xanthonol	**115**	Larvae of *Haemonchus contortus*	Anthelmintic	LD_{90}: 50 µg/mL	[70]
Eumitrins A_1 A_2	**116, 117**	inhibitors for nitric oxide formation by macrophages	-	-	[94]
Hirtusneanoside	**120**	*Bacillus subtilis*	Antibacterial	LD_{50}: 0.0140 µM	[76]

Hirtusneanoside	**120**	*Staphylococcus aureus*	Antibacterial	LD_{50}: 0.0034 μM	[76]

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