Table S1. Significant differences (reported as *p-values*) of sea cucumber crude extracts compare to control experiments using the Kruskal-Wallis test.

Conc. (μg mL⁻¹)	Species / Condition	*A. mauritiana*	*A. echinites*	*Bohadschia sp.*	*B. vitiensis*	*B. argus*	*H. edulis*	*H. atra*	*H. hilla*	*H. whitmaei*
150	**suspended**	0.000	0.000	0.000	0.000	0.000	0.000	0.050	0.371	0.649
	attached	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.091	0.398
15	**suspended**	0.000	0.001	0.010	0.794	0.006	0.374	0.011	0.709	0.052
	attached	0.002	0.036	0.098	0.050	0.121	0.385	0.003	0.000	0.008
1.5	**suspended**	0.179	0.001	0.174	0.159	0.025	0.883	0.128	0.000	0.001
	attached	0.000	0.000	0.000	0.859	0.001	0.000	0.017	0.000	0.011

Table S2. Saponins reported, and found in studied species

Exact mass (*m/z*)	Molecular formula	Compound	Species	Bioactivity	Reference
600.3662	$C_{35}H_{52}O_8$	*hillaside A*	*Holothuria hilla*	Cytotoxic	(Wu et al. 2007)
694.3928	$C_{37}H_{58}O_{12}$	*hillaside B*	*H. hilla*	Cytotoxic	Wu et al., 2007
750.4554	$C_{41}H_{66}O_{12}$	*bivittoside A*	*Bohadschia bivittata**1	Anti-fungal	(Kitagawa et al. 1989a)
764.4347	$C_{41}H_{64}O_{13}$	*holothurinosideD*	*H. Forskali*	Anti-viral	(Rodriguez et al. 1991)
806.4453	$C_{43}H_{66}O_{14}$	*stichorrenoside C*	*Stichopus horrens*	n.d.	(Cuong et al. 2017)
868.3891	$C_{41}H_{65}NaO_{16}S$	*echinoside B*	*Achtinopyga echinites, Actinopyga mauritiana*	Anti-fungal	(Kitagawa et al. 1980)
870.3683	$C_{40}H_{63}NaO_{17}S$	*hillaside C*	*H. hilla*	Cytotoxic	(Wu et al. 2006b)
882.3683	$C_{41}H_{63}NaO_{17}S$	*holothurin B*	*Holothuria leucospilota*	Ichthyotoxin	(Kitagawa et al. 1978a)
		holothurin B4	*Holothuria polii*	n.d.	(Silchenko et al. 2005a)
		nobiliside B	*Holothuria nobilis*	cytotoxic	(Wu et al. 2006a)
884.384	$C_{41}H_{65}NaO_{17}S$	*holothurin B2*	*H. polii*	Taxonomic marker	(Silchenko et al. 2005b)
		leucospilotaside B	*H. leucospilota*	Cytotoxic	(Han et al. 2010)
984.3071	$C_{41}H_{62}Na_2O_{20}S_2$	*lecanoroside A*	*Actinopyga lecanora*	Cytotoxic	(Zhang et al. 2008)
1054.5348	$C_{53}H_{82}O_{21}$	*cladoloside A*	*Cladolabes sp*	n.d	(Avilov and Stonik 1988)
		cladoloside A4	*Cladolabes schmeltzii*	Cytotoxic	(Silchenko et al. 2014)
1086.561	$C_{54}H_{86}O_{22}$	*DS-pervicoside B*	*Holothuria pervicax*	Anti-fungal	(Kitagawa et al. 1989b)
1088.5767	$C_{54}H_{88}O_{22}$	*bivittoside B*	*B. bivittata*	Anti-fungal	(Kitagawa et al. 1981a; Kitagawa et al. 1989a)
		DS-pervicoside C	*H. pervicax*	Anti-fungal	(Kitagawa et al. 1989b)
1100.5767	$C_{55}H_{88}O_{22}$	*lefevreioside A1*	*Cucumaria lefevrei*	n.d.	(Rodriguez and Riguera 1989)
		cucumarioside A15	*Eupentacta fraudatrix*	Anti-fungal, Cytotoxic	(Silchenko et al. 2012)
1102.5559	$C_{54}H_{86}O_{23}$	*holothurinoside C*	*H. Forskali*	Anti-tumour, anti-viral	(Rodriguez et al. 1991)
1102.5559	$C_{54}H_{86}O_{23}$	*apostichoposide A1*	*Apostichopus japonicus*	Cytotoxic	(Zhang et al. 2020)
1104.5353	$C_{53}H_{84}O_{24}$	*holothurinosideX*	*Holothuria lessoni*	n.d.	(Bahrami et al. 2016)
1104.5716	$C_{54}H_{88}O_{23}$	*holothurinosideY*	*H. lessoni*	n.d.	(Bahrami et al. 2018)
		DS-echinoside A	*Pearsonothuria graeffei*	Anti-cancer	(Zhao et al. 2011)
1116.5353	$C_{54}H_{84}O_{24}$	*apostichoposide C*	*A. japonicus*	n.d.	(Zhang et al. 2018)
1118.5509	$C_{54}H_{86}O_{24}$	*desholothurin A*	*H. Forskali*	Anti-tumour	(Rodriguez et al. 1991)
		arguside E	*Bohadschia argus*	Cytotoxic	(Liu et al. 2008b)
1120.5666	$C_{54}H_{88}O_{24}$	*holothurinosideZ*	*H. lessoni*	n.d.	(Bahrami et al. 2014a)
1144.5665	$C_{56}H_{88}O_{24}$	*arguside A*	*B. argus*	cytotoxic	(Liu et al. 2007)
1166.5178	$C_{54}H_{86}O_{25}S$	*perivicoside B*	n.d.	antibiotic	(Kokai Tokkyo Koho 1984)
1168.5335	$C_{54}H_{88}O_{25}S$	*perivicoside C*			

1176.5563	$C_{56}H_{88}O_{26}$	*arguside D*	*B. argus*	Anti-fungal	(Liu et al. 2008a)
1198.4841	$C_{55}H_{83}NaO_{25}S$	*intercedenside A*	*Mensamaria intercedens*	Anti-tumore; cytotoxic	(Zou et al. 2003)
		cucumarioside G3	*E. fraudatrix*	n.d.	(Kalinin et al. 1992)
1200.4998	$C_{55}H_{85}NaO_{25}S$	*cucumarioside G1*	*Cucumaria fraudatrix*[*2]	n.d.	(Afiyatullov et al. 1985)
		violaceuside A	*Pseudocolochirus violaceus*	Cytotoxic	(Zhang et al. 2006b)
1204.4948	$C_{54}H_{85}NaO_{26}S$	*24- dehydroechinoside A*	*Actinopyga agassizi*	n.d.	(Kitagawa et al. 1982)
		fuscocineroside B/C	*Holothuria fuscoscinera*	Cytotoxic	(Zhang et al. 2006a)
		scabraside A	*H. scabra*		(Han et al. 2009)
1206.5104	$C_{54}H_{87}NaO_{26}S$	*echinoside A*	*A. echinites, A. mauritiana*	Anti-fungal	(Kitagawa et al. 1980)
1206.474	$C_{53}H_{85}NaO_{27}S$	*holothurin E*	*H. lesson*	n.d.	(Bahrami and Franco 2015)
1207.4818	$C_{53}H_{84}NaO_{27}S$	*lecanoroside B*	*Actinopyga lecanora*	Cytotoxic	(Zhang et al. 2008)
1214.4791	$C_{55}H_{83}NaO_{26}S$	*intercedenside H*	*M. intercedens*	Cytotoxic	(Zou et al. 2005)
		colochiroside B3	*Colochirus robustus*	cytotoxic	(Silchenko et al. 2015)
1220.4896	$C_{54}H_{85}NaO_{27}S$	*holothurin A*	*H. leucospilota*	Anti-bacteria	(Kitagawa et al. 1979)
			Holothuria edulis	Anti-fungal	(Kobayashi et al. 1991)
			H. polii, Holothuria tubolosa	n.d.	(Silchenko et al. 2005b)
		17-hydroxy fuscocineroside B	*Bohadschia marmorata*	Anti-fungal	(Yuan et al. 2009b; Yuan et al. 2009c)
		25-hydroxy fuscocineroside B			
		25-hydroxy-dehydroechinoside A	*Actinopyga flammea*	Anti-fungal, Anti-tumore	(Bhatnagar et al. 1985)
		22-hydroxy-24-dehydro-echinoside A			
		scabraside B	*Holothuria scabra*	Cytotoxic	(Han et al. 2009)
1222.5053	$C_{54}H_{87}NaO_{27}S$	*holothurin A1*	*Holothuria floridana, Holothuria grisea*	n.d.	(Oleinikova et al. 1982)
		holothurin A4	*H. scabra*	Cytotoxic	(Hal Dang et al. 2007)
1228.4277	$C_{53}H_{80}O_{28}S2$	*cucumechinoside B*	*Cucumaria echinata*[*3]	Anti tumore; anti fungal	(Miyamoto et al. 1990)
1230.474	$C_{55}H_{83}NaO_{27}S$	*intercedenside C,D*	*M. intercedens*	Anti tumore; cytotoxic	(Zou et al. 2003; Zou et al. 2005)
1232.4896	$C_{55}H_{85}NaO_{27}S$	*intercedenside F*	*M. intercedens*	cytotoxic	(Zou et al. 2005)
1234.4689	$C_{54}H_{83}NaO_{28}S$	*calcigeroside C1*	*Pentamera calcigera*	n.d.	(Avilov et al. 2000)
1236.4846	$C_{54}H_{85}NaO_{28}S$	*holothurin D*	*H. lesson*	n.d.	(Bahrami et al. 2014b)
1246.5982	$C_{60}H_{94}O_{27}$	*coustesides G*	*Bohadschia cousteaui*	Anti-fungal	(Elbandy et al. 2014)
1248.6138	$C_{60}H_{96}O_{27}$	*impatienside B*	*H. axiloga*	Anti-fungal	(Yuan et al. 2009a)
1248.6139	$C_{60}H_{96}O_{27}$	*coustesides H*	*B. cousteaui*	Anti-fungal	(Elbandy et al. 2014)
1250.6295	$C_{60}H_{98}O_{27}$	*coustesides J*			
1260.428	$C_{53}H_{82}Na2O_{27}S_2$	*magnumoside C_4*	*Massinium magnum*[*4]	Anti-tumour	(Silchenko et al. 2017)
1262.5002	$C_{56}H_{87}NaO_{28}S$	*fuscocineroside A*	*H. fuscoscinerea*	Cytotoxic	(Zhang et al. 2006a)
1264.6088	$C_{60}H_{96}O_{28}$	*causteside E,F*	*B. cousteaui*	Anti-fungal	(Elbandy et al. 2014)
		griseaside A	*H. grisea*	Anti-tumor	(Sun et al. 2008)
		holothurinoside E	*H. forskali*	n.d.	(van Dyck et al. 2010)
1264.5158	$C_{56}H_{89}NaO_{28}S$	*22-acetoxy echinoside A*	*A. flammea*	n.d.	(Bhatnagar et al. 1985)
1266.6245	$C_{60}H_{98}O_{28}$	*coustesides I*	*B. cousteaui*	Anti-fungal	(Elbandy et al. 2014)
		griseaside A	*H. grisea*	Cytotoxic	(Sun et al. 2008)
1280.6037	$C_{60}H_{96}O_{29}$	*holothurinosideA*	*H. Forskali*	Anti-tumour	(Rodriguez et al. 1991)
		causteside C	*B. cousteaui*	Anti-fungal	(Elbandy et al. 2014)
1308.635	$C_{62}H_{100}O_{29}$	*pervicoside D*	*H. axiloga*	Anti-fungal	(Yuan et al. 2009a)
1322.6142	$C_{62}H_{98}O_{30}$	*holothurinoside B*	*H. Forskali*	Anti-viral	(Rodriguez et al., 1991)
		causteside D	*B. cousteaui*	Anti-fungal	(Elbandy et al., 2014)

1374.4856	$C_{59}H_{90}O_{32}S2$	*cucumarioside A3*	*Cucumaria***	Cytotoxic	(Drozdova et al. 1997)
		cucumarioside A6-2			
1386.5138	$C_{60}H_{92}Na2O_{31}S$	*synaptoside A*	*Synaptida***	Cytotoxic	(Avilov et al. 2008)
1392.6561	$C_{66}H_{104}O_{31}$	*holotoxin A1(stichoposide A)*	*Stichopus japonicus*	n.d.	(Elyakov 1983)
1410.703	$C_{67}H_{110}O_{31}$	*bivittoside C*	*B. argus, B. bivittata*	Anti-fungal	(Kitagawa et al. 1981a; Kitagawa et al. 1989a)
1410.703					
1422.6667	$C_{67}H_{106}O_{32}$	*coustesides B*	*B. cousteaui*	Anti-fungal	(Elbandy et al., 2014)
		holotoxin A	*S. japonicus*	Anti-fungal	(Kitagawa et al. 1978b)
1424.682	$C_{67}H_{108}O_{32}$	*marmoratoside A*	*B. marmorata*	Anti-fungal	(Yuan et al., 2009)
		impatienside A	*Holothuria impatiens*	Cytotoxic	(Sun et al. 2007)
1425.3459[+]	$C_{54}H_{85}NaO_{28}S$	*holothurin A3*	*H. scabra*	Cytotoxic	(Hal Dang et al. 2007)
1426.698	$C_{67}H_{110}O_{32}$	*bivittoside D*	*B. argus, B. bivittata*	Anti-fungal	(Kitagawa et al. 1981a; Kitagawa et al. 1989a)
			Bohadschia vitiensis	Spermicidal, Anti-fungal	(Lakshmi et al. 2008; Lakshmi et al. 2012)
		holothurinoside G	*H. forskali*	n.d.	(van Dyck et al. 2010)
1438.698	$C_{68}H_{110}O_{32}$	*stichoposide C*	*Holothuria***	n.d.	(Stonik et al. 1983)
		stichloroside C1	*Stichopus chloronotus*	Anti-fungal	(Kitagawa et al. 1981b)
1440.677	$C_{67}H_{108}O_{33}$	*marmoratoside B*	*B. marmorata*	Anti-fungal	(Yuan et al. 2009c)
		17-hydroxy impatienside A	*B. marmorata*	Anti-fungal	(Yuan et al. 2009c)
		cousteside A	*B. cousteaui*	Anti-fungal	(Elbandy et al. 2014)
1440.3257	$C_{53}H_{79}Na3O_{35}S_3$	*fallaxoside D_1*	*Cucumaria fallax*	n.d.	(Silchenko et al. 2016)
1442.6929	$C_{67}H_{110}O_{33}$	*arguside B*	*B. argus*	Anti-fungal	(Liu et al. 2008c)
1442.6929	$C_{67}H_{110}O_{33}$	*arguside C*	*B. argus*	Anti-fungal	(Liu et al. 2008c)
1470.6879	$C_{68}H_{110}O_{34}$	*lessonoside A,B,D*	*H. lessoni*	n.d.	(Bahrami and Franco 2015)
1484.7034	$C_{69}H_{112}O_{34}$	*25-acetoxybivittoside D*	*B. marmorata*	Anti-fungal	(Yuan et al. 2009c)

**based on WoRMS: [1] Bohadschia bivittata was not found. Holothuria bivittata is not accepted, and replaced with Bohadschia vitiensis (Semper, 1868) ,[2] C ucumaria fraudatrix is not accepted, and replaced with Eupentacta fraudatrix (D'yakoov, Baranova & Savel'eva, 1958); [3] Cucumaria echinata is not accepted, and replaced with Pseudocnus echinatus (von Marenzeller,1882); [4]Neothyonidium magnum is accepted as Massinium magnum (Ludwig, 1882)*

*** the author mentioned the genus*

+The exact mass does not match with the reported formula, and structure

Table S3. Exact mass (*m/z*), molecular formula, retention time (RT), and Intensity signal (IntSig) of saponins, and sapogenins (aglycone parts) presented in the three sea cucumber genera *Holothuria, Bohadschia,* and *Actinopyga*

Molecular formula	Sample code	Exact mass (*m/z*)	*H. edulis*		*H. atra*		*H. hilla*		*H. whitmaei*		*B. vitiensis*		*Bohadschia sp.*		*B. argus*		*A. mauritiana*		*A. echinites*	
			RT	IntSig	RT	IntSig	RT	IntSig	RT	IntSig	RT	IntSig	RT	IntSig	RT	IntSig	RT	IntSig	RT	IntSig
$C_{29}H_{45}O_4$	M457T11.6	457.3318	11.63	184035	11.63	48457	11.65	19484	11.63	13514	11.63	78480	11.63	98646	11.65	47819	11.65	82074	11.65	94798
$C_{29}H_{45}O_4$	M457T12.1	457.3318	12.07	37295	12.07	3138	12.1	1861	12.07	1898	12.07	10742	12.07	15313	12.1	11938	12.1	5849	12.1	9126
$C_{29}H_{45}O_4$	M457T12.8	457.3318	12.8	11598	12.88	1333	-	-	-	-	12.82	1498	-	-	-	-	12.82	1034	-	-
$C_{29}H_{45}O_4$	M457T14.6	457.3318	14.58	68189	14.57	1694	14.52	6861	14.6	1555	14.6	12801	14.6	22148	14.6	5836	-	-	-	-
$C_{29}H_{45}O_4$	M457T14,7	457.3318	14.76	226972	14.76	14146	14.76	9550	14.76	3028	14.76	46297	14.76	61424			-	-	14.78	95012
$C_{29}H_{45}O_4$	M457T15	457.3318	14.98	206407	14.98	27010	15	3127	14.98	4266	14.98	37080	14.98	43936	15	24262	-	-	15	378109
$C_{30}H_{46}O_5$	M486T8.3	486.3345	-	-	-	-	-	-	-	-	-	-	-	-	8.27	13519	-	-	-	-
$C_{30}H_{46}O_5$	M486T8.7	486.3345	-	-	-	-	-	-	-	-	8.66	246	8.66	11359	8.66	92718	-	-	-	-
$C_{30}H_{46}O_5$	M486T8.8	486.3345	8.82	4398	8.82	2975	-	-	-	-	-	-	-	-	8.97	2541	8.82	8608	8.82	2560
$C_{30}H_{46}O_5$	M486T9.1	486.3345			9.11	13219	-	-	-	-	9.11	186	9.11	8764	9.13	46648	9.13	5966		
$C_{30}H_{46}O_5$	M486T9.3	486.3345	9.29	3674	9.27	29502	-	-	9.29	420	-	-	-	-	-	-	9.29	10541	9.29	2541
$C_{30}H_{46}O_5$	M486T9.6	486.3345	-	-	-	-	-	-	-	-	9.64	181	9.62	723	9.66	8180	-	-	-	-
$C_{30}H_{46}O_5$	M486T10	486.3345	-	-	-	-	9.74	773	9.74	534	-	-	-	-	-	-	10	16590	-	-
$C_{30}H_{46}O_5$	M486T10.4	486.3345	10.43	4413	10.3	2547			10.49	591	-	-	-	-	-	-	-	-	10.47	2314
$C_{30}H_{46}O_5$	M486T10.8	486.3345	-	-	10.77	46309	-	-	-	-	-	-	-	-	-	-	10.77	20257		
$C_{30}H_{46}O_5$	M486T11.8	486.3345	11.82	9471	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.79	2715
$C_{30}H_{48}O_4$	M472T9.9	472.3552	-	-	-	-	-	-	9.66	323	9.94	5288	9.94	13935	9.96	42508	-	-	-	-
$C_{30}H_{48}O_4$	M472T10.3	472.3552	10.3	3018	10.3	65	10.3	972	10.3	1078	10.3	59479	10.28	78073	10.28	79433	-	-	-	-
$C_{30}H_{48}O_4$	M472T10.5	472.3552	-	-	-	-	-	-	-	-	10.45	1091	10.49	5109	10.55	7531	-	-	-	-
$C_{30}H_{48}O_4$	M472T10.9	472.3552	10.88	2439	10.9	83	-	-	-	-	-	-	-	-	-	-	10.88	1154	10.88	2706
$C_{30}H_{48}O_4$	M472T11.4	472.3552	11.39	3304	-	-	-	-	-	-	-	-	-	-	-	-	11.39	4004	11.37	4258
$C_{30}H_{48}O_4$	M472T13.5	472.3552	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.44	23504	13.48	271
$C_{30}H_{42}O_5$	M482T6.8	482.3032	6.89	18464	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
$C_{30}H_{42}O_5$	M482T7.3	482.3032	-	-	-	-	-	-	-	-	-	-	-	-	7.29	2442	-	-	-	-
$C_{30}H_{42}O_5$	M482T8.4	482.3032	-	-	-	-	-	-	-	-	-	-	8.44	1136	8.42	4850	-	-	-	-
$C_{30}H_{42}O_5$	M482T8.5	482.3032	8.5	13170	8.5	50650	8.51	1081	-	-	-	-	-	-	-	-	8.5	6857	-	-
$C_{30}H_{42}O_5$	M8482T8.8	482.3032	-	-	-	-	8.8	5397	8.82	470	-	-	8.7	756	-	-	-	-	8.82	7571
$C_{30}H_{42}O_5$	M482T8.9	482.3032	8.97	38461	8.97	25652	8.95	39691	9	17036	-	-	8.91	487	8.93	2735	9	10770	9	8029
$C_{30}H_{42}O_5$	M482T9.1	482.3032	-	-	-	-	-	-	-	-	9.11	307	9.11	1722	-	-	-	-	-	-
$C_{30}H_{42}O_5$	M482T9.4	482.3032	9.38	12363	-	-	9.38	1943	9.38	1342	-	-	-	-	-	-	-	-	-	-
$C_{30}H_{42}O_5$	M482T9.6	482.3032	-	-	9.62	34737	-	-	-	-	-	-	-	-	9.62	1010	9.6	44740	-	-
$C_{30}H_{42}O_5$	M482T10.4	482.3032	-	-	10.34	14274	-	-	10.39	1409	-	-	-	-	-	-	10.3	20266	10.37	2467

$C_{30}H_{44}O_5$	M484T8.1	484.3189	-	-	-	-	-	-	-	-	8.1	665	8.1	4276	-	-	-	-	-	-
$C_{30}H_{44}O_5$	M484T8.4	484.3189	-	-	-	-	-	-	8.38	4902	8.46	1007	8.44	34833	-	-	-	-	-	-
$C_{30}H_{44}O_5$	M484T8.6	484.3189	8.62	2651	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.68	2266
$C_{30}H_{44}O_5$	M484T8.9	484.3189	8.97	296066	-	-	8.95	305644	-	-	-	-	8.91	5260	-	-	-	-	-	-
$C_{30}H_{44}O_5$	M484T9	484.3189	-	-	-	-	-	-	9	149532	9.02	642	-	-	-	-	9.32	176	9	78700
$C_{30}H_{44}O_5$	M484T10-4	484.3189	-	-	-	-	-	-	10.39	12701	-	-	-	-	-	-	-	-	10.37	24249
$C_{30}H_{44}O_5$	M484T11	484.3189	11.07	10806	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
$C_{30}H_{44}O_4$	M468T8.8	468.3239	8.82	9643	-	-	8.82	17494	8.82	626	-	-	-	-	-	-	8.82	24333	8.82	7273
$C_{30}H_{44}O_4$	M468T8.7	468.3239	-	-	-	-	-	-	-	-	8.66	449	8.66	11899	8.66	213137	-	-	-	-
$C_{30}H_{44}O_4$	M468T9.1	468.3239	-	-	9.11	16580			9.11	149	-	-	9.11	9601	9.13	75000	-	-	-	-
$C_{30}H_{44}O_4$	M468T9.3	468.3239	-	-	9.27	130539	9.29	22528	9.29	1240	-	-	-	-	-	-	9.29	31667	9.29	6290
$C_{30}H_{44}O_4$	M468T9.7	468.3239	-	-	-	-	9.74	3412	9.74	1942	-	-	-	-	-	-	-	-	-	-
$C_{30}H_{44}O_4$	M468T9.6	468.3239	-	-	-	-	-	-	-	-	9.64	876	9.62	7108	9.62	126607	-	-	-	-
$C_{30}H_{44}O_4$	M468T10	468.3239	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	33190	10.02	2394
$C_{30}H_{44}O_4$	M468T10.2	468.3239	-	-	-	-	-	-	-	-	10.19	1218	10.19	3587	-	-	-	-	-	-
$C_{30}H_{44}O_4$	M468T10.5	468.3239	10.45	114404	-	-	10.51	3631	10.49	10239	-	-	-	-	-	-	10.47	50322	10.47	41600
$C_{30}H_{44}O_4$	M468T10.8	468.3239			10.77	68089	-	-	-	-	-	-	-	-	-	-	10.77	29218	-	-
$C_{30}H_{44}O_4$	M468T11.1	468.3239	11.11	5257	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	25131
$C_{35}H_{52}O_8$	M600T7.12	600.3662	-	-	-	-	-	-	-	-	-	-	-	-	7.12	47562	-	-	-	-
$C_{35}H_{52}O_8$	M600T8.7	600.3662	-	-	-	-	8.87	425	-	-	-	-	8.66	2453	8.66	51372	-	-	-	-
$C_{35}H_{52}O_8$	M600T9.1	600.3662	-	-	9.11	4009			-	-	-	-	9.11	2160	9.13	20817	-	-	-	-
$C_{35}H_{52}O_8$	M600T9.3	600.3662	9.29	1175	9.27	26114	9.29	2709	9.29	127	-	-	-	-	-	-	9.29	4499	9.29	817
$C_{35}H_{52}O_8$	M600T9.6	600.3662	-	-	-	-	-	-	-	-	-	-	9.62	1181	9.62	28245	9.64	1383	-	-
$C_{35}H_{52}O_8$	M600T10.4	600.3662	10.45	21547	-	-	10.49	319	10.49	1243	10.49	629	10.49	1849	-	-	10.47	8604	10.47	6507
$C_{35}H_{52}O_8$	M600T10.7	600.3662	-		10.77	2731	-	-	-	-	-	-	-	-	-	-	10.77	1177		
$C_{35}H_{52}O_8$	M600T11	600.3662	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.07	1068	11.02	6497
$C_{35}H_{52}O_8$	M600T12.8	600.3662	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.82	3107	-	-
$C_{41}H_{66}O_{12}$	M750T9.9	750.4554	-	-	-	-	-	-	-	-	9.96	335	-	-	9.94	1104	-	-	-	-
$C_{41}H_{66}O_{12}$	M750T10.3	750.4554	-	-	-	-	10.3	296	10.3	234	10.3	20390	10.28	30195	10.32	30206	-	-	-	-
$C_{41}H_{66}O_{12}$	M750T10.9	750.4554	10.88	1822	-	-	-	-	-	-	-	-	-	-	10.92	1667	10.88	1058	10.88	2995
$C_{41}H_{66}O_{12}$	M750T11.3	750.4554	11.39	7058	-	-	-	-	-	-	11.28	42534	11.28	93291	11.3	53961	11.39	7813	11.37	9341
$C_{41}H_{66}O_{12}$	M750T13.5	750.4554	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.44	90887	13.46	3565
$C_{41}H_{64}O_{13}$	M764T8.7	764.4347	-	-	-	-	-	-	-	-	-	-	8.66	2511	8.66	25988	-	-	-	-
$C_{41}H_{64}O_{13}$	M764T9.1	764.4347	-	-	-	-	-	-	-	-	-	-	9.11	6055	9.13	38180	9.13	4040	-	-
$C_{41}H_{64}O_{13}$	M764T9.3	764.4347	9.29	6215	9.27	81762	9.29	16543	9.29	663	-	-	-	-	-	-	9.29	19563	9.29	4650
$C_{41}H_{64}O_{13}$	M764T9.4	764.4347	-	-	-	-	9.43	1478	-	-	9.4	559			9.4	6053	-	-	-	-
$C_{41}H_{64}O_{13}$	M764T9.7	764.4347	-	-	-	-	9.74	1393	9.74	798	9.74	833	9.74	4587	9.76	8769	-	-	-	-
$C_{41}H_{64}O_{13}$	M764T10.5	764.4347	10.43	11900	-	-	-	-	10.49	1662	-	-	-	-	-	-	-	-	10.47	5504
$C_{41}H_{64}O_{13}$	M764T10.8	764.4347	-	-	10.77	117043	-	-	-	-	10.75	588	-	-	-	-	10.77	51245	-	-

$C_{41}H_{64}O_{13}$	M764T12.2	764.4347	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.22	4931	12.2	3949
$C_{43}H_{66}O_{14}$	M806T9.3	806.4453	-	-	-	-	-	-	9.29	488	-	-	-	-	9.32	649	-	-	-	-
$C_{43}H_{66}O_{14}$	M806T9.7	806.4453	-	-	-	-	-	-	9.66	466	-	-	-	-	9.68	509	-	-	-	-
$C_{43}H_{66}O_{14}$	M806T9.8	806.4453	-	-	-	-	-	-	-	-	-	-	-	-	9.81	353	9.81	352	-	-
$C_{43}H_{66}O_{14}$	M806T10	806.4453	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.02	6544	10.02	1479
$C_{43}H_{66}O_{14}$	M806T11.2	806.4453	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.22	2751	-	-
$C_{41}H_{63}NaO_{16}S$	M866T10.8	866.3734	-	-	10.79	699	-	-	-	-	-	-	-	-	-	-	10.77	539	-	-
$C_{41}H_{63}NaO_{16}S$	M866T12.2	866.3734	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.2	567	12.22	532
$C_{41}H_{63}NaO_{16}S$	M866T15.1	866.3734	15.17	112	-	-	15.13	39	-	-	-	-	-	-	-	-	-	-	-	-
$C_{41}H_{63}NaO_{16}S$	M866T16.2	866.3734			-	-	-	-	-	-			16.23	71	16.23	82	-	-	-	-
$C_{41}H_{63}NaO_{17}S$	M882T10.4	882.3683	10.39	195	10.39	2033	-	-	10.41	238	10.32	48	10.32	62	-	-	10.37	730	10.37	700
$C_{41}H_{65}NaO_{17}S$	M882T14.2	882.384			-	-	-	-	-	-	14.17	83	14.27	71	-	-	-	-	-	-
$C_{41}H_{65}NaO_{17}S$	M882T15.8	882.384	15.84	57	-	-	15.6	73	15.74	79	-	-	-	-	-	-	-	-	-	-
$C_{41}H_{65}NaO_{16}S$	M868T12.9	868.3891	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.85	250	-	-
$C_{41}H_{65}NaO_{16}S$	M868T13.1	868.3891	-	-	-	-	-	-	13.18	48	-	-	-	-	13.19	52	13.1	1969	13.08	955
$C_{41}H_{65}NaO_{16}S$	M868T13	868.3891	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
$C_{40}H_{63}NaO_{17}S$	M870T8.1	870.3683	-	-	-	-	-	-	-	-			8.1	96	8.12	116	-	-	-	-
$C_{40}H_{63}NaO_{17}S$	M870T9.6	870.3683	-	-	9.6	580	-	-	-	-	-	-	-	-	-	-	9.6	742		
$C_{40}H_{63}NaO_{17}S$	M870T11.1	870.3683	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.16	268	11.16	187
$C_{40}H_{63}NaO_{17}S$	M870T13.8	870.3683	-	-	-	-	13.87	30	-	-	-	-	-	-	-	-	-	-	13.83	198
$C_{54}H_{86}O_{22}$	M1086T9.7	1086.561	-	-	9.11	251	-	-	-	-	-	-	9.76	413	9.74	831	-	-	-	-
$C_{54}H_{86}O_{22}$	M1086T10.7	1086.561	10.64	1929			-	-	-	-	10.75	1093	10.75	1276	10.28	630	-	-	10.64	306
$C_{54}H_{86}O_{22}$	M1086T11.1	1086.561	11.11	31369	11.16	197	-	-	11.16	71	-	-	-	-	-	-	11.09	28112	11.07	64326
$C_{54}H_{88}O_{22}$	M1088T10.3	1088.5767	-	-	-	-	-	-			10.28	382	10.28	1109	-	-	-	-	-	-
$C_{54}H_{88}O_{22}$	M1088T10.9	1088.5767	-	-	-	-	10.92	29	-	-	-	-	-	-	10.9	116	10.9	386	10.9	3968
$C_{54}H_{88}O_{22}$	M1088T11.4	1088.5767	11.39	1014	-	-	-	-	-	-	-	-	-	-	10.35	739	11.39	1952	11.37	2345
$C_{54}H_{86}O_{23}$	M1102T9.1	1102.5559	-	-	9.11	27206	-	-	-	-	-	-	9.11	6116	9.13	171722	9.13	8034	-	-
$C_{54}H_{86}O_{23}$	M1102T9.3	1102.5559	-	-	9.29	14417	9.29	2229	-	-	-	-	-	-	-	-	9.29	2265	9.29	702
$C_{54}H_{86}O_{23}$	M1102T10.5	1102.5559	10.47	16517	10.49	2917			10.49	2319	-	-	-	-	-	-	10.45	8906	10.47	8951
$C_{54}H_{86}O_{23}$	M1102T11.8	1102.5559	11.82	2111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.79	884
$C_{53}H_{84}O_{24}$	M1104T8.6	1104.5353	8.64	41	-	-	-	-	-	-	-	-			8.64	348	8.68	291	8.68	347
$C_{53}H_{84}O_{24}$	M1104T8.4	1104.5353	-	-	-	-	-	-	-	-	-	-	8.44	149	8.52	1486	8.59	185	-	-
$C_{54}H_{88}O_{24}$	M1104T10	1104.5716	-	-	-	-	-	-	-	-	-	-	9.94	173	9.96	300	-	-	-	-
$C_{54}H_{88}O_{24}$	M1104T10.7	1104.5716	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.71	244	10.71	933
$C_{54}H_{88}O_{24}$	M1104T11.1	1104.5716	11.11	19192	11.16	675	11.16	192	11.16	396	11.16	175	11.16	219	11.16	518	11.09	13705	11.09	24662
$C_{54}H_{84}O_{24}$	M1116T9.4	1116.5353	9.38	7544	9.38	1489	9.4	532	9.38	241	-	-	9.38	226	-	-	9.38	271	-	-
$C_{54}H_{86}O_{24}$	M1118T6.9	1118.5509	-	-	-	-	-	-	-	-	-	-	-	-	6.99	12629	-	-	-	-

$C_{54}H_{86}O_{24}$	M1118T8.7	1118.5509	-	-	-	-	-	-	-	-	-	-	8.66	1302	8.68	26858	-	-	-	-
$C_{54}H_{86}O_{24}$	M1118T8.9	1118.5509	8.93	4843	8.95	3834	8.93	4516	8.91	1079	8.91	243	8.91	5919	8.93	153956	8.93	61994	-	-
$C_{54}H_{86}O_{24}$	M1118T9	1118.5509	9.02	9537	9.02	5741	9.04	10800	9.02	14126	-	-	-	-	-	-	-	-	9.02	8791
$C_{54}H_{88}O_{23}$	M1120T8.8	1120.5666	8.82	690	8.8	264	8.82	952	-	-	-	-	-	-	-	-	8.78	2578	8.82	494
$C_{56}H_{88}O_{24}$	M1144T8.5	1144.5665	-	-	8.48	261	-	-	-	-	-	-	-	-	8.5	532	-	-	-	-
$C_{56}H_{88}O_{24}$	M1144T9.8	1144.5665	-	-	-	-	-	-	-	-	-	-	-	-	9.81	2222	9.81	450	-	-
$C_{56}H_{88}O_{24}$	M1144T10	1144.5665	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.02	2021	10.04	445
$C_{54}H_{88}O_{25}S$	M1166T11.2	1166.5178	11.11	544	11.16	40	-	-	-	-	-	-	-	-	-	-	11.16	649	11.02	194
$C_{54}H_{88}O_{25}S$	M1168T8.5	1168.5335					-	-	-	-	-	-	8.48	477	8.5	327	-	-	-	-
$C_{56}H_{88}O_{26}$	M1176T8.5	1176.5563	8.5	1397	8.5	3591	-	-	-	-	-	-	-	-	8.42	9251	-	-	-	-
$C_{56}H_{88}O_{26}$	M1176T8.1	1176.5563	-	-	-	-	-	-	-	-	8.1	143	8.1	1327	8.1	15995	-	-	-	-
$C_{56}H_{88}O_{26}$	M1176T11.7	1176.5563	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.65	3144	11.65	467
$C_{55}H_{85}NaO_{25}S$	M1200T8.8	1200.4998	8.82	943	-	-	8.82	2291	8.8	59	-	-	-	-	8.82	415	-	-	-	-
$C_{55}H_{85}NaO_{25}S$	M1200T11.3	1200.4998	-	-	-	-	-	-	-	-	11.3	52	11.3	61	-	-	11.16	4780	11.26	389
$C_{54}H_{85}NaO_{26}S$	M1204T10.5	1204.4947	10.49	149	-	-	-	-	-	-	-	-	-	-	-	-	10.49	689	10.51	112
$C_{54}H_{85}NaO_{27}S$	M1220T9	1220.4896	9.06	153	-	-	-	-	9.06	115	-	-	-	-	-	-	9.02	197	9.02	121
$C_{54}H_{85}NaO_{27}S$	M1220T10.8	1220.4896	-	-	-	-	-	-	-	-	10.77	56	10.77	75	-	-	-	-	-	-
$C_{54}H_{87}NaO_{26}S$	M1206T9.7	1206.5104	-	-	-	-	-	-	-	-	9.74	35	9.76	183	8.12	220	-	-	-	-
$C_{54}H_{87}NaO_{26}S$	M1206T10.4	1206.5104	10.43	30	-	-	-	-	-	-	-	-	-	-	10.13	161	-	-	-	-
$C_{54}H_{87}NaO_{26}S$	M1206T11.2	1206.5104	-	-	11.14	28	11.18	21	-	-	-	-	11.3	168	11.84	122	11.16	151	11.14	313
$C_{53}H_{85}NaO_{27}S$	M1206T9.1	1206.474	-	-	9.13	120		-	-	-	-	-	-	-	9.13	744	-	-	-	-
$C_{53}H_{85}NaO_{27}S$	M1206T10.5	1206.474	-	-	10.49	127	10.49	38	10.49	119	-	-	-	-	-	-	-	-	-	-
$C_{53}H_{85}NaO_{27}S$	M1206T11.1	1206.474	11.11	935	-	-	-	-	-	-	-	-	-	-	-	-	11.11	1791	11.07	3125
$C_{53}H_{85}NaO_{27}S$	M1206T11.4	1206.474	11.37	688	-	-	-	-	-	-	-	-	-	-	-	-	11.39	4763	11.37	5440
$C_{53}H_{84}NaO_{27}S$	M1207T8.1	1207.4818	-	-	-	-	-	-	-	-	8.08	75	8.1	307	8.12	1213	-	-	-	-
$C_{53}H_{84}NaO_{27}S$	M1207T8.5	1207.4818	-	-	8.48	612	-	-	-	-	-	-	-	-	-	-	-	-	-	-
$C_{53}H_{84}NaO_{27}S$	M1207T11.1	1207.4818	11.11	853	-	-	-	-	-	-	-	-	-	-	-	-	11.07	124	11.07	169
$C_{53}H_{84}NaO_{27}S$	M1207T11.4	1207.4818	11.39	1684	-	-	-	-	-	-	-	-	-	-	-	-	11.37	818	11.41	251
$C_{55}H_{83}NaO_{26}S$	M1214T8.5	1214.4791	-	-	8.46	1607	-	-	-	-	-	-	8.48	2371	8.5	1726	-	-	-	-
$C_{54}H_{85}NaO_{27}S$	M1220T9	1220.4896	9	149	8.95	232	-	-	-	-	-	-	-	-	-	-	-	-	-	-
$C_{54}H_{85}NaO_{27}S$	M1220T9.1	1220.4896	9.06	185	-	-	9.04	846	9.04	900	-	-	-	-	-	-	9.02	197	9.02	121
$C_{54}H_{87}NaO_{27}S$	M1222T10.7	1222.5053	-	-	-	-	-	-	-	-	10.75	124	10.75	101	10.15	185	-	-	-	-
$C_{53}H_{80}O_{28}S_2$	M1228T8.8	1228.4277	-	-	-	-	-	-	-	-	-	-	8.48	81	8.82	87	8.(2	975	-	-
$C_{53}H_{80}O_{28}S_2$	M1228T9.4	1228.4277	9.38	23499	9.38	4429	9.4	2087	9.38	1069	-	-	-	-	-	-	-	-	-	-
$C_{55}H_{83}NaO_{27}S$	M1230T8.1	1230.474	-	-	-	-	-	-	-	-	8.1	155	8.1	459	8.12	1408	8.15	170	-	-
$C_{55}H_{83}NaO_{27}S$	M1230T8.4	1230.474	8.52	90	8.4	287	-	-	-	-	-	-	8.44	377	8.42	194	-	-	-	-
$C_{55}H_{83}NaO_{27}S$	M1230T11	1230.474	-	-	-	-	9.43	107	-	-	-	-	-	-	-	-	10.94	115	11.37	121

$C_{54}H_{85}NaO_{28}S$	M1236T8.5	1236.4846	8.57	26	-	-	-	-	-	-	-	-	8.44	127	8.48	147	-	-	-	-
$C_{60}H_{94}O_{27}$	M1246T8.7	1246.5982			-	-	-	-	-	-	-	-	8.66	123	8.68	14019	-	-	-	-
$C_{60}H_{94}O_{27}$	M1246T9	1246.5982	8.97	355	8.97	229	8.95	135	9	159	-	-	-	-	-	-	9	108	-	-
$C_{60}H_{94}O_{27}$	M1246T9.4	1246.5982	-	-	-	-	9.4	63	-	-	-	-	-	-	9.47	1828	-	-	-	-
$C_{60}H_{94}O_{27}$	M1246T9.6	1246.5982	-	-	-	-	-	-	-	-	-	-	9.62	246	9.66	10612	-	-	-	-
$C_{60}H_{94}O_{27}$	M1246T10.7	1246.5982	-	-	-	-	-	-	-	-	10.75	152	10.75	232	-	-	-	-	-	-
$C_{60}H_{96}O_{27}$	M1248T9.4	1248.6139	-	-	-	-	-	-	-	-	-	-	-	-	9.45	4543	-	-	-	-
$C_{60}H_{96}O_{27}$	M1248T9.8	1248.6139	-	-	-	-	-	-	-	-	9.74	143	9.76	655	9.78	12306	-	-	-	-
$C_{60}H_{96}O_{27}$	M1248T10.8	1248.6139	-	-	-	-	-	-	-	-	10.75	1633	10.75	1577	-	-	-	-	-	-
$C_{60}H_{96}O_{27}$	M1248T11.3	1248.6139	-	-	-	-	-	-	-	-	11.28	562	11.33	117	-	-	-	-	-	-
$C_{60}H_{96}O_{27}$	M1248T11	1248.6139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.09	110	11.04	254
$C_{60}H_{98}O_{27}$	M1250T10.3	1250.6295	10.3	105	-	-	-	-	-	-	10.3	2014	10.35	3031	10.35	2758	-	-	-	-
$C_{53}H_{82}Na_2O_{27}S_2$	M1260T10	1260.428	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.02	1246	-	-
$C_{53}H_{82}Na_2O_{27}S_2$	M1260T9	1260.428	-	-	9.02	249	9	90	9	50	-	-	-	-	-	-	-	-	-	-
$C_{60}H_{96}O_{28}$	M1264T8.6	1264.6088	-	-	-	-	-	-	-	-	-	-	8.66	2456	8.68	222601	8.64	127	-	-
$C_{60}H_{96}O_{28}$	M1264T9.5	1264.6088	-	-	-	-	9.43	1568	-	-	-	-	-	-	9.49	14169	-	-	-	-
$C_{60}H_{96}O_{28}$	M1264T9.7	1264.6088	-	-	-	-	-	-	-	-	9.64	183	9.64	799	9.66	129520	-	-	-	-
$C_{60}H_{96}O_{28}$	M1264T8.7	1264.6088	-	-	-	-	-	-	-	-			8.66	2456	8.68	222601	8.64	127	-	-
$C_{60}H_{96}O_{28}$	M1264T9.6	1264.6088	-	-	-	-	9.43	1568	-	-	9.64	183	9.64	799	9.66	129520	-	-	-	-
$C_{60}H_{98}O_{28}$	M1266T10.7	1266.6245	-	-	10.71	47	-	-	-	-	10.75	56			10.17	1017	-	-	10.15	106
$C_{60}H_{96}O_{29}$	M1280T8.4	1280.6037	-	-	-	-	-	-	-	-	8.44	118	8.44	16409	8.44	390904	8.44	476	-	-
$C_{62}H_{100}O_{29}$	M1308T9.7	1308.635			-	-	-	-	-	-	-	-	9.72	32	9.74	158	-	-	-	-
$C_{62}H_{100}O_{29}$	M1308T11.6	1308.635	11.61	54	-	-	-	-	-	-	-	-	-	-	-		11.61	142	11.58	61
$C_{59}H_{90}O_{32}S_2$	M1374T9	1374.4856	9	422	9.25	162	8.97	280	9	347	-	-	-	-	9.47	209	9.29	224	9	106
$C_{66}H_{104}O_{31}$	M1392T8.7	1392.6561	-	-	-	-	-	-	-	-	-	-	-	-	8.66	7963	-	-	-	-
$C_{66}H_{104}O_{31}$	M1392T9.4	1392.6561	-	-	9.27	73	-	-	-	-	-	-	-	-	9.47	134321	-	-	-	-
$C_{66}H_{104}O_{31}$	M1392T9.6	1392.6561	-	-	-	-	-	-	-	-	-	-	9.62	1276	9.62	23799	-	-	-	-
$C_{66}H_{104}O_{31}$	M1392T9.8	1392.6561	-	-	-	-	-	-	-	-	-	-	9.74	8590	9.76	7551	-	-	-	-
$C_{66}H_{104}O_{31}$	M1392T10.7	1392.6561	10.43	123	-	-	-	-	-	-	10.75	5008	10.73	1938	-	-	-	-	-	-
$C_{67}H_{110}O_{31}$	M1410T10.3	1410.703			-	-	-	-	-	-			10.28	9506	10.32	9254	-	-	-	-
$C_{67}H_{110}O_{31}$	M1410T11.3	1410.703	11.28	173	-	-	-	-	11.28	41	11.3	270185	11.3	403627	11.3	258252	-	-	-	-
$C_{67}H_{110}O_{31}$	M1410T13	1410.703	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.99	1307	13.01	1213
$C_{67}H_{106}O_{32}$	M1422T9.6	1422.6667	-	-	-	-	-	-	-	-	-	-	9.4	1074	9.4	66846	-	-	-	-
$C_{67}H_{106}O_{32}$	M1422T9.8	1422.6667	-	-	-	-	-	-	-	-	-	-	9.74	8590	9.76	7551	-	-	-	-
$C_{67}H_{108}O_{32}$	M1424T9.6	1424.6823	-	-	-	-	-	-	-	-	-	-	9.62	20084	-	-	9.62	87900	-	-
$C_{67}H_{108}O_{32}$	M1424T9.4	1424.6823	-	-	-	-	9.4	25	-	-	-	-	-	-	9.45	18099	-	-	-	-
$C_{67}H_{108}O_{32}$	M1424T9.8	1424.6823	-	-	-	-	-	-	-	-	9.74	8846	9.76	175639	9.76	398783	-	-	-	-

$C_{67}H_{108}O_{32}$	M1424T10.8	1424.6823	-	-	-	-	-	-	-	-	10.75	146286	10.75	170102	-	-	-	-	-	-
$C_{67}H_{110}O_{32}$	M1426T9.8	1426.698	-	-	-	-	-	-	-	-	-	-	9.76	24745	9.72	22319	-	-	-	-
$C_{67}H_{110}O_{32}$	M1426T10.3	1426.698	10.3	2675	10.3	17	10.28	45	10.28	73	10.3	253640	10.3	349016	10.32	500577	-	-	10.3	99
$C_{67}H_{110}O_{32}$	M1426T10.8	1426.698	-	-	-	-	-	-	-	-	10.75	44754	10.75	46554	-	-	-	-	-	-
$C_{68}H_{110}O_{32}$	M1438T10.2	1438.698	-	-	-	-	-	-	10.17	1277	-	-	-	-	10.17	13230	-	-	-	-
$C_{67}H_{108}O_{33}$	M1440T7.12	1440.6772	-	-	-	-	-	-	-	-	-	-	-	-	7.12	226118	-	-	-	-
$C_{67}H_{108}O_{33}$	M1440T7.4	1440.6772	-	-	-	-	-	-	-	-	-	-	-	-	7.38	128454	-	-	-	-
$C_{67}H_{108}O_{33}$	M1440T8.7	1440.6772	-	-	-	-	-	-	-	-	-	-	8.66	4178	8.66	198297	8.19	108	-	-
$C_{67}H_{108}O_{33}$	M1440T9.6	1440.6772	-	-	-	-	-	-	-	-	-	-	9.62	20073	9.64	360514	-	-	-	-
$C_{67}H_{110}O_{33}$	M1442T7.3	1442.6929	-	-	-	-	-	-	-	-	-	-	-	-	7.38	17805	-	-	-	-
$C_{67}H_{110}O_{33}$	M1442T8.7	1442.6929	-	-	-	-	-	-	-	-	-	-	-	-	8.66	57137	-	-	-	-
$C_{67}H_{110}O_{33}$	M1442T9.3	1442.6929	9.36	33	9.31	28	-		-	-	-	-		-	-	-	-	-	-	-
$C_{67}H_{110}O_{33}$	M1442T9.9	1442.6929	-	-	-	-	-	-	-	-	9.94	1487	9.94	22617	9.96	162540	-	-	-	-
$C_{67}H_{110}O_{33}$	M1442T10.1	1442.6929	-	-	-	-	-	-	-	-	-		10.13	1217	10.13	154000	-	-	-	-
$C_{68}H_{110}O_{33}$	M1454T9.8	1454.6929	-	-	-	-	-	-	9.81	513	-	-	-	-	9.81	7674	-	-	-	-

Table S4. Exact mass (*m/z*), molecular formula, retention time (RT in minutes), and Intensity signal of saponins presented in isolated fractions of *B. argus*

Exact mass (*m/z*)	Compound code	Fr.1		Fr.2		Fr.3		Fr.4	
		RT	Intensity signal	RT	Intensity signal	RT	Intensity signal	RT	Intensity signal
468.3239	$C_{30}H_{44}O_4$	7.33	28424	8.62	123481	10	93	9.08	421
468.3239	$C_{30}H_{44}O_4$	7.12	15096	8.44	24853	10.21	66	10.15	470
600.3662	$C_{35}H_{52}O_8$	7.33	23077	8.44	33649	10.21	19	10.13	245
600.3662	$C_{35}H_{52}O_8$	7.12	19415	8.62	24716	-	-	10	119
1116.535	$C_{54}H_{84}O_{24}$	7.42	557	8.06	1177	10.58	54	9.34	79
1118.551	$C_{54}H_{86}O_{24}$	7.42	16946	8.64	20184	10.62	59	8.89	28
1118.551	$C_{54}H_{86}O_{24}$	7.59	11152	-	-	-	-	-	-
1120.567	$C_{54}H_{88}O_{23}$	7.74	146	8.4	142	13.25	12	5.83	28
1144.567	$C_{56}H_{88}O_{24}$	7.4	36	8.62	101	10.62	15	10.25	74
1214.479	$C_{55}H_{83}NaO_{26}S$	8.03	1105	8.44	5509	10.6	75	8.25	22
1264.609	$C_{60}H_{96}O_{28}$	7.33	255	8.62	18308	10.35	15	10.92	105
1280.604	$C_{60}H_{96}O_{29}$	5.43	68	8.4	59158	10.58	58	12.07	27
1424.682	$C_{67}H_{108}O_{32}$	7.93	4324	8.64	51	10.35	4450	10.28	513
1426.698	$C_{67}H_{110}O_{32}$	7.97	61	8.48	105	10.39	465477	10.31	139189
1438.698	$C_{54}H_{84}O_{24}$	7.65	28	8.46	33	10.71	30	10.28	51
1422.667	$C_{66}H_{104}O_{31}$	7.33	670	8.62	1388	10.28	501	10.25	175
1422.667	$C_{66}H_{104}O_{31}$	7.93	316	8.46	180	10.37	242	-	-
1440.677	$C_{67}H_{108}O_{33}$	7.33	32702	8.62	113676	10.41	277	10.25	84
1440.677	$C_{67}H_{108}O_{33}$	7.93	9991	-	-	-	-	-	-
1442.693	$C_{67}H_{110}O_{33}$	7.33	6165	8.52	19	10.66	115	10.06	506
1442.693	$C_{67}H_{110}O_{33}$	7.48	3920	-	-	10.41	-	9.9	687
1454.693	$C_{68}H_{110}O_{33}$	7.69	28	8.36	27	10.66	142955	9.96	26
1454.693	$C_{68}H_{110}O_{33}$	-	-	-	-	10.75	124314	-	-

Figures:

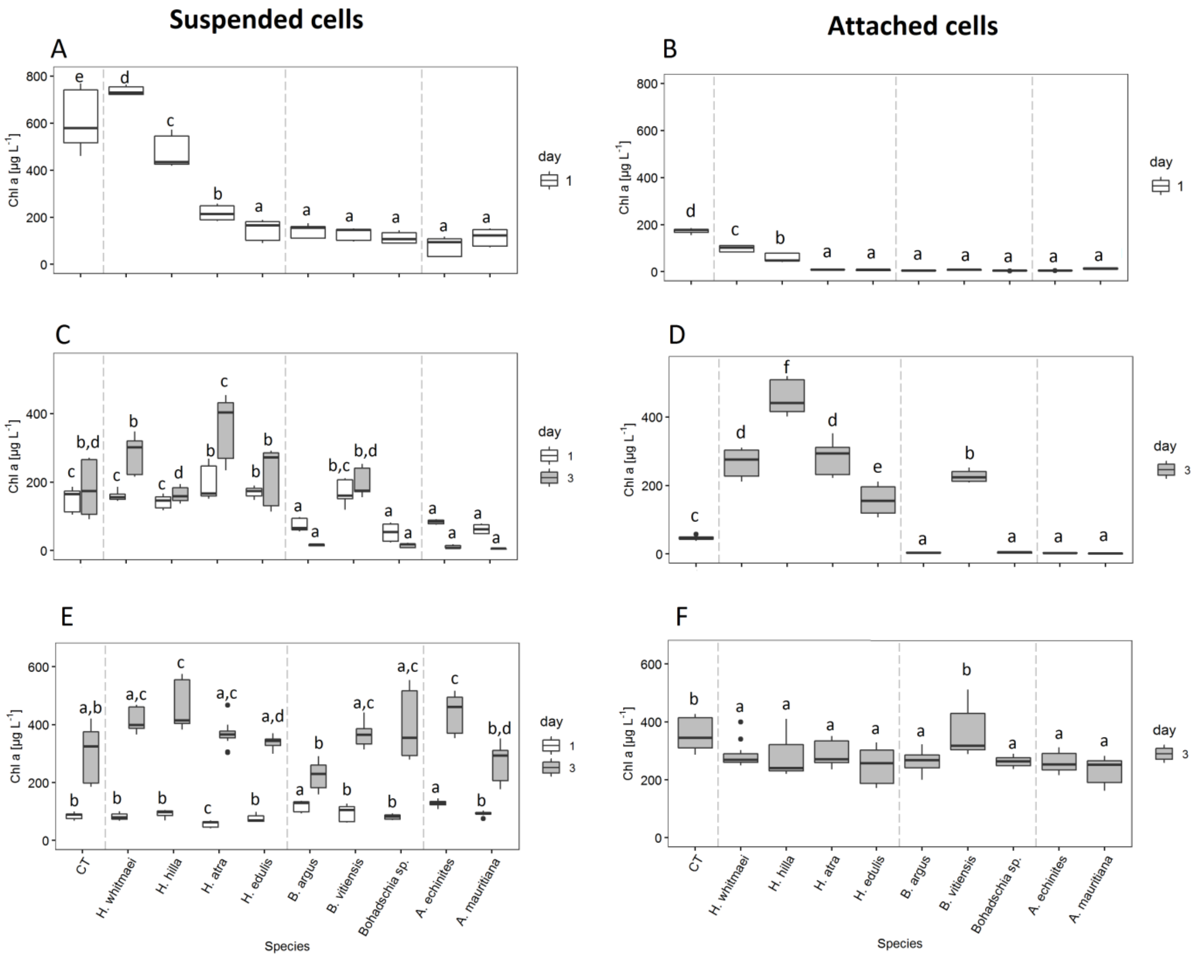

Figure S1(A-F). *Chl a* concentrations in the suspended cells in water after incubation of *C. closterium* with different concentrations of sea cucumbers extracts (**A**=150 µg mL^{-1}; **C**= 15 µg mL^{-1}; **E**= 1.5 µg mL^{-1}) and of *C. closterium* attached to the flask surface (**B**=150 µg mL^{-1}; **D**= 15 µg mL^{-1}; **F**=1.5 µg mL^{-1}). Dashed lines separate different genera of sea cucumbers (*Holothuria*, *Bohadschia*, *Actinopyga*). CT=Control. $^{a-e}$ indicate significance levels according to Post Hoc test.

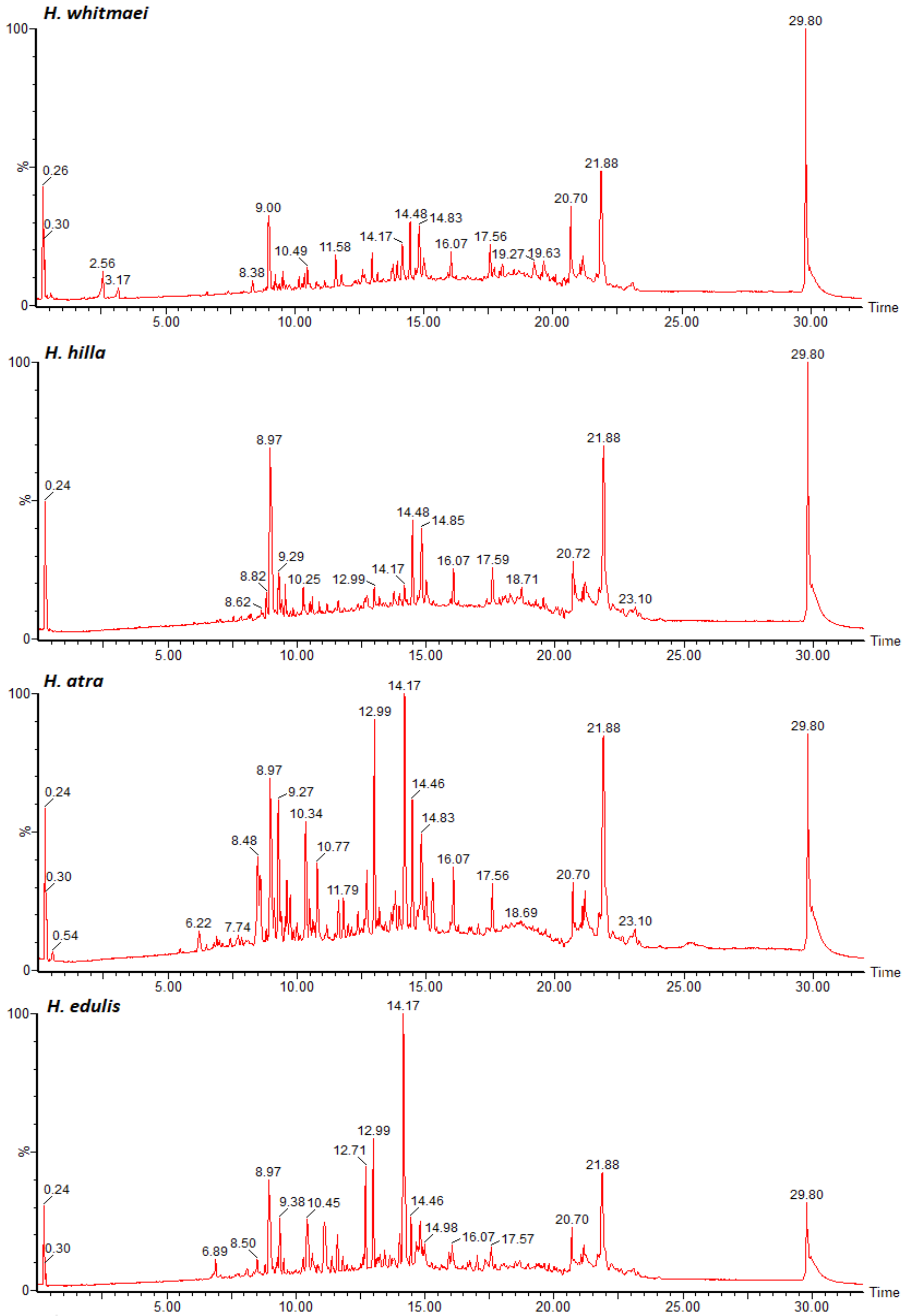

Figure S2. LC/MS spectra of the crude extracts of genus *Holothuria* (Y-axis relative intensity in % of maximum peak, x-axis retention time in minutes).

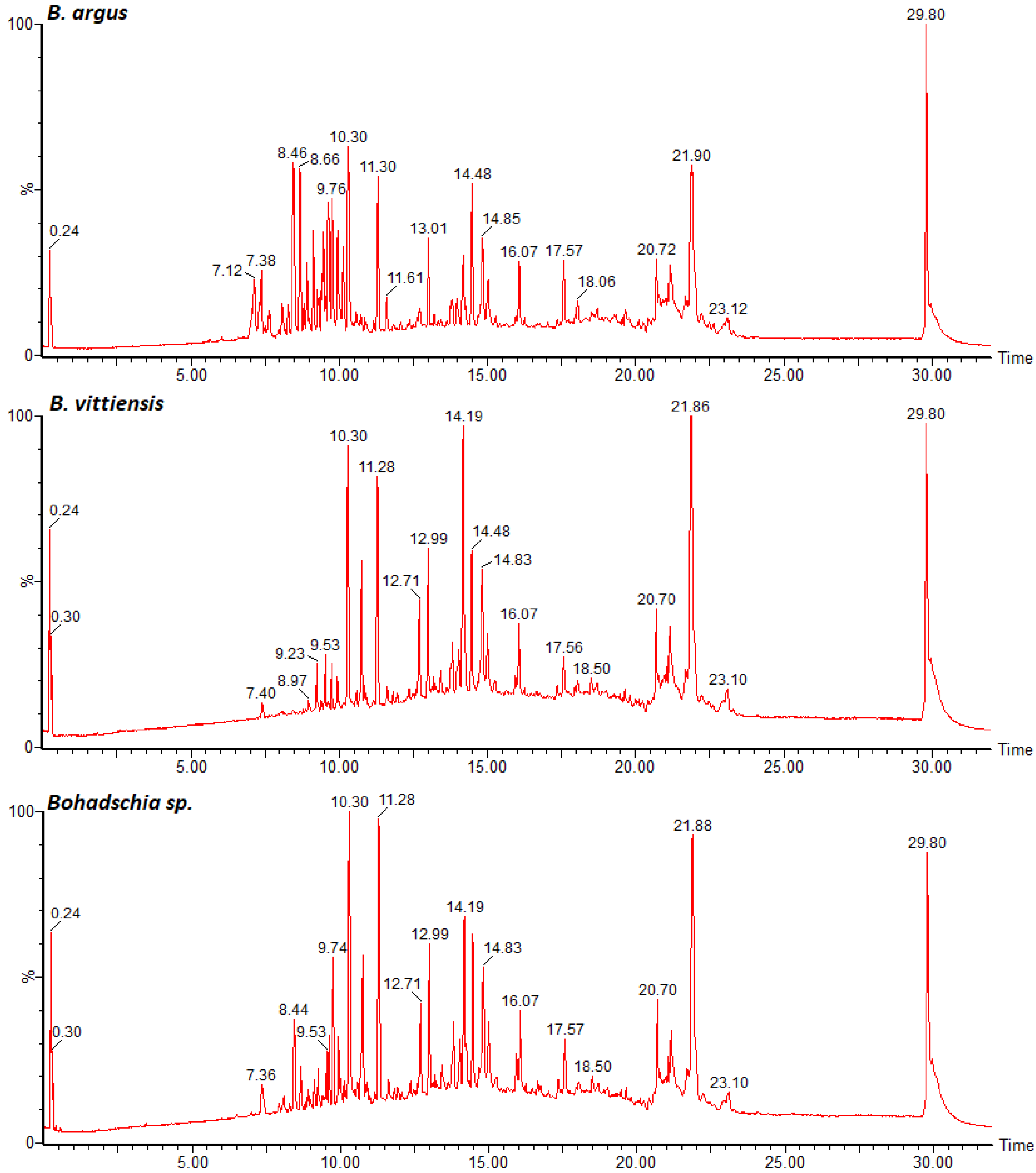

Figure S3. LC/MS spectra of the crude extracts of genus *Bohadschia* (Y-axis relative intensity in % of maximum peak, x-axis retention time in minutes).

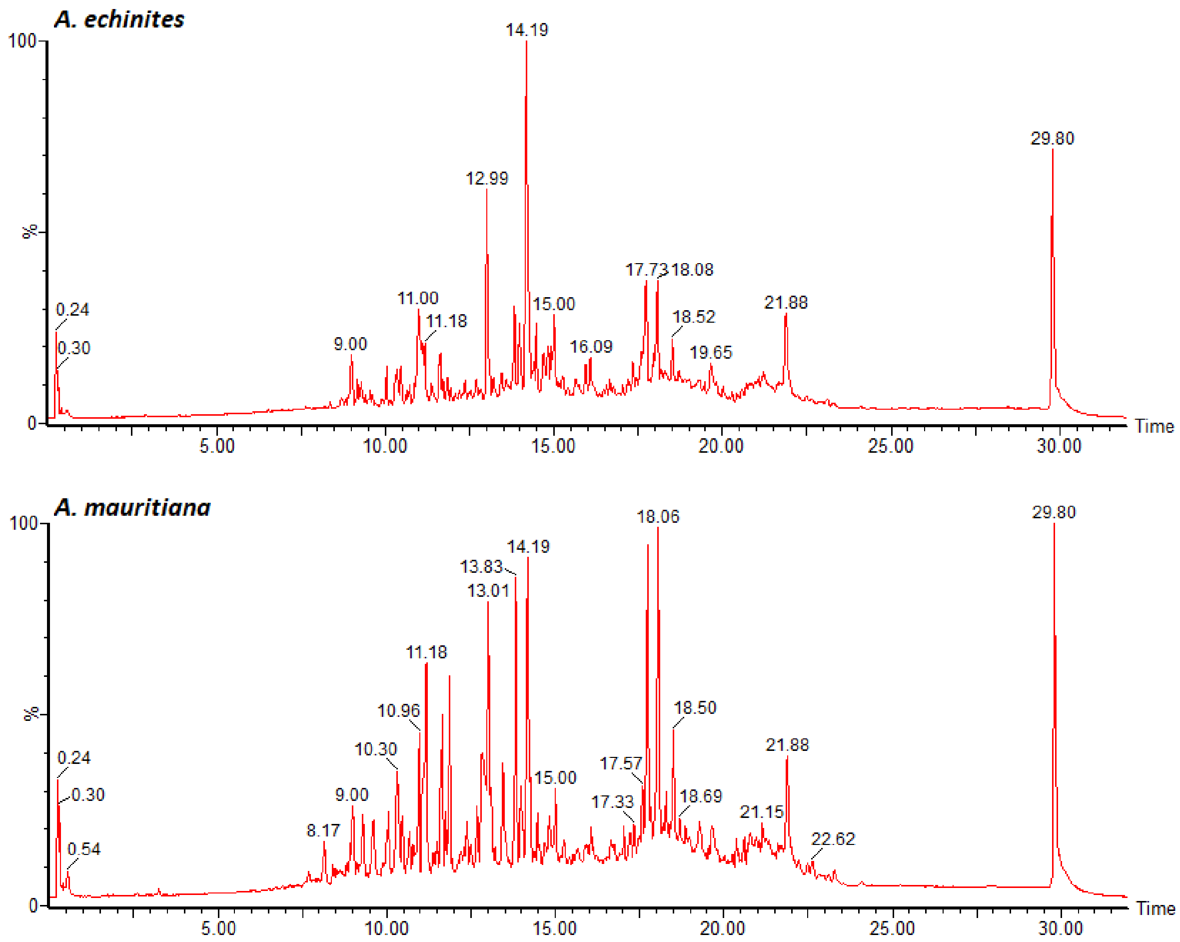

Figure S4. LC/MS spectra of the crude extracts of genus *Actinopyga* (Y-axis relative intensity in % of maximum peak, x-axis retention time in minutes).

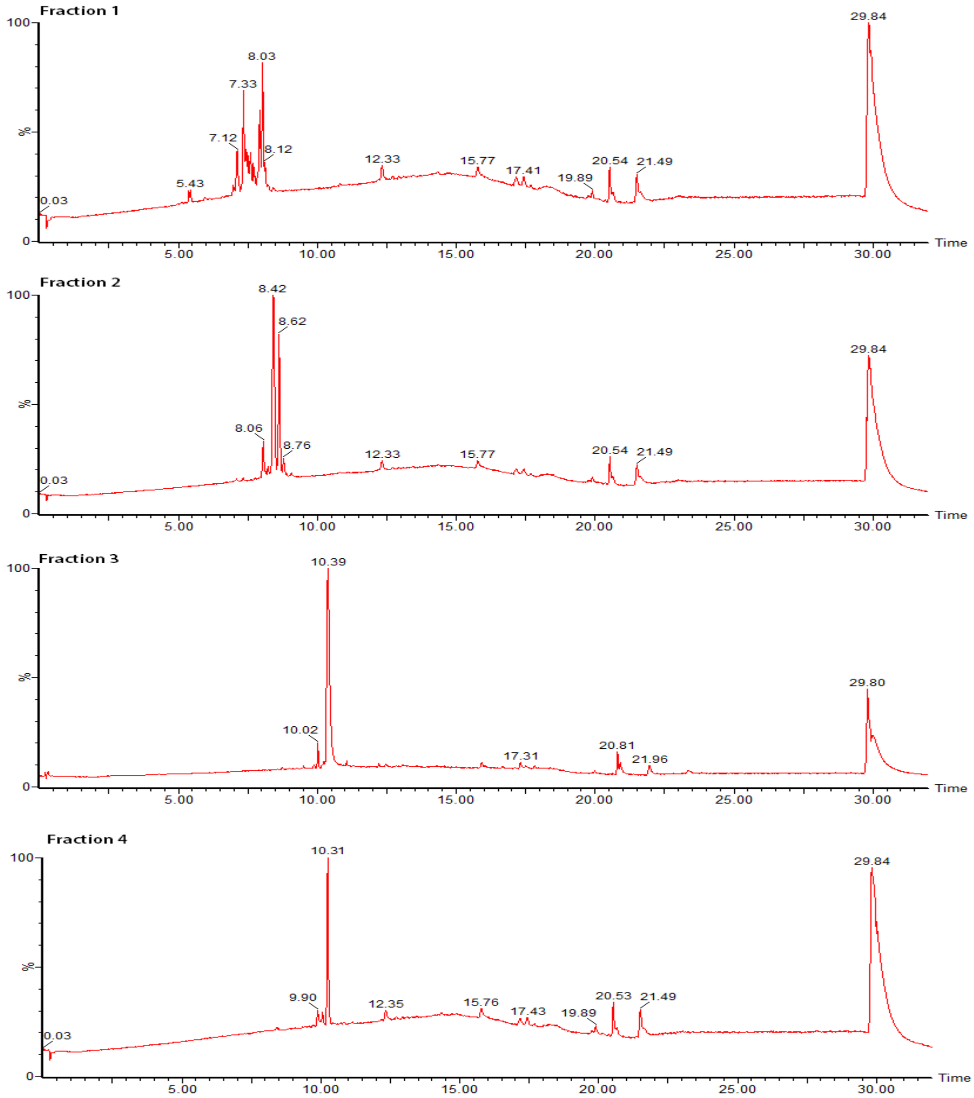

Figure S5. LC/MS spectra of fractions isolated from *B. argus* (see **Table S4**; Y-axis relative intensity in % of maximum peak, x-axis retention time in minutes).

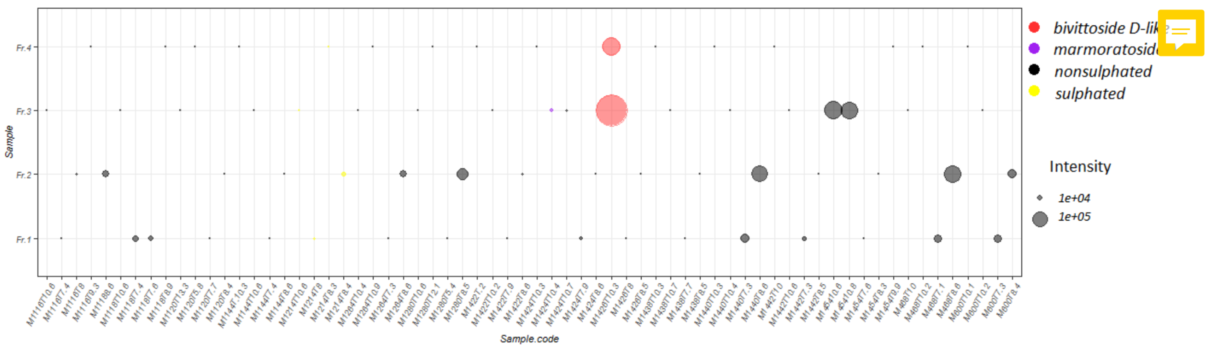

Figure S6 Identified saponins species presented in different fractions isolated from *B. argus.* The red color referred to the presence of a semi-purified saponin species (i.e. *bivittoside D-like* at m/z 1426.698). Size of bubbles represented the peak area of the molecules obtained from LC/MS analysis.

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