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Lampiran 2. Jurnal Publikasi Terpilih

Jurnal Publikasi	ISSN (*International Standar Serial Number*)	*H-Index* 2021	*H-Index* 2022	*Quartile* (Tahun Terbit)	Referensi	Jumlah
Algae	12262617, 20930860	19	25	Q2 (2018)	[39]	1
Algal Research	22119264	54	75	Q1 (2018)	[54]	2
				Q1 (2019)	[15]	
Biomedicine & Preventive Nutrition	22105239	20	25	Q3 (2013)	[7]	2
				Q3 (2014)	[57]	
Bioresource Technology	09608524, 18732976	273	317	Q1 (2017)	[10]	1
Biotechnology and Bioprocess Engineering	12268372	49	57	Q2 (2014)	[37]	1
Energies	19961073	78	111	Q2 (2020)	[46]	1
Foods	23048158	11	53	Q1 (2020)	[22]	1
Food Chemistry	03088146, 18737072	242	281	Q1 (2011)	[9][55]	9
				Q1 (2014)	[6][17]	
				Q1 (2015)	[13][56]	
				Q1 (2017)	[5]	
				Q1 (2018)	[2][16]	
Food Hydrocolloids	0268005X	144	174	Q1 (2019)	[3][11]	2
Food Research International	9639969	149	177	Q1 (2014)	[4]	3
				Q1 (2017)	[1][8]	
Global Change Biology	13541013, 13652486	235	272	Q1 (2015)	[40]	1
International Food Research Journal	19854668, 22317546	43	55	Q2 (2013)	[29]	2
				Q3 (2017)	[26]	
International Journal of Food Sciences and Nutrition	09637486, 14653478	68	79	Q2 (2014)	[18]	1
Iranian Journal of Science and Technology	10286276	17	24	Q4 (2018)	[24]	1
Journal of Applied Phycology	09218971, 15735176	101	118	Q1 (2014)	[42][47]	18
				Q1 (2019)	[27][31]	
				Q2 (2013)	[35][52][63]	
				Q2 (2015)	[62]	

				Q2 (2016)	[25][28][61]	
				Q2 (2017)	[23][30][43]	
				Q2 (2018)	[32][34][41][53]	
Journal of the Science of Food and Agriculture	00225142, 10970010	131	152	Q1 (2012)	[60]	2
				Q1 (2014)	[20]	
Journal of Chromatography A	00219673, 18733778	221	237	Q1 (2019)	[12]	1
Journal of Food Composition and Analysis	08891575, 10960481	114	121	Q1 (2016)	[49]	1
Journal of Food Science	00221147, 17503841	150	160	Q1 (2017)	[50]	1
Journal of Phycology	00223646, 15298817	127	132	Q1 (2015)	[58]	1
Marine Drugs	16603397	98	128	Q1 (2017)	[36]	4
				Q1 (2019)	[19]	
				Q2 (2013)	[38]	
				Q2 (2016)	[21]	
Molecules	14203049	131	171	Q2 (2019)	[33]	3
				Q2 (2020)	[44][45]	
Oceanologia	783234	42	45	Q2 (2013)	[48]	1
Preventive Nutrition and Food Science	22871098, 22878602	24	29	Q4 (2013)	[59]	1
Songklanakarin Journal Science Technology	1253395	33	36	Q3 (2012)	[51]	1
The Journal of Supercritical Fluids	8968446	106	119	Q1 (2019)	[14]	1

Lampiran 3. Negara Asal *Edible Seaweed* Terpilih

Negara	Jenis	Spesies	Referensi
Afrika Selatan	P	*Ecklonia maxima*	[28]
	C	*Ulva capensis*	[35]
		Ulva rigida	[35]
Amerika Serikat (USA)	R	*Palmaria mollis*	[39]
	C	*Ulva spp.*	[39]
Argentina	R	*Porphyra columbina*	[18]
Australia	C	*Chaetomorpha linum*	[40]
		Cladophora coelothrix	[40]
		Derbesia tenuissima	[40]
		Ulva ohnoi	[40][58]
Bangladesh	R	*Gelidium pusillum*	[29]
Britania Raya (Inggris)	C	*Ulva rigida*	[16]
Britania Raya (Skotlandia)	P	*Ascophyllum nodosum*	[4]
		Fucus spiralis	[4]
		Fucus vesiculosus	[4]
		Laminaria digitata	[4]
		Pelvetia canaliculata	[4]
Chili	R	*Ceramium*	[49]
		Iridaea	[49]
		Gigartina (Luga)	[49]
		Mazzaella	[49]
		Polysiphonia	[49]
		Porphyra	[49]
		Pyropia orbicularis	[34]
		Sarcothalia	[49]
	P	*Adenocystis*	[49]
		Ecklonia maxima	[28]
		Lessonia	[49]
		Macrocystis	[49]
	C	*Cladophora*	[49]
		Codium	[49]
		Enteromorpha	[49]
		Monostroma	[49]
		Ulva	[49]
		Ulva spp.	[27]
		Ulva lactuca	[35]
China	R	*Porphyra spp*	[51]
	P	*Sargassum naozhouense*	[38]
Denmark	P	*Laminaria digitata*	[23]
		Saccharina latissima	[23][62]
Filipina	C	*Caulerpa racemosa*	[45]
		Ulva fasciata	[45]
Iberia	R	*Porphyra purpurea*	[52]
	P	*Undaria pinnatifida*	[52]
India	R	*Gelidiella acerosa*	[7]
		Gracilaria edulis	[13][33]
		Gracilaria corticate	[33]
		Gracilaria crassa	[42]

	P	*Sargassum wightii*	[7]
	C	*Enteromorpha compressa*	[57]
		Enteromorpha linza	[57]
		Enteromorpha tubulosa	[57]
		Ulva lactuca	[10]
Iran	R	*Gracilaria corticate*	[24]
		Gracilaria salicornia	[60]
	P	*Sargassum vulgar*	[24]
	C	*Ulva intestinalis*	[31]
		Ulva lactuca	[60]
		Ulva linza	[24]
Irlandia	R	*Palmaria palmata*	[44]
	P	*Alaria esculenta*	[44]
		Ascophyllum nodosum	[1]
		Fucus vesiculosis	[44]
Islandia	R	*Palmaria palmata*	[21][25]
	P	*Alaria esculenta*	[25]
Israel	R	*Gracilaria sp.*	[11]
	C	*Ulva sp.*	[11]
Jepang	C	*Ulva pertusa*	[63]
Kanada	R	*Chondrus crispus*	[44]
Kepulauan Faroe (wilayah dependensi Denmark)	P	*Saccharina latissima*	[15][43]
Kepulauan Turks dan Caicos (wilayah dependensi Britania Raya)	P	*Sargassum fluitans*	[46]
		Sargassum natans	[46]
Korea Selatan	R	*Porphyra haitanensis*	[59]
		Porphyra tenera	[59]
		Pyropia yezoensis	[14][61]
	C	*Ulva pertusa*	[37]
Malaysia	R	*Gracilaria changii*	[5]
		Kappaphycus alvarezii	[26][47]
Meksiko	C	*Ulva clathrata*	[55]
Mesir	R	*Pterocladia capillacea*	[48]
	C	*Ulva lactuca*	[48]
Norwegia	R	*Chondrus crispus*	[30]
		Furcellaria lumbricalis	[30]
		Palmaria palmata	[20][30]
		Porphyra dioica	[30]
		Porphyra purpurea	[30]
		Porphyra umbilicalis	[30]
		Vetebrata lanosa	[20]
	P	*Alaria esculenta*	[20][30]
		Ascophyllum nodosum	[30]
		Fucus serratus	[30]
		Fucus spiralis	[30]
		Fucus vesiculosus	[20][30]
		Himanthalia elongata	[30]
		Laminaria digitata	[20][30]
		Laminaria hyperborea	[20]
		Pelvetia canaliculata	[20][30]

		Saccharina latissima	[30][41][54]
	C	*Cladophora rupestris*	[20][30]
		Enteromorpha intestinalis/ Ulva intestinalis	[20][30]
		Ulva lactuca	[20][30]
Portugal	R	*Chondrus crispus*	[2]
		Gracilaria sp.	[2]
		Gracilaria vermiculophylla	[22]
		Osmundea pinnatifida	[2][17]
		Porphyra spp.	[2]
		Porphyra sp.	[17]
		Porphyra dioica	[22]
		Porphyra umbilicalis	[22]
		Pterocladiella capillacea	[50]
	P	*Fucus spiralis*	[2][17][36]
		Saccorhiza polyschides	[2]
	C	*Ulva compressa*	[50]
		Ulva rigida	[22][50]
		Ulva spp.	[2]
Prancis	R	*Chondrus crispus*	[2]
	P	*Ascophyllum nodosum*	[2]
Selandia Baru	P	*Undaria pinnatifida*	[56]
Spanyol	R	*Gracilaria longissimi/ Gracilaria verrucosa*	[12]
		Porphyra spp.	[12]
	P	*Ascophyllum nodosum*	[19]
		Bifurcaria bifurcata	[19]
		Fucus vesiculosus	[19]
		Himanthalia elongata	[8]
		Laminaria japonica	[12]
		Undaria pinnatifida	[2]
	C	*Ulva lactuca*	[12]
Swedia	R	*Porphyra umbilicalis*	[53]
	P	*Saccharina latissima*	[3][53]
	C	*Ulva lactuca*	[53]
Thailand	R	*Gracilaria fisheri*	[6][51]
	R	*Gracilaria tenuistipitata*	[51]
	P	*Sargassum oligocystum*	[32]
Tunisia	C	*Ulva lactuca*	[9]

Lampiran 4. Konversi Satuan Data Asam Glutamat *Edible Seaweed* Terpilih

Rhodophyta

Spesies	Referensi	Asam Glutamat (Referensi)	Faktor Konversi	Asam Glutamat (g/100g dw *seaweed*)
Ceramium	[49]	12.7 g/100g P	P=28g/100g dw *seaweed*	3.556
Chondrus crispus(aquaculture)	[2]	3.17±0.14 g/100g P	P=19.5±0.16 g/100g dw	0.618
Chondrus crispus (wild)	[2]	3.58±0.06 g/100g P	P=19.1±0.33 g/100g dw	0.684
Chondrus crispus (B)	[30]	12.6±0.3%TAA	TAA=12.8±0.1%dw	1.613
Chondrus crispus	[44]	25.63%TAA	TAA=137.41mg/g dw =13.741g/100g dw	3.522
		12.13%TAA	TAA=226.26mg/g dw=22.626g/100g dw	2.745
		25.83%TAA	TAA=73.54mg/g dw=7.354g/100g dw	1.900
Furcellaria lumbricalis	[30]	11.9±0.2%TAA	TAA=8.7±0.4%dw	1.035
Gigartina (Luga)	[49]	18.5 g/100g P	P=9.67g/100g dw *seaweed*	1.789
Gelidiella acerosa	[7]	13.67±0.95 mg/g P	(AG:1000)g×100g; P=0.061g/100g dw	0.00083
Gelidium pusillum	[29]	108.8 mg/g P	(AG:1000)g×100g; P=11.31±1.02%dw	1.231
Gracilaria changii	[5]	8.42±2.20 mg/g DW	(AG:1000)g×100g	0.842
Gracilaria corticata	[24]	8.59 g/100g P	P=11.22±0.52%dw	0.964
	[33]	2.54±0.06 mg/g dw	(AG:1000)g×100g	0.254
Gracilaria crassa	[42]	4.45±0.34 mg/g dw	(AG:1000)g×100g	0.445
Gracilaria edulis	[13]	13.1±0.65mg/g P	CP=6.68±0.94 mg/g DW=0.668g/100g dw	0.088
	[33]	2.77±0.15 mg/g dw	(AG:1000)g×100g	0.277
Gracilaria fisheri	[6]	7973±120 mg/100g P	P=27.84%DW	2.220
		46.7±2.83 mg/100g P	P=27.84%DW	0.013
	[51]	0.81 mg/100mg dw	1mg/100mg=1g/100g	0.810
		1.05 mg/100mg dw	1mg/100mg=1g/100g	1.050
Gracilaria longissima	[12]	18.15±0.27mg/g dw	(AG:1000)g×100g	1.815

Gracilaria salicornia	[60]	75.9±6.3 mg/g P	P=9.58±0.15 g/100g dw	0.727
Gracilaria sp.	[2]	3.52±0.14 g/100g P	P=24.7±0.24 g/100g dw	0.869
		3.21±0.17 g/100g P	P=24.4±0.24 g/100g dw	0.783
	[11]	13.01±0.57%TAA	TAA diganti P=24.786%DW (Nf=4.59)	3.225
Gracilaria tenuistipitata	[51]	2.09 mg/100mg dw	1mg/100mg=1g/100g	2.090
		2.18 mg/100mg dw	1mg/100mg=1g/100g	2.180
Gracilaria vermiculophylla	[22]	12.47±0.54 mg/g dm	(AG:1000)g×100g	1.247
Iridaea	[49]	10.1 g/100g P	P=24.1g/100g dw *seaweed*	2.434
Kappaphycus alvarezii	[26]	0.45 mg/100mg dw	mg/100mg=g/100g	0.450
		0.79 mg/100mg dw	mg/100mg=g/100g	0.790
	[47]	0.33%dw Kapparazii	–	0.330
Mazzaella	[49]	12.3 g/100g P	P=15.3g/100g dw *seaweed*	1.882
Osmundea pinnatifida	[2]	4.51±0.15 g/100g P	P=24.3±0.73 g/100g dw	1.096
		4.30±0.21 g/100g P	P=22.8±0.33 g/100g dw	0.980
	[17]	12.17±0.18 mg/g P	P=20.79±0.12%dw	0.253
Palmaria mollis	[39]	2.52±0.27 g/100g dm	–	2.520
Palmaria palmata	[20]	21.3±0.5 g/kg dw	(AG:10)	2.130
	[21]	20.4±1.8 mg/g dw	(AG:1000)g×100g	2.040
		27.7±5.6 mg/g dw	(AG:1000)g×100g	2.770
		43.1±5.3 mg/g dw	(AG:1000)g×100g	4.310
		50.3±5.2 mg/g dw	(AG:1000)g×100g	5.030
		44.1±3.1 mg/g dw	(AG:1000)g×100g	4.410
	[25]	17.8±1.2 mg/g dw	(AG:1000)g×100g	1.780
		26.5±1.9 mg/g dw	(AG:1000)g×100g	2.650
		30.0±2.7 mg/g dw	(AG:1000)g×100g	3.000
		27.8±1.3 mg/g dw	(AG:1000)g×100g	2.780
	[30]	12.3±0.7%TAA	TAA=12.4±0.2%dw	1.525
	[44]	15.15%TAA	TAA=112.18mg/g dw=11.218g/100g dw	1.700
		12.28%TAA	TAA=73.10mg/g dw=7.310g/100g dw	0.898

		24.7%TAA	TAA=35.23mg/g dw=3.523g/100g dw	0.870
		31.12%TAA	TAA=59.68mg/g dw=5.968g/100g dw	1.857
Polysiphonia	[49]	9.48 g/100g P	P=30.4g/100g dw *seaweed*	2.882
Porphyra	[49]	13.6 g/100g P	P=22g/100g dw *seaweed*	2.992
Porphyra columbina	[18]	10.50±0.56 g/100g P	P=24.61±0.21 g/100g dw	2.584
Porphyra dioica	[22]	22.57±0.72 mg/g dm	(AG:1000)g×100g	2.257
		31.48±0.43 mg/g dm	(AG:1000)g×100g	3.148
	[30]	10.5±0.3%TAA	TAA=24.2±0.4%dw	2.541
Porphyra haitanensis	[59]	277.45 mg/100g dw	(AG:1000)	0.277
Porphyra purpurea	[30]	12.6±0.2%TAA	TAA=15.9±0.1%dw	2.003
	[52]	83.04±6.13 mg/g P	P=33.2%dw	2.757
Porphyra sp.	[17]	10.30±0.15 mg/g P	P=24.82±0.05%dw	0.256
Porphyra spp. (aquaculture)	[2]	4.33±0.14 g/100g P	P=27.4±0.08 g/100g dw	1.186
		4.33±0.20 g/100g P	P=28.2±0.16 g/100g dw	1.221
Porphyra spp.	[12]	26.63±0.20mg/g dw	(AG:1000)g×100g	2.663
Porphyra tenera	[59]	843.35 mg/100g dw	(AG:1000)	0.843
Porphyra umbilicalis	[22]	21.07±0.22 mg/g dm	(AG:1000)g×100g	2.107
		25.91±1.63 mg/g dm	(AG:1000)g×100g	2.591
	[30]	11.5±0.1%TAA	TAA=17.7±0.2%dw	2.036
	[53]	8.9±0.5%TAA	TAA=31.8 ± 1.7%dw *seaweed*	2.830
		6.5±0.2%TAA	TAA=14%dw EP=4.452%dw *seaweed*	0.289
		6.5±0.1%TAA	TAA=71.0%dw EP=22.578%dw *seaweed*	1.468
		23.0±2.6%TAA	TAA=20%dw EP=6.36%dw *seaweed*	1.463
Pterocladia capillacea/ Pterocladiella capillacea	[48]	151.36 µg/g dw	(AG:10^6)g×100g	0.015
		196.18 µg /g dw	(AG:10^6)g×100g	0.0196
		178.22 µg /g dw	(AG:10^6)g×100g	0.018
	[50]	35.39±0.08 mg/g P	P=20.16±0.15%dw	0.713
Pyropia orbicularis	[34]	13.94±0.71 g/100g P	P=4.42±0.25 g/100g dm	0.616
		9.74±2.11 g/100g P	P=24.15±0.11 g/100g dm	2.352

		10.54±0.28 g/100g P	P=23.15±2.78 g/100g dm	2.440
		9.89±0.32 g/100g P	P=22.34±0.27 g/100g dm	2.209
		9.75±0.08 g/100g P	P=24.92±0.38 g/100g dm	2.430
		9.48±0.13 g/100g P	P=22.45±0.65 g/100g dm	2.128
Pyropia yezoensis	[14]	4632.55 mg/100g dm	(AG:1000)g×100g	4.633
	[61]	2.22±0.4 g/100g dw	–	2.220
		2.43±0.29 g/100g dw	–	2.430
		1.99±0.35 g/100g dw	–	1.990
		1.99±0.14 g/100g dw	–	1.990
		2.35±0.23 g/100g dw	–	2.350
		2.40±0.36 g/100g dw	–	2.400
		1.98±0.29 g/100g dw	–	1.980
		2.16±0.10 g/100g dw	–	2.160
		2.63±0.38 g/100g dw	–	2.630
		2.31±0.17 g/100g dw	–	2.310
		1.88±0.29 g/100g dw	–	1.880
		0.58 ± 0.0 g/100g dw	–	0.580
Sarcothalia	[49]	13.6 g/100g P	P=13.5g/100g dw *seaweed*	1.836
Vetebrata lanosa	[20]	16.3±0.4 g/kg dw	(AG:10)	1.630

Phaeophyta

Spesies	**Referensi**	**Asam Glutamat (Referensi)**	**Faktor Konversi**	**Asam Glutamat (g/100g dw *seaweed*)**
Adenocystis	[49]	18.8 g100g P	P=12.6 g/100g dw *seaweed*	2.369
Alaria esculenta	[20]	20.1±1.1 g/kg dw	(AG:10)	2.010
	[25]	14.6±1.7 mg/g dw	(AG:1000)g×100g	1.460

		15.9±4.8 mg/g dw	(AG:1000)g×100g	1.590
		14.0±1.4 mg/g dw	(AG:1000)g×100g	1.400
		13.9±1.8 mg/g dw	(AG:1000)g×100g	1.390
	[30]	25.8±0.4%TAA	TAA=11.8±0.1%dw	3.044
	[44]	14.09%TAA	TAA=61.12mg/g dw=6.112g/100g dw	0.861
		12.11%TAA	TAA=93.70mg/g dw=9.370g/100g dw	1.135
		27.12%TAA	TAA=31.34mg/g dw=3.134g/100g dw	0.850
		33.89%TAA	TAA=37.62mg/g dw=3.762g/100g dw	1.275
Ascophyllum nodosum	[1]	24.04±0.88 %TAA	TAA=P hasil ekstraksi=16.90±0.32%total protein=1.205477g/100g dw	0.290
		41.02±0.98 %TAA	TAA=P hasil ekstraksi=56.35±1.96%total protein=4.0194455g/100g dw	1.649
		25.19±1.02 %TAA	TAA=P hasil ekstraksi=59.76±2.44%total protein=4.2626808g/100g dw	1.074
	[2]	6.46±0.01 g/100g P	P=6.90±0.16 g/100g dw	0.446
		7.23±0.09 g/100g P	P=9.40±0.08 g/100g dw	0.680
	[4]	0.72±0.16 mg/g dw	(AG:1000)g×100g	0.072
		0.47±0.12 mg/g dw	(AG:1000)g×100g	0.047
	[19]	1714.55 mg/100g DW	(AG:1000)g	1.715
	[30]	16.3±0.2%TAA	TAA=3.5±0.0%dw	0.571
Bifurcaria bifurcata	[19]	1504.53mg/100g DW	(AG:1000)g	1.505
Ecklonia maxima (Kelpak)	[28]	79.5 mg/100g dw	(AG:1000)g×100g	0.080
		78.5 mg/100g dw	(AG:1000)g×100g	0.079
Ecklonia maxima (Afrikelp)	[28]	12 mg/100g dw	(AG:1000)g×100g	0.012
		13.4 mg/100g dw	(AG:1000)g×100g	0.013
Ecklonia maxima (Basfoliar Kelp)	[28]	9.5 mg/100g dw	(AG:1000)g×100g	0.0095
		10.1 mg/100g dw	(AG:1000)g×100g	0.0101
Fucus serratus	[30]	19.6±0.1%TAA	TAA=4.6±0.1%dw	0.902
Fucus spiralis	[2]	7.26±0.19 g/100g P	P=11.8±0.16 g/100g dw	0.857

		8.12±0.17 g/100g P	P=11.7±0.24 g/100g dw	0.950
	[4]	1.65±0.13 mg/g dw	(AG:1000)g×100g	0.165
		1.25±0.29 mg/g dw	(AG:1000)g×100g	0.125
	[17]	12.12±0.10 mg/g P	P=9.71±0.03%dw	0.118
	[30]	13.4±0.0%TAA	TAA=4.6±0.0%dw	0.616
	[36]	10.40±0.10mg/g dw P dalam HP	(AG:1000)g×100g; P dalam HP=12.315 g/100g HP=1.0504695g/100g dw	0.089
		7.01±0.22mg/g dw P dalam HP	(AG:1000)g×100g; P dalam HP=33.628 g/100g dw HP=2.8684684g/100g dw	0.060
		46.33±0.42mg/g dw P dalam HP	(AG:1000)g×100g; P dalam HP=47.403 g/100g dw HP=4.0434759g/100g dw	0.395
Fucus vesiculosus	[4]	0.43±0.13 mg/g dw	(AG:1000)g×100g	0.043
		0.54±0.25 mg/g dw	(AG:1000)g×100g	0.054
	[19]	1974.47 mg/100g DW	(AG:1000)g	1.974
	[20]	17.9±2.2 g/kg dw	(AG:10)	1.790
	[30]	15.0±0.3%TAA	TAA=4.3±0.0%dw	0.645
	[44]	17.09%TAA	TAA=44.30mg/g dw=4.430g/100g dw	0.757
		5.57%TAA	TAA=57.82mg/g dw=5.782g/100g dw	0.032
		28.77%TAA	TAA=17.60mg/g dw=1.760g/100g dw	0.506
		25.63%TAA	TAA=19.72mg/g dw=1.972g/100g dw	0.505
Himanthalia elongata	[8]	7.52±0.05 g/kg P	P=63.38±0.49% EP=4.1197%dw *seaweed*	0.049
	[30]	14.4±1.2%TAA	TAA=5.9±0.1%dw	0.850
Laminaria digitata	[4]	0.15±0.03 mg/g dw	(AG:1000)g×100g	0.015
		0.61±0.26 mg/g dw	(AG:1000)g×100g	0.061
	[20]	8.5±0.6 g/kg dw	(AG:10)	0.850
	[23]	18.82 µg/mg db	µg/mg=mg/g; (AG:1000)g×100g	1.882
		7.32 µg/mg db	µg/mg=mg/g; (AG:1000)g×100g	0.732
		33.21 µg/mg db	µg/mg=mg/g; (AG:1000)g×100g	3.321
		3.08 µg/mg db	µg/mg=mg/g; (AG:1000)g×100g	0.308

	[30]	14.7±0.1%TAA	TAA=7.7±0.1%dw	1.132
Laminaria hyperborea	[20]	8.6±0.6 g/kg dw	(AG:10)	0.860
Laminaria japonica	[12]	3.72±0.19mg/g dw	(AG:1000)g×100g	0.372
Lessonia	[49]	14.9 g100g P	P=12.5g/100g dw *seaweed*	1.863
Macrocystis	[49]	13.3 g100g P	P=17.3g/100g dw *seaweed*	2.301
Pelvetia canaliculata	[4]	1.02±0.09 mg/g dw	(AG:1000)g×100g	0.102
		1.32±0.25 mg/g dw	(AG:1000)g×100g	0.132
	[20]	15.0±1.2 g/kg dw	(AG:10)	1.500
	[30]	18.7±0.3%TAA	TAA=4.8±0.0%dw	0.898
Saccharina latissima	[3]	13.36 mg/100g P	P=6.1±0.1%dw biomassa *seaweed*	0.00081
		9.7 mg/100g P	P=15.4±0.4%dw biomassa *seaweed*	0.0015
		13.04 mg/100g P	P=20.3±0.1%dw biomassa *seaweed*	0.0026
		18.74 mg/100g P	P=8.0±0.1%dw biomassa *seaweed*	0.0015
		10.51 mg/100g P	P=24.9±0.2%dw biomassa *seaweed*	0.0026
		14.45 mg/100g P	P=40.5±0.5%dw biomassa *seaweed*	0.0059
		18.2 mg/100g P	P=7.6±0.1%dw biomassa *seaweed*	0.0014
		10.02 mg/100g P	P=22.0±0.6%dw biomassa *seaweed*	0.0022
		15.54 mg/100g P	P=19.0±0.8% dw biomassa *seaweed*	0.00295
		19.94 mg/100g P	P=7.8±0.4%dw biomassa *seaweed*	0.0016
		11.14 mg/100g P	P=15.3±0.8%dw biomassa *seaweed*	0.017
		13.85 mg/100g P	P=26.2±0.6%dw biomassa *seaweed*	0.0036
		16.7 mg/100g P	P=6.6±0.4%dw biomassa *seaweed*	0.0011
		9.29 mg/100g P	P=1.3±0.1%dw biomassa *seaweed*	0.00012
		11.21 mg/100g P	P=2.0±0.3%dw biomassa *seaweed*	0.00022
		20.11 mg/100g P	P=8.2±0.3%dw biomassa *seaweed*	0.0016
		10.64 mg/100g P	P=28.0±0.9%dw biomassa *seaweed*	0.00298
		13.15 mg/100g P	P=37.6±0.7%dw biomassa *seaweed*	0.0049
	[15]	162.1±3.2 mg/g P	P=2.9±0.3%dw	0.470
		179±17 mg/g P	P=4.3±0.9%dw	0.770

		216±34 mg/g P	P=3.4±0.4%dw	0.734
		144±20 mg/g P	P=3.8±1.2%dw	0,547
		156±19 mg/g P	P=5.5±1.3%dw	0.858
		276±53 mg/g P	P=4.1±2.1%dw	1.132
		333±60 mg/g P	P=3.8±0.7%dw	1.265
		223±10 mg/g P	P=3.8±0.7%dw	0.847
		233±27 mg/g P	P=4.2±2.9%dw	0.979
		137±11 mg/g P	P=4.6±0.6%dw	0.630
		146.2±0.4 mg/g P	P=5.9±0.7%dw	0.863
		136±25 mg/g P	P=5.1±0.6%dw	0.694
		147.7±2.5 mg/g P	P=4.4±0.1%dw	0.650
	[23]	17.45 µg/mg db	µg/mg=mg/g; (AG:1000)g×100g	1.745
		6.11 µg/mg db	µg/mg=mg/g; (AG:1000)g×100g	0.611
		14.60 µg/mg db	µg/mg=mg/g; (AG:1000)g×100g	1.460
		29.98 µg/mg db	µg/mg=mg/g; (AG:1000)g×100g	2.998
	[30]	13.8±0.9%TAA	TAA=9.8±0.0%dw	1.352
	[41]	120.0±1.4 mg/g P	P=TAA=7.2±0.3%dw	0.864
		129.3±2.8 mg/g P	P=TAA=7.3±0.3%dw	0.944
		125.6±5.8 mg/g P	P=TAA=7.4±0.3%dw	0.929
		118.8±2.6 mg/g P	P=TAA=7.2±0.1%dw	0.855
	[43]	12.5±2.5 g/100g TAA	TAA=14.8±0.7%dw	1.850
		11.0±4.5 g/100g TAA	TAA=16.1±4.1%dw	1.771
		17.6±10.6 g/100g TAA	TAA=14.0±3.6%dw	2.464
		18.9±1.6 g/100g TAA	TAA=11.5±1.7%dw	2.174
		14.4±4.3 g/100g TAA	TAA=11.5±1.7%dw	1.656
		26.2±3.7 g/100g TAA	TAA=4.0±0.7%dw	1.048
		32.4±7.8 g/100g TAA	TAA=7.7±1.6%dw	2.495
		19.6±4.4 g/100g TAA	TAA=6.0±0.1%dw	1.176
		15.6±1.8 g/100g TAA	TAA=10.9±1.2%dw	1.700

		14.5±0.6 g/100g TAA	TAA=7.9±0.5%dw	1.146
		13.0±1.8 g/100g TAA	TAA=7.7±2.0%dw	1.001
	[53]	7.5±0.1%TAA	TAA=10.1 ± 0.2%dw *seaweed*	0.758
		9.0±0.1%TAA	TAA=1%dw EP=0.101%dw *seaweed*	0.0091
		8.5±0.1%TAA	TAA=40.7%dw EP=4.1107%dw *seaweed*	0.349
		15.8±0.1%TAA	TAA=3%dw EP=0.303%dw *seaweed*	0.048
	[54]	26.0±0.5 g/kg dm	(AG:10)g/100g	2.600
		26.6±0.4 g/kg dm	(AG:10)g/100g	2.660
		16.8±0.1 g/kg dm	(AG:10)g/100g	1.680
		16.8±1.0 g/kg dm	(AG:10)g/100g	1.680
		29.7±0.2 g/kg dm	(AG:10)g/100g	2.970
		36.5±2.7 g/kg dm	(AG:10)g/100g	3.650
	[62]	160.2±36.6 mg/g P	1.5±0.2%dw	0.240
		146.9±0.6 mg/g P	2.0±0.9%dw	0.294
		266.5±33.3 mg/g P	7.0±1.2%dw	1.866
		233.6±17.2 mg/g P	11.3±4.0%dw	2.633
		236.1±72.8 mg/g P	7.5±1.6%dw	1.771
		281.9±64.0 mg/g P	4.0±1.0%dw	1.128
		225.3±8.3 mg/g P	5.2±1.9%dw	1.172
		190.1±62.9 mg/g P	2.0±1.1%dw	0.380
		204.2±40.6 mg/g P	7.6±1.7%dw	1.552
		260.9±93.2 mg/g P	12.7±1.6%dw	3.313
		213.5±32.3 mg/g P	7.2±2.9%dw	1.537
		304.4±142.0 mg/g P	8.0±4.9%dw	2.435
		299.9±29.5 mg/g P	4.5±2.7%dw	1.350
Saccorhiza polyschides	[2]	4.26±0.07 g/100g P	P=12.4±0.01 g/100g dw	0.528
		4.72±0.07 g/100g P	P=11.8±0.16 g/100g dw	0.557
Sargassum (natans & fluitans)	[46]	0.85%dw	–	0.850
Sargassum fluitans (D)	[46]	0.46%dw	–	0.460

Sargassum naozhouense	[38]	13.21 g/100g P	P=11.2%db	1.480
Sargassum natans	[46]	0.35%dw	–	0.350
		0.58%dw	–	0.580
Sargassum oligocystum	[32]	775.19±9.60 mg/g dw	(AG:1000)	0.775
		1940.27±8.19 mg/g dw	(AG:1000)	1.940
		744.11±14.16 mg/g dw	(AG:1000)	0.744
Sargassum vulgar	[24]	8.17 g/100g P	P=15.31±0.28%dw	1.251
Sargassum wightii	[7]	18.34±1.65 mg/g P	P=1.482±0.20mg/g dw=0.1482g/100g dw	0.0027
Undaria pinnatifida	[2]	7.66±0.14 g/100g P	P=16.5±0.08 g/100g dw	1.264
		6.19±0.14 g/100g P	P=19.5±0.21 g/100g dw	1.207
	[52]	120.85±20.26 mg/g P	P=16.8%dw	2.030
	[56]	1.26±0.21 g/100g dw	–	1.260
		1.38±0.29 g/100g dw	–	1.380
		2.11±0.90 g/100g dw	–	2.110
		1.38±0.11 g/100g dw	–	1.380
		1.07±0.36 g/100g dw	–	1.070
		1.30±0.16 g/100g dw	–	1.300
		0.73±0.13 g/100g dw	–	0.730
		0.87±0.32 g/100g dw	–	0.870
		0.90±0.19 g/100g dw	–	0.900
		0.57±0.08 g/100g dw	–	0.570
		0.82±0.15 g/100g dw	–	0.820
		1.09±0.56 g/100g dw	–	1.090
		1.25±0.18 g/100g dw	–	1.250
		1.35±0.18 g/100g dw	–	1.350

Chlorophyta

Spesies	**Referensi**	**Asam Glutamat (Referensi)**	**Faktor Konversi**	**Asam Glutamat (g/100g dw *seaweed*)**
Caulerpa racemosa	[45]	18.70±0.17%TAA	TAA diganti P=19.9±0.5%dw	3.721
Chaetomorpha linum	[40]	15.7±0.6 mg/g dw	(AG:1000)g×100g	1.570
Cladophora	[49]	11 g/100g P	P=24.5g/100g dw *seaweed*	2.695
Cladophora coelothrix	[40]	26.9±1.6 mg/g dw	(AG:1000)g×100g	2.690
Cladophora rupestris	[20]	5.7±0.8 g/kg dw	(AG:10)	0.570
	[30]	15.3±0.2%TAA	TAA=13.9±0.0%dw	2.127
Codium	[49]	19 g/100g P	P=14.8g/100g dw *seaweed*	2.812
Derbesia tenuissima	[40]	33.0±0.4 mg/g dw	(AG:1000)g×100g	3.300
Enteromorpha	[49]	14.5 g/100g P	P=19.9g/100g dw *seaweed*	2.886
Enteromorpha compressa	[57]	13.11 g/100g P	P=17.48±0.41%dw	2.292
Enteromorpha intestinalis	[20]	18.2±2.0 g/kg dw	(AG:10)	1.820
Enteromorpha linza	[57]	12.68 g/100g P	P=12.5±1.26%dw	1.585
Enteromorpha tubulosa	[57]	12.52 g/100g P	P=19.09±0.91%dw	2.390
Monostroma	[49]	13.2 g/100g P	P=19.6g/100g dw *seaweed*	2.587
Ulva	[49]	11.8 g/100g P	P=26.4g/100g dw *seaweed*	3.115
Ulva capensis	[35]	9.4±1.0 g/100g P	NP(Nx5.58)=17.3g/100g DW	1.889
Ulva clathrata (Roth)	[55]	11.56±0.18 g/100g P	21.9±0.1%dw	2.532
		11.54±0.57 g/100g P	25.9 ± 0.1%dw	2.989
		10.93±0.43 g/100g P	23.0 ± 0.1%dw	2.514
		12.8±0.32 g/100g P	20.1±0.1%dw	2.573
Ulva compressa	[50]	32.49±0.10 mg/g P	P=15.66±0.09%dw	0.509
Ulva fasciata Delile	[45]	15.49±0.14%TAA	TAA diganti P=11.1±0.7%dw	1.719
Ulva intestinalis	[30]	13.2±0.1%TAA	TAA=13.1±0.8%dw	1.729
	[31]	13.14±0.40 g/100g P	P=13.55±0.07 g/100g dw	1.780

Ulva lactuca	[9]	12.94±0.10g/100g P	P=8.46±0.01%db	1.095
	[10]	0.321±0.45 mg/g P	P=0.08g/g DW=8g/100g dw	0.0026
	[12]	33.08±0.85mg/g dw	(AG:1000)g×100g	3.308
	[20]	12.2±0.5 g/kg dw	(AG:10)	1.220
	[30]	13.5±0.5%TAA	TAA=17.5±0.3%dw	2.363
	[35]	9.0±0.5 g/100g P	NP(N×5.58)=16.4g/100g DW	1.476
	[48]	169.3 μg/g dw	(AG:10^6)g×100g	0.017
		124.13 μg/g dw	(AG:10^6)g×100g	0.012
		191.94 μg/g dw	(AG:10^6)g×100g	0.019
	[53]	10.6±0.2%TAA	TAA=19.6 ± 0.6%dw *seaweed*	2.078
		7.9±0.5%TAA	TAA=10%dw EP=1.96%dw *seaweed*	0.155
		8.5±0.2%TAA	TAA=51.2%dw EP=10.0352%dw *seaweed*	0.853
		25.9%TAA	TAA=15%dw EP=2.94%dw *seaweed*	0.761
	[60]	70.7±6.6 mg/g P	P=10.69±0.67 g/100g dw	0.756
Ulva linza	[24]	6.11 g/100g P	P=18.10±0.35%dw	1.106
Ulva ohnoi	[40]	20.0±0.4 mg/g dw	(AG:1000)g×100g	2.000
	[58]	12.14±0.16%TAA	17.69±0.29%dw	2.148
		12.49±0.20%TAA	15.76±0.29%dw	1.968
		12.30±0.14%TAA	15.25±0.3%dw	1.876
		12.42±0.22 %TAA	14.76±0.14%dw	1.833
		11.95±0.03%TAA	15.25±0.23%dw	1.822
		11.89±0.11%TAA	16.34±0.18%dw	1.943
		12.08±0.19%TAA	17.26±0.32%dw	2.085
		11.54±0.02%TAA	17.67±0.17%dw	2.039
		11.89±0.16%TAA	18.40±0.73%dw	2.188
Ulva pertusa	[37]	2.33 g/100g dw	–	2.330
	[63]	47±11 mg/g dw	(AG:1000)g×100g	4.700
	[63]	23±6 mg/g dw	(AG:1000)g×100g	2.300
	[63]	57±10 mg/g dw	(AG:1000)g×100g	5.700

	[63]	66±13 mg/g dw	(AG:1000)g×100g	6.600
Ulva rigida	[16]	1.22±0.05 g/100g dw	–	1.220
		1.06±0.04 g/100g dw	–	1.060
		1.39±0.04 g/100g dw	–	1.390
		1.41±0.06 g/100g dw	–	1.410
		2.26±0.03 g/100g dw	–	2.260
		1.80±0.05 g/100g dw	–	1.800
		2.21±0.05 g/100g dw	–	2.210
		1.70±0.05 g/100g dw	–	1.700
	[22]	9.47±0.23 mg/g dm	(AG:1000)g×100g	0.947
	[35]	10.9±0.2 g/100g P	NP(N×5.58)=17.4 g/100g DW	1.636
	[50]	7.63±0.08 mg/g P	P=15.78±0.10%dw	0.120
Ulva sp.	[11]	12.00±1.41%TAA	TAA diganti P=8.704%DW	1.044
Ulva spp.	[2]	4.08±0.18 g/100g P	P=20.5±0.49 g/100g dw	0.836
		5.22±0.27 g/100g P	P=23.3±0.01 g/100g dw	1,216
	[27]	2.04±0.11 g/100g P	P=15.90±0.36 g/100g DM	0.324
		3.96±0.46 g/100g P	P=18.22±0.01 g/100g DM	0.722
		4.08±0.23 g/100g P	P=16.48±0.17 g/100g DM	0.672
		1.92±0.14 g/100g P	P=20.23±0.82 g/100g DM	0.388
	[39]	2.75±0.22 g/100g dm	–	2.750

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