Food and Agriculture Organization of the United Nations

Global seaweeds and microalgae production, 1950–2019

WAPI factsheet to facilitate evidence-based policy-making and sector management in aquaculture

June 2021

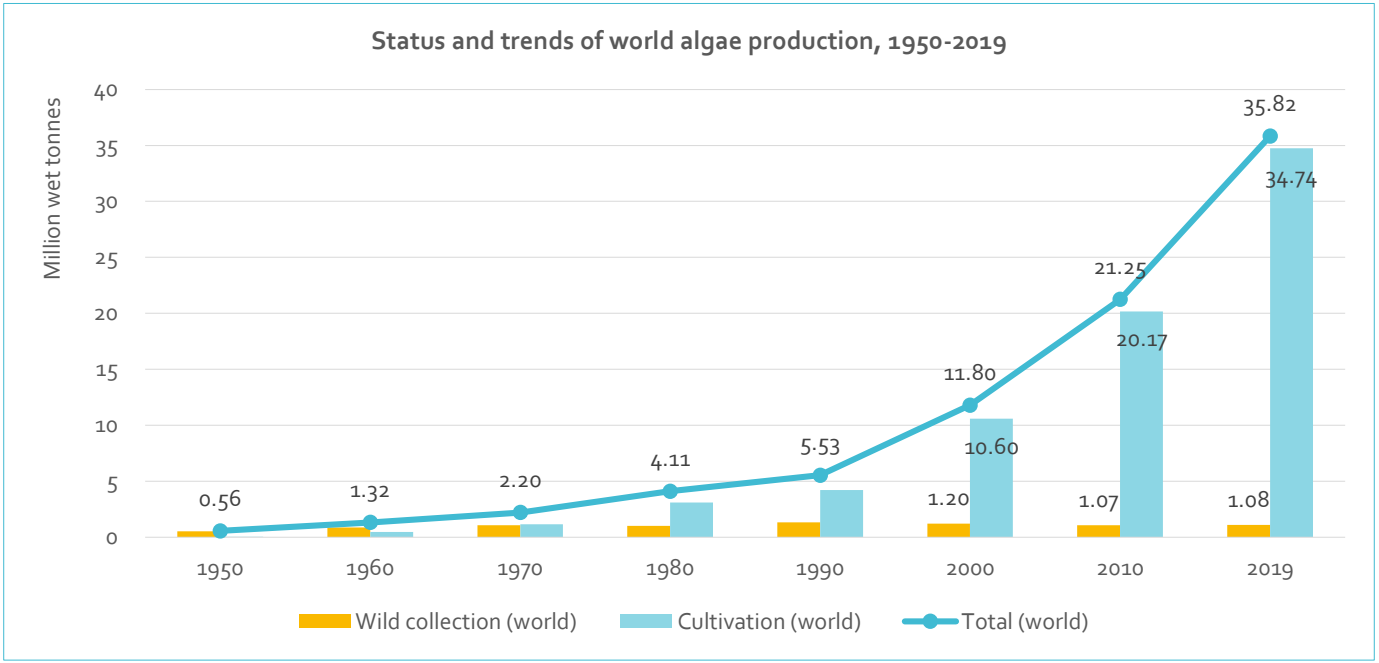
Preparation of this factsheet

- This factsheet is based on FAO statistics on aquaculture and fisheries production. The data and statistics, which were the most updated at the time when the factsheet was prepared, may differ from data and statistics used in other WAPI factsheets because of different data sources or different versions of the same dataset. They may not be consistent with data and statistics from other sources.
- The term "country" used in this factsheet includes non-sovereign territory. The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.
- The factsheet follows the grouping of Landlocked Developing Countries and Small Island Developing States (SIDS) adopted by the UN Office of the High Representative for the Least Developed Countries, Landlocked Development countries and Small Island Developing States (UN-OHRLLS): http://unohrlls.org/about-sids/country-profiles/. Unless noted otherwise, other country grouping in this factsheet follows the United Nations M49 standard.
- The preparation of the factsheet has benefited from tables and charts generated by various World Aquaculture Performance Indicator (WAPI) modules. Most of these data analysis tools are for FAO internal use, yet some of them are available for test use. Visit the WAPI webpage for more information about WAPI information and knowledge products.
- The factsheet was prepared by Junning Cai and Giulia Galli. Valuable comments and suggestions provided by Esther Garrido Gamarro and Giorgos Paximadis are acknowledged. The validity and relevance of the results depend on the quality (in terms of timeliness and accuracy) of the underlying data and statistics used in the analyses. Errors could also occur in the analyses despite our efforts to minimize them. Simple text are provided to help users understand the tables and charts. Users may use the original data sources to verify the results. We welcome your feedback to help us improve the factsheet.
- Contact: Junning Cai (FAO Aquaculture Officer); junning.cai@fao.org; wapi@fao.org.

Contents

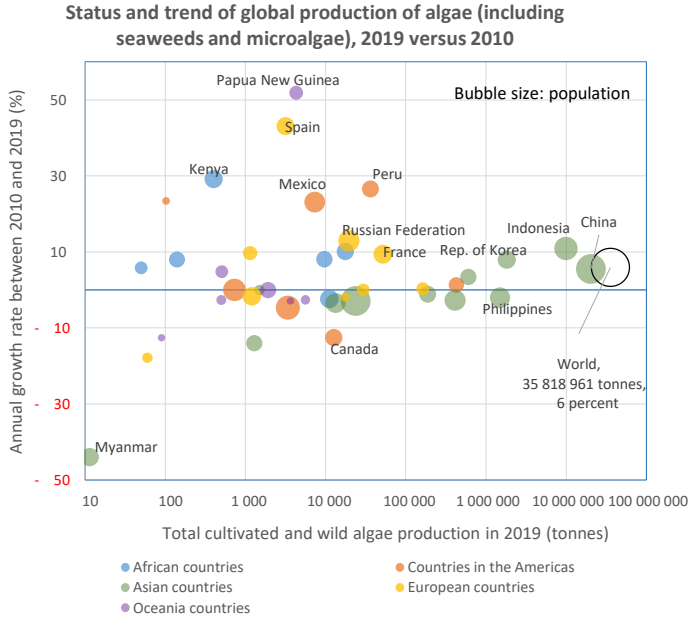
World

Global algae production (including cultivation and wild collection) increased over 60 times from 0.56 million (wet) tonnes in 1950 to 35.82 million tonnes in 2019; nearly all the growth was contributed by cultivation.



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

In 2019, 35.8 million tonnes of world algae (including seaweeds and microalgae) production was contributed by 54 countries/territories with 97 percent of the production coming from cultivation.



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Global algae (including seaweeds and microalgae) production, 2019

Country/area	Total (cultivated and wild) production (tonnes)	Share of world total (%)	Aquaculture share in total production (%)
World	**35 818 961**	**100.00**	**96.98**
Asia	**34 881 600**	**97.38**	**99.10**
China	20 351 442	56.82	99.14
Indonesia	9 962 900	27.81	99.55
Korea, Republic of	1 821 475	5.09	99.52
Philippines	1 500 326	4.19	99.98
Korea, Dem. People's Rep.	603 000	1.68	100.00
Japan	412 300	1.15	83.80
Malaysia	188 110	0.53	100.00
Americas	**488 144**	**1.36**	**4.87**
Chile	427 508	1.19	5.28
Peru	36 348	0.10	0.00
Canada	12 655	0.04	0.00
Mexico	7 336	0.02	0.14
United States of America	3 394	0.01	7.75
Europe	**287 386**	**0.80**	**3.99**
Norway	163 197	0.46	0.07
France	51 683	0.14	0.74
Ireland	29 542	0.08	0.14
Russian Federation	19 544	0.05	54.10
Iceland	17 533	0.05	0.00
Africa	**145 259**	**0.41**	**81.33**
United Republic of Tanzania	106 069	0.30	100.00
Morocco	17 591	0.05	1.55
South Africa	11 155	0.03	19.32
Madagascar	9 665	0.03	91.72
Oceania	**16 572**	**0.05**	**85.32**
Solomon Islands	5 600	0.02	100.00
Papua New Guinea	4 300	0.01	100.00
Kiribati	3 650	0.01	100.00
Australia	1 923	0.01	0.00

World cultivation and wild collection of seaweeds and microalgae, 2019

Species groups	Region = **World**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the region	Number of countries in the region cultivating and/or collecting the species group	Total cultivation and wild production in the region (tonnes)	Share of the region's total algae production (%)
Algae	**55**	**54**	**35 818 961**	**100.00**
Microalgae	**7**	**10**	**56 456**	**0.16**
Spirulina/Arthrospira	3	10	56 208	0.16
Green microalgae	4	4	248	0.00
Seaweeds	**48**	**49**	**35 762 504**	**99.84**
Brown seaweeds	18	20	17 069 418	47.65
Laminaria/Saccharina	4	11	12 411 987	34.65
Undaria	2	5	2 566 316	7.16
Sargassum	2	2	303 973	0.85
Lessonia	2	2	247 312	0.69
Macrocystis	2	3	66 779	0.19
Miscellaneous brown seaweeds	6	17	1 473 051	4.11
Red seaweeds	20	43	18 441 240	51.48
Carrageenan seaweeds	8	25	11 685 174	32.62
Agar seaweeds	6	14	3 695 231	10.32
Porphyra/Pyropia	3	7	2 984 573	8.33
Miscellaneous red seaweeds	3	15	76 261	0.21
Green seaweeds (excluding microalgae)	8	12	32 926	0.09
Ulva	3	4	2 356	0.01
Caulerpa	1	1	1 090	0.00
Miscellaneous green seaweeds	4	7	29 480	0.08
Seaweeds nei	2	10	218 921	0.61

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

World cultivation of seaweeds and microalgae, 2019

Species group	Region = **World**; Scope = **Cultivation**; Year = **2019**				
	Number of ASFIS species items in the group being cultivated in the region	Number of countries in the region cultivating the species group	Cultivation of the species group in the region (tonnes)	Share of the region's cultivation of all algae species (%)	Contribution of cultivation to the region's total production of the species group (%)
Algae	**34**	**47**	**34 735 590**	**100.00**	**96.98**
Microalgae	**7**	**10**	**56 456**	**0.16**	**100.00**
Spirulina/Arthrospira	3	10	56 208	0.16	**100.00**
Green microalgae	4	4	248	0.00	**100.00**
Seaweeds	**27**	**42**	**34 679 134**	**99.84**	**96.97**
Brown seaweeds	10	14	16 393 764	47.20	96.04
Laminaria/Saccharina	2	7	12 273 748	35.33	98.89
Undaria	2	4	2 563 582	7.38	99.89
Sargassum	2	2	303 973	0.88	100.00
Lessonia					
Macrocystis	1	1	2	0.00	0.00
Miscellaneous brown seaweeds	3	8	1 252 459	3.61	85.02
Red seaweeds	9	32	18 251 474	52.54	98.97
Carrageenan seaweeds	3	23	11 622 213	33.46	99.46
Agar seaweeds	3	11	3 639 833	10.48	98.50
Porphyra/Pyropia	2	5	2 984 123	8.59	99.98
Miscellaneous red seaweeds	1	2	5 305	0.02	6.96
Green seaweeds (excluding microalgae)	6	6	16 696	0.05	50.71
Ulva	1	1	2 155	0.01	91.46
Caulerpa	1	1	1 090	0.00	100.00
Miscellaneous green seaweeds	4	4	13 451	0.04	45.63
Seaweeds nei	2	5	17 200	0.05	7.86

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

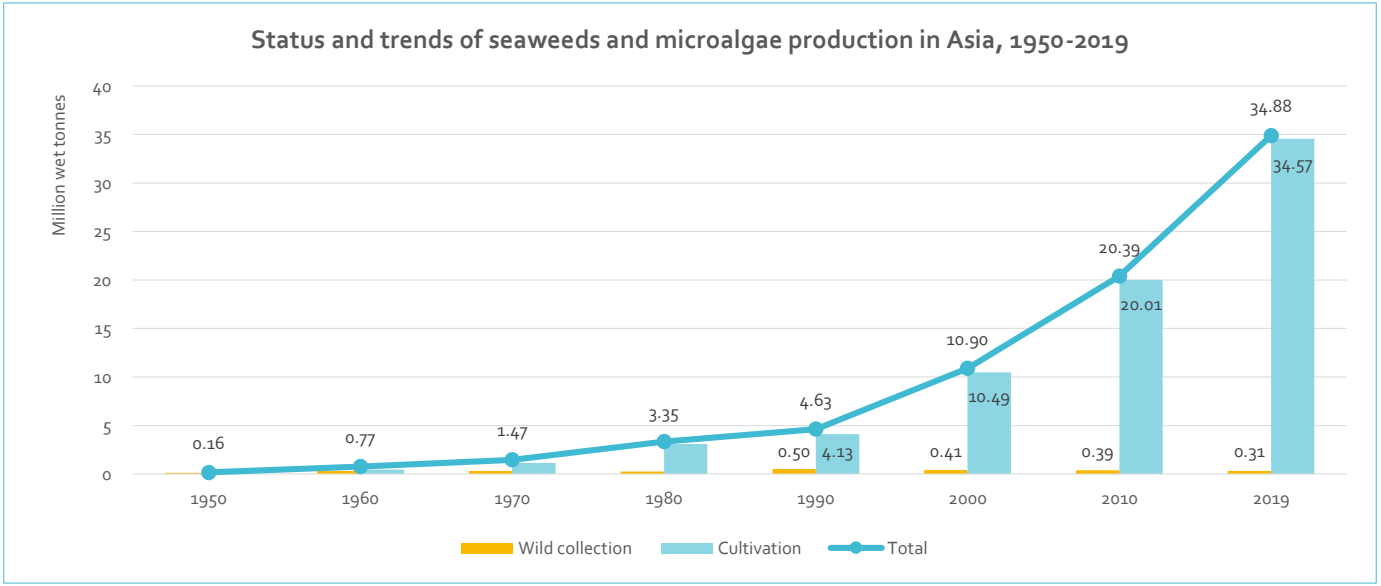
World wild collection of seaweeds and microalgae, 2019

Species group	Region = **World**; Scope = **Wild collection**; Year = **2019**				
	Number of ASFIS species items in the group being collected in the region	Number of countries in the region collecting the species group	Wild collection of the species group in the region (tonnes)	Share of the region's wild collection of all algae species (%)	Contribution of wild collection to the region's total production of the species group (%)
Aquatic plants	**36**	**26**	**1 083 370**	**100.00**	**3.02**
Microalgae					
Seaweeds	**36**	**26**	**1 083 370**	**100.00**	**3.03**
Brown seaweeds	13	16	675 654	62.37	3.96
Laminaria/Saccharina	3	7	138 239	12.76	1.11
Undaria	1	2	2 735	0.25	0.11
Sargassum					
Lessonia	2	2	247 312	22.83	100.00
Macrocystis	2	3	66 777	6.16	100.00
Miscellaneous brown seaweeds	5	13	220 592	20.36	14.98
Red seaweeds	15	20	189 766	17.52	1.03
Carrageenan seaweeds	5	2	62 961	5.81	0.54
Agar seaweeds	4	7	55 398	5.11	1.50
Porphyra/Pyropia	3	4	450	0.04	0.02
Miscellaneous red seaweeds	3	14	70 956	6.55	93.04
Green seaweeds (excluding microalgae)	6	8	16 230	1.50	49.29
Ulva	3	3	201	0.02	8.54
Caulerpa					
Miscellaneous green seaweeds	3	5	16 029	1.48	54.37
Algae nei	2	9	201 721	18.62	92.14

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Asia

Asia – seaweeds and microalgae production



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Asia's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Region = **Asia**; Scope = **Cultivation and wild collection**; Year = **2019**				
	Number of ASFIS species items in the group being cultivated and/or collected in the region	Number of countries in the region cultivating and/or collecting the species group	Total cultivation and wild production in the region (tonnes)	Share of the region's total algae production (%)	Contribution to world production of species group (%)
Algae	**24**	**14**	**34 881 600**	**100.00**	**97.38**
Microalgae	**2**	**1**	**54 850**	**0.16**	**97.15**
Spirulina/Arthrospira	1	1	54 650	0.16	97.23
Green microalgae	1	1	200	0.00	80.50
Seaweeds	**22**	**14**	**34 826 750**	**99.84**	**97.38**
Brown seaweeds	5	5	16 436 418	47.12	96.29
Laminaria/Saccharina	1	4	12 320 034	35.32	99.26
Undaria	1	3	2 566 002	7.36	99.99
Sargassum	2	2	303 973	0.87	100.00
Lessonia					
Macrocystis					
Miscellaneous brown seaweeds	1	3	1 246 409	3.57	84.61
Red seaweeds	9	14	18 148 400	52.03	98.41
Carrageenan seaweeds	3	9	11 491 956	32.95	98.35
Agar seaweeds	3	6	3 617 872	10.37	97.91
Porphyra/Pyropia	2	5	2 984 271	8.56	99.99
Miscellaneous red seaweeds	1	3	54 301	0.16	71.20
Green seaweeds (excluding microalgae)	6	5	26 682	0.08	81.04
Ulva	1	1	73	0.00	3.10
Caulerpa	1	1	1 090	0.00	100.00
Miscellaneous green seaweeds	4	3	25 519	0.07	86.56
Seaweeds nei	2	4	215 249	0.62	98.32

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Asia's cultivation of seaweeds and microalgae, 2019

Species group	Region = **Asia**; Scope =**Cultivation**; Year = **2019**					
	Number of ASFIS species items in the group being cultivated in the region	Number of countries in the region cultivating the species group	Cultivation production in the region (tonnes)	Share of the region's cultivation of all algae species (%)	Contribution to world cultivation of the species group (%)	Cultivation share in the region's total production of the species group (%)
Algae	**22**	**14**	**34 568 073**	**100.00**	**99.52**	**99.10**
Microalgae	**2**	**1**	**54 850**	**0.16**	**97.15**	**100.00**
Spirulina/Arthrospira	1	1	54 650	0.16	97.23	100.00
Green microalgae	1	1	200	0.00	80.50	100.00
Seaweeds	**20**	**14**	**34 513 223**	**99.84**	**99.52**	**99.10**
Brown seaweeds	5	4	16 382 409	47.39	99.93	99.67
Laminaria/Saccharina	1	4	12 273 519	35.51	100.00	99.62
Undaria	1	3	2 563 477	7.42	100.00	99.90
Sargassum	2	2	303 973	0.88	100.00	100.00
Lessonia						
Macrocystis						
Miscellaneous brown seaweeds	1	1	1 241 440	3.59	99.12	99.60
Red seaweeds	8	14	18 099 207	52.36	99.17	99.73
Carrageenan seaweeds	3	9	11 491 956	33.24	98.88	100.00
Agar seaweeds	2	6	3 617 828	10.47	99.40	100.00
Porphyra/Pyropia	2	5	2 984 123	8.63	100.00	100.00
Miscellaneous red seaweeds	1	1	5 300	0.02	99.91	9.76
Green seaweeds (excluding microalgae)	5	3	14 505	0.04	86.88	54.36
Ulva						
Caulerpa	1	1	1 090	0.00	100.00	100.00
Miscellaneous green seaweeds	4	2	13 415	0.04	99.73	52.57
Seaweeds nei	2	2	17 101	0.05	99.42	7.94

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Asia's wild collection of seaweeds and microalgae, 2019

Species group	Region = **Asia**; Scope = **Wild collection**; Year = **2019**					
	Number of ASFIS species items in the group being collected in the region	Number of countries in the region collecting the species group	Wild collection production in the region (tonnes)	Share of the region's wild collection of all algae species (%)	Contribution to world wild collection of the species group (%)	Wild collection share in the region's total production of the species group (%)
Algae	**12**	**7**	**313 527**	**100.00**	**28.94**	**0.90**
Microalgae						
Seaweeds	**12**	**7**	**313 527**	**100.00**	**28.94**	**0.90**
Brown seaweeds	3	3	54 009	17.23	7.99	0.33
Laminaria/Saccharina	1	2	46 515	14.84	33.65	0.38
Undaria	1	1	2 525	0.81	92.34	0.10
Sargassum						
Lessonia						
Macrocystis						
Miscellaneous brown seaweeds	1	2	4 969	1.58	2.25	0.40
Red seaweeds	4	5	49 193	15.69	25.92	0.27
Carrageenan seaweeds						
Agar seaweeds	2	2	43	0.01	0.08	0.00
Porphyra/Pyropia	1	2	148	0.05	32.92	0.00
Miscellaneous red seaweeds	1	3	49 001	15.63	69.06	90.24
Green seaweeds (excluding microalgae)	4	3	12 177	3.88	75.03	45.64
Ulva	1	1	73	0.02	36.36	100.00
Caulerpa						
Miscellaneous green seaweeds	3	2	12 104	3.86	75.51	47.43
Seaweeds nei	1	4	198 148	63.20	98.23	92.06

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

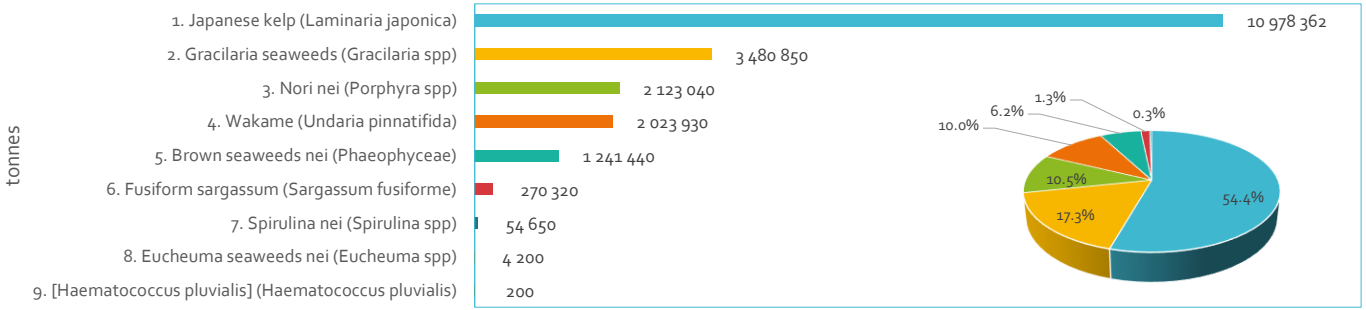
China

China's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **China**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**10**	**20 351 442**	**100.00**	**56.82**
Microalgae	**2**	**54 850**	**0.27**	**97.15**
Spirulina/Arthrospira	1	54 650	0.27	97.23
Green microalgae	1	200	0.00	80.50
Seaweeds	**8**	**20 296 592**	**99.73**	**56.75**
Brown seaweeds	4	14 514 052	71.32	85.03
Laminaria/Saccharina	1	10 978 362	53.94	88.45
Undaria	1	2 023 930	9.94	78.87
Sargassum	1	270 320	1.33	88.93
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds	1	1 241 440	6.10	84.28
Red seaweeds	3	5 608 090	27.56	30.41
Carrageenan seaweeds	1	4 200	0.02	0.04
Agar seaweeds	1	3 480 850	17.10	94.20
Porphyra/Pyropia	1	2 123 040	10.43	71.13
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei	1	174 450	0.86	79.69

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

China: species composition in algae cultivation in 2019 (20 176 992 tonnes)



China: species composition in algae wild collection in 2019 (174 450 tonnes)

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

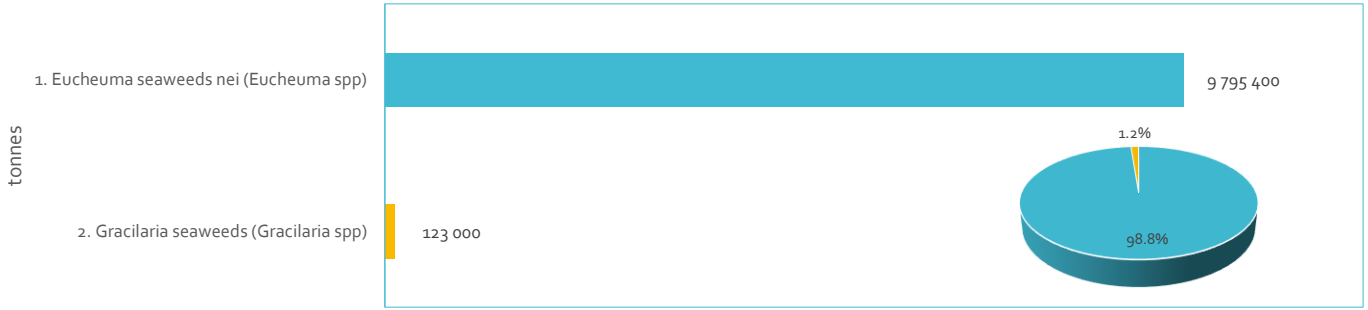
Indonesia

Indonesia's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Indonesia**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**3**	**9 962 900**	**100.00**	**27.81**
Microalgae				
Seaweeds	**3**	**9 962 900**	**100.00**	**27.86**
Brown seaweeds				
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds				
Red seaweeds	3	9 962 900	100.00	54.03
Carrageenan seaweeds	1	9 795 400	98.32	83.83
Agar seaweeds	1	123 000	1.23	3.33
Porphyra/Pyropia				
Miscellaneous red seaweeds	1	44 500	0.45	58.35
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Indonesia: species composition in algae cultivation in 2019 (9 918 400 tonnes)



Indonesia: species composition in algae wild collection in 2019 (44 500 tonnes)

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

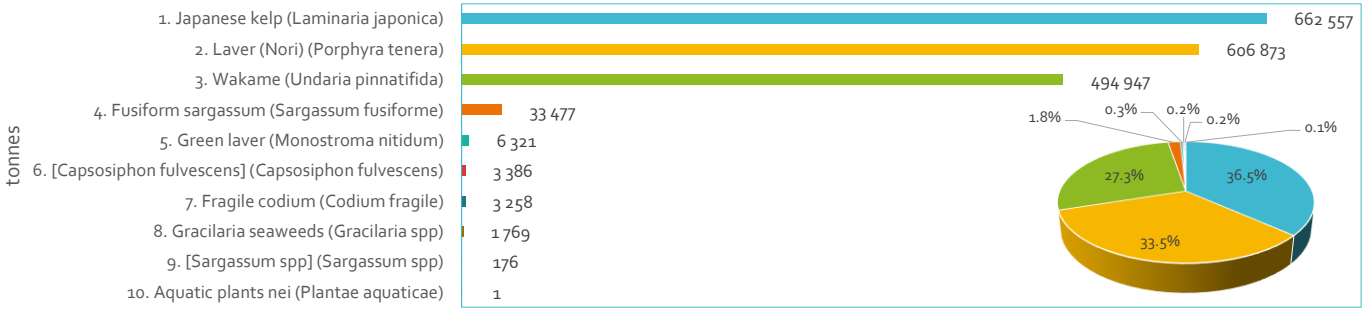
Republic of Korea

Republic of Korea's cultivation and wild collection of seaweeds and microalgae, 2019

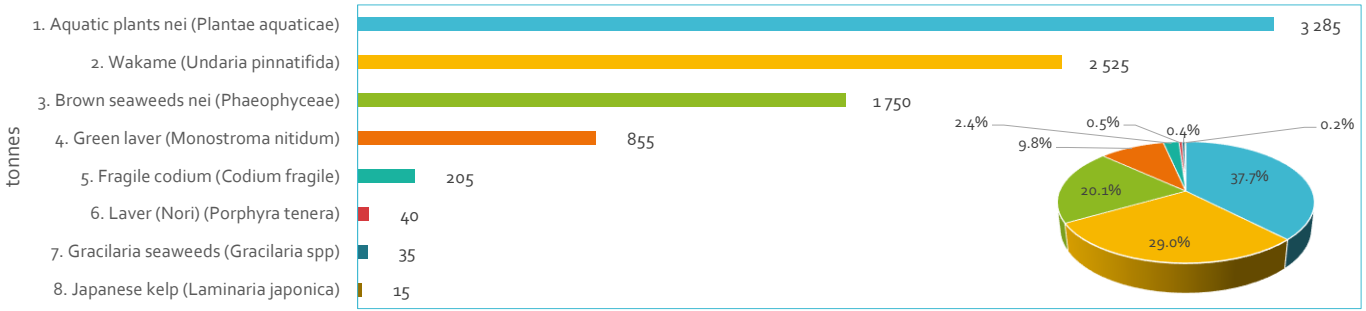
Species group	Country/territory = **Republic of Korea**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**11**	**1 821 475**	**100.00**	**5.09**
Microalgae				
Seaweeds	**11**	**1 821 475**	**100.00**	**5.09**
Brown seaweeds	5	1 195 447	65.63	7.00
Laminaria/Saccharina	1	662 572	36.38	5.34
Undaria	1	497 472	27.31	19.38
Sargassum	2	33 653	1.85	11.07
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds	1	1 750	0.10	0.12
Red seaweeds	2	608 717	33.42	3.30
Carrageenan seaweeds				
Agar seaweeds	1	1 804	0.10	0.05
Porphyra/Pyropia	1	606 913	33.32	20.34
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)	3	14 025	0.77	42.60
Ulva				
Caulerpa				
Miscellaneous green seaweeds	3	14 025	0.77	47.57
Seaweeds nei	1	3 286	0.18	1.50

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Republic of Korea: species composition in algae cultivation in 2019 (1 812 765 tonnes)



Republic of Korea: species composition in algae wild collection in 2019 (8 710 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

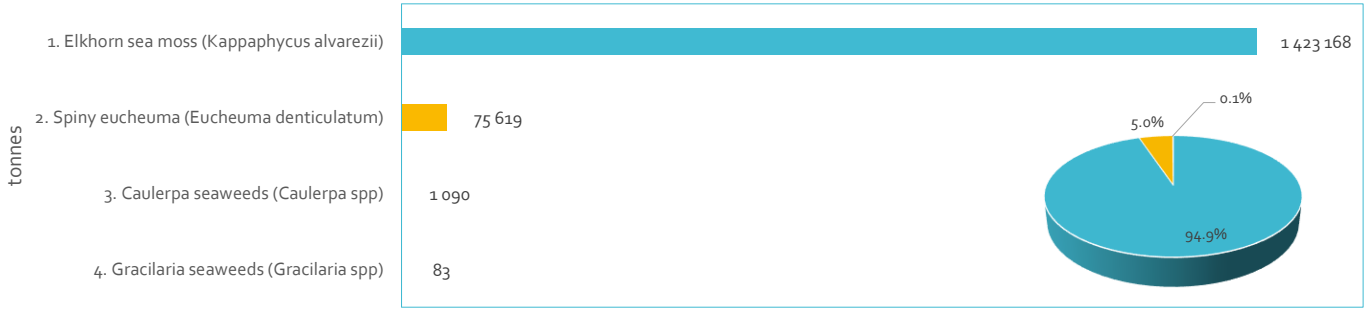
Philippines

Philippines' cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Philippines**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**5**	**1 500 326**	**100.00**	**4.19**
Microalgae				
Seaweeds	**5**	**1 500 326**	**100.00**	**4.20**
Brown seaweeds				
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds				
Red seaweeds	4	1 499 236	99.93	8.13
Carrageenan seaweeds	2	1 498 788	99.90	12.83
Agar seaweeds	1	83	0.01	0.00
Porphyra/Pyropia				
Miscellaneous red seaweeds	1	365	0.02	0.48
Green seaweeds (excluding microalgae)	1	1 090	0.07	3.31
Ulva				
Caulerpa	1	1 090	0.07	100.00
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Philippines: species composition in algae cultivation in 2019 (1 499 961 tonnes)



Philippines: species composition in algae wild collection in 2019 (365 tonnes)

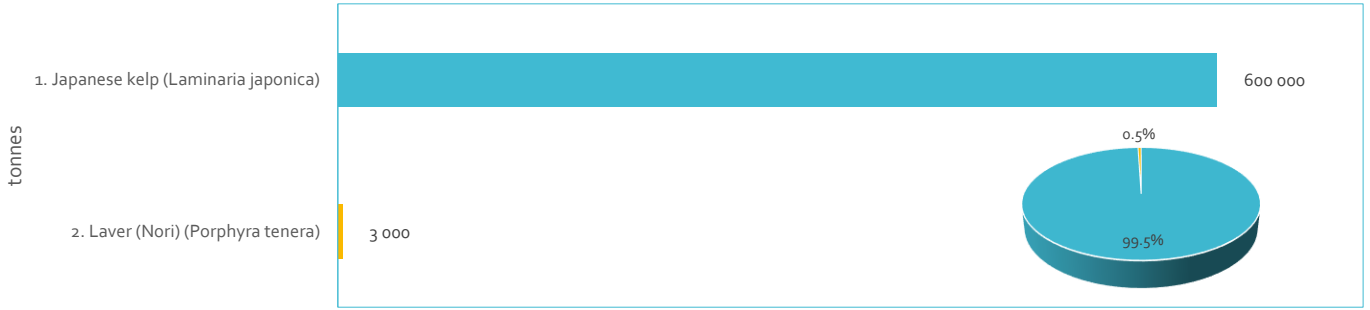
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Democratic People's Republic of Korea

Democratic People's Republic of Korea's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Democratic People's Republic of Korea**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**2**	**603 000**	**100.00**	**1.68**
Microalgae				
Seaweeds	**2**	**603 000**	**100.00**	**1.69**
Brown seaweeds	1	600 000	99.50	3.52
Laminaria/Saccharina	1	600 000	99.50	4.83
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds				
Red seaweeds	1	3 000	0.50	0.02
Carrageenan seaweeds				
Agar seaweeds				
Porphyra/Pyropia	1	3 000	0.50	0.10
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).



No data on wild collection production

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

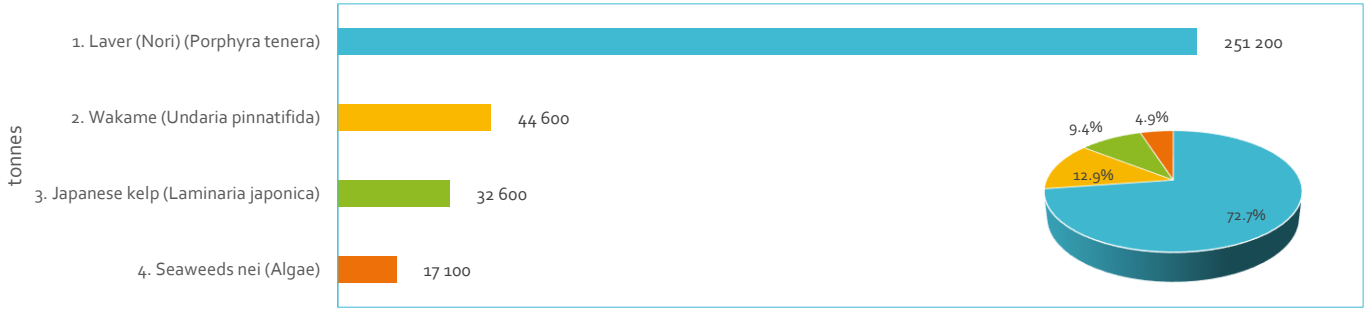
Japan

Japan's cultivation and wild collection of seaweeds and microalgae, 2019

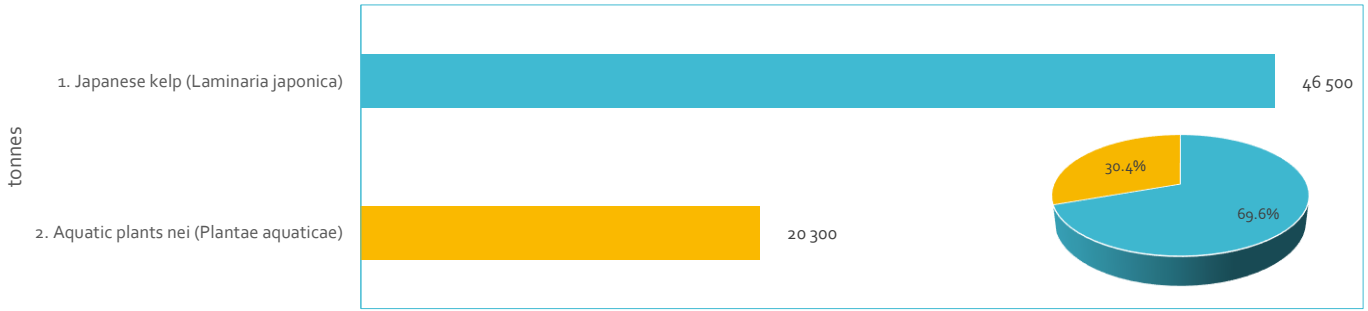
Species group	Country/territory = **Japan**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**5**	**412 300**	**100.00**	**1.15**
Microalgae				
Seaweeds	**5**	**412 300**	**100.00**	**1.15**
Brown seaweeds	2	123 700	30.00	0.72
Laminaria/Saccharina	1	79 100	19.19	0.64
Undaria	1	44 600	10.82	1.74
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds				
Red seaweeds	1	251 200	60.93	1.36
Carrageenan seaweeds				
Agar seaweeds				
Porphyra/Pyropia	1	251 200	60.93	8.42
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei	2	37 400	9.07	17.08

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Japan: species composition in algae cultivation in 2019 (345 500 tonnes)



Japan: species composition in algae wild collection in 2019 (66 800 tonnes)



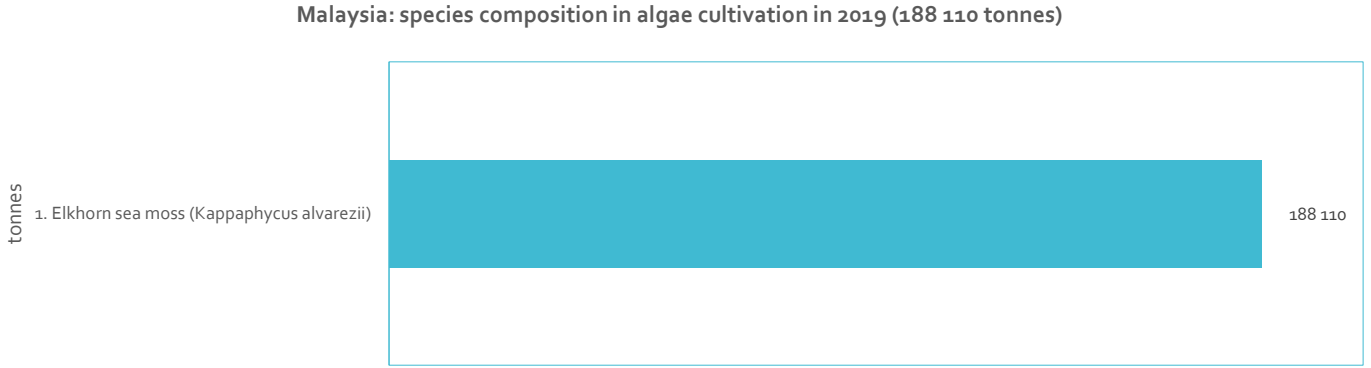
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Malaysia

Malaysia's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Malaysia**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**1**	**188 110**	**100.00**	**0.53**
Microalgae				
Seaweeds	**1**	**188 110**	**100.00**	**0.53**
Brown seaweeds				
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds				
Red seaweeds	1	188 110	100.00	1.02
Carrageenan seaweeds	1	188 110	100.00	1.61
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

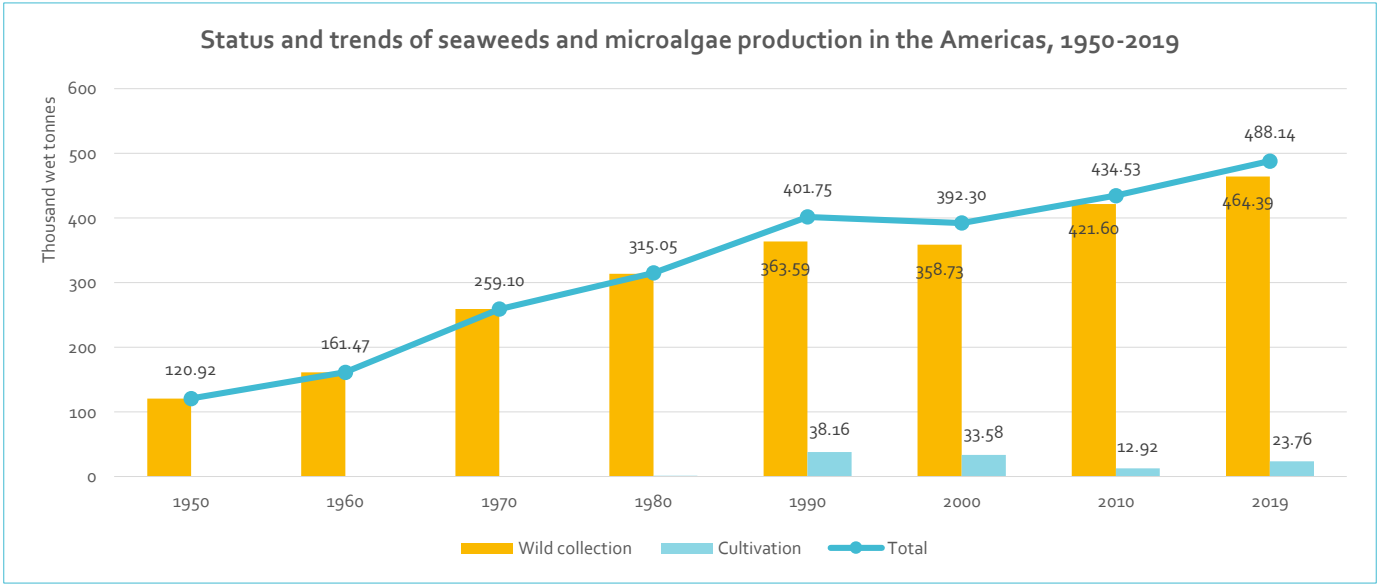


No data on wild collection production

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Americas

Americas – seaweeds and microalgae production



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

The Americas' cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Region = **Americas**; Scope =**Cultivation and wild collection**; Year = **2019**				
	Number of ASFIS species items in the group being cultivated and/or collected in the region	Number of countries in the region cultivating and/or collecting the species group	Total cultivation and wild production in the region (tonnes)	Share of the region's total algae production (%)	Contribution to world production of species group (%)
Algae	**24**	**11**	**488 144**	**100.00**	**1.36**
Microalgae	**2**	**1**	**903**	**0.18**	**1.60**
Spirulina/Arthrospira	1	1	861	0.18	1.53
Green microalgae	1	1	42	0.01	16.91
Seaweeds	**22**	**11**	**487 241**	**99.82**	**1.36**
Brown seaweeds	7	5	341 528	69.96	2.00
Laminaria/Saccharina					
Undaria					
Sargassum					
Lessonia	2	2	247 312	50.66	100.00
Macrocystis	2	3	66 779	13.68	100.00
Miscellaneous brown seaweeds	3	4	27 437	5.62	1.86
Red seaweeds	12	9	142 099	29.11	0.77
Carrageenan seaweeds	8	8	63 835	13.08	0.55
Agar seaweeds	2	2	75 931	15.56	2.05
Porphyra/Pyropia	1	1	294	0.06	0.01
Miscellaneous red seaweeds	1	2	2 039	0.42	2.67
Green seaweeds (excluding microalgae)	1	1	3 125	0.64	9.49
Ulva					
Caulerpa					
Miscellaneous green seaweeds	1	1	3 125	0.64	10.60
Seaweeds nei	2	2	489	0.10	0.22

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

The Americas' cultivation of seaweeds and microalgae, 2019

Species group	Region = **Americas**; Scope = **Cultivation**; Year = **2019**					
	Number of ASFIS species items in the group being cultivated in the region	Number of countries in the region cultivating the species group	Cultivation production in the region (tonnes)	Share of the region's cultivation of all algae species (%)	Contribution to world cultivation of the species group (%)	Cultivation share in the region's total production of the species group (%)
Algae	**10**	**9**	**23 759**	**100.00**	**0.07**	**4.87**
Microalgae	**2**	**1**	**903**	**3.80**	**1.60**	**100.00**
Spirulina/Arthrospira	1	1	861	3.62	1.53	100.00
Green microalgae	1	1	42	0.18	16.91	100.00
Seaweeds	**8**	**9**	**22 856**	**96.20**	**0.07**	**4.69**
Brown seaweeds	2	3	253	1.06	0.00	0.07
Laminaria/Saccharina						
Undaria						
Sargassum						
Lessonia						
Macrocystis	1	1	2	0.01	100.00	0.00
Miscellaneous brown seaweeds	1	2	251	1.06	0.02	0.91
Red seaweeds	5	7	22 581	95.04	0.12	15.89
Carrageenan seaweeds	3	6	874	3.68	0.01	1.37
Agar seaweeds	1	2	21 702	91.34	0.60	28.58
Porphyra/Pyropia						
Miscellaneous red seaweeds	1	1	5	0.02	0.09	0.25
Green seaweeds (excluding microalgae)						
Ulva						
Caulerpa						
Miscellaneous green seaweeds						
Seaweeds nei	2	2	17 101	0.05	99.42	7.94

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

The Americas' wild collection of seaweeds and microalgae, 2019

Species group	Region = **Americas**; Scope = **Wild collection**; Year = **2019**					
	Number of ASFIS species items in the group being collected in the region	Number of countries in the region collecting the species group	Wild collection production in the region (tonnes)	Share of the region's wild collection of all algae species (%)	Contribution to world wild collection of the species group (%)	Wild collection share in the region's total production of the species group (%)
Algae	**18**	**5**	**464 385**	**100.00**	**42.86**	**95.13**
Microalgae						
Seaweeds	**18**	**5**	**464 385**	**100.00**	**42.86**	**95.31**
Brown seaweeds	7	5	341 275	73.49	50.51	99.93
Laminaria/Saccharina						
Undaria						
Sargassum						
Lessonia	2	2	247 312	53.26	100.00	100.00
Macrocystis	2	3	66 777	14.38	100.00	100.00
Miscellaneous brown seaweeds	3	3	27 186	5.85	12.32	99.09
Red seaweeds	9	3	119 518	25.74	62.98	84.11
Carrageenan seaweeds	5	2	62 961	13.56	100.00	98.63
Agar seaweeds	2	1	54 229	11.68	97.89	71.42
Porphyra/Pyropia	1	1	294	0.06	65.29	100.00
Miscellaneous red seaweeds	1	1	2 034	0.44	2.87	99.75
Green seaweeds (excluding microalgae)	1	1	3 125	0.67	19.25	100.00
Ulva						
Caulerpa						
Miscellaneous green seaweeds	1	1	3 125	0.67	19.50	100.00
Seaweeds nei	1	4	198 148	63.20	98.23	92.06

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

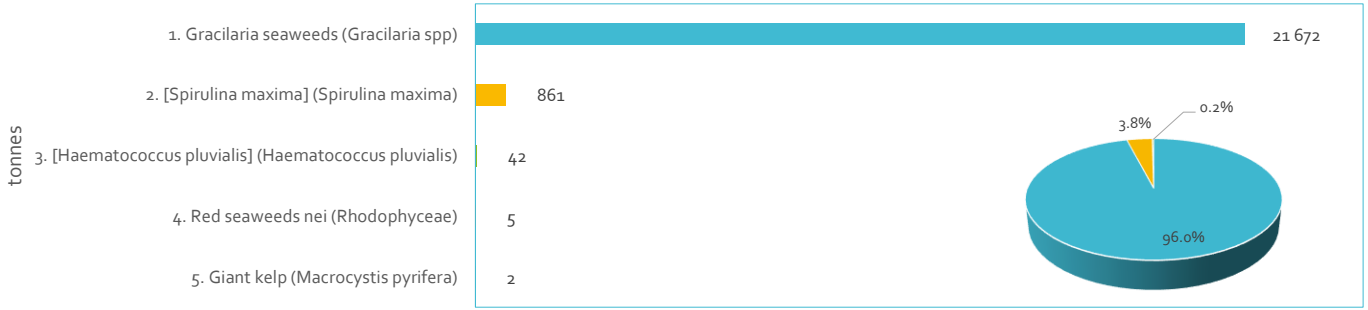
Chile

Chile's cultivation and wild collection of seaweeds and microalgae, 2019

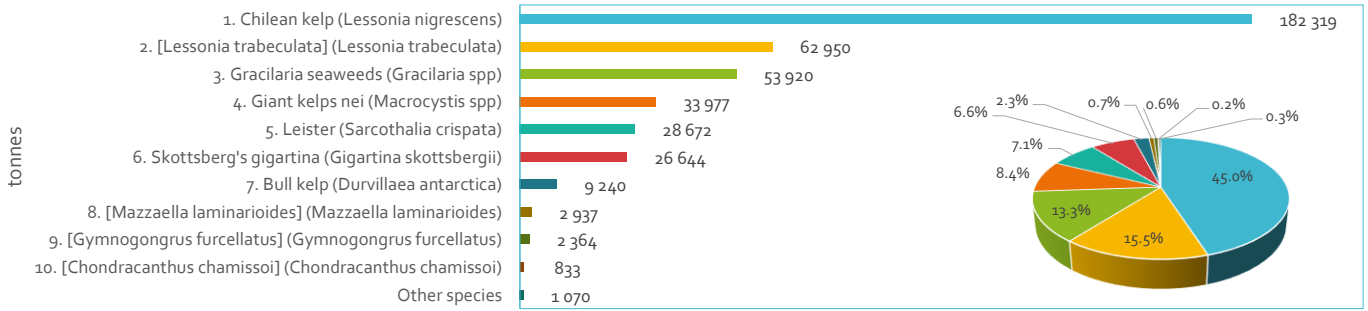
Species group	Country/territory = **Chile**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**17**	**427 508**	**100.00**	**1.19**
Microalgae	**2**	**903**	**0.21**	**1.60**
Spirulina/Arthrospira	1	861	0.20	1.53
Green microalgae	1	42	0.01	16.91
Seaweeds	**15**	**426 605**	**99.79**	**1.19**
Brown seaweeds	5	288 488	67.48	1.69
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia	2	245 269	57.37	99.17
Macrocystis	2	33 979	7.95	50.88
Miscellaneous brown seaweeds	1	9 240	2.16	0.63
Red seaweeds	9	137 650	32.20	0.75
Carrageenan seaweeds	5	61 450	14.37	0.53
Agar seaweeds	2	75 901	17.75	2.05
Porphyra/Pyropia	1	294	0.07	0.01
Miscellaneous red seaweeds	1	5	0.00	0.01
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei	1	467	0.11	0.21

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Chile: species composition in algae cultivation in 2019 (22 582 tonnes)



Chile: species composition in algae wild collection in 2019 (404 926 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

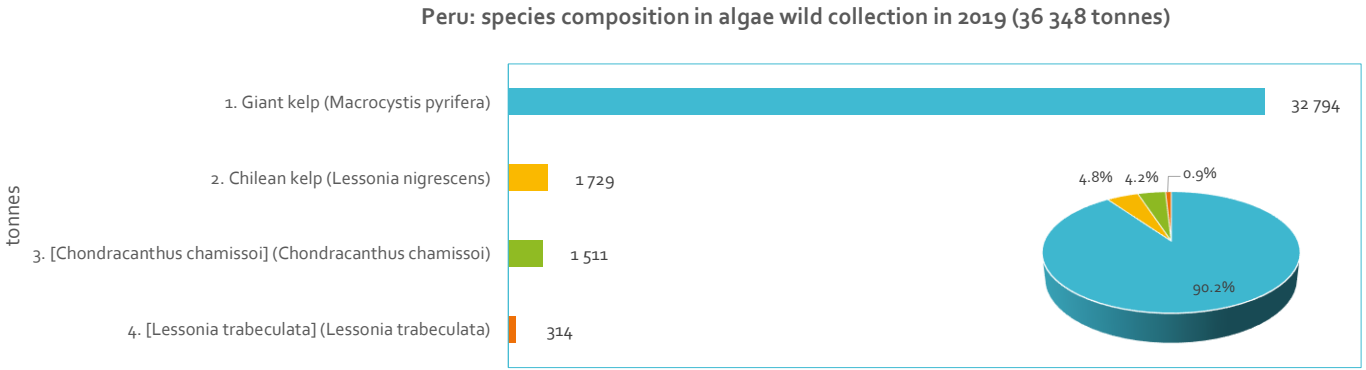
Peru

Peru's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Peru**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**4**	**36 348**	**100.00**	**0.10**
Microalgae				
Seaweeds	**4**	**36 348**	**100.00**	**0.10**
Brown seaweeds	3	34 837	95.84	0.20
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia	2	2 043	5.62	0.83
Macrocystis	1	32 794	90.22	49.11
Miscellaneous brown seaweeds				
Red seaweeds	1	1 511	4.16	0.01
Carrageenan seaweeds	1	1 511	4.16	0.01
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

No data on cultivation production



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

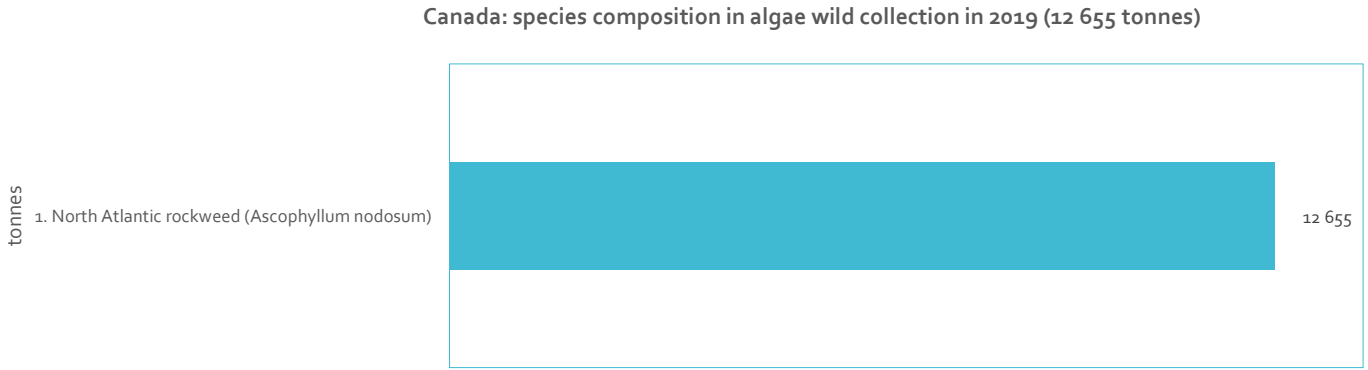
Canada

Canada's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Canada**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**1**	**12 655**	**100.00**	**0.04**
Microalgae				
Seaweeds	**1**	**12 655**	**100.00**	**0.04**
Brown seaweeds	1	12 655	100.00	0.07
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds	1	12 655	100.00	0.86
Red seaweeds				
Carrageenan seaweeds				
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

No data on cultivation production



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Mexico

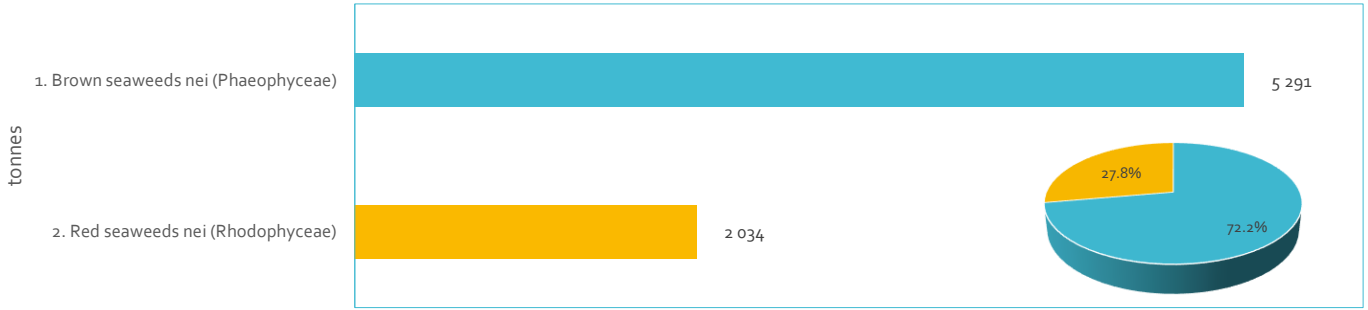
Mexico's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Mexico**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**2**	**7 336**	**100.00**	**0.02**
Microalgae				
Seaweeds	**2**	**7 336**	**100.00**	**0.02**
Brown seaweeds	1	5 301	72.27	0.03
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds	1	5 301	72.27	0.36
Red seaweeds	1	2 034	27.73	0.01
Carrageenan seaweeds				
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds	1	2 034	27.73	2.67
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Mexico: species composition in algae cultivation in 2019 (10 tonnes)

Mexico: species composition in algae wild collection in 2019 (7 326 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

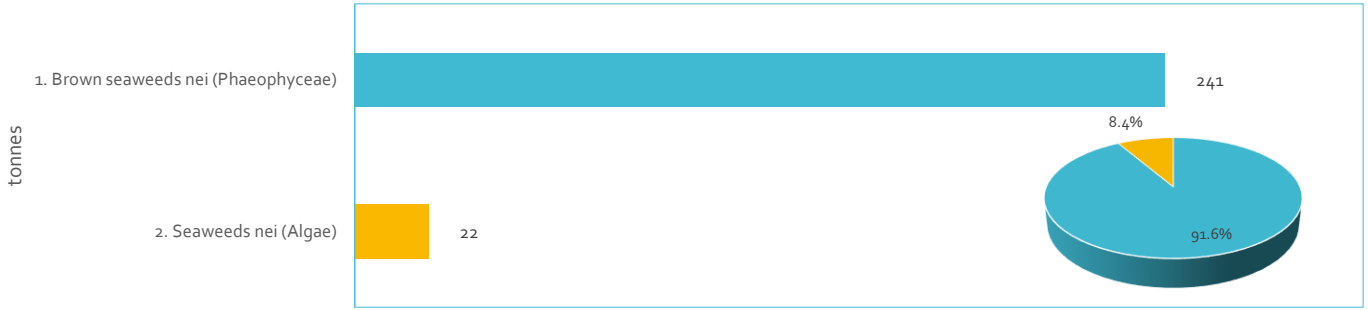
United States of America

United States of America's cultivation and wild collection of seaweeds and microalgae, 2019

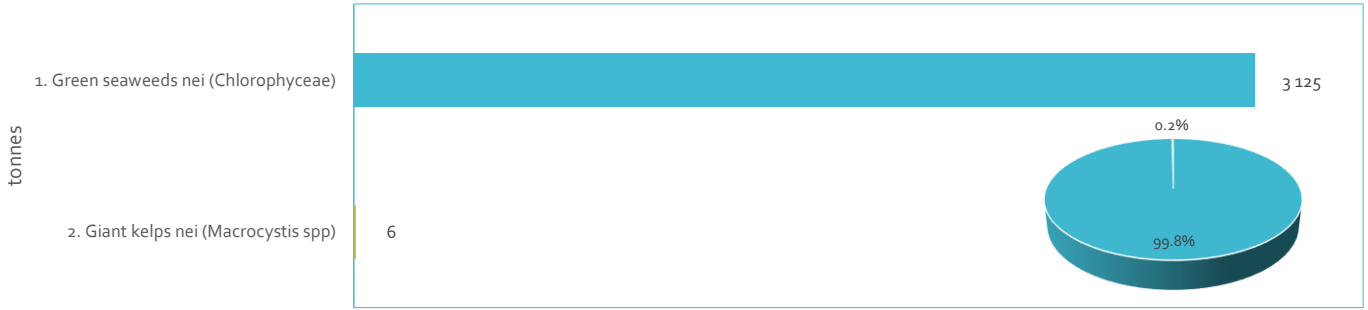
Species group	Country/territory = **United States of America**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**4**	**3 394**	**100.00**	**0.01**
Microalgae				
Seaweeds	**4**	**3 394**	**100.00**	**0.01**
Brown seaweeds	2	247	7.28	0.00
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis	1	6	0.18	0.01
Miscellaneous brown seaweeds	1	241	7.10	0.02
Red seaweeds				
Carrageenan seaweeds				
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)	1	3 125	92.07	9.49
Ulva				
Caulerpa				
Miscellaneous green seaweeds	1	3 125	92.07	10.60
Seaweeds nei	1	22	0.65	0.01

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

United States of America: species composition in algae cultivation in 2019 (263 tonnes)



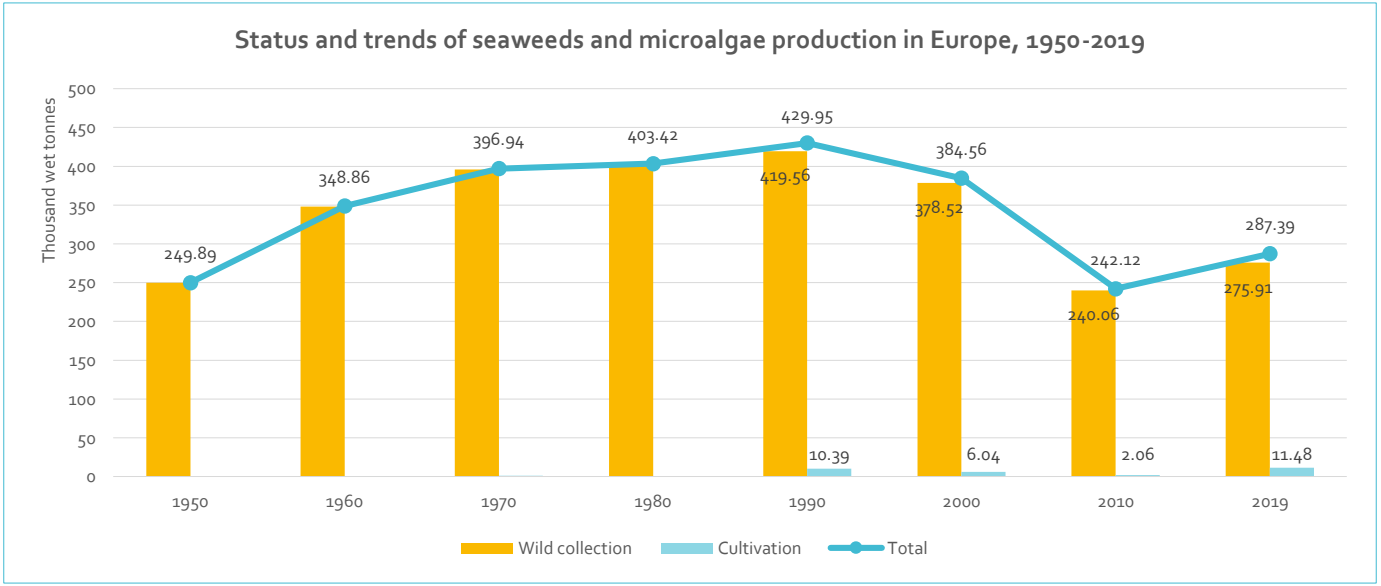
United States of America: species composition in algae wild collection in 2019 (3 131 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Europe

Europe – seaweeds and microalgae production



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Europe's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Region = **Europe**; Scope = **Cultivation and wild collection**; Year = **2019**				
	Number of ASFIS species items in the group being cultivated and/or collected in the region	Number of countries in the region cultivating and/or collecting the species group	Total cultivation and wild production in the region (tonnes)	Share of the region's total algae production (%)	Contribution to world production of species group (%)
Algae	**25**	**12**	**287 386**	**100.00**	**0.80**
Microalgae	**5**	**4**	**353**	**0.12**	**0.63**
Spirulina/Arthrospira	2	4	347	0.12	0.62
Green microalgae	3	2	6	0.00	2.59
Seaweeds	**20**	**10**	**287 033**	**99.88**	**0.80**
Brown seaweeds	9	7	281 194	97.85	1.65
Laminaria/Saccharina	3	7	91 953	32.00	0.74
Undaria	2	2	314	0.11	0.01
Sargassum					
Lessonia					
Macrocystis					
Miscellaneous brown seaweeds	4	7	188 926	65.74	12.83
Red seaweeds	7	8	2 201	0.77	0.01
Carrageenan seaweeds					
Agar seaweeds	3	2	390	0.14	0.01
Porphyra/Pyropia	1	1	8	0.00	0.00
Miscellaneous red seaweeds	3	8	1 803	0.63	2.36
Green seaweeds (excluding microalgae)	2	4	964	0.34	2.93
Ulva	1	1	128	0.04	5.43
Caulerpa					
Miscellaneous green seaweeds	1	3	836	0.29	2.84
Seaweeds nei	2	3	2 674	0.93	1.22

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Europe's cultivation of seaweeds and microalgae, 2019

Species group	Region = **Europe**; Scope =**Cultivation**; Year = **2019**					
	Number of ASFIS species items in the group being cultivated in the region	Number of countries in the region cultivating the species group	Cultivation production in the region (tonnes)	Share of the region's cultivation of all algae species (%)	Contribution to world cultivation of the species group (%)	Cultivation share in the region's total production of the species group (%)
Algae	**12**	**9**	**11 478**	**100.00**	**0.03**	**3.99**
Microalgae	**5**	**4**	**353**	**3.08**	**0.63**	**100.00**
Spirulina/Arthrospira	2	4	347	3.02	0.62	100.00
Green microalgae	3	2	6	0.06	2.59	100.00
Seaweeds	**7**	**7**	**11 125**	**96.92**	**0.03**	**3.88**
Brown seaweeds	4	6	11 012	95.94	0.07	3.92
Laminaria/Saccharina	1	3	229	1.99	0.00	0.25
Undaria	1	1	105	0.91	0.00	33.37
Sargassum						
Lessonia						
Macrocystis						
Miscellaneous brown seaweeds	2	4	10 678	93.03	0.85	5.65
Red seaweeds	1	1	0	0.00	0.00	0.01
Carrageenan seaweeds						
Agar seaweeds	1	1	0	0.00	0.00	0.03
Porphyra/Pyropia						
Miscellaneous red seaweeds						
Green seaweeds (excluding microalgae)	1	2	36	0.31	0.21	3.72
Ulva						
Caulerpa						
Miscellaneous green seaweeds	1	2	36	0.31	0.27	4.29
Seaweeds nei	1	2	77	0.67	0.45	2.88

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Europe's wild collection of seaweeds and microalgae, 2019

Species group	Region = **Europe**; Scope = **Wild collection**; Year = **2019**					
	Number of ASFIS species items in the group being collected in the region	Number of countries in the region collecting the species group	Wild collection production in the region (tonnes)	Share of the region's wild collection of all algae species (%)	Contribution to world wild collection of the species group (%)	Wild collection share in the region's total production of the species group (%)
Algae	**17**	**9**	**275 908**	**100.00**	**25.47**	**96.01**
Microalgae						
Seaweeds	**17**	**9**	**275 908**	**100.00**	**25.47**	**96.12**
Brown seaweeds	7	6	270 182	97.92	39.99	96.08
Laminaria/Saccharina	2	5	91 724	33.24	66.35	99.75
Undaria	1	1	210	0.08	7.66	66.63
Sargassum						
Lessonia						
Macrocystis						
Miscellaneous brown seaweeds	4	6	178 248	64.60	80.80	94.35
Red seaweeds	6	8	2 201	0.80	1.16	99.99
Carrageenan seaweeds						
Agar seaweeds	2	2	390	0.14	0.70	99.97
Porphyra/Pyropia	1	1	8	0.00	1.79	100.00
Miscellaneous red seaweeds	3	8	1 803	0.65	2.54	100.00
Green seaweeds (excluding microalgae)	2	3	928	0.34	5.72	96.28
Ulva	1	1	128	0.05	63.64	100.00
Caulerpa						
Miscellaneous green seaweeds	1	2	800	0.29	4.99	95.71
Seaweeds nei	2	3	2 597	0.94	1.29	97.12

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Norway

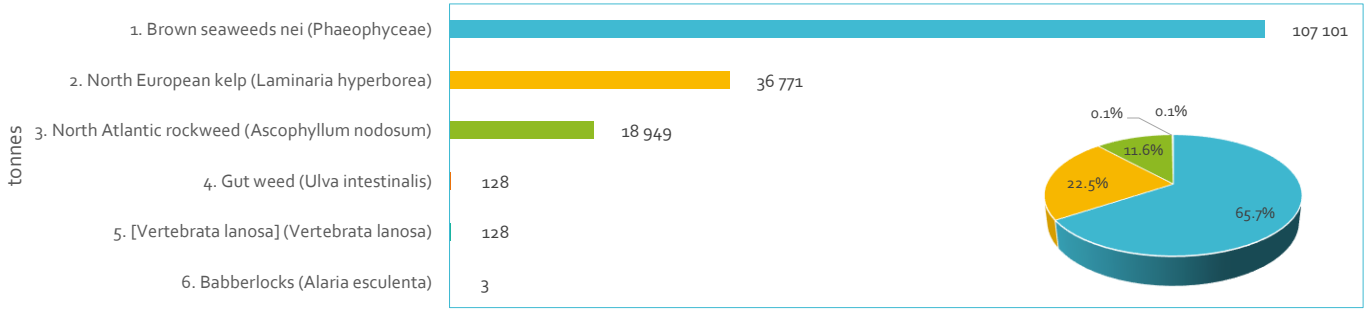
Norway's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Norway**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**7**	**163 197**	**100.00**	**0.46**
Microalgae				
Seaweeds	**7**	**163 197**	**100.00**	**0.46**
Brown seaweeds	5	162 941	99.84	0.95
Laminaria/Saccharina	2	36 844	22.58	0.30
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds	3	126 097	77.27	8.56
Red seaweeds	1	128	0.08	0.00
Carrageenan seaweeds				
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds	1	128	0.08	0.17
Green seaweeds (excluding microalgae)	1	128	0.08	0.39
Ulva	1	128	0.08	5.43
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Norway: species composition in algae cultivation in 2019 (117 tonnes)

Norway: species composition in algae wild collection in 2019 (163 080 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

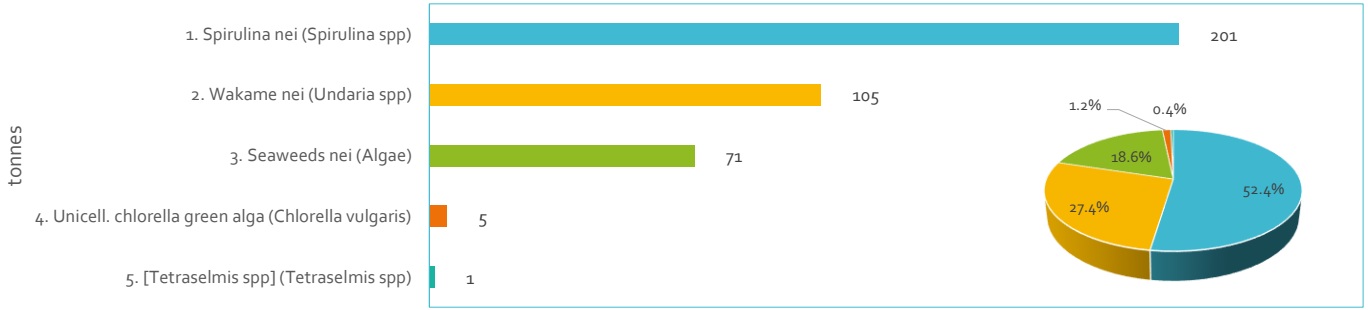
France

France's cultivation and wild collection of seaweeds and microalgae, 2019

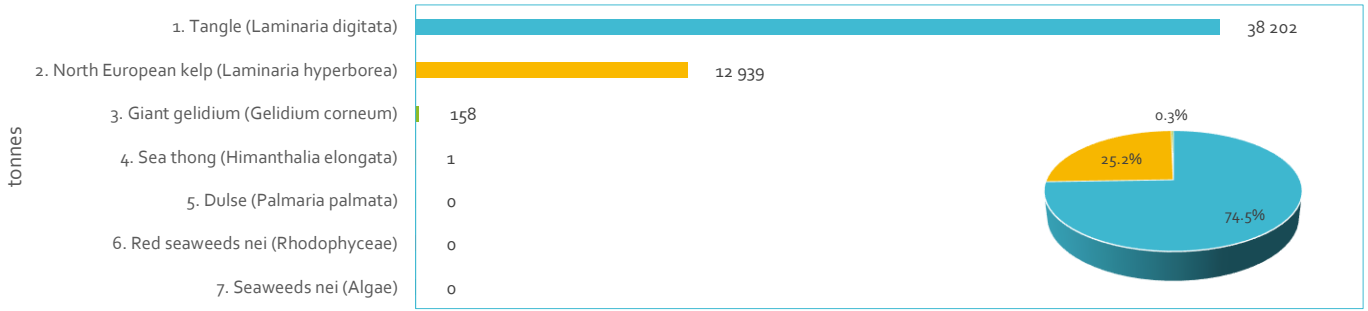
Species group	Country/territory = **France**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**11**	**51 683**	**100.00**	**0.14**
Microalgae	**3**	**207**	**0.40**	**0.37**
Spirulina/Arthrospira	1	201	0.39	0.36
Green microalgae	2	6	0.01	2.50
Seaweeds	**8**	**51 476**	**99.60**	**0.14**
Brown seaweeds	4	51 247	99.16	0.30
Laminaria/Saccharina	2	51 141	98.95	0.41
Undaria	1	105	0.20	0.00
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds	1	1	0.00	0.00
Red seaweeds	3	158	0.31	0.00
Carrageenan seaweeds				
Agar seaweeds	1	158	0.31	0.00
Porphyra/Pyropia				
Miscellaneous red seaweeds	2	0	0.00	0.00
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei	1	71	0.14	0.03

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

France: species composition in algae cultivation in 2019 (383 tonnes)



France: species composition in algae wild collection in 2019 (51 300 tonnes)



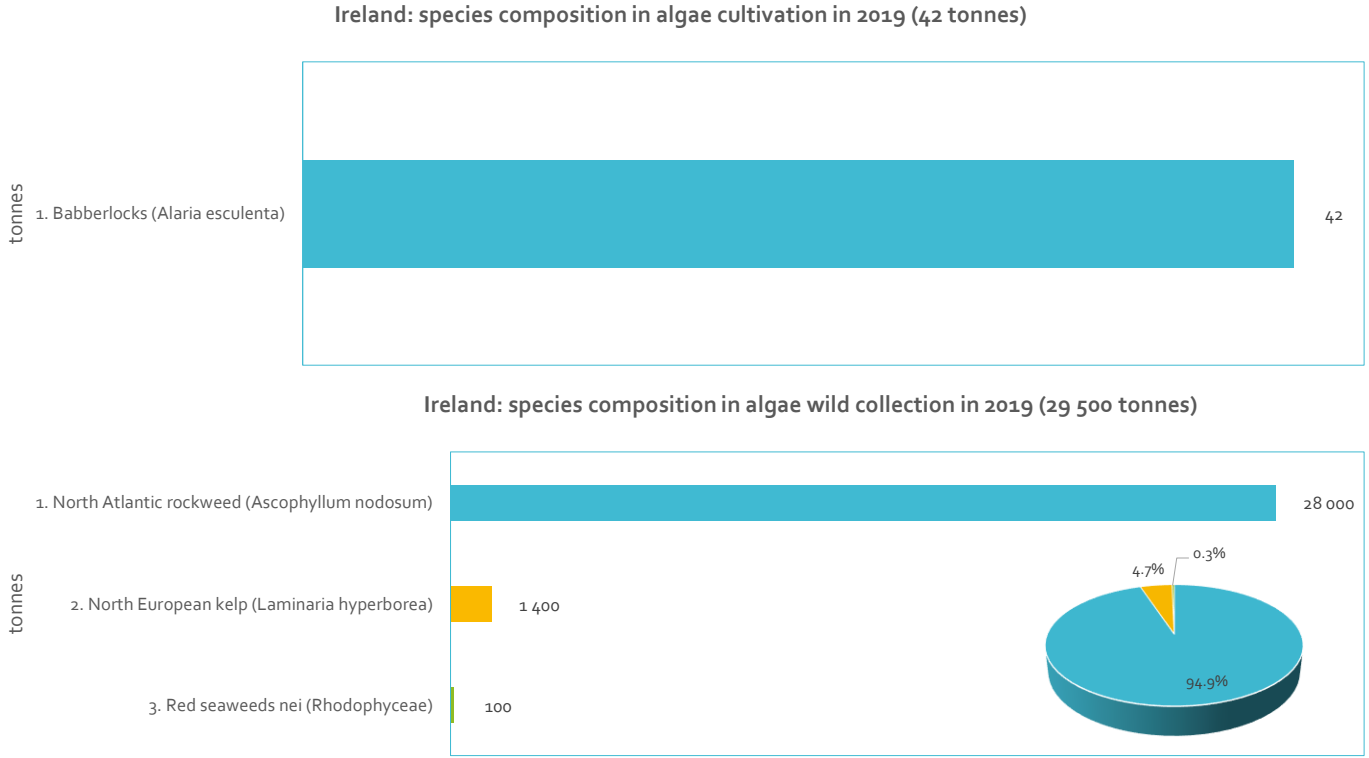
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Ireland

Ireland's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory =**Ireland**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**4**	**29 542**	**100.00**	**0.08**
Microalgae				
Seaweeds	**4**	**29 542**	**100.00**	**0.08**
Brown seaweeds	3	29 442	99.66	0.17
Laminaria/Saccharina	1	1 400	4.74	0.01
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds	2	28 042	94.92	1.90
Red seaweeds	1	100	0.34	0.00
Carrageenan seaweeds				
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds	1	100	0.34	0.13
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Russian Federation

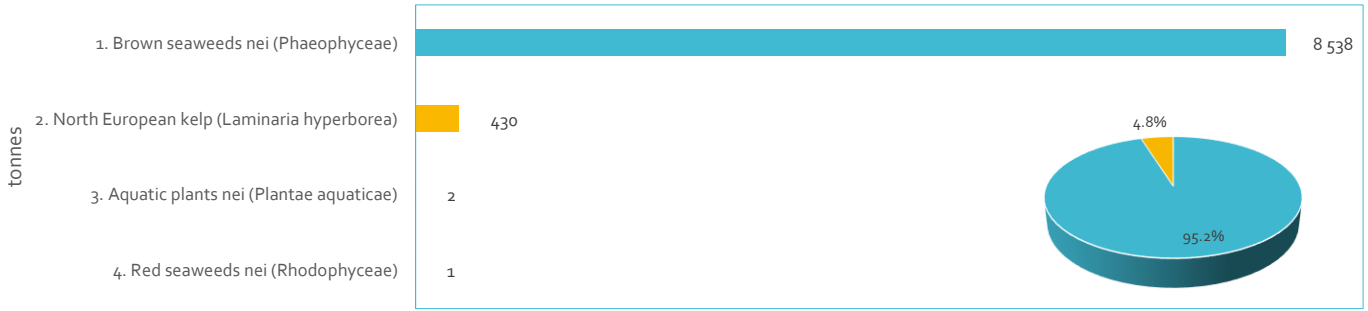
Russian Federation's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Russian Federation**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**4**	**19 544**	**100.00**	**0.05**
Microalgae				
Seaweeds	**4**	**19 544**	**100.00**	**0.05**
Brown seaweeds	2	19 541	99.98	0.11
Laminaria/Saccharina	1	430	2.20	0.00
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds	1	19 111	97.78	1.30
Red seaweeds	1	1	0.01	0.00
Carrageenan seaweeds				
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds	1	1	0.01	0.00
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei	1	2	0.01	0.00

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Russian Federation: species composition in algae cultivation in 2019 (10 573 tonnes)

Russian Federation: species composition in algae wild collection in 2019 (8 971 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

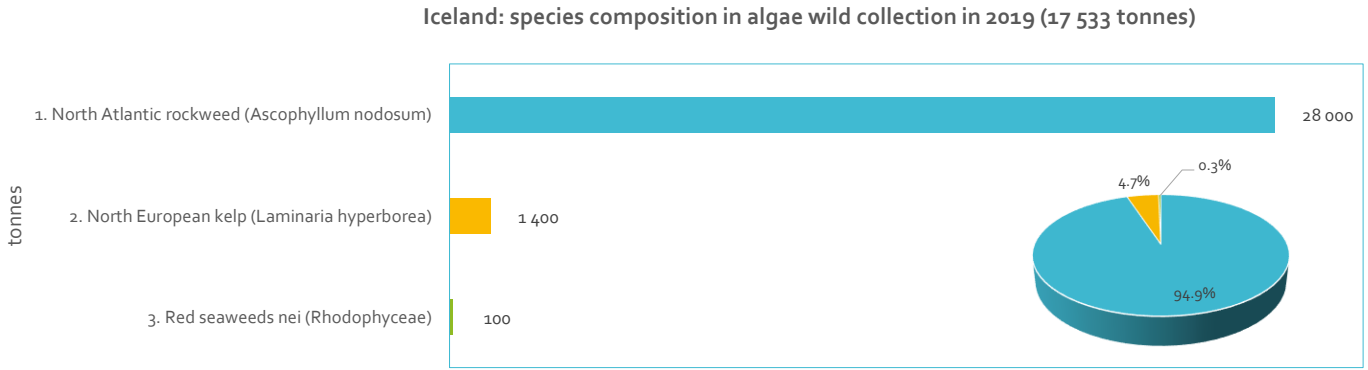
Iceland

Iceland's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory =**Iceland**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**3**	**17 533**	**100.00**	**0.05**
Microalgae				
Seaweeds	**3**	**17 533**	**100.00**	**0.05**
Brown seaweeds	3	17 533	100.00	0.10
Laminaria/Saccharina	2	1 982	11.30	0.02
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds	1	15 551	88.70	1.06
Red seaweeds				
Carrageenan seaweeds				
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

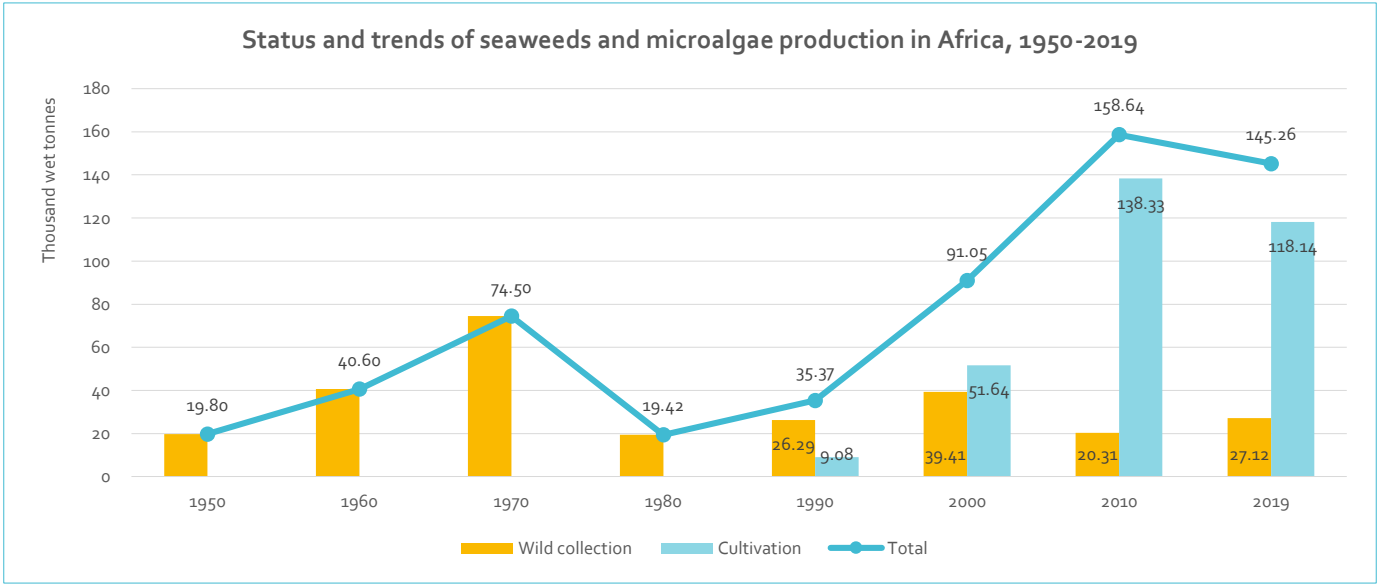
No data on cultivation production



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Africa

Africa – seaweeds and microalgae production



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Africa's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Region = **Africa**; Scope = **Cultivation and wild collection**; Year = **2019**				
	Number of ASFIS species items in the group being cultivated and/or collected in the region	Number of countries in the region cultivating and/or collecting the species group	Total cultivation and wild production in the region (tonnes)	Share of the region's total algae production (%)	Contribution to world production of species group (%)
Algae	**11**	**10**	**145 259**	**100.00**	**0.41**
Microalgae	**2**	**4**	**350**	**0.24**	**0.62**
Spirulina/Arthrospira	2	4	350	0.24	0.62
Green microalgae					
Seaweeds	**9**	**7**	**144 909**	**99.76**	**0.41**
Brown seaweeds	1	1	8 265	5.69	0.05
Laminaria/Saccharina					
Undaria					
Sargassum					
Lessonia					
Macrocystis					
Miscellaneous brown seaweeds	1	1	8 265	5.69	0.56
Red seaweeds	7	7	134 489	92.59	0.73
Carrageenan seaweeds	3	4	115 334	79.40	0.99
Agar seaweeds	3	3	1 038	0.71	0.03
Porphyra/Pyropia					
Miscellaneous red seaweeds	1	2	18 118	12.47	23.76
Green seaweeds (excluding microalgae)	1	1	2 155	1.48	6.54
Ulva	1	1	2 155	1.48	91.46
Caulerpa					
Miscellaneous green seaweeds					
Seaweeds nei					

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Africa's cultivation of seaweeds and microalgae, 2019

Species group	Region = **Africa**; Scope = **Cultivation**; Year = **2019**					
	Number of ASFIS species items in the group being cultivated in the region	Number of countries in the region cultivating the species group	Cultivation production in the region (tonnes)	Share of the region's cultivation of all algae species (%)	Contribution to world cultivation of the species group (%)	Cultivation share in the region's total production of the species group (%)
Algae	**8**	**10**	**118 141**	**100.00**	**0.34**	**81.33**
Microalgae	**2**	**4**	**350**	**0.30**	**0.62**	**100.00**
Spirulina/Arthrospira	2	4	350	0.30	0.62	100.00
Green microalgae						
Seaweeds	**6**	**7**	**117 791**	**99.70**	**0.34**	**81.29**
Brown seaweeds						
Laminaria/Saccharina						
Undaria						
Sargassum						
Lessonia						
Macrocystis						
Miscellaneous brown seaweeds						
Red seaweeds	5	6	115 636	97.88	0.63	85.98
Carrageenan seaweeds	3	4	115 334	97.62	0.99	100.00
Agar seaweeds	2	2	303	0.26	0.01	29.18
Porphyra/Pyropia						
Miscellaneous red seaweeds						
Green seaweeds (excluding microalgae)	1	1	2 155	1.82	12.90	100.00
Ulva	1	1	2 155	1.82	100.00	100.00
Caulerpa						
Miscellaneous green seaweeds						
Seaweeds nei						

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Africa's wild collection of seaweeds and microalgae, 2019

Species group	Region = **Africa**; Scope = **Wild collection**; Year = **2019**					
	Number of ASFIS species items in the group being collected in the region	Number of countries in the region collecting the species group	Wild collection production in the region (tonnes)	Share of the region's wild collection of all algae species (%)	Contribution to world wild collection of the species group (%)	Wild collection share in the region's total production of the species group (%)
Algae	**3**	**3**	**27 118**	**100.00**	**2.50**	**18.67**
Microalgae						
Seaweeds	**3**	**3**	**27 118**	**100.00**	**2.50**	**18.71**
Brown seaweeds	1	1	8 265	30.48	1.22	100.00
Laminaria/Saccharina						
Undaria						
Sargassum						
Lessonia						
Macrocystis						
Miscellaneous brown seaweeds	1	1	8 265	30.48	3.75	100.00
Red seaweeds	2	3	18 853	69.52	9.93	14.02
Carrageenan seaweeds						
Agar seaweeds	1	1	735	2.71	1.33	70.82
Porphyra/Pyropia						
Miscellaneous red seaweeds	1	2	18 118	66.81	25.53	100.00
Green seaweeds (excluding microalgae)						
Ulva						
Caulerpa						
Miscellaneous green seaweeds						
Seaweeds nei						

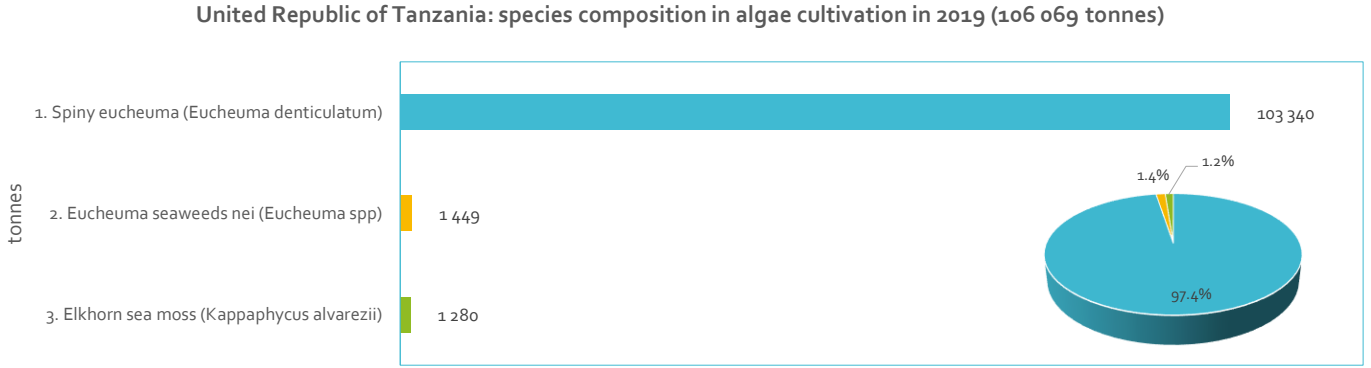
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

United Republic of Tanzania

United Republic of Tanzania's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **United Republic of Tanzania**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**3**	**106 069**	**100.00**	**0.30**
Microalgae				
Seaweeds	**3**	**106 069**	**100.00**	**0.30**
Brown seaweeds				
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds				
Red seaweeds	3	106 069	100.00	0.58
Carrageenan seaweeds	3	106 069	100.00	0.91
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).



No data on wild collection production

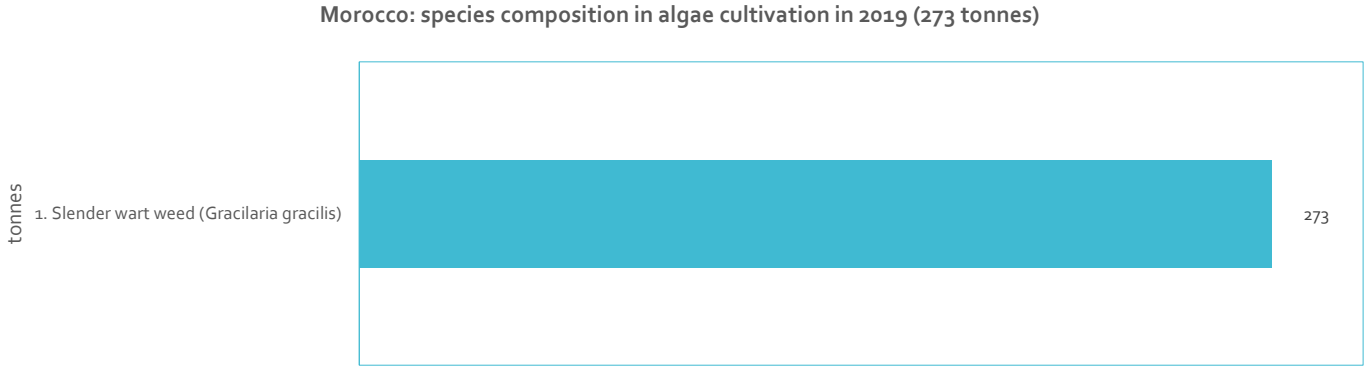
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

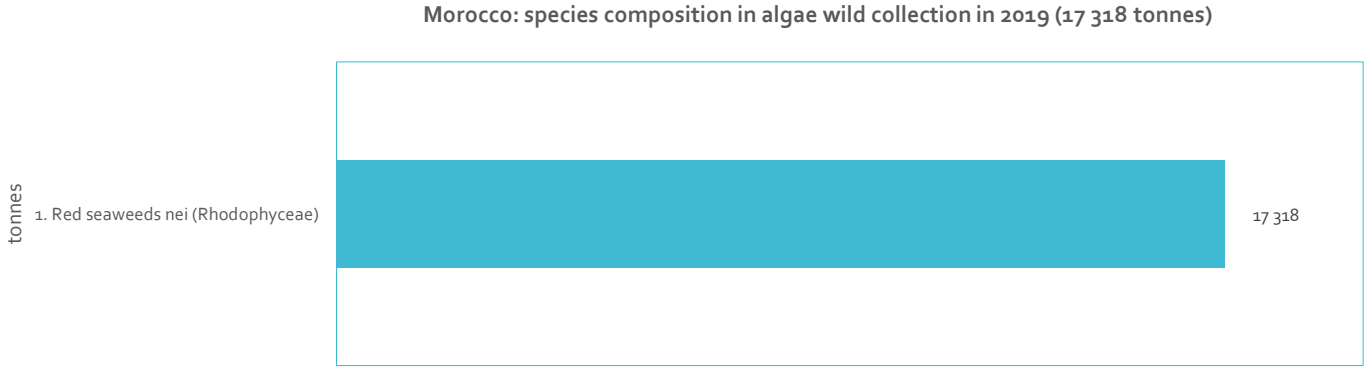
Morocco

Morocco's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Morocco;** Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**2**	**17 591**	**100.00**	**0.05**
Microalgae				
Seaweeds	**2**	**17 591**	**100.00**	**0.05**
Brown seaweeds				
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds				
Red seaweeds	2	17 591	100.00	0.10
Carrageenan seaweeds				
Agar seaweeds	1	273	1.55	0.01
Porphyra/Pyropia				
Miscellaneous red seaweeds	1	17 318	98.45	22.71
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).





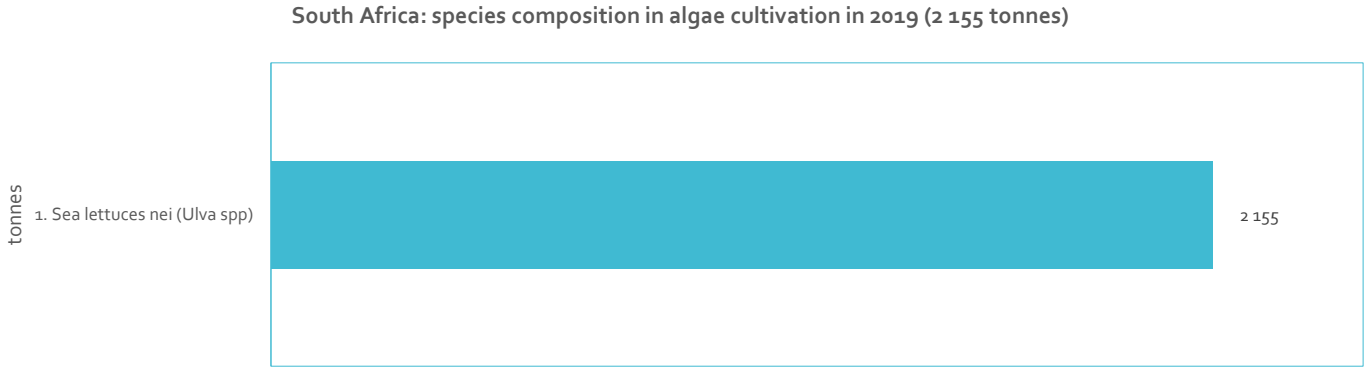
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

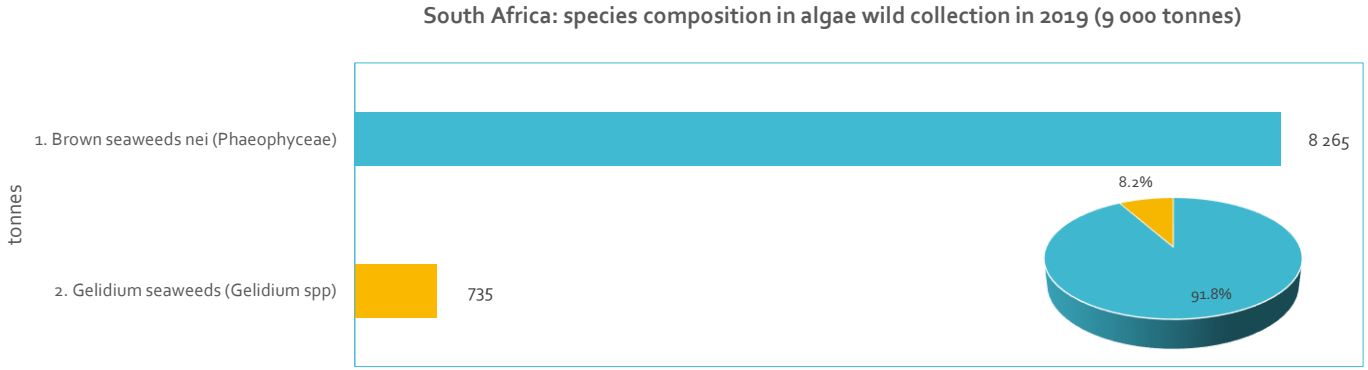
South Africa

South Africa's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **South Africa;** Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**3**	**11 155**	**100.00**	**0.03**
Microalgae				
Seaweeds	**3**	**11 155**	**100.00**	**0.03**
Brown seaweeds	1	8 265	74.10	0.05
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds	1	8 265	74.10	0.56
Red seaweeds	1	735	6.59	0.00
Carrageenan seaweeds				
Agar seaweeds	1	735	6.59	0.02
Porphyra/Pyropia				
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)	1	2 155	19.32	6.54
Ulva	1	2 155	19.32	91.46
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).





Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Madagascar

Madagascar's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Madagascar**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**2**	**9 665**	**100.00**	**0.03**
Microalgae				
Seaweeds	**2**	**9 665**	**100.00**	**0.03**
Brown seaweeds				
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds				
Red seaweeds	2	9 665	100.00	0.05
Carrageenan seaweeds	1	8 865	91.72	0.08
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds	1	800	8.28	1.05
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

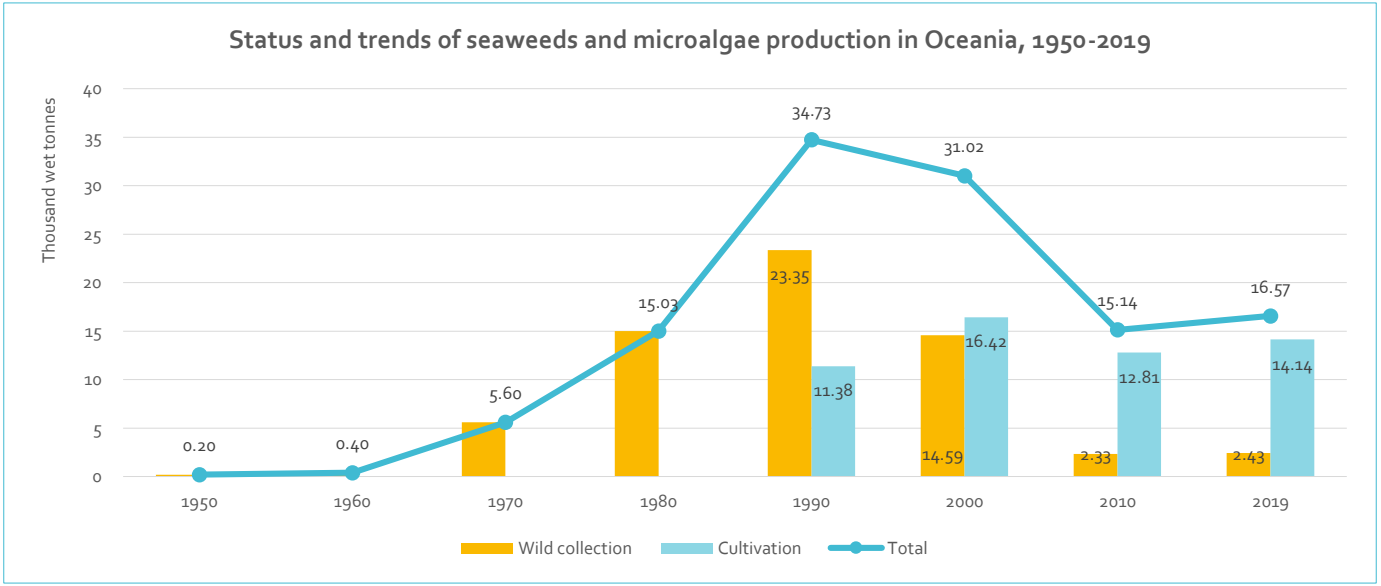
Madagascar: species composition in algae cultivation in 2019 (8 865 tonnes)

Madagascar: species composition in algae wild collection in 2019 (800 tonnes)

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Oceania

Oceania – seaweeds and microalgae production



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Oceania's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Region = **Oceania**; Scope = **Cultivation and wild collection**; Year = **2019**				
	Number of ASFIS species items in the group being cultivated and/or collected in the region	Number of countries in the region cultivating and/or collecting the species group	Total cultivation and wild production in the region (tonnes)	Share of the region's total algae production (%)	Contribution to world production of species group (%)
Algae	**7**	**7**	**16 572**	**100.00**	**0.05**
Microalgae					
Seaweeds	**7**	**7**	**16 572**	**100.00**	**0.05**
Brown seaweeds	2	2	2 013	12.15	0.01
Laminaria/Saccharina					
Undaria					
Sargassum					
Lessonia					
Macrocystis					
Miscellaneous brown seaweeds	2	2	2 013	12.15	0.14
Red seaweeds	3	5	14 051	84.78	0.08
Carrageenan seaweeds	2	4	14 050	84.78	0.12
Agar seaweeds	1	1	1	0.00	0.00
Porphyra/Pyropia					
Miscellaneous red seaweeds					
Green seaweeds (excluding microalgae)	1	1	0.01	0.00	0.00
Ulva	1	1	0.01	0.00	0.00
Caulerpa					
Miscellaneous green seaweeds					
Seaweeds nei	1	1	509	3.07	0.23

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Oceania's cultivation of seaweeds and microalgae, 2019

Species group	Region = **Oceania**; Scope = **Cultivation**; Year = **2019**					
	Number of ASFIS species items in the group being cultivated in the region	Number of countries in the region cultivating the species group	Cultivation production in the region (tonnes)	Share of the region's cultivation of all algae species (%)	Contribution to world cultivation of the species group (%)	Cultivation share in the region's total production of the species group (%)
Algae	**3**	**5**	**14 140**	**100.00**	**0.04**	**85.32**
Microalgae						
Seaweeds	**3**	**5**	**14 140**	**100.00**	**0.04**	**85.32**
Brown seaweeds	1	1	90	0.64	0.00	4.47
Laminaria/Saccharina						
Undaria						
Sargassum						
Lessonia						
Macrocystis						
Miscellaneous brown seaweeds	1	1	90	0.64	0.01	4.47
Red seaweeds	2	4	14 050	99.36	0.08	100.00
Carrageenan seaweeds	2	4	14 050	99.36	0.12	100.00
Agar seaweeds						
Porphyra/Pyropia						
Miscellaneous red seaweeds						
Green seaweeds (excluding microalgae)						
Ulva						
Caulerpa						
Miscellaneous green seaweeds						
Seaweeds nei						

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Oceania's wild collection of seaweeds and microalgae, 2019

Species group	Region = **Oceania**; Scope = **Wild collection**; Year = **2019**					
	Number of ASFIS species items in the group being collected in the region	Number of countries in the region collecting the species group	Wild collection production in the region (tonnes)	Share of the region's wild collection of all algae species (%)	Contribution to world wild collection of the species group (%)	Wild collection share in the region's total production of the species group (%)
Algae	**4**	**2**	**2 432**	**100.00**	**0.22**	**14.68**
Microalgae						
Seaweeds	**4**	**2**	**2 432**	**100.00**	**0.22**	**14.68**
Brown seaweeds	1	1	1 923	79.06	0.28	95.53
Laminaria/Saccharina						
Undaria						
Sargassum						
Lessonia						
Macrocystis						
Miscellaneous brown seaweeds	1	1	1 923	79.06	0.87	95.53
Red seaweeds	1	1	1	0.03	0.00	0.00
Carrageenan seaweeds						
Agar seaweeds	1	1	1	0.03	0.00	100.00
Porphyra/Pyropia						
Miscellaneous red seaweeds						
Green seaweeds (excluding microalgae)	1	1	0.01	0.00	0.00	100.00
Ulva	1	1	0.01	0.00	0.00	100.00
Caulerpa						
Miscellaneous green seaweeds						
Seaweeds nei	1	1	509	20.92	0.25	100.00

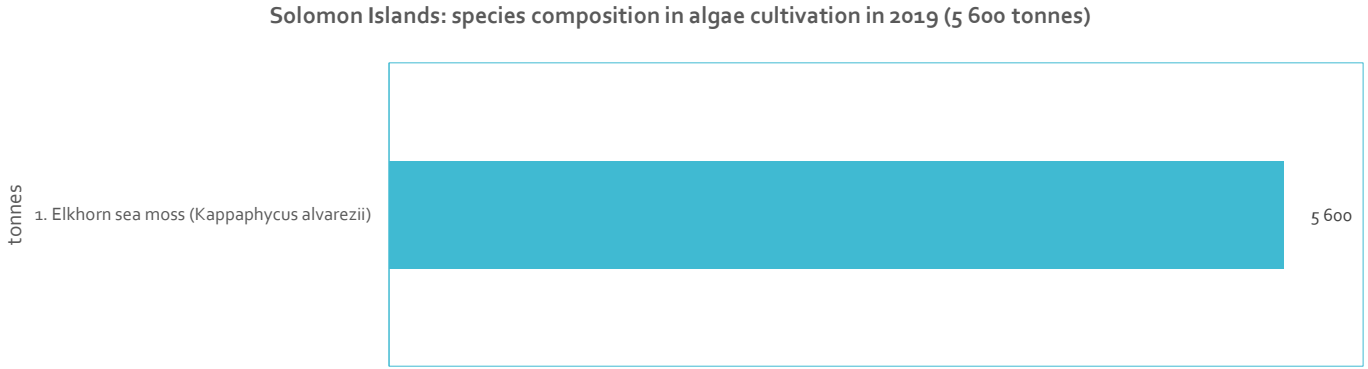
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Solomon Islands

Solomon Islands' cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Solomon Islands**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**1**	**5 600**	**100.00**	**0.02**
Microalgae				
Seaweeds	**1**	**5 600**	**100.00**	**0.02**
Brown seaweeds				
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds				
Red seaweeds	1	5 600	100.00	0.03
Carrageenan seaweeds	1	5 600	100.00	0.05
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).



No data on wild collection production

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Papua New Guinea

Papua New Guinea's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Papua New Guinea**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**1**	**4 300**	**100.00**	**0.01**
Microalgae				
Seaweeds	**1**	**4 300**	**100.00**	**0.01**
Brown seaweeds				
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds				
Red seaweeds	1	4 300	100.00	0.02
Carrageenan seaweeds	1	4 300	100.00	0.04
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Papua New Guinea: species composition in algae cultivation in 2019 (4 300 tonnes)

No data on wild collection production

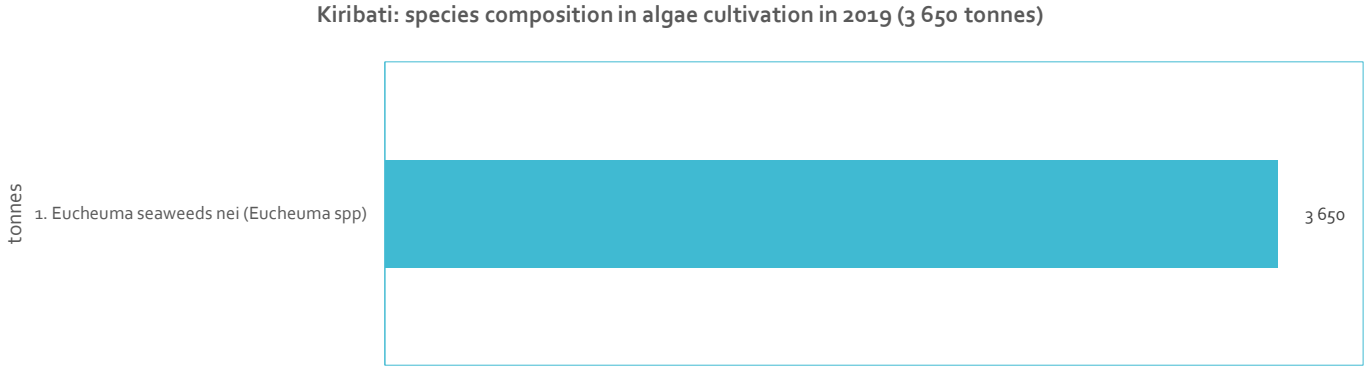
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Kiribati

Kiribati's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Kiribati**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**1**	**3 650**	**100.00**	**0.01**
Microalgae				
Seaweeds	**1**	**3 650**	**100.00**	**0.01**
Brown seaweeds				
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds				
Red seaweeds	1	3 650	100.00	0.02
Carrageenan seaweeds	1	3 650	100.00	0.03
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).



No data on wild collection production

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

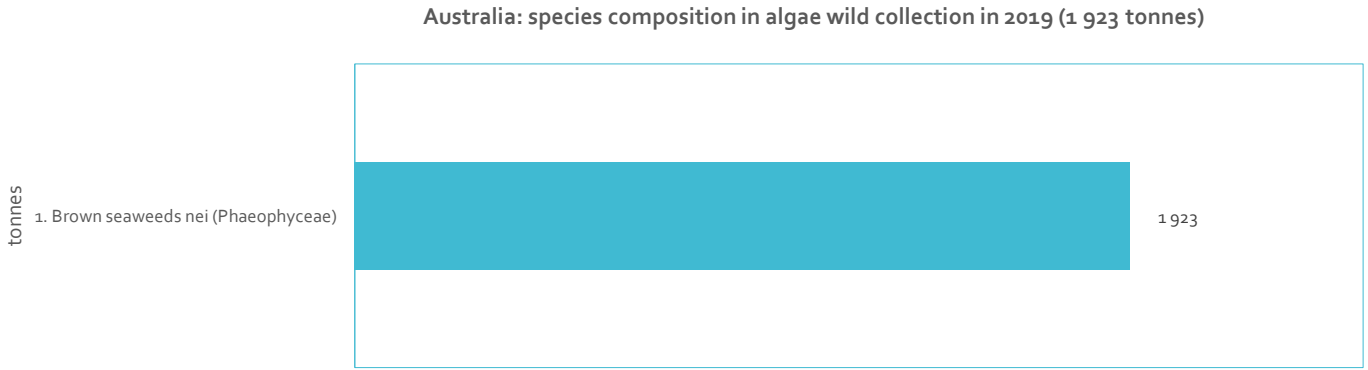
Australia

Australia's cultivation and wild collection of seaweeds and microalgae, 2019

Species group	Country/territory = **Australia**; Scope = **Cultivation and wild collection**; Year = **2019**			
	Number of ASFIS species items in the group being cultivated and/or collected in the country/territory	Total cultivation and wild collection in the country/territory (tonnes)	Share of the country/territory's total algae production (%)	Contribution to world production of the species group (%)
Algae	**1**	**1 923**	**100.00**	**0.01**
Microalgae				
Seaweeds	**1**	**1 923**	**100.00**	**0.01**
Brown seaweeds	1	1 923	100.00	0.01
Laminaria/Saccharina				
Undaria				
Sargassum				
Lessonia				
Macrocystis				
Miscellaneous brown seaweeds	1	1 923	100.00	0.13
Red seaweeds				
Carrageenan seaweeds				
Agar seaweeds				
Porphyra/Pyropia				
Miscellaneous red seaweeds				
Green seaweeds (excluding microalgae)				
Ulva				
Caulerpa				
Miscellaneous green seaweeds				
Seaweeds nei				

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

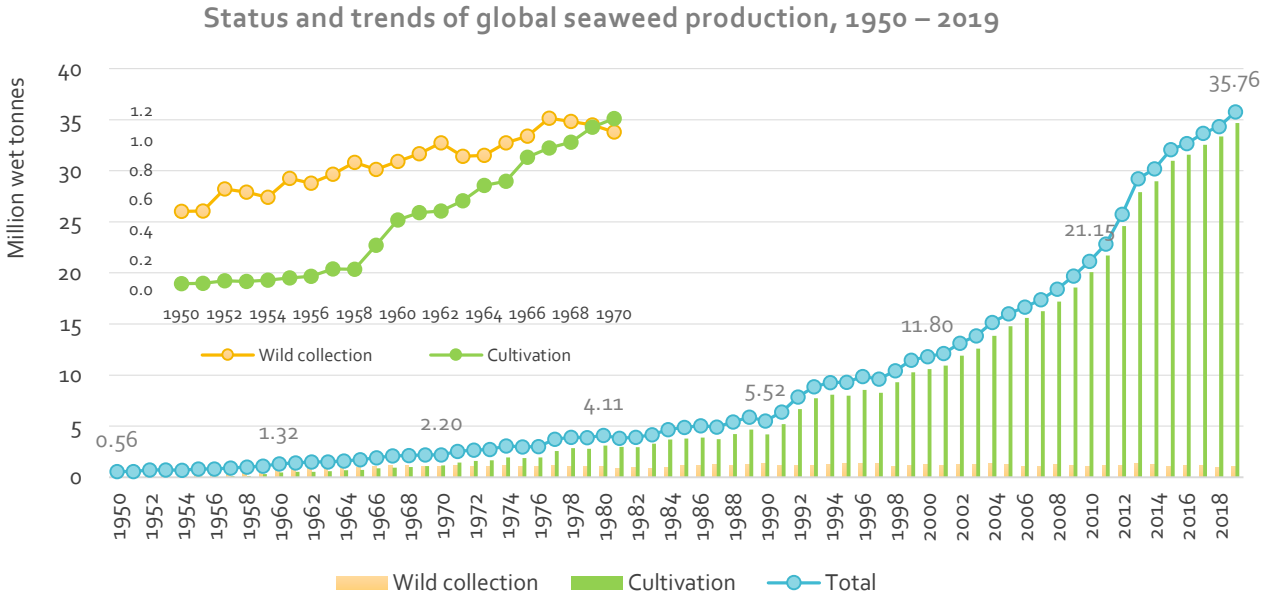
No data on cultivation production



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

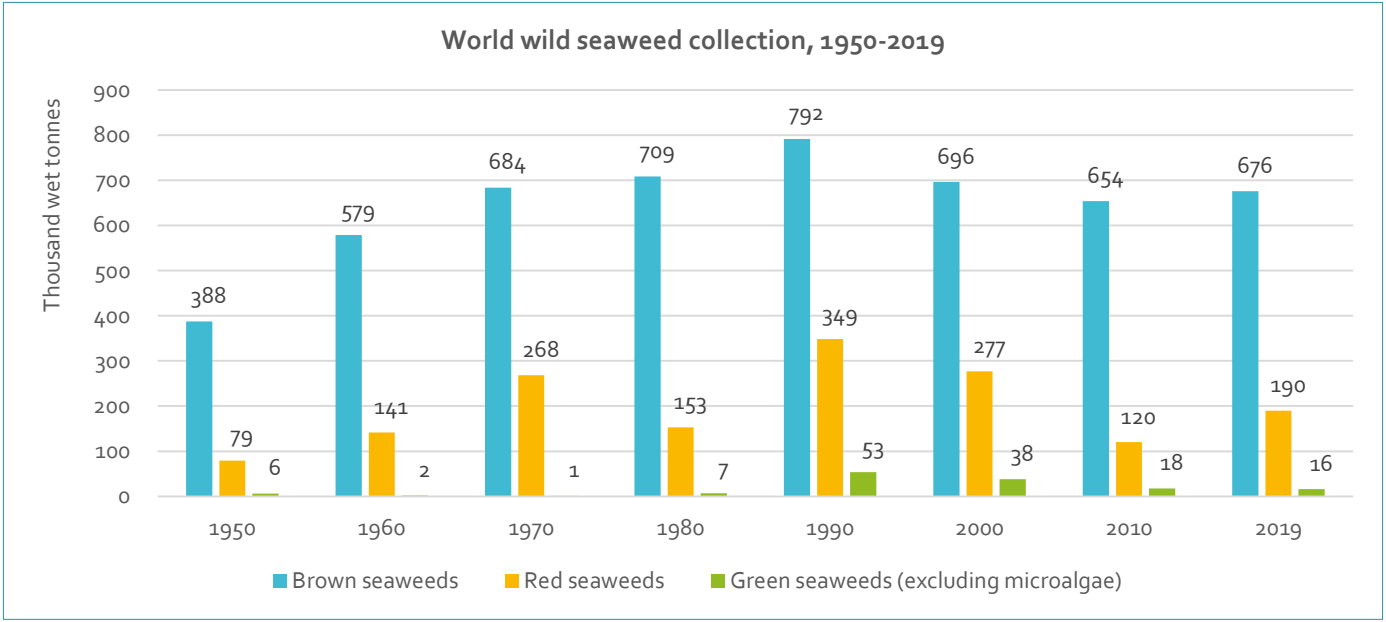
Seaweeds

In 1969, the 2.2 million tonnes of world seaweed production was evenly contributed by wild collection and cultivation. After half of a century, while the wild production remained at 1.1 million tonnes, the cultivation production has increased to 34.7 million tonnes that accounted for 97 percent of the world seaweed production in 2019.



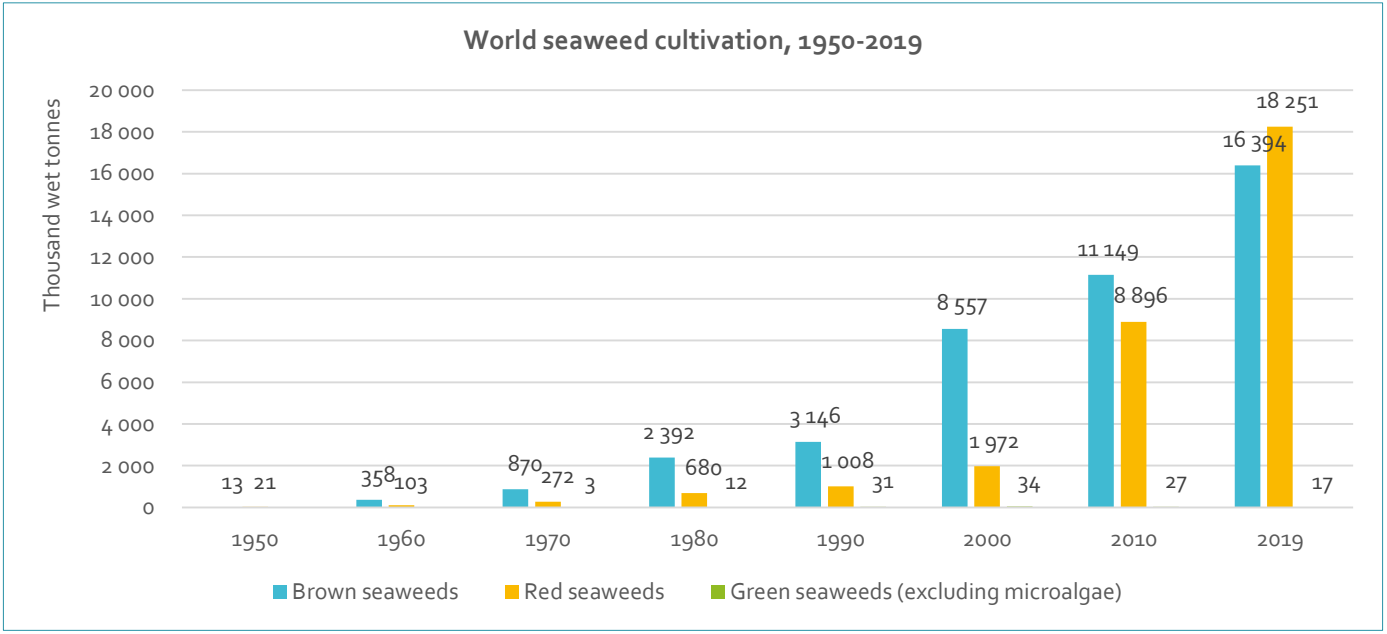
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

World wild seaweed collection declined from 1.33 million tonnes in 1990 to 1.08 million tonnes in 2019, and the decline occurred to all the three seaweed groups, i.e. brown seaweeds (from 792 000 tonnes to 676 000 tonnes), red seaweeds (from 349 000 tonnes to 190 000 tonnes); and green seaweeds (from 53 000 tonnes to 16 000 tonnes).



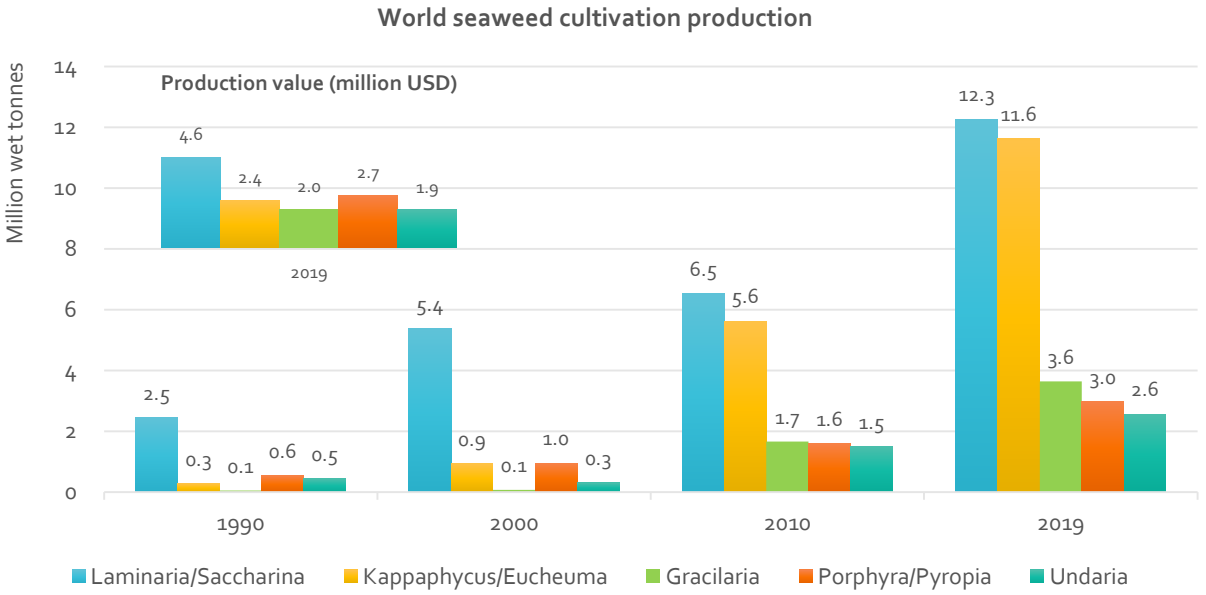
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

World seaweed cultivation increased from 4.2 million tonnes in 1990 to 34.7 million tonnes in 2019. The growth was contributed by brown seaweeds cultivation (from 3.1 million tonnes to 16.4 million tonnes) and red seaweeds cultivation (from 1 million tonnes to 18.3 million tonnes), whereas green seaweeds cultivation declined from 31 000 tonnes to 17 000 tonnes.



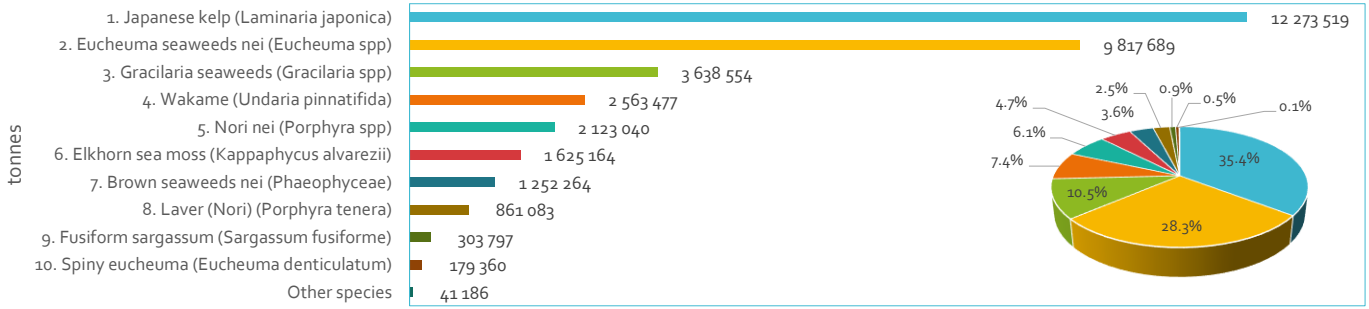
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Five species groups accounted for over 95 percent of world seaweed cultivation production in 2019; they are *Laminaria/Saccharina* (35.4 percent); *Kappaphycus/Eucheuma* (33.5 percent); *Gracilaria* (10.5 percent); *Porphyra/Pyropia* (8.6 percent); and *Undaria* (7.4 percent).

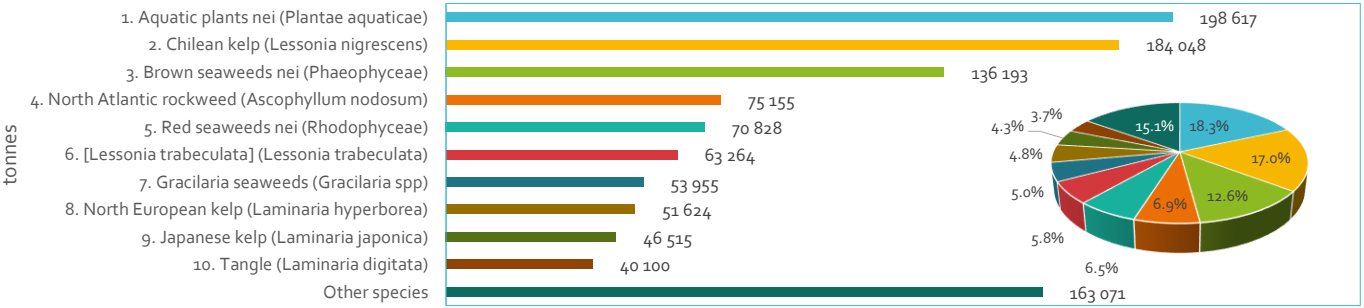


Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

World: species composition in seaweed cultivation in 2019 (34 679 134 tonnes)

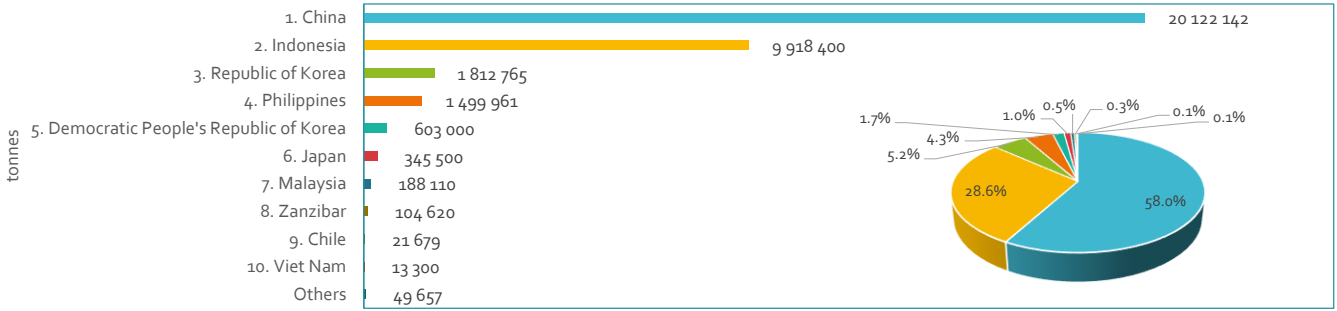


World: species composition in wild seaweed collection in 2019 (1 083 370 tonnes)

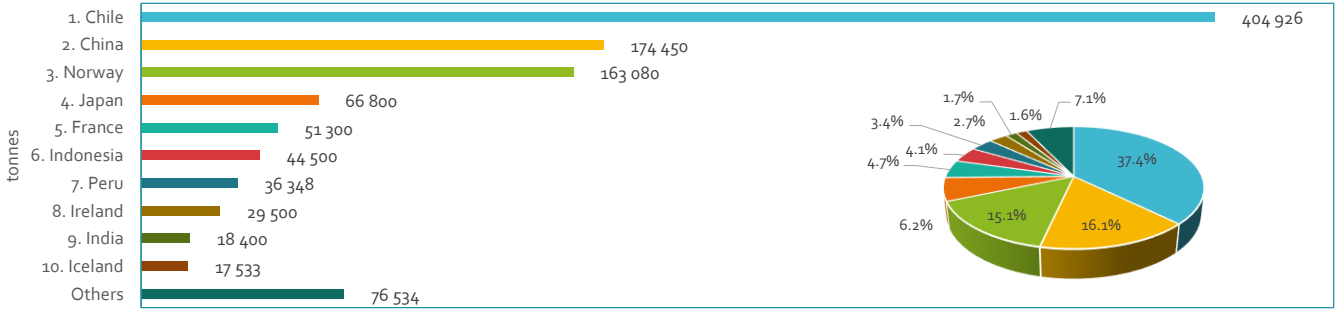


Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Seaweeds cultivation: countries/territories with the highest production in 2019 (world production: 34 679 134 tonnes)



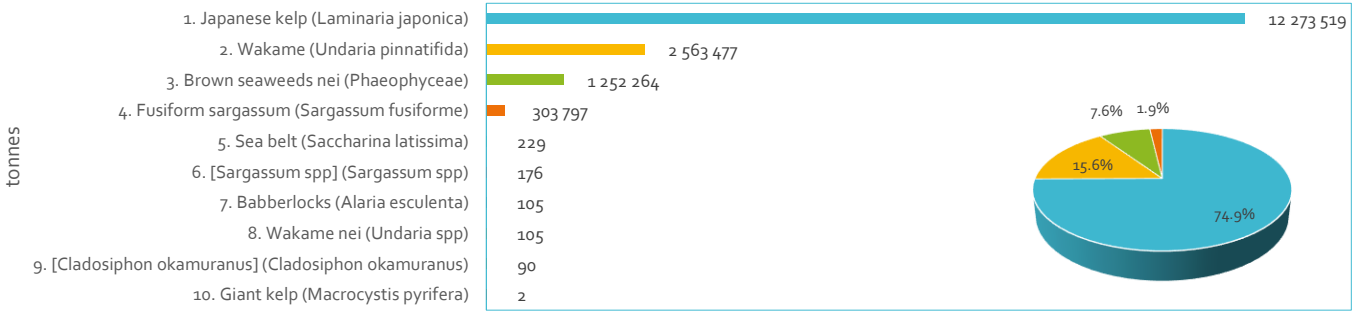
Seaweeds wild collection: countries/territories with the highest production in 2019 (world production: 1 083 370 tonnes)



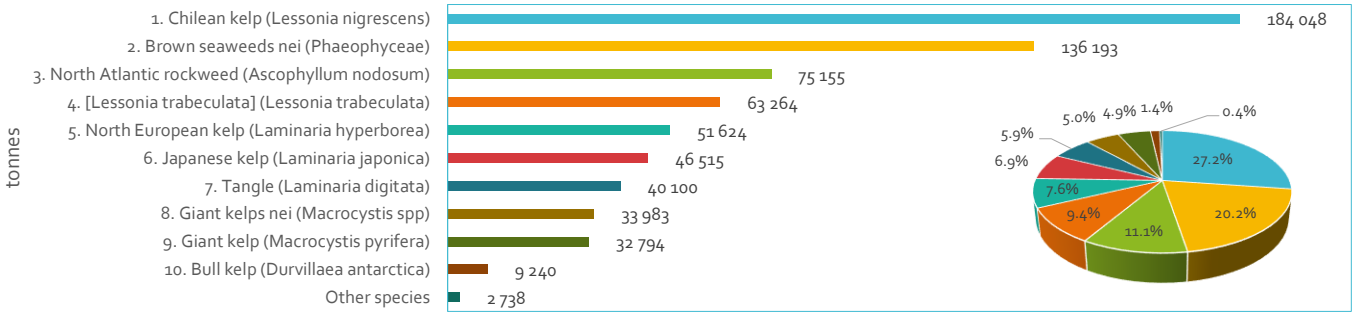
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Brown seaweeds

Brown seaweeds: species composition in world cultivation in 2019 (16 393 764 tonnes)



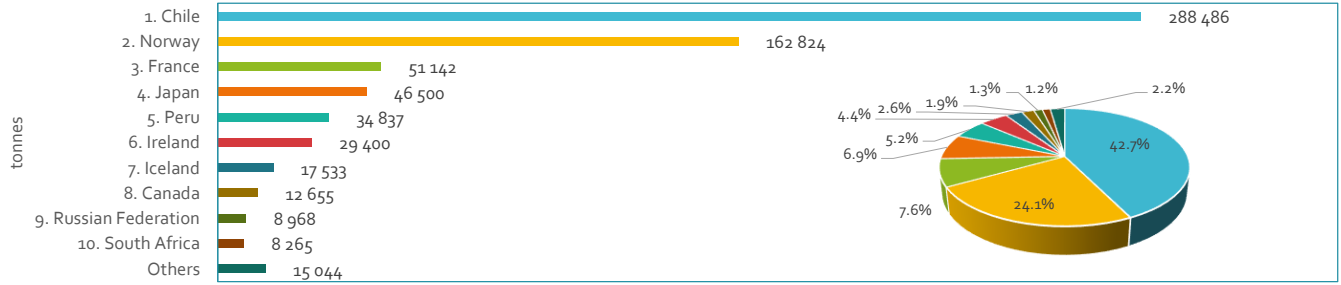
Brown seaweeds: species composition in world wild collection in 2019 (675 654 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Brown seaweeds cultivation: countries/territories with the highest production in 2019
(world production: 16 393 764 tonnes)

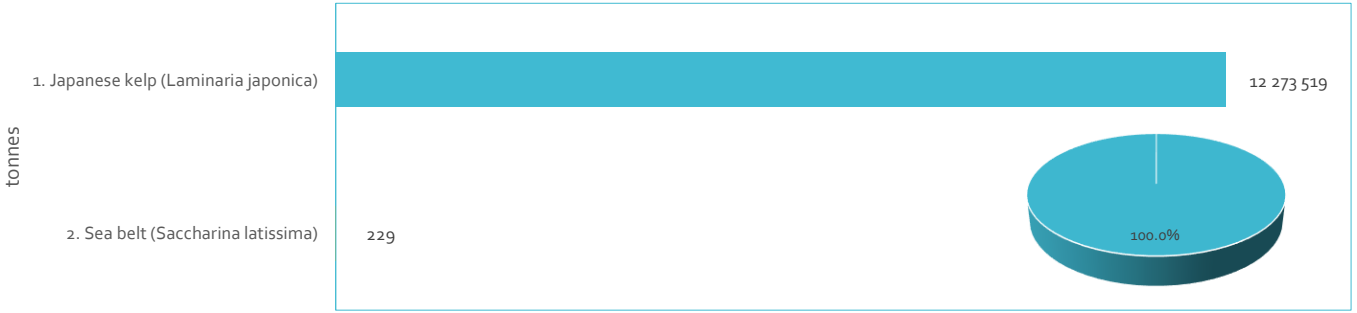
Brown seaweeds wild collection: countries/territories with the highest production in 2019
(world production: 675 654 tonnes)



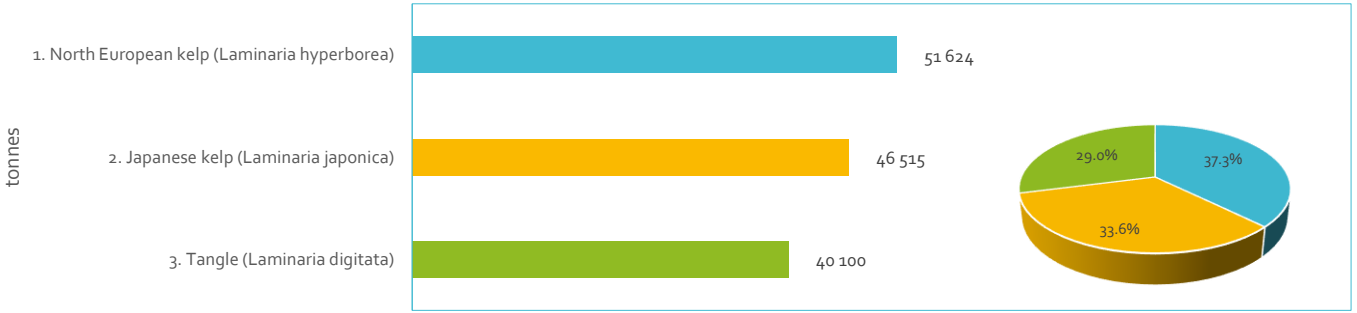
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Laminaria/ Saccharina

Laminaria/Saccharina: species composition in world cultivation in 2019 (12 273 748 tonnes)

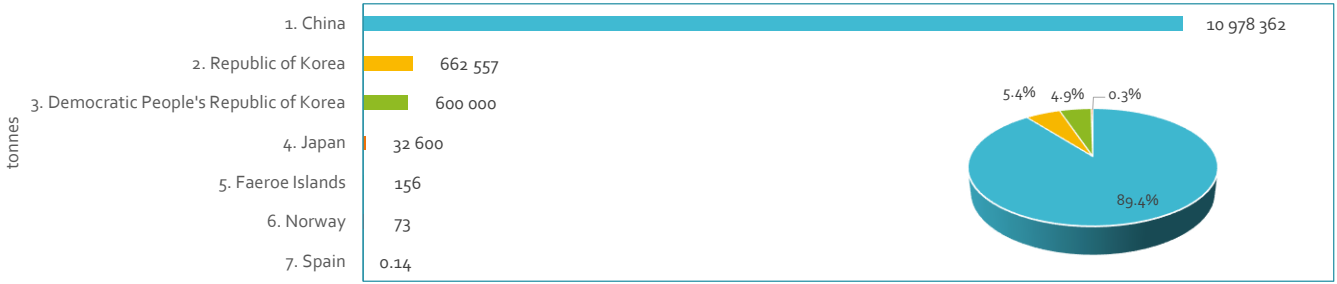


Laminaria/Saccharina: species composition in wild collection in 2019 (138 239 tonnes)

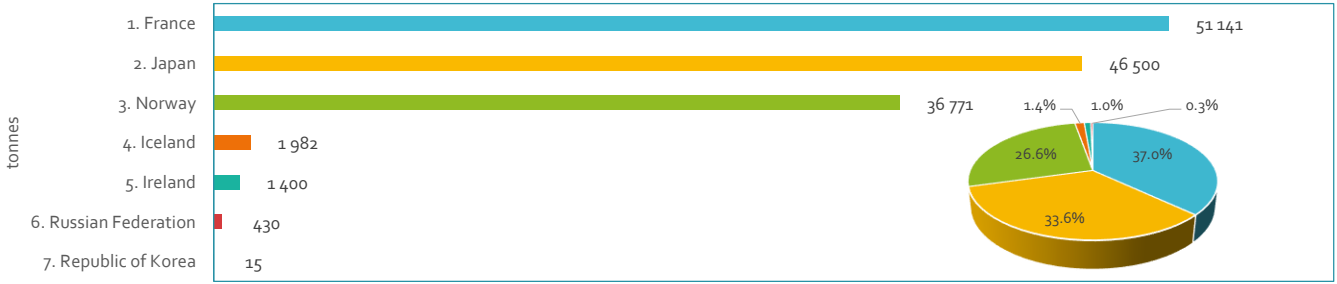


Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

***Laminaria/Saccharina* cultivation: countries/territories with the highest production in 2019**
(world production: 12 273 748 tonnes)



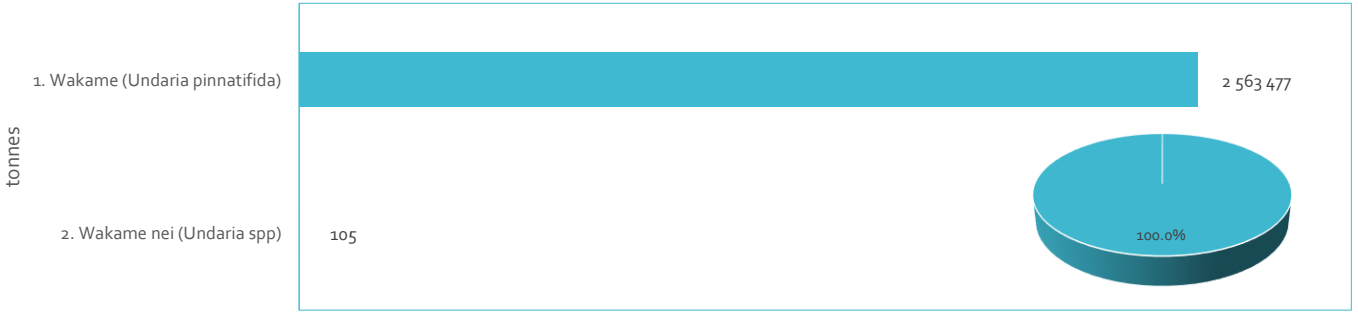
***Laminaria/Saccharina* wild collection: countries/territories with the highest production in 2019**
(world production: 138 239 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Undaria

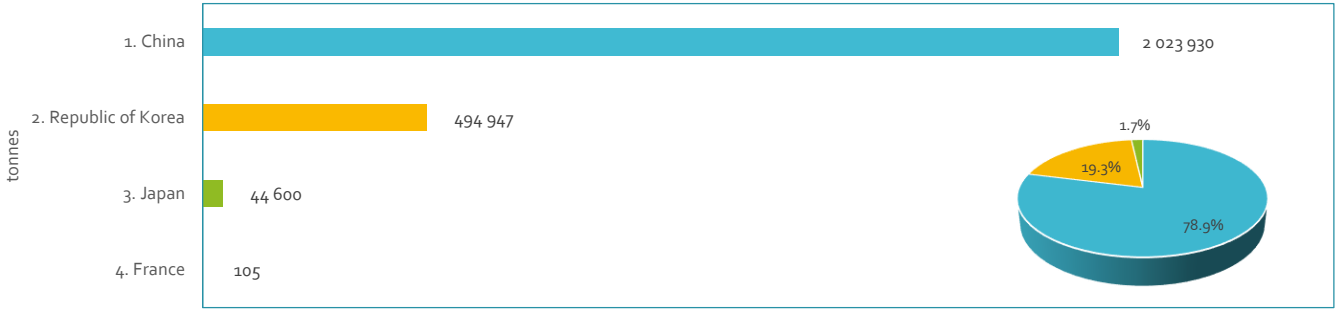
Undaria: species composition in world cultivation in 2019 (2 563 582 tonnes)



Undaria: species composition in world wild collection in 2019 (2 735 tonnes)

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Undaria cultivation: countries/territories with the highest production in 2019 (world production: 2 563 582 tonnes)

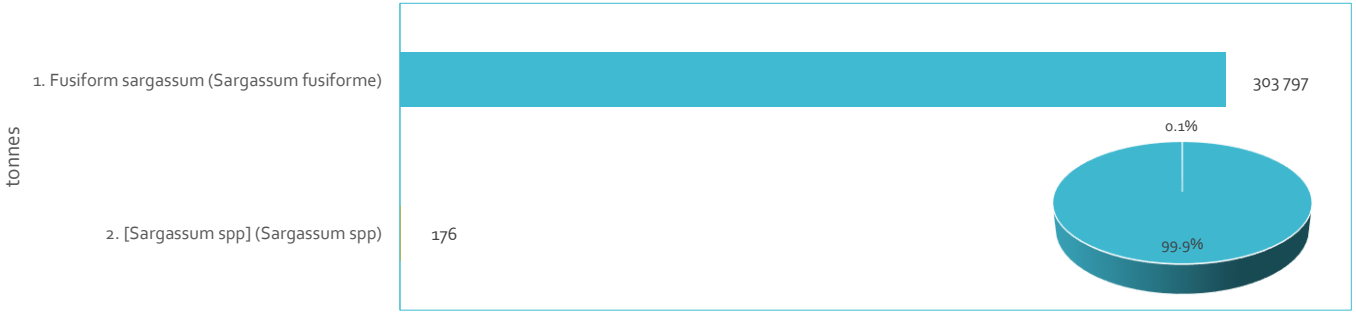


Undaria wild collection: countries/territories with the highest production in 2019 (world production: 2 735 tonnes)

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Sargassum

Sargassum: species composition in world cultivation in 2019 (303 973 tonnes)



No data on wild collection of *Sargassum*

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Sargassum cultivation: countries/territories with the highest production in 2019 (world production: 303 973 tonnes)

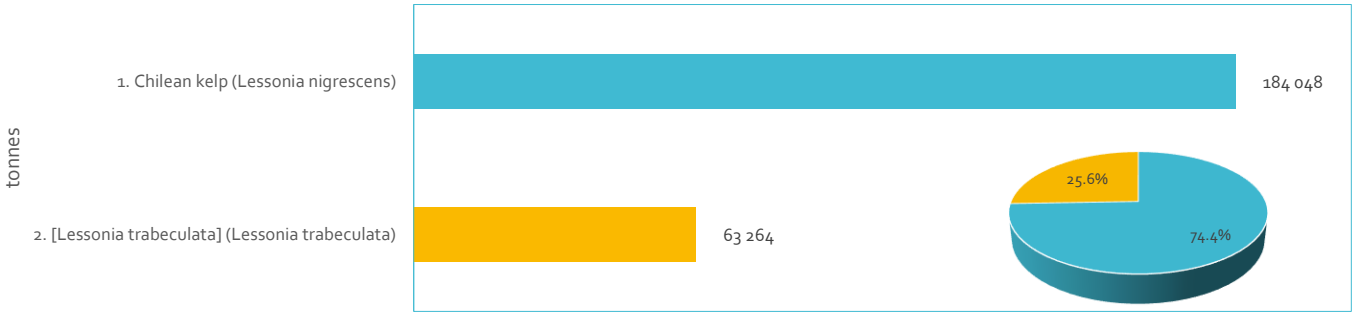
No data on wild collection of *Sargassum*

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Lessonia

No data on cultivation production

***Lessonia*: species composition in world wild collection in 2019 (247 312 tonnes)**



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

No data on cultivation production

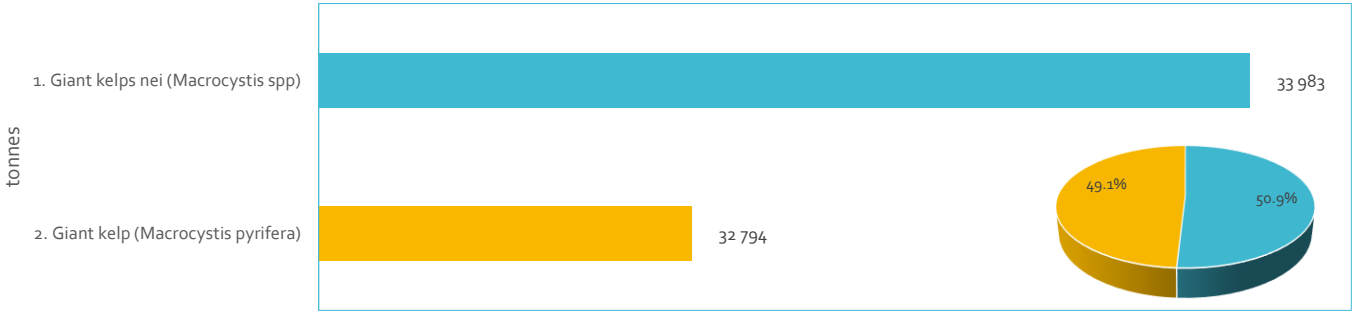
Lessonia **wild collection: countries/territories with the highest production in 2019 (world production: 247 312 tonnes)**

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Macrocystis

Macrocystis: species composition in world cultivation in 2019 (2 tonnes)

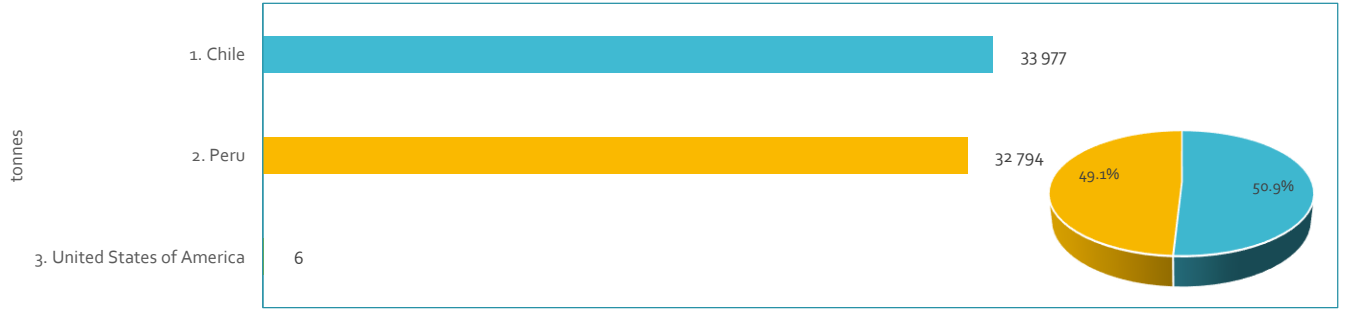
Macrocystis: species composition in world wild collection in 2019 (66 777 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Macrocystis cultivation: countries/territories with the highest production in 2019 (world production: 2 tonnes)

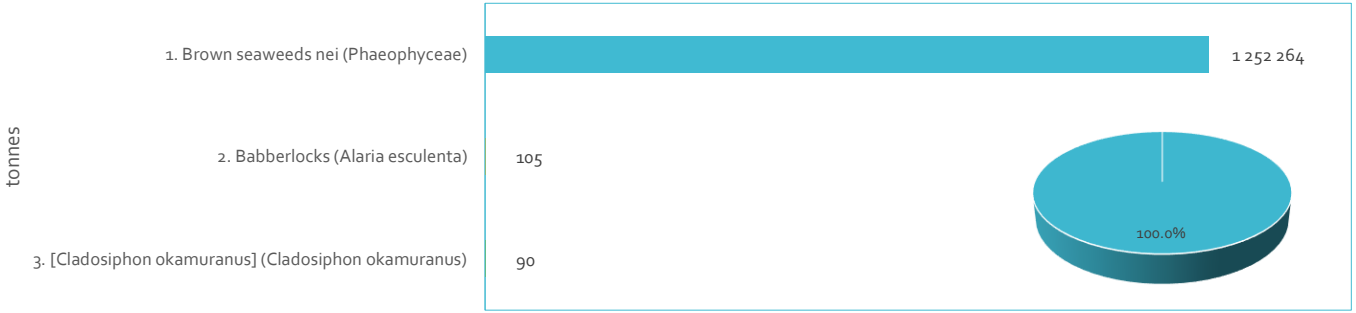
Macrocystis wild collection: countries/territories with the highest production in 2019 (world production: 66 777 tonnes)



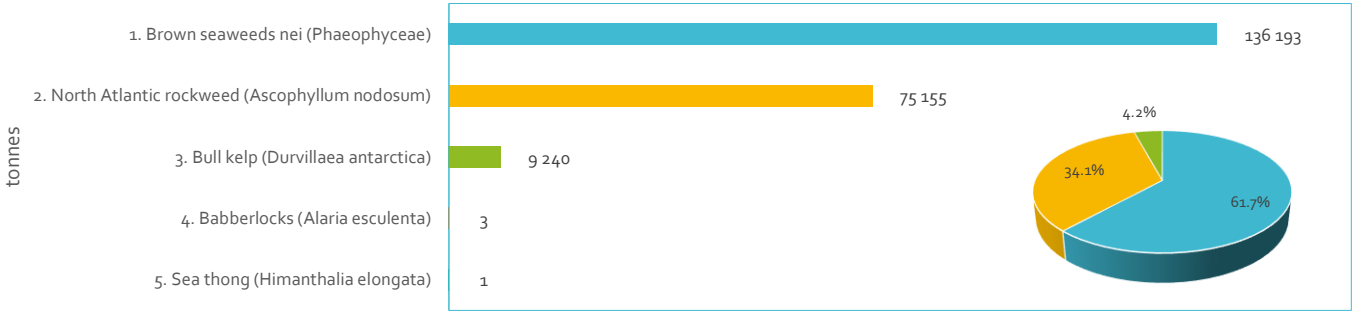
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Miscellaneous brown seaweeds

Miscellaneous brown seaweeds: species composition in world cultivation in 2019 (1 252 459 tonnes)

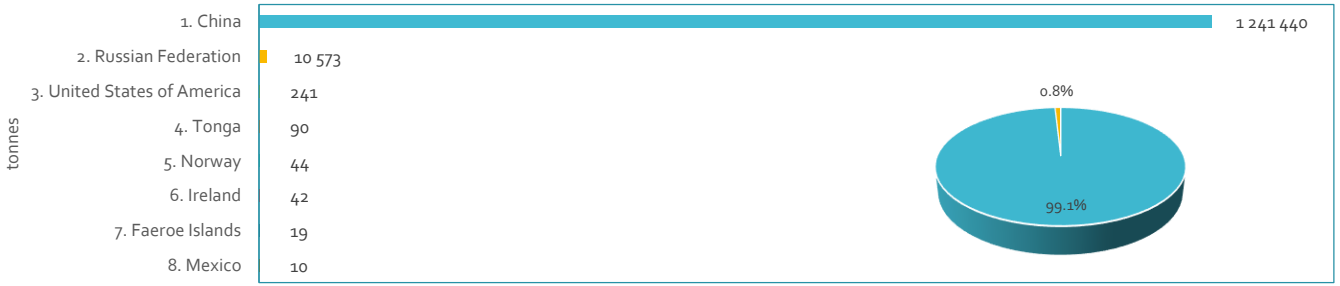


Miscellaneous brown seaweeds: species composition in world wild collection in 2019 (220 592 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Miscellaneous brown seaweeds cultivation: countries/territories with the highest production in 2019 (world production: 1 252 459 tonnes)

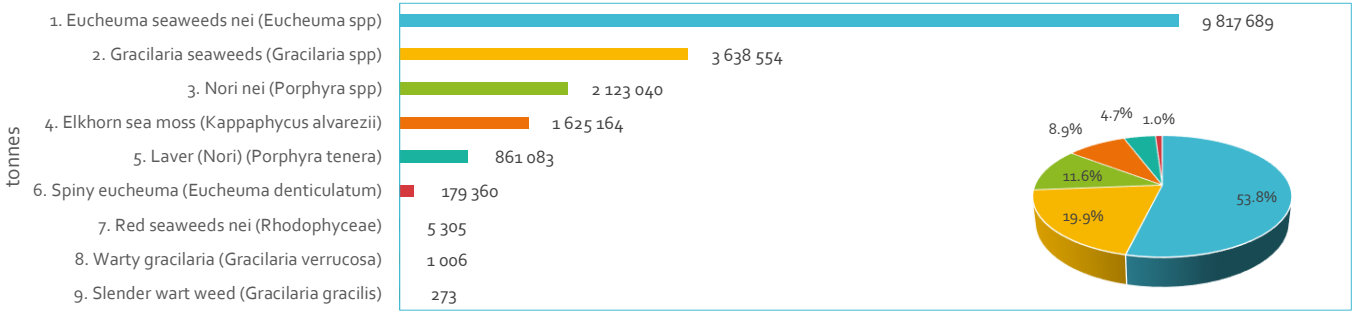


Miscellaneous brown seaweeds wild collection: countries/territories with the highest production in 2019 (world production: 220 592 tonnes)

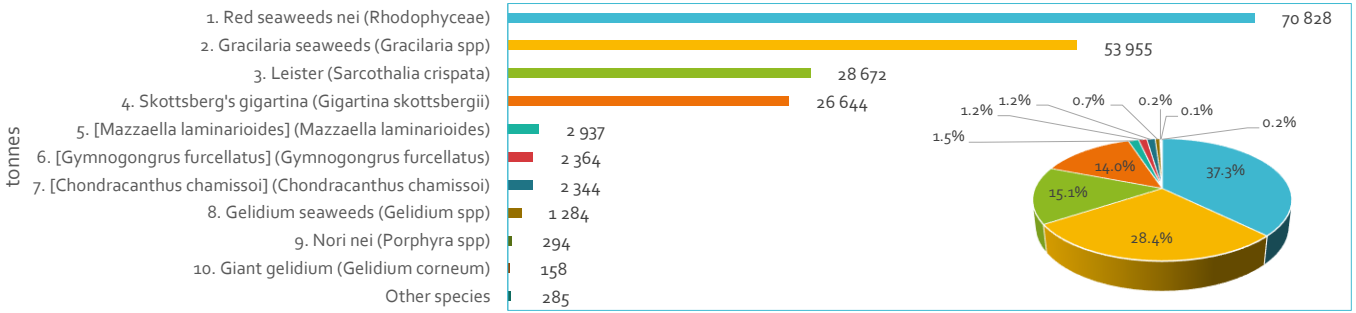
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Red seaweeds

Red seaweeds: species composition in world cultivation in 2019 (18 251 474 tonnes)

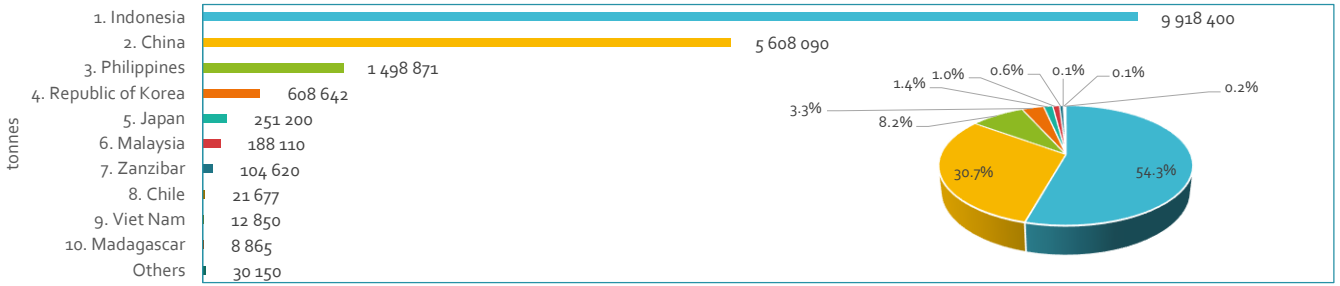


Red seaweeds: species composition in world wild collection in 2019 (189 766 tonnes)

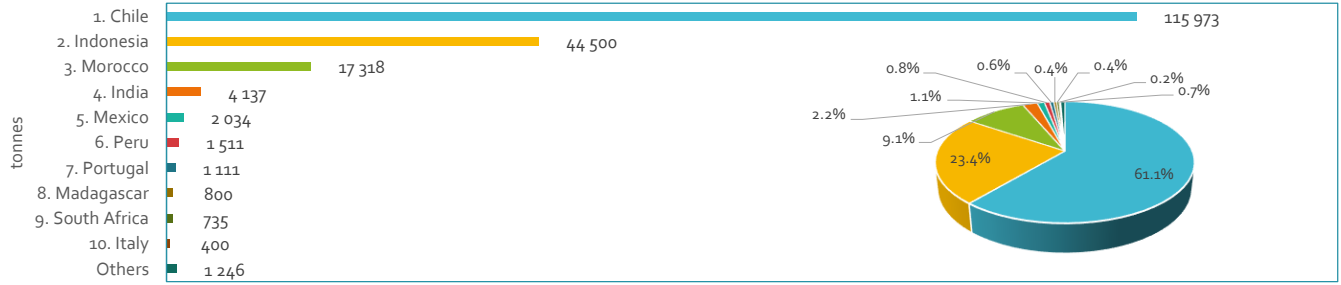


Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Red seaweeds cultivation: countries/territories with the highest production in 2019
(world production: 18 251 474 tonnes)



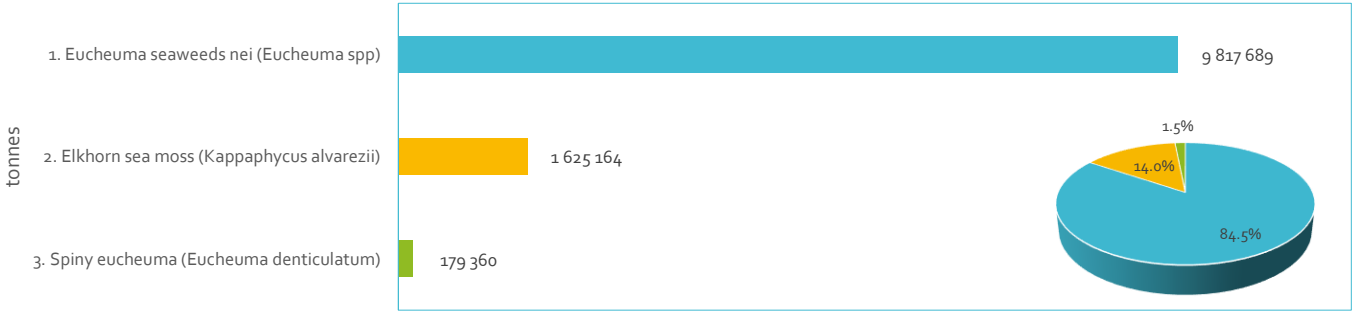
Red seaweeds wild collection: countries/territories with the highest production in 2019
(world production: 189 766 tonnes)



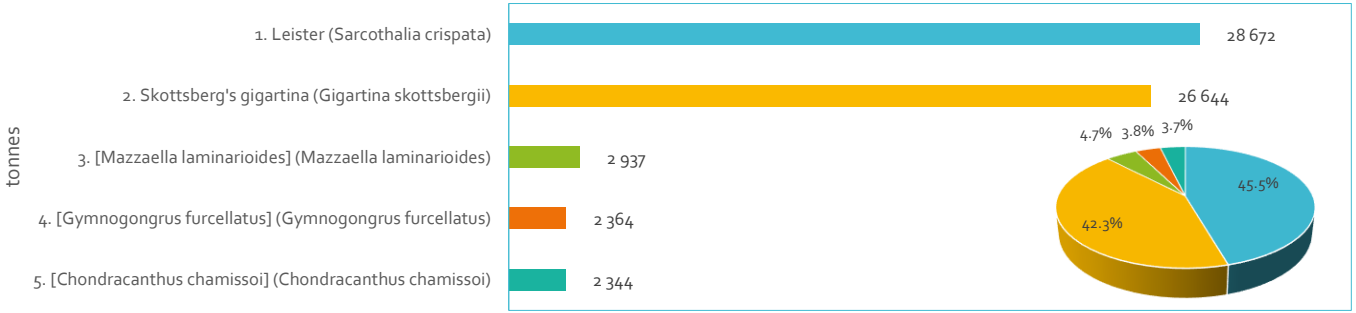
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Carrageenan seaweeds

Carrageenan seaweeds: species composition in world cultivation in 2019 (11 622 213 tonnes)



Carrageenan seaweeds: species composition in world wild collection in 2019 (62 961 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

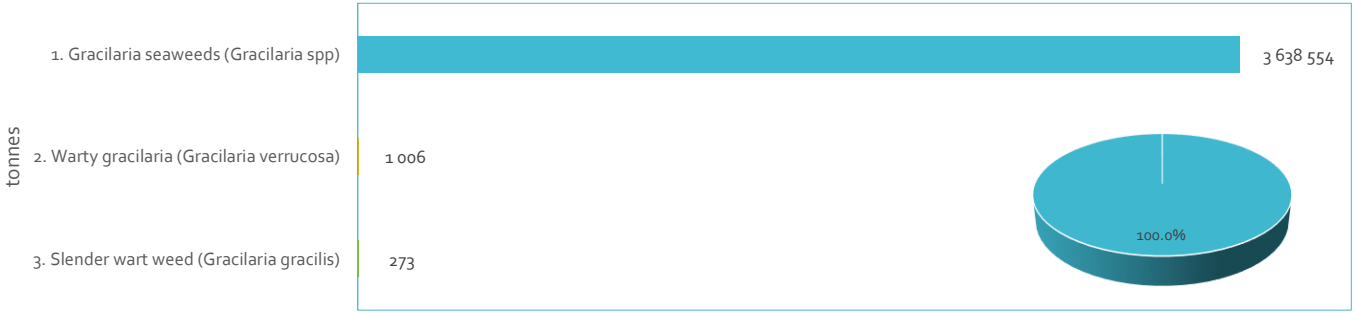
Carrageenan seaweeds cultivation: countries/territories with the highest production in 2019 (world production: 11 622 213 tonnes)

Carrageenan seaweeds wild collection: countries/territories with the highest production in 2019 (world production: 62 961 tonnes)

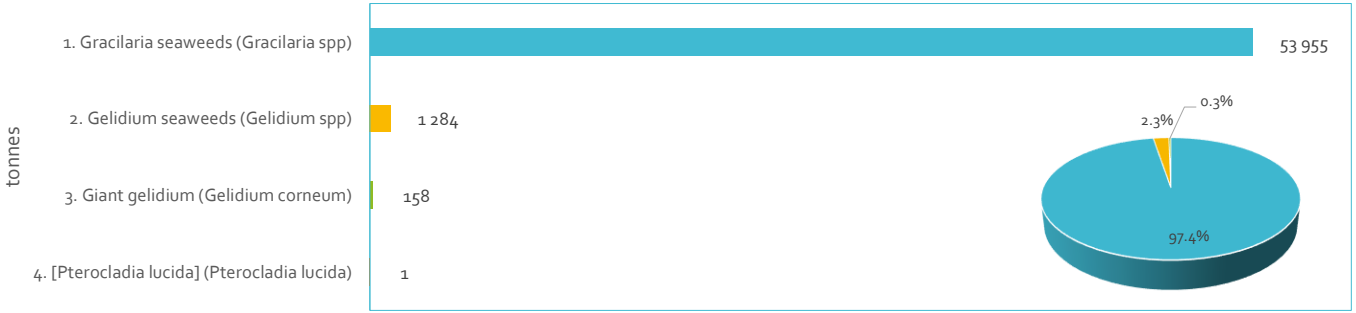
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Agar seaweeds

Agar seaweeds: species composition in world cultivation in 2019 (3 639 833 tonnes)



Agar seaweeds: species composition in world wild collection in 2019 (55 398 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

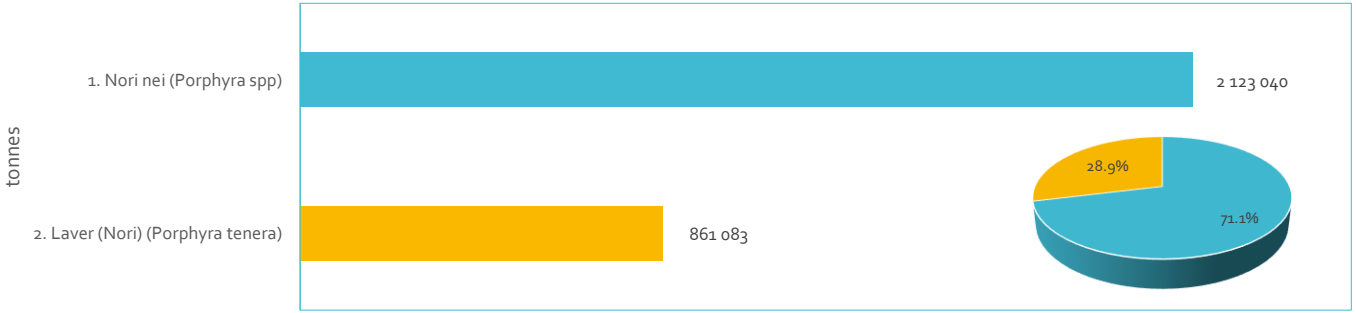
Agar seaweeds cultivation: countries/territories with the highest production in 2019 (world production: 3 639 833 tonnes)

Agar seaweeds wild collection: countries/territories with the highest production in 2019 (world production: 55 398 tonnes)

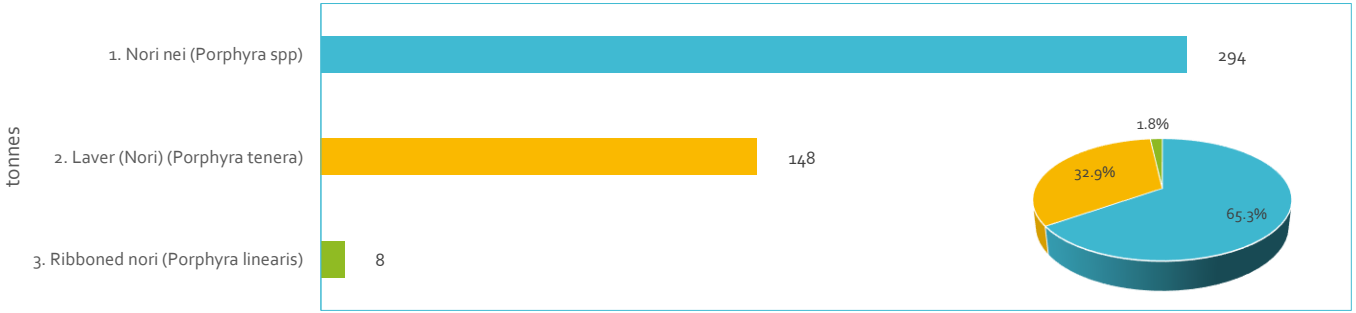
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Porphyra

Porphyra: species composition in world cultivation in 2019 (2 984 123 tonnes)

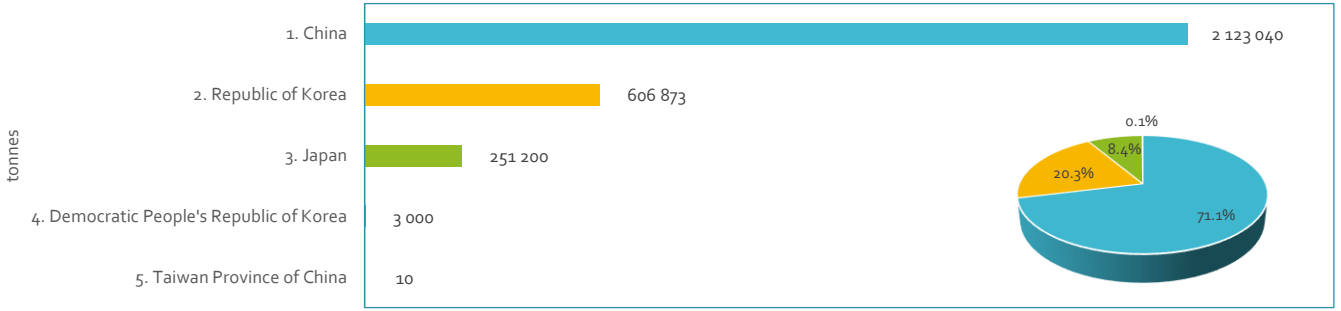


Porphyra: species composition in world wild collection in 2019 (450 tonnes)

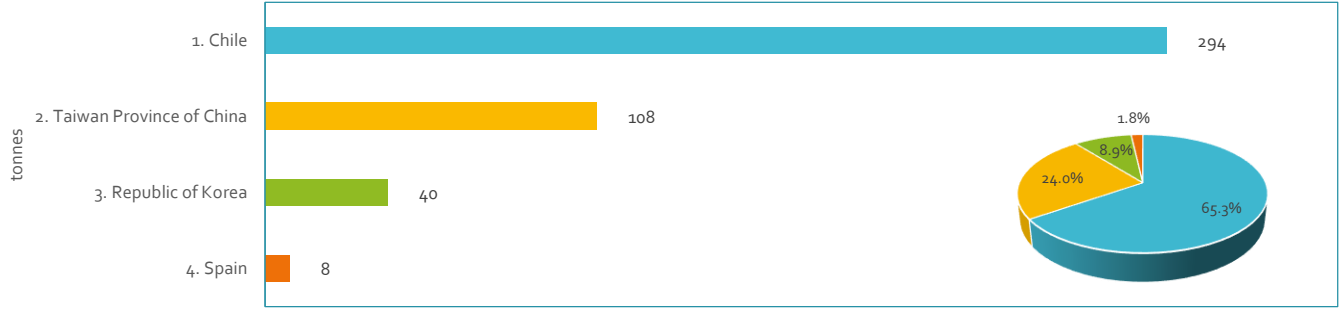


Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Porphyra cultivation: countries/territories with the highest production in 2019 (world production: 2 984 123 tonnes)

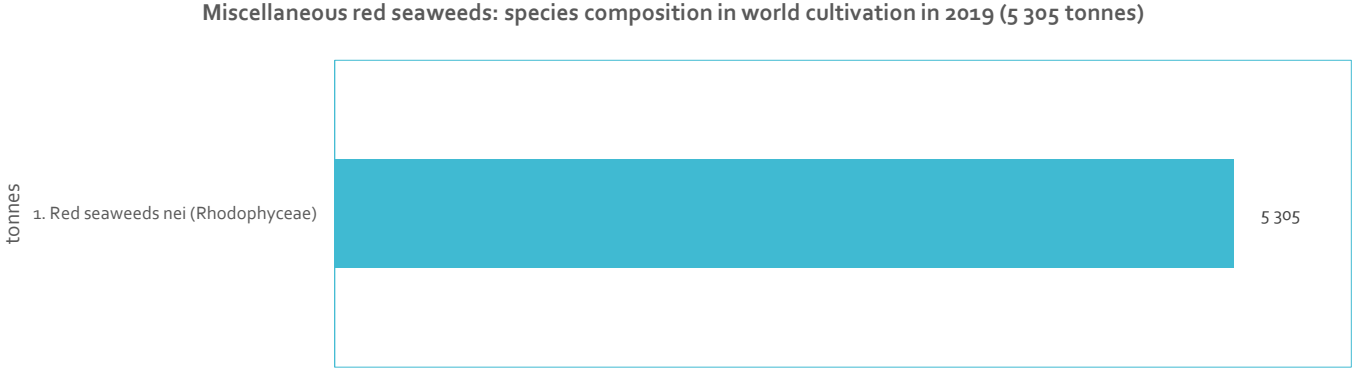


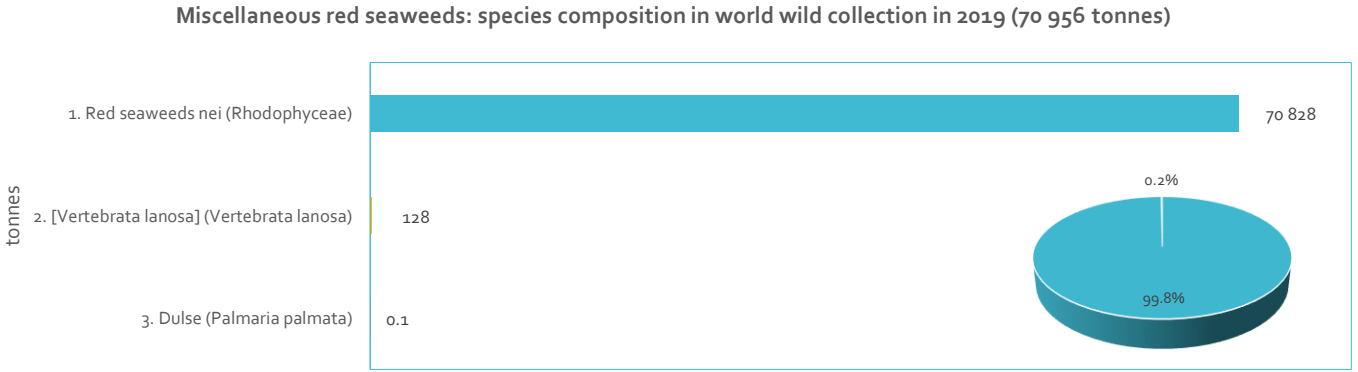
Porphyra wild collection: countries/territories with the highest production in 2019 (world production: 450 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Miscellaneous red seaweeds

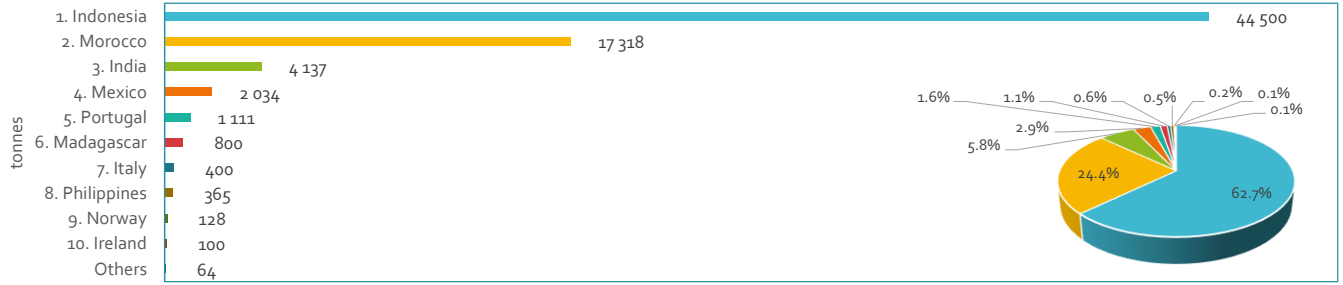




Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Miscellaneous red seaweeds cultivation: countries/territories with the highest production in 2019
(world production: 5 305 tonnes)

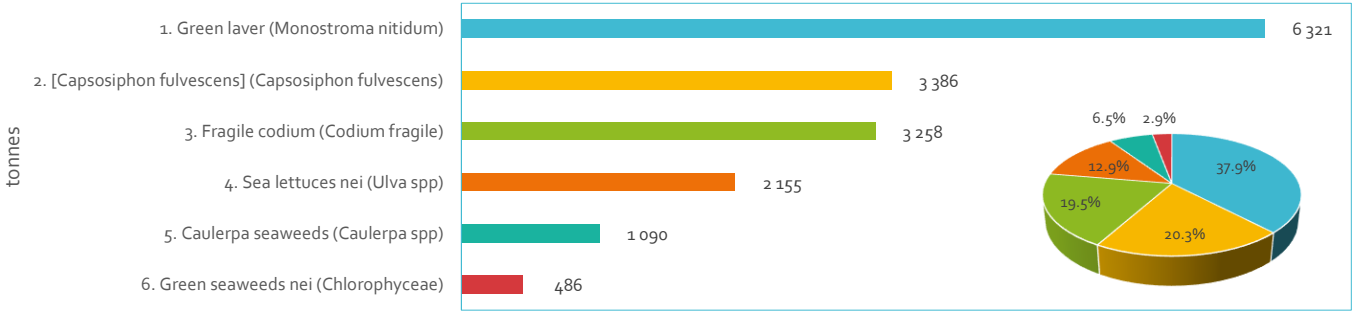
Miscellaneous red seaweeds wild collection: countries/territories with the highest production in 2019
(world production: 70 956 tonnes)



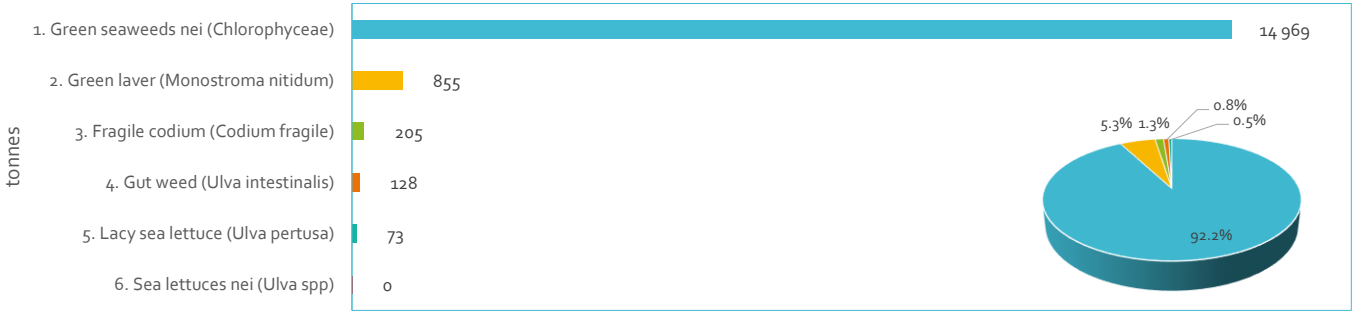
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Green seaweeds (excluding microalgae)

Green seaweeds (excluding microalgae): species composition in world cultivation in 2019 (16 696 tonnes)

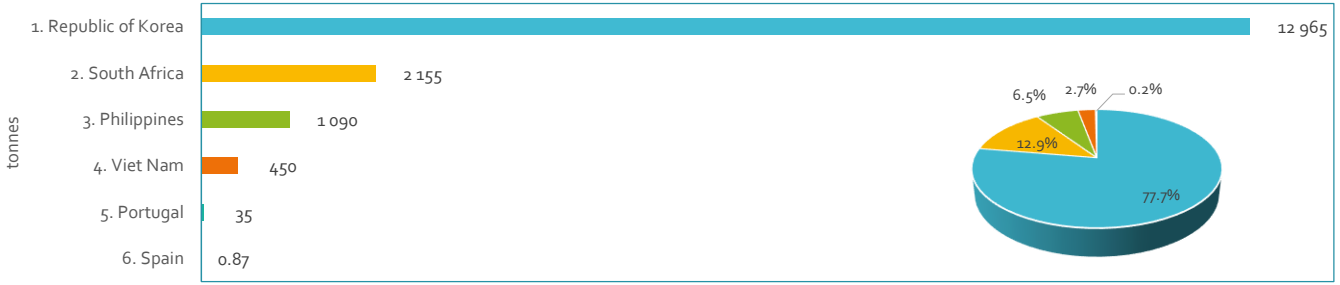


Green seaweeds (excluding microalgae): species composition in world wild collection in 2019 (16 230 tonnes)

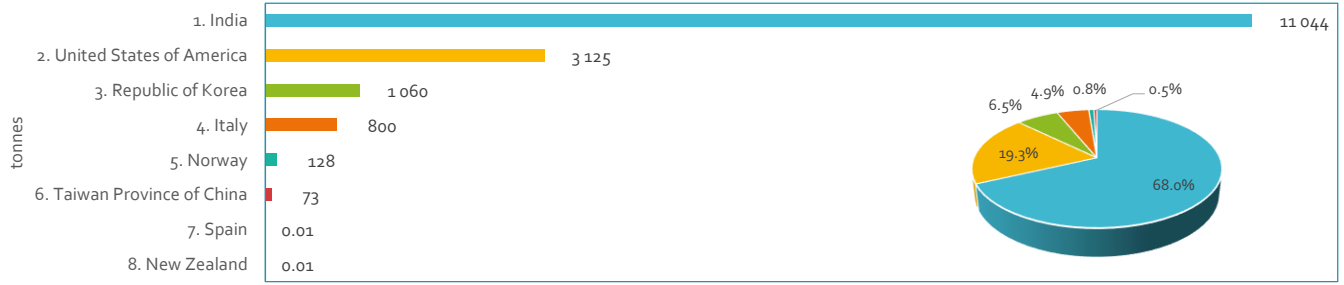


Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Green seaweeds (excluding microalgae) cultivation: countries/territories with the highest production in 2019
(world production: 16 696 tonnes)

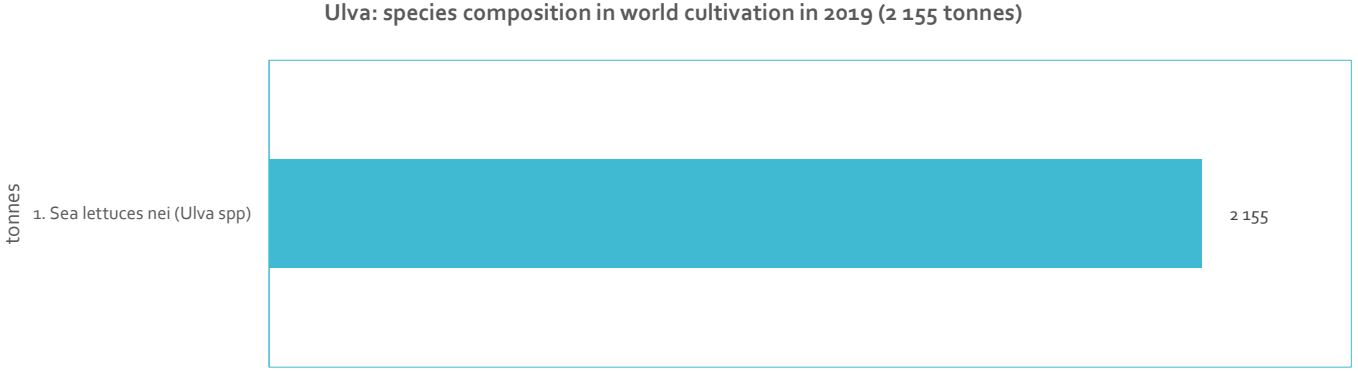


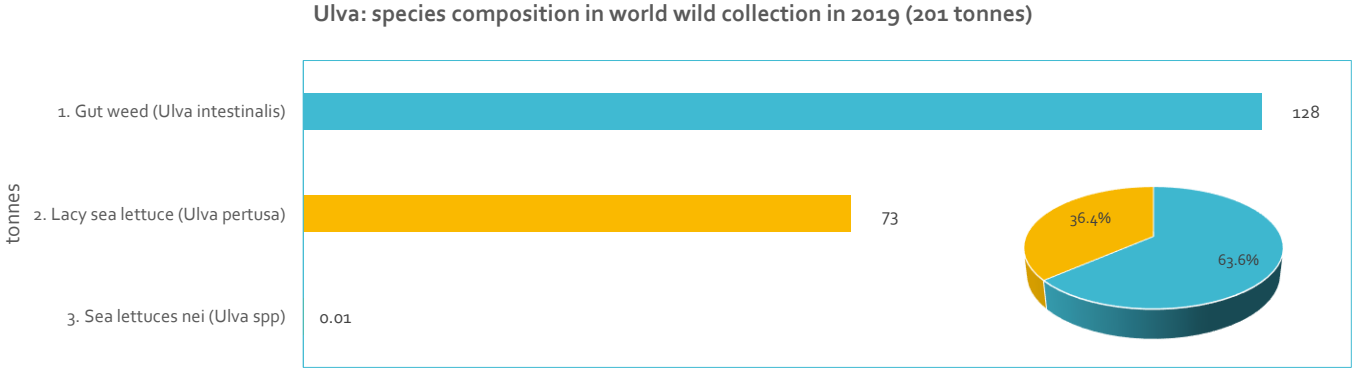
Green seaweeds (excluding microalgae) wild collection: countries/territories with the highest production in 2019
(world production: 16 230 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Ulva

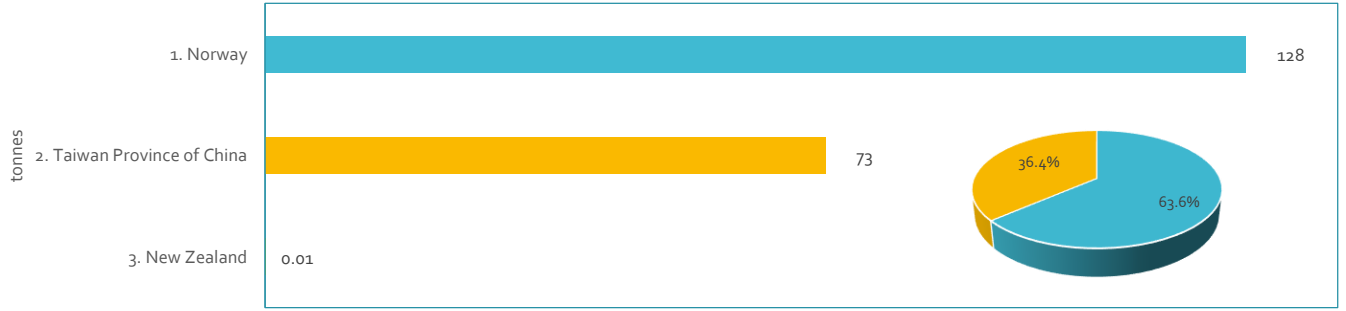




Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Ulva cultivation: countries/territories with the highest production in 2019 (world production: 2 155 tonnes)

Ulva wild collection: countries/territories with the highest production in 2019 (world production: 201 tonnes)



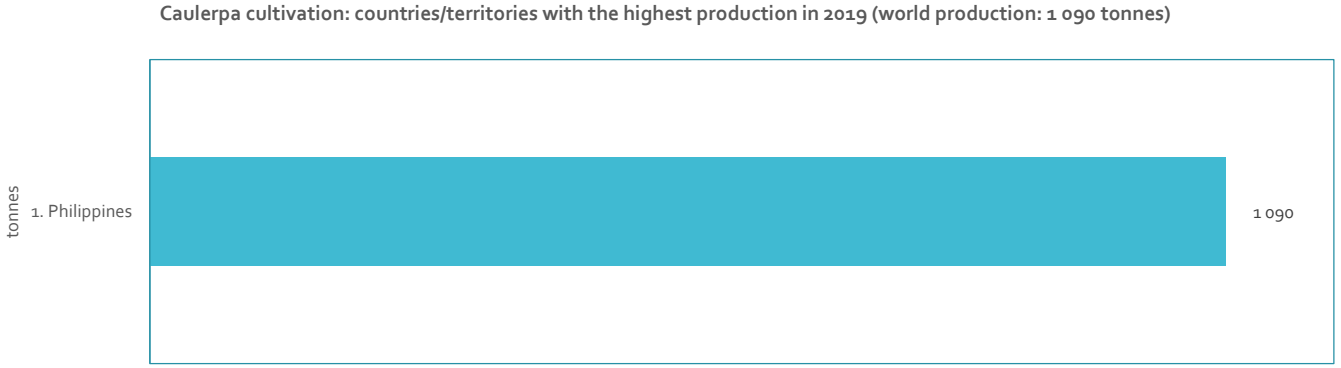
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Caulerpa

Caulerpa: species composition in world cultivation in 2019 (1 090 tonnes)

No data on wild collection production

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

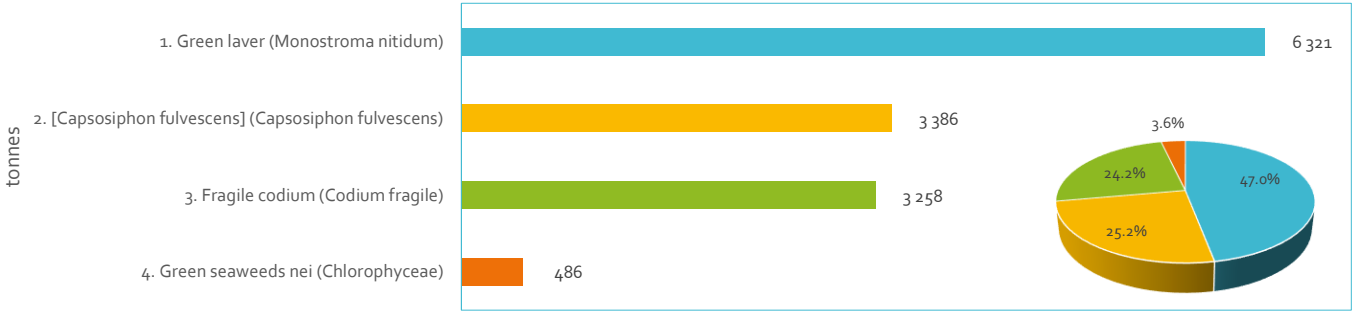


No data on wild collection production

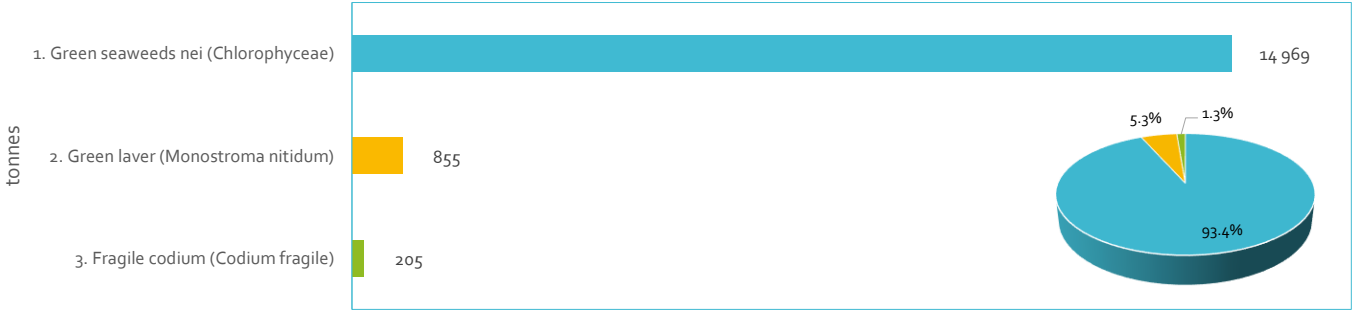
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Miscellaneous green seaweeds

Miscellaneous green seaweeds: species composition in world cultivation in 2019 (13 451 tonnes)

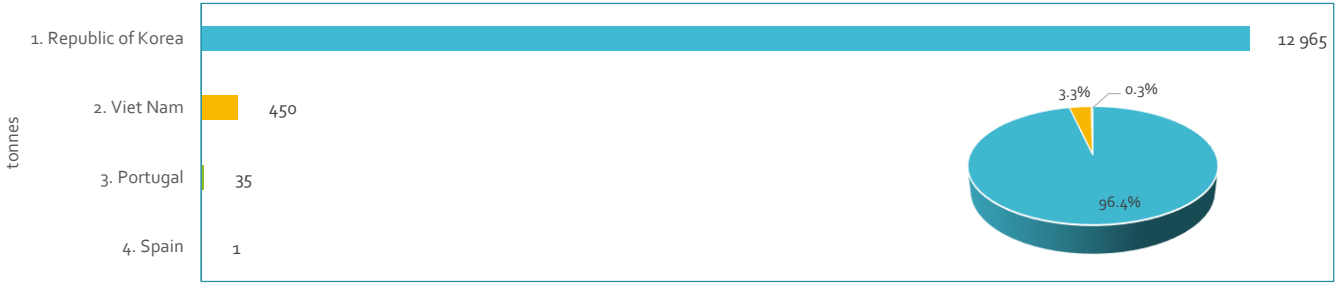


Miscellaneous green seaweeds: species composition in world wild collection in 2019 (16 029 tonnes)

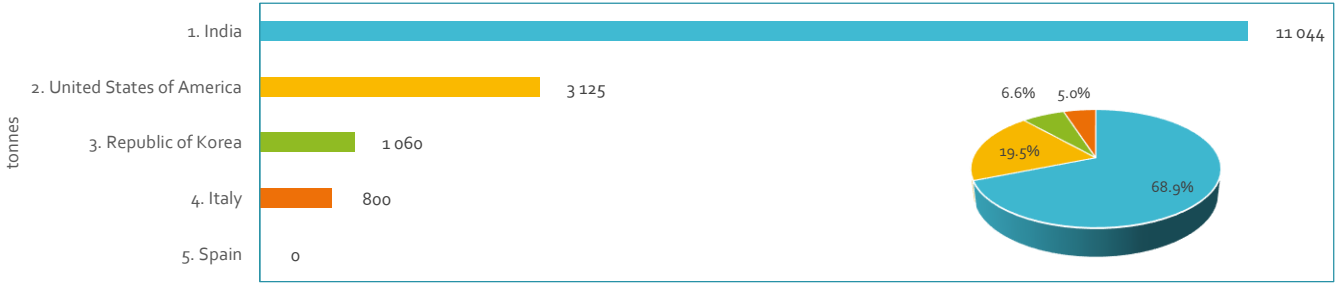


Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Miscellaneous green seaweeds cultivation: countries/territories with the highest production in 2019
(world production: 13 451 tonnes)



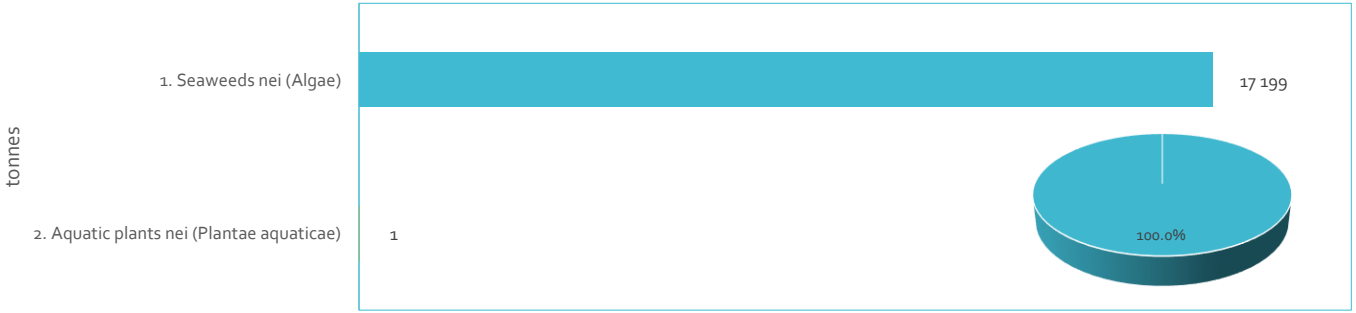
Miscellaneous green seaweeds wild collection: countries/territories with the highest production in 2019
(world production: 16 029 tonnes)



Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Seaweeds nei

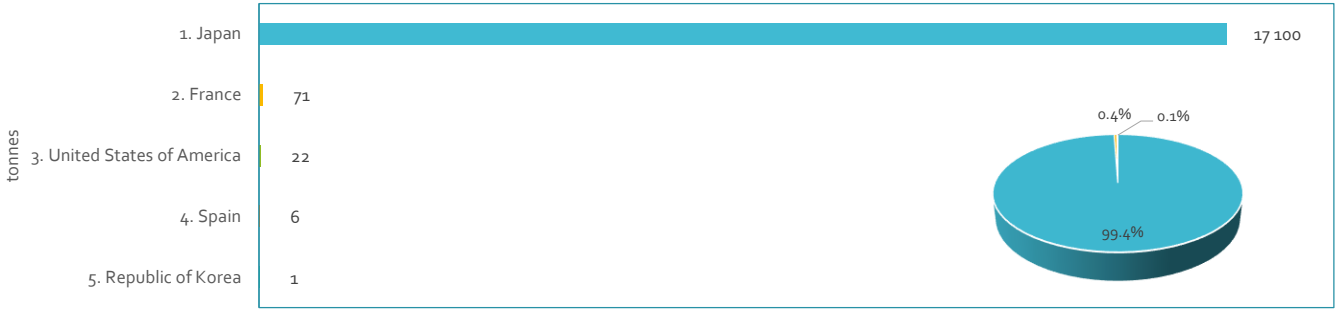
Seaweeds nei: species composition in world cultivation in 2019 (17 200 tonnes)



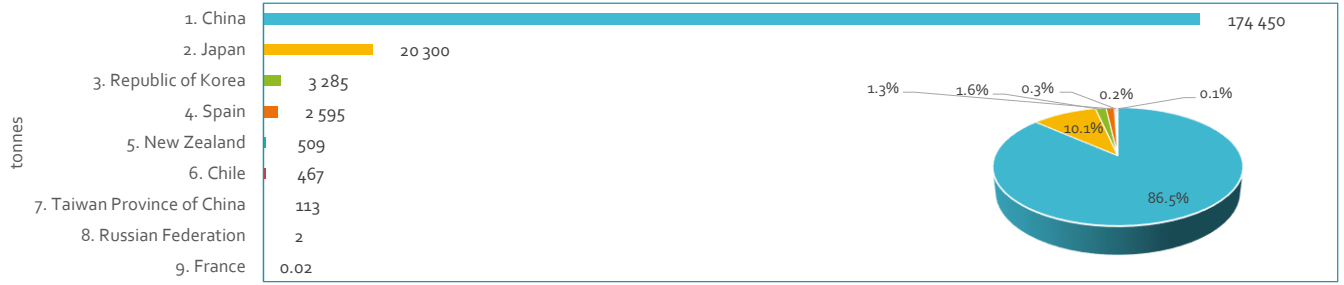
Seaweeds nei: species composition in world wild collection in 2019 (201 721 tonnes)

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Seaweeds nei cultivation: countries/territories with the highest production in 2019 (world production: 17 200 tonnes)

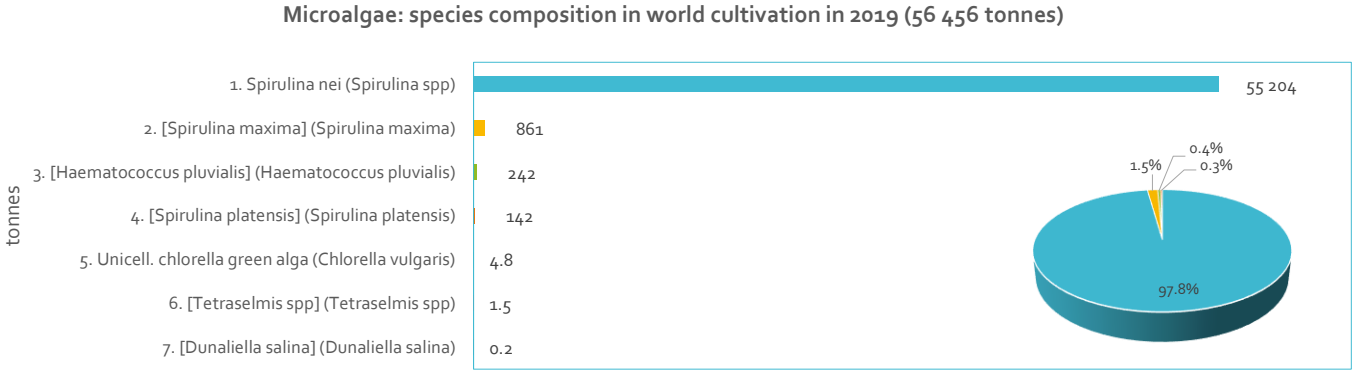


Seaweeds nei wild collection: countries/territories with the highest production in 2019 (world production: 201 721 tonnes)



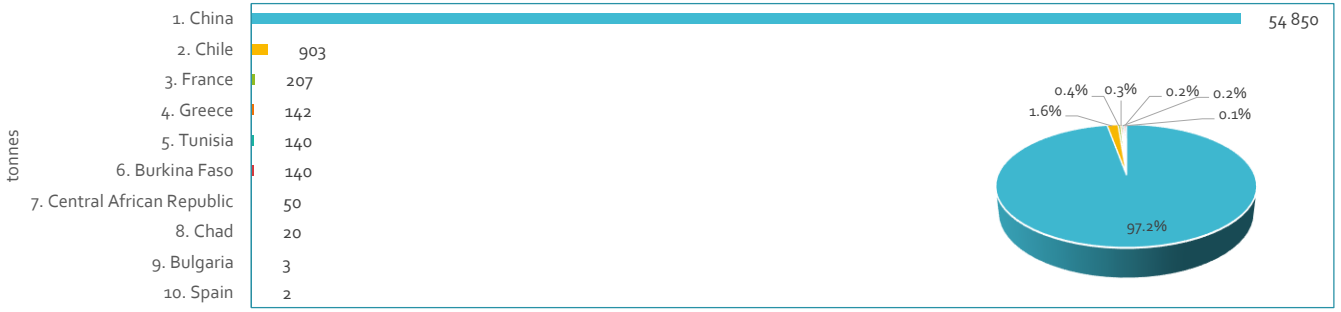
Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Microalgae



No data on wild collection production

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).



No data on wild collection production

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

Spirulina/Arthrospira cultivation: countries/territories with the highest production in 2019 (world production: 56 208 tonnes)

No data on wild collection production

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).

No data on wild collection production

Data source: FAO 2021. FAO Global Fishery and Aquaculture Production Statistics (FishStatJ; March 2021; www.fao.org/fishery/statistics/software/fishstatj/en).