

Table 1: Known natural products with ecological activity in Antarctic marine ecosystems.

PHYLUM	SPECIES	METABOLITE	CODE	ACTIVITY	REFERENCES	
RHODOPHYTA		Averene	1	D _A	Ankisetty et al., 2004	
	<i>Plocamium cartilagineum</i>	epi-plocamene-D	2	D _A		
		halogenated monoterpenes		D _F		Amsler et al. 2013
CILIATA	<i>Euplotes focardii</i>	epoxyfocardin	54	C _G	Guella et al. 1996	
		focardin	55	C _G		
	<i>Euplotes nobilii</i> (strain AC-1)	pheromone En-1	67	Ph	Felici et al. 1999	
		pheromone En-2	68	Ph		
PORIFERA	<i>Anoxycalyx (Scolymastra) joubini</i>	Glasssponisine	11	D _A	Núñez-Pons & Avila 2014	
	<i>Crella sp.</i>	Norselic acid A	12	D _A	Ma et al. 2009	
	<i>Dendrilla membranosa</i>	Picolinic acid	3	T _S	Baker et al. 1993, 1995	
		7-methyladenine	4	T _S		
	<i>Isodictya erinacea</i>	p-Hydroxybenzaldehyde	5	T _S	Baker and Yoshida, 1994; Moon et al., 2000	
		Erebusinone	56	Mo	Amsler et al., 2001	
	<i>Kirkpatrickia variolosa</i>	Uncharacterized purple pigment		T _S	Baker et al. 1994	
	<i>Latrunculia apicalis</i>	Discorhabdin C and G	6	T _S ; A _B	Yang et al. 1995	
		Discorhabdin G	7	A _B ; D _S	Furrow et al. 2003	
	<i>Rossellidae spp.</i>	5 α -cholestan-3 β -one	10	D _A ; D _S	Núñez-Pons et al. 2012	
	<i>Suberites sp.</i>	Suberitenones A and B	8-9	T _S ; A _B	Baker et al., 1997	
	CNIDARIA	<i>Ainigmaptilon antarcticus</i>	Ainigmaptilon A	30	D _S ; A _B ; A _D	Iken and Baker, 2003
			Water-borne Cholesterol	13	T _S ; Co	Slattery et al., 1997a
		<i>Alcyonium antarcticum</i> (= <i>A. paessleri</i>)	22-dehydrocholesterol	14	T _S ; Co	
			22-dehydro-7-hydroxy-cholesterol	15	T _S ; Co	
		Wax esters	27-28	D _A ; D _S	Núñez-Pons et al. 2013	
<i>Alcyonium grandis</i>		Illudalenes 1-9	16-24	D _A ; D _S		
		Wax esters	27-28	D _A ; D _S		
<i>Alcyonium hadonii</i>		Wax esters	27-28	D _A ; D _S		
<i>Alcyonium paucilobulatum</i>		Wax esters	27-28	D _A ; D _S		
<i>Alcyonium rosseum</i>		Illudalenes 10-11	25-26	D _A ; D _S		
		Wax esters	27-28	D _A ; D _S		
<i>Clavularia frankliniana</i>		Chimyl alcohol	29	D _S		McClintock et al., 1994c
<i>Gersemia antarctica</i>	Homarine	31	A _B	Slattery et al. 1997a		
	Trigonelline	44	A _B			

MOLLUSCA		Diterpene monoacylglycerides		D _S	
	<i>Austrodoris kerguelenensis</i>	Diterpene diacylglycerides	32-33	D _S	Iken et al., 2002
		Monoacylglycerides from fatty acids		D _S	
	<i>Bathydoris hodgsoni</i>	Hodgsonal	34	D _S	Avila et al., 2000
	<i>Clione antarctica</i>	Pteroenone	43	D _F	Yoshida et al., 1995
	<i>Marseniopsis mollis</i>	Homarine	31	D _S	McClintock et al., 1994a
	<i>Tritoniella belli</i>	Chimyl alcohol	29	D _S	McClintock et al., 1994c
ECHINODERMATA		Acodontasterosides D, E, F, G, H, I	45-50	A _B	De Marino et al. 1997
	<i>Acodontaster conspicuus</i>	Steroids 15, 18, 19	51-53	A _B	De Marino et al. 1998
CHORDATA		Meridianins A-G	36-42	D _A ; D _S ; A _B	Núñez-Pons et al., 2010
	<i>Aplidium falklandicum</i>	Meridianins A-G	36-42	D _A ; D _S ; A _B	
	<i>Aplidium meridianum</i>	Rosinone B	35	D _A ; D _S	Carbone et al. 2012; Núñez-Pons et al., 2012
ARTHROPODA		halogenated monoterpenes		D _F	Amsler et al. 2013
	<i>Paradexamine fissicauda</i>	Porphyra-334	57	UVph	
		Shinorine	58	UVph	
		Palythine	59	UVph	
		Mycosporine-glycine	60	UVph	
SEVERAL TAXA		Asterina-330	61	UVph	Karentz et al. 1991; Karentz 1994; McClintock & Karentz 1997; Karentz & Bosch 2001; Hoyer et al. 2003
		Palythene	62	UVph	
		Palythinol	63	UVph	
		Mycosporine-glycine:valine	64	UVph	
		Palythenic acid	65	UVph	
		Usujirene	66	UVph	

Ecological activities

T_S: Tube-foot retraction in seastars

D_A: Deterrent against amphipods

D_S: Deterrent against seastars

D_F: Deterrent against fish

Co: Competitors avoidance

A_B: Antibacterial

A_D: Antifouling against diatoms

C_G: Cytotoxicity to gametes of sympatric spp.

Ph: Mating induction (pheromone)

Mo: Molting inhibition on crustaceans

UVph: UV-B Photoprotection