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LAMPIRAN

Lampiran 1. Senyawa Rumput Laut *Eucheuma spinosum*

No	Senyawa	Area %	Berat Molekul (MW)	Smiles	Similarity Index	PubChem ID
1	1,8-Di(4-nitrophenylmethyl)-3,6-diazahomoadamantan-9-one	0.42	436	C1CN2CC3(CN1CC(C2)(C3=O)CC4=CC=C(C=C4)[N+](=O)[O-])CC5=CC=C(C=C5)[N+](=O)[O-]	76	547088
2	6,7-Dioxabicyclo[3.2.2]nonane	0.08	128	C1CC2CCC(C1)OO2	77	136113
3	(1,3Z,5E)-UNDECA-1,3,5-TRIENE	0.07	150	CCCCC/C=C/C=C/C=C	86	5367412
4	2-Vinyl-9-[3-deoxy-.beta.-d-ribofuranosyl]hypoxanthine	0.30	278	C=CC1=NC2=C(C(=O)N1)N=CN2C3C(CC(O3)CO)O	75	135789727
5	2-Methyl-5-(propan-2-ylidene)cyclohexane-1,4-diol	0.07	170	CC1CC(C(=C(C)C)CC1O)O	64	91697160
6	1H-PYRROLE-2,5-DIONE, 3-ETHYL-4-METHYL-	0.08	139	CCC1=C(C(=O)NC1=O)C	86	29995
7	2-DECENAL, (E)-	0.16	154	CCCCCCC/C=C/C=O	86	5283345
8	Nonanoic acid	0.06	158	CCCCCCCCC(=O)O	73	8158

9	.alpha.-Amorphene	0.03	204	CC1=CC2C(CC1)C(=CCC2C(C)C)C	64	101708
10	5-Hydroxy-6-phenylhexanoic acid, d-lactone	0.09	190	C1CC(OC(=O)C1)CC2=CC=CC=C2	62	567304
11	N,N-Dimethylaminoethanol	1.46	89	CN(C)CCO	96	7902
12	9-OCTADECENOIC ACID (Z)-	0.12	282	CCCCCCCC/C=C\CCCCCCCC(=O)O	78	445639
13	Fumaric acid, ethyl 2-methylallyl ester	0.12	198	CCOC(=O)/C=C/C(=O)OCC(=C)C	86	5461492
14	1-(3,3-Dimethyl-but-1-ynyl)-1,2-dimethyl-3-methylene-cyclopropane	0.03	162	CC1C(=C)C1(C)C#CC(C)(C)C	78	535139
15	Cyclopentane, 1,1,3,3-tetramethyl- (CAS)	0.02	126	CC1(CCC(C1)(C)C)C	82	123522
16	2,6-Di-tert-butyl-4-hydroxy-4-methylcyclohexa-2,5-dien-1-one	0.08	236	CC1(C=C(C(=O)C(=C1)C(C)(C)C)C(C)(C)C)O	77	146102
17	Dodecane, 1-chloro-	0.15	204	CCCCCCCCCCCCCl	96	8192
18	Photocitral a	0.28	152	CC1CCC(C1C=O)C(=C)C	79	102684

19	1-Allyloxy-1-ethyl-1-silacyclopentane	0.59	170	CC[Si]1(CCCC1)OCC=C	82	588025
20	PHENOL, 2,4-BIS(1,1-DIMETHYLETHYL)-	0.28	206	CC(C)(C)C1=CC(=C(C=C1)O)C(C)(C)C	96	7311
21	1,8(2H,5H)-Naphthalenedione, hexahydro-8a-methyl-, cis-	0.48	180	CC12C(CCCC1=O)CCCC2=O	77	580218
22	2(4H)-Benzofuranone, 5,6,7,7a-tetrahydro-4,4,7a-trimethyl-, (R)-	0.26	180	C[C@@]12CCCC(C1=CC(=O)O2)(C)C	94	6432173
23	Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methylpropyl)-, ethyl ester	0.19	198	CCOC(=O)C1C(C1(C)C)CC(C)C	72	550428
24	2,5-METHANO-1H-INDEN-7(4H)-ONE, HEXAHYDRO-	0.06	150	C1C2CC3CC1CC(=O)C3C2	77	591417
25	.omega.-3 Arachidonic Acid methyl ester	0.06	318	CC/C=C\C/C=C\C/C=C/C/C=C\CCCCCCC(=O)OC	72	168314136
26	DODECANOIC ACID	0.23	200	CCCCCCCCCCCC(=O)O	94	3893
27	Fumaric acid, ethyl 2-methylallyl ester	4.27	198	CCOC(=O)/C=C/C(=O)OCC(=C)C	92	5461492
28	4-(6,6-Dimethyl-2-methylenecyclohex-3-enylidene)pentan-2-ol	0.01	206	CC(C/C(=C/1\C(=C)C=CCC1(C)C)/C)O	63	5370028

29	4-Fluoro-2-methoxyphenol, isopropyl ether	0.04	184	CC(C)OC1=C(C=C(C=C1)F)OC	77	2774562
30	TRANS-METHYL DIHYDROJASMONATE	0.03	226	CCCCC[C@@H]1[C@H](CCC1=O)CC(=O)OC	77	1738124
31	2-Methyl-4-methoxyoct-1-ene	0.40	156	CCCCC(CC(=C)C)OC	84	12657011
32	Tetradecane, 1-chloro-	0.39	232	CCCCCCCCCCCCCCCl	91	17043
33	Heptadecane	0.68	240	CCCCCCCCCCCCCCCCC	98	12398
34	1-{2-[3-(2-Acetyloxiran-2-yl)-1,1-dimethylpropyl]cycloprop-2-enyl}ethanone	0.17	236	CC(=O)C1C=C1C(C)(C)CCC2(CO2)C(=O)C	79	540318
35	Methyl tetradecanoate	0.62	242	CCCCCCCCCCCCCC(=O)OC	97	31284
36	7-Tetradecene	0.05	196	CCCCCC/C=C/CCCCCC	85	5364651
37	ETHANOL, 2-(TETRADECYLOXY)-	0.08	258	CCCCCCCCCCCCCCOCCO	88	16491
38	Tetradecanoic acid	1.70	228	CCCCCCCCCCCCCC(=O)O	97	11005

39	1-Octadecene (CAS)	0.02	252	CCCCCCCCCCCCCCCCC=C	94	8217
40	2(4H)-BENZOFURANONE, 5,6,7,7A-TETRAHYDRO-6-HYDROXY-4,4,7A-TRIME	0.03	196	CC(C)COC(=O)CCC1=CC=CO1	74	7733
41	Octadecanoic acid, 9,10-dichloro-, methyl ester	0.00	366	CCCCCCCCC(C(CCCCCCCC (=O)OC)Cl)Cl	70	93161
42	(-)-Loliolide	0.15	196	C[C@@]12C[C@H](CC(C1=CC (=O)O2)(C)C)O	78	100332
43	Pentadecanoic acid, methyl ester (CAS)	0.12	256	CCCCCCCCCCCCCCC(=O)OC	96	23518
44	Neophytadiene	1.31	278	CC(C)CCCC(C)CCCC(C)CCCC(=C)C=C	97	10446
45	2-PENTADECANONE, 6,10,14-TRIMETHYL-	0.73	268	CC(C)CCCC(C)CCCC(C)CCCC(=O)C	96	10408
46	2-HEXADECEN-1-OL, 3,7,11,15-TETRAMETHYL-, [R-[R*,R*-(E)]]-	0.58	296	C[C@@H](CCC[C@@H](C)CCC/C (=C/CO)/C)CCCC(C)C	94	5280435
47	1,2-Benzenedicarboxylic acid, bis(2-methylpropyl) ester	0.02	278	CC(C)COC(=O)C1=CC=CC=C1C (=O)OCC(C)C	91	6782
48	2-HEXADECEN-1-OL, 3,7,11,15-TETRAMETHYL-, [R-[R*,R*-(E)]]-	1.10	296	C[C@@H](CCC[C@@H](C)CCC/C (=C/CO)/C)CCCC(C)C	94	5280435

49	1-Nonadecene (CAS)	0.13	266	CCCCCCCCCCCCCCCCCC=C	95	29075
50	9-Hexadecenoic acid, methyl ester, (Z)-	0.36	268	CCCCCC/C=C\CCCCCCCC(=O)OC	97	643801
51	9-HEXADECENOIC ACID, METHYL ESTER, (Z)-	2.53	268	CCCCCC/C=C\CCCCCCCC(=O)OC	93	643801
52	HEXADECANOIC ACID, METHYL ESTER	7.76	270	CCCCCCCCCCCCCCCC(=O)OC	97	8181
53	Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, methyl ester	0.03	292	CC(C)(C)C1=CC(=CC(=C1O)C(C)(C)C)CCC(=O)OC	91	62603
54	2,5-FURANDIONE, 3-(DODECENYL)DIHYDRO-	0.01	266	CCCCCCCCCC/C=C/C1CC(=O)OC1=O	77	6433892
55	Phytol	0.07	296	C[C@@H](CCC[C@@H](C)CCC/C(=C/CO)/C)CCCC(C)C	90	5280435
56	9,12-Octadecadienoyl chloride, (Z,Z)-	0.33	298	CCCCC/C=C\C/C=C\CCCCCCCC(=O)Cl	87	9817754
57	n-Hexadecanoic acid	18.51	256	CCCCCCCCCCCCCCCC(=O)O	96	985
58	Cyclopentaneundecanoic acid, methyl ester	2.59	268	COC(=O)CCCCCCCCCCC1CCCC1	95	535041

59	Z,Z-10,12-Hexadecadienal	0.21	236	CCC/C=C\C=C/CCCCCCCCC=O	74	5365660
60	Ethanol, 2-(dodecyloxy)-	0.14	230	CCCCCCCCCCCCOCCO	84	24750
61	i-Propyl 14-methyl-pentadecanoate	0.07	298	CC(C)CCCCCCCCCCCCC(=O)OC(C)C	86	53745103
62	Hexadecanoic acid, 14-methyl-, methyl ester (CAS)	0.08	284	CCC(C)CCCCCCCCCCCCC(=O)OC	84	520159
63	Tetrahydropyranyl ether of citronellol	0.05	240	CC(CCC=C(C)C)CCOC1CCCOC1	79	558921
64	9-Octadecenoic acid (Z)- (CAS)	1.99	282	CCCCCCCC/C=C\CCCCCCCC(=O)O	87	445639
65	2(3H)-FURANONE, 5-BUTYLDIHYDRO-	0.37	142	CCCCC1CCC(=O)O1	86	7704
66	methyl .gamma.-linolenoate	0.08	292	C[C@]12CC[C@@H](C[C@@H]1CC [C@@H]3[C@@H]2CC[C@]4([C@H] 3CC[C@@H]4O)C)O	95	242332
67	1-Dodecanol, 3,7,11-trimethyl-	0.12	228	CC(C)CCCC(C)CCCC(C)CCO	88	138824
68	9,12-Octadecadienoic acid (Z,Z)-, methyl ester (CAS)	0.24	294	CCCCC/C=C\C/C=C\CCCCCCCC(=O)OC	91	5284421

69	9-Octadecenoic acid (Z)-, methyl ester	0.93	296	CCCCCCCC/C=C\CCCCCCCC(=O)OC	97	5364509
70	2-HEXADECEN-1-OL, 3,7,11,15-TETRAMETHYL-, [R-[R*,R*-(E)]]-	1.41	296	C[C@@H](CCC[C@@H](C)CCC/C (=C/CO)/C)CCCC(C)C	94	5280435
71	Methyl stearate	0.37	298	CCCCCCCCCCCCCCCCCC(=O)OC	97	8201
72	2H-Pyran-2-one, tetrahydro-6-undecyl-	0.26	254	CCCCCCCCCCC1CCCC(=O)O1	83	110976
73	Z-8-Methyl-9-tetradecenoic acid	0.69	240	CCCC/C=C\C(C)CCCCCCC(=O)O	85	5364410
74	2-Propenoic acid, 3-(4-methoxyphenyl)-, 2-ethylhexyl ester	0.34	290	CCCCC(CC)COC(=O)/C=C/C1 =CC=C(C=C1)OC	94	5355130
75	benzamide, 3,5-bis(dodecylsulfonyl)-N-methyl-2-nitro-N-phenyl-	0.51	720	CCCCCCCCCCCCS(=O)(=O)C1 =CC(=C(C(=C1)S(=O)(=O) CCCCCCCCCCCC)[N+](=O)[O-]) C(=O)N(C)C2=CC=CC=C2	64	91704033
76	Methyl 9-cis,11-trans-octadecadienoate	0.37	294	CCCCCC/C=C/C=C\CCCCCCCC (=O)OC	93	11748436
77	Cyclopentanetridecanoic acid, methyl ester (CAS)	0.88	296	COC(=O)CCCCCCCCCCCCC1CCCC1	92	554135
78	Diethylene glycol monododecyl ether	0.12	274	CCCCCCCCCCCCOCCOCCO	79	76457

79	Z-8-Octadecen-1-ol acetate	0.06	310	CCCCCCCCC/C=C\CCCCCCCOC(=O)C	80	5363532
80	2-Chloroethyl palmitate	0.05	318	CCCCCCCCCCCCCCCC(=O)OCCCl	84	13579
81	N-(2-Trifluoroacetyloxyethyl)-9Z-hexadecenamide, N-trifluoroacetyl-	0.16	489	CC.CCN(C1=CC=C(C=C1)C(C(F)(F)F)O)C(=O)C2CCC(CC2)O.COCC(F)(F)F	91	144169784
82	Palmitoyl chloride	0.73	274	CCCCCCCCCCCCCCCC(=O)Cl	82	8206
83	Heneicosapentaenoic Acid methyl ester	1.02	330	CC/C=C\C/C=C\C/C=C\C/C=C\C/C=C\CCCCC(=O)OC	95	90382235
84	2-(Dimethylamino)ethyl (8Z,11Z,14Z)-icosa-8,11,14-trienoate	0.47	377	CCCCC/C=C\C/C=C\C/C=C\C/C=C\CCCC(NC(C)(C)CO)O	89	44366841
85	2-(Dimethylamino)ethyl vaccenoate	1.53	353	CCCCCCCC/C=C\CCCCCCCCCC(=O)NCCO	92	5283452
86	Methyl 9-eicosenoate	0.15	324	CCCCCCCCCC/C=C\CCCCCCCC(=O)OC	84	13908975
87	HEPTANEDIOIC ACID, 4-METHYL-, DIMETHYL ESTER	0.14	202	CC(CCC(=O)OC)CCC(=O)OC	70	521222
88	2-ETHYLHEXYL (2E)-3-(4-METHOXYPHENYL)-2-PROPENOATE	0.37	290	CCCCC(CC)COC(=O)/C=C/C1=CC=C(C=C1)OC	78	5355130

89	CYCLOHEXANE, 1,1'-TETRADECYLIDENEBIS-	0.06	362	CCCCCCCCCCCCCC(C1CCCCC1)C2CCCCC2	79	291313
90	4,8,12,16-Tetramethylheptadecan-4-olide	0.09	324	CC(C)CCCC(C)CCCC(C)CCCC1(CCC(=O)O1)C	94	567149
91	Octanoic acid, 2-dimethylaminoethyl ester	0.30	215	CCCCCCCC(=O)OCCN(C)C	91	3075918
92	Palmitoleamide	0.58	253	CCCCCC/C=C\CCCCCCCC(=O)N	93	56936054
93	Bis(dodecanamido)methane	0.19	690	CCCCCCCCCCCCCCCCCCCCCC(=O)NCNC(=O)CCCCCCCCCCCCCCCCCCCCC	75	547843
94	Oleoyl chloride	0.09	300	CCCCCCCC/C=C\CCCCCCCC(=O)Cl	89	5364783
95	Benzeneacetic acid, 10-undecenyl ester	0.41	288	C=CCCCCCCCCCOC(=O)CC1=CC=CC=C1	72	244471
96	Ascorbyl Palmitate	0.77	414	CCCCCCCCCCCCCCCC(=O)OC[C@@H]([C@@H]1C(=C(C(=O)O1)O)O)O	71	54680660
97	N-(2-Trifluoroacetyloxyethyl)-9Z-hexadecenamide, N-trifluoroacetyl-	0.60	489	CC.CCN(C1=CC=C(C=C1)C(C(F)(F)F)O)C(=O)C2CCC(CC2)O.COCC(F)(F)F	84	144169784
98	N-(2-Trifluoroacetyloxyethyl)-9Z-hexadecenamide, N-trifluoroacetyl-	1.61	489	CC.CCN(C1=CC=C(C=C1)C(C(F)(F)F)O)C(=O)C2CCC(CC2)O.COCC(F)(F)F	91	144169784

99	Palmitoyl chloride	4.78	274	CCCCCCCCCCCCCCCC(=O)Cl	79	8206
100	Palmitoyl chloride	0.91	274	CCCCCCCCCCCCCCCC(=O)Cl	79	8206
101	Hexadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester	2.94	330	CCCCCCCCCCCCCCCC (=O)OC(CO)CO	93	123409
102	BIS(2-ETHYLHEXYL) PHTHALATE	1.32	390	CCCCC(CC)COC(=O)C1=CC =CC=C1C(=O)OCC(CC)CCCC	97	8343
103	1,E-11,Z-13-Heptadecatriene	0.45	234	CCC/C=C\C=C\CCCCCCCCC=C	78	5365584
104	Dimethylaminoethyl oleate	0.33	353	CCCCCCCC/C=C\CCCCCCCCC (=O)NCCO	93	5283452
105	N-(2-Trifluoroacetyloxyethyl)-9Z-hexadecenamide, N-trifluoroacetyl-	0.76	489	CC.CCN(C1=CC=C(C=C1)C(C(F) (F)F)O)C(=O)C2CCC(CC2) O.COCC(F)(F)F	81	144169784
106	1,2-Cyclohexanedicarboxylic acid, bis(2-ethylhexyl) ester	0.31	396	CCCCC(CC)COC(=O)C1CCCCC1C (=O)OCC(CC)CCCC	81	6784
107	3-Cyclopentylpropionic acid, 3-tridecyl ester	0.25	324	CCCCCCCCCC(CC)OC (=O)CCC1CCCC1	79	580424
108	trans-5-Amino-1,3,3-trimethylcyclohexanemethylamine	0.22	170	CC1(CC(CC(C1)(C)CN)N)C	73	17857

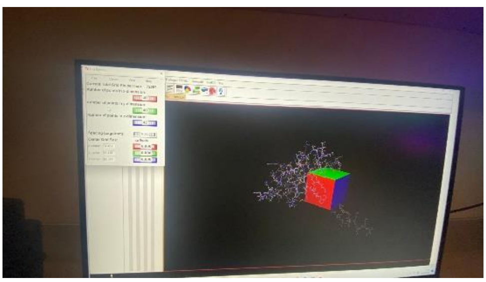
109	2-(Dimethylamino)ethyl vaccenoate	0.49	353	CCCCCCCC/C=C\CCCCCCCCCC (=O)NCCO	80	5283452
110	2-Undecanone, 6,10-dimethyl-	0.16	198	CC(C)CCCC(C)CCCC(=O)C	80	95495
111	9-octadecenoic acid, 2,2,2-trifluoroethyl ester	0.12	364	CCCCCCCC/C=C/CCCCCCCC (=O)OCC(F)(F)F	77	15332203
112	Octocrylene	0.36	361	CCCCC(CC)COC(=O)C(=C (C1=CC=CC=C1)C2=CC =CC=C2)C#N	76	22571
113	Oleoyl chloride	0.49	300	CCCCCCCC/C=C\CCCCCCCC (=O)Cl	92	5364783
114	Oleic anhydride	0.23	546	CCCCCCCC/C=C\CCCCCCCC (=O)OC(=O)CCCCCCC/C =C\CCCCCCCC	88	5369123
115	2,5-Furandione, dihydro-3-tetradecyl-	0.22	296	CCCCCCCCCCCCCCC1CC (=O)OC1=O	72	98128
116	Octadecanoic acid, 2,3-dihydroxypropyl ester	0.44	358	CCCCCCCCCCCCCCCCCC (=O)OCC(CO)O	77	24699
117	1-Naphthaleneacetic acid, dodec-2-en-1-yl ester	0.12	352	CCCCCCCCC/C=C/COC(=O) CC1=CC=CC2=CC=CC=C21	68	91717627
118	1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	0.24	390	CCCCC(CC)COC(=O)C1=CC (=CC=C1)C(=O)OCC(CC) CCCC	94	8733

119	Cholest-5-en-3-ol (3.beta.)-, carbonochloridate	0.30	448	C[C@H](CCCC(C)C)[C@H]1CC[C@@H]2[C@@]1(CC[C@H]3[C@H]2CC=C4[C@@]3(CC[C@@H](C4)OC(=O)Cl)C)C	86	111262
120	Oleic acid, 3-hydroxypropyl ester	0.41	340	CCCCCCCC/C=C\CCCCCCCC(=O)OCCCO	79	5352775
121	2,6,10,14,18,22-Tetracosahexaene, 2,6,10,15,19,23-hexamethyl-, (all-E)-	0.38	410	CC(=CCC/C(=C/CC/C(=C/CC/C=C(/CC/C=C(/CCC=C(C)C)\C)\C)/C)/C)C	97	638072
122	Didecyl phthalate	0.07	446	CCCCCCCCCCOC(=O)C1=CC=CC=C1C(=O)OCCCCCCCCCC	85	6788
123	Cholestan-6-one, 3-chloro-, (3.beta.,5.alpha.)-	0.58	420	C[C@H](CCCC(C)C)[C@H]1CC[C@@H]2[C@@]1(CC[C@H]3[C@H]2CC(=O)[C@@H]4[C@@]3(CC[C@@H](C4)Cl)C)C	64	13872580
124	8-Hexadecene, 8,9-diheptyl-	0.40	420	CCCCCCCC(=C(CCCCCCC)CCCCCCC)CCCCCCC	61	634521
125	CHOLESTA-4,6-DIEN-3-OL, BENZOATE, (3.BETA.)-	1.11	488	CC(C)CCCC(C)C1CCC2C1(CCC3C2C=CC4=CC(CCC34C)OC(=O)C5=CC=CC=C5)C	87	33010
126	Cholest-5-en-3-ol (3.beta.)-, propanoate	0.65	442	CCC(=O)OC1CCC2(C3CCC4(C(C3CC=C2C1)CCC4C(C)CCCC(C)C)C)C	86	313255
127	C37H51N3O4	0.05	601	C[C@H](/C=C/[C@H](C)C(C)C)[C@H]1CC[C@@H]2[C@@]1(CCC3[C@]24C=C[C@@]5([C@@]3(CC[C@@H](C5)OOC)	56	134887363

				C)N6N4C(=O)N(C6=O)C7=CC =CC=C7)C		
128	Cholesta-5,7-dien-3-ol, acetate, (3.beta.)-	0.03	426	C[C@H](CCCC(C)C)[C@H]1CC [C@@H]2[C@@]1(CC[C@H] 3C2=CC=C4[C@@]3(CC[C@@H] (C4)OC(=O)C)C)C	81	99487
129	Cholesta-5,7-dien-3.beta.-ol, 3,5-dinitrobenzoate	0.02	578	CC(C)CCCC(C)C1CCC2C1 (CCC3C2=CC=C4C3(CCC(C4) OC(=O)C5=CC(=CC(=C5)[N+] (=O)[O-])[N+](=O)[O-])C)C	65	313257
130	Cholesteryl 3-cyclohexylbutyrate	0.05	538	CC(C)CCCC(C)C1CCC2C1 (CCC3C2CC=C4C3(CCC(C4) OC(=O)CC(C)C5CCCCC5)C)C	78	537190
131	22,23-Dibromostigmasterol acetate	0.04	612	CCC(C(C)C)C(C(C(C)C1CCC2C1 (CCC3C2CC=C4C3(CCC (C4)OC(=O)C)C)C)Br)Br	73	296869
132	Cholest-5-en-3-ol (3.beta.)- (CAS)	11.49	386	C[C@H](CCCC(C)C)[C@H]1CC [C@@H]2[C@@]1(CC[C@H] 3[C@H]2CC=C4[C@@]3 (CC[C@@H](C4)O)C)C	93	5997
133	3,5-CYCLOCHOLESTAN-6-ONE	0.09	384	CC(C)CCCC(C)C1CCC2C1 (CCC3C2CC(=O)C45C3 (CCC4C5)C)C	93	281918

Lampiran 2. Dokumentasi Kegiatan

No	Dokumentasi	Keterangan
1.		Pencucian rumput laut
2.		Pengeringan rumput laut
3.		Menghaluskan rumput laut yang sudah kering
4.		Proses maserasi

5.		Penyaringan ekstrak sampel
6.		Rotary evaporator
7.		Proses GC-MS
8.		Proses docking