

LIFE medCLIFFS CONSENSUS LIST

The **LIFE medCLIFFS Consensus List** is composed by a total of 94 plant taxa not to be planted or marketed on the Costa Brava and Cap de Creus areas.

All those taxa meet at least one of the following criteria:

Criteria	Definition
1	Commercialized species which are also monitored in the LIFEmedCLIFFS project: plants that show obvious invasiveness or a high potential to become invasive in the coming years in the Costa Brava
2	Invasive species in Catalonia, according to Sáez & Aymerich (2021)
3	Invasive species in Catalonia according to EXOCAT report "The exotic species of Catalonia. Summary of the Exocat 2021 project" (Rotchés-Ribalta <i>et al.</i> , 2022)
4	Species considered invasive throughout the Spanish territory. Based on the work Saez <i>et al.</i> (2011)
5	Invasive or potentially problematic species according to expert judgment of the LIFE medCLIFFS IAPS Working Group ¹ , as a result of its meetings during Action C4
6	Species whose import, cultivation and commercialization is prohibited in Spain, at least at peninsular level, and/or throughout Europe. Based on the European and Spanish legislation (EU Regulations 2016/1141; 2017/1263; 2019/1262; 2022/1203; Spanish Royal Decree 630/2013) and Spanish Orders Order TED/1126/2020 and Order TED/339/2023)

It is worth to note that a total of 70 species included in the **LIFE medCLIFFS Consensus List** are plants catalogued as invasive and already prohibited in the current Spanish and/or European legislation. Its possession, transport, traffic and commerce implies the application of legal sanctions to those who fail to comply with these regulations. Those species are highlighted in red within the list.

¹ The **IAPS Working Group** has been created during action A4 of the LIFE medCLIFFS project. It is in charge of creating the prevention tools in action C4 (consensus, watch and white lists of plants; code of conduct) and is composed by 14 external experts and 6 members of the LIFE medCLIFFS project, coming from the gardening and plant production sectors, research and academia, and public land managers and technicians of the relevant administrations. The complete list of IAPS Working Group members is provided in the corresponding deliverable.



The remaining 24 species must not be planted or marketed, at least in the area of the project (i.e. Costa Brava and Cap de Creus), since they show an obvious invasiveness or a high potential to become invasive in the coming years within this area.

A selection of species is monitored by the LIFE medCLIFFS Volunteering Network in action C2 (a link to the corresponding factsheets is available in the list). The risk of invasion of these selected species is being modelled in action C1. For the most aggressive species in Cap de Creus (*Carpobrotus* spp., *Opuntia* spp. and *Gazania rigens*), action C3 of the project is developing effective methods for their control in coastal cliffs.

References

EU Regulation 2016/1141. Commission Implementing Regulation (EU) 2016/1141 of 13 July 2016 adopting a list of invasive alien species of Union concern pursuant to Regulation (EU) No 1143/2014 of the European Parliament and of the Council

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016R1141>

EU Regulation 2017/1263. Updating the list of invasive alien species of Union concern established by Implementing Regulation (EU) 2016/1141 pursuant to Regulation (EU) No 1143/2014 of the European Parliament and of the Council

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017R1263>

EU Regulation 2019/1262. Commission Implementing Regulation (EU) 2019/1262 of 25 July 2019 amending Implementing Regulation (EU) 2016/1141 to update the list of invasive alien species of Union concern <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R1262>

EU Regulation 2022/1203. Commission Implementing Regulation (EU) 2022/1203 of 12 July 2022 amending Implementing Regulation (EU) 2016/1141 to update the list of invasive alien species of Union concern <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022R1203>

Real Decreto 630/2013 por el que se regula el Catálogo español de especies exóticas invasoras. (BOE, Texto consolidado. Última modificación: 17 de junio de 2016, Pág. 1-19). Ministerio de Agricultura, Alimentación y Medio Ambiente. <https://www.boe.es/buscar/doc.php?id=BOE-A-2013-8565>

Orden TED/1126/2020, de 20 de noviembre, por la que se modifica el Anexo del Real Decreto 139/2011, de 4 de febrero, para el desarrollo del Listado de Especies Silvestres en Régimen de Protección Especial y del Catálogo Español de Especies Amenazadas, y el Anexo del Real Decreto 630/2013, de 2 de agosto, por el que se regula el Catálogo Español de Especies Exóticas Invasoras.

<https://www.boe.es/buscar/doc.php?id=BOE-A-2020-15296>

Orden TED/339/2023, de 30 de marzo, por la que se modifica el anexo del Real Decreto 139/2011, de 4 de febrero, para el desarrollo del Listado de Especies Silvestres en Régimen de Protección Especial y del Catálogo Español de Especies Amenazadas, y el anexo del Real Decreto 630/2013, de 2 de agosto, por el que se regula el Catálogo Español de Especies Exóticas Invasoras

<https://www.boe.es/eli/es/o/2023/03/30/ted339>

Rotchés-Ribalta *et al.* (2022) Les espècies exòtiques de Catalunya. Resum del projecte Exocat 2021.

<https://mediambient.gencat.cathomeexocat2022>

Sáez, L. & Aymerich, P. (2021). An annotated checklist of the vascular plants of Catalonia (north-eastern Iberian Peninsula),

https://mediambient.gencat.cat/web/.content/home/ambits_dactuacio/patrimoni_natural/especies_exotiques_medinatural/Inici/checklist-alien-flora-catalunya.pdf

Saez *et al.* (2004) Atlas de las plantas alóctonas invasoras en España. Dirección General para la Biodiversidad. Madrid. 378 p.

Saez *et al.* (2011) La flora alóctona de la Comunidad Valenciana (España). Bot. Complut. 35: 97–130.

Funding

LIFE medCLIFFS Towards an integrative management of Invasive Alien Plant Species in Mediterranean sea cliffs of European interest (LIFE20 NAT/ES/001223) is a nature conservation project financed by the LIFE program of the European Union working to improve the management of invasive alien plant species in the habitat of community interest 1240 – Mediterranean cliffs with endemic *Limonium* spp. and to guarantee the conservation of this habitat.

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#	Species	Criteria						Comments
		1	2	3	4	5	6	
1	Acacia dealbata	X			X	X	X	
2	<i>Acacia mearnsii</i>					X		It is included in Annex II of the "potentially invasive species" of Royal Decree 1628/2011, but not in its subsequent editions, due to issues of territorial and management competences.
3	<i>Acacia melanoxylon</i>				X	X	X	
4	<i>Acacia saligna</i> (syn. <i>Acacia cyanophylla</i>)				X	X	X	In general, these species and some others from genus <i>Acacia</i> (eg., <i>Acacia cyclops</i> or <i>A. longifolia</i>) are considered very problematic in the Mediterranean area.
5	Agave americana	X		X	X	X	X	
6	Ailanthus altissima	X	X	X	X	X	X	
7	<i>Alternanthera philoxeroides</i>		X	X		X	X	
8	<i>Ambrosia artemisiifolia</i>				X	X	X	
9	<i>Andropogon virginicus</i>					X	X	
10	Araujia sericifera	X		X	X	X	X	
11	<i>Arctotheca calendula</i>			X	X	X		Likely commercialized.
12	<i>Artemisia annua</i>			X		X		
13	Arundo donax	X	X	X	X	X		
14	<i>Asclepias syriaca</i>					X	X	
15	<i>Asparagus asparagoides</i>					X	X	
16	<i>Austrocylindropuntia subulata</i>				X	X	X	This genus has been often synonymized with <i>Cylindropuntia</i> , and all <i>Cylindropuntia</i> are prohibited according to the Royal Decree 630/2013.
17	<i>Azolla</i> spp.				X	X	X	Typically, <i>Azolla filiculoides</i> .
18	<i>Baccharis halimifolia</i>				X	X	X	
19	<i>Buddleja davidii</i>		X		X	X	X	
20	<i>Cabomba caroliniana</i>					X	X	
21	<i>Cardiospermum grandiflorum</i>					X	X	

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		1	2	3	4	5	6	
22	Carpobrotus acinaciformis	X			X	X	X	
23	Carpobrotus edulis	X	X	X	X	X	X	
24	Celastrus orbiculatus					X	X	Included in the Commission Implementing Regulation (EU) 2022/1203, but applying from 2 August 2027,
25	Cenchrus longisetus (syn. Pennisetum villosum)	X		X		X		
26	Cenchrus setaceus (syn. Pennisetum setaceum)	X			X	X	X	
27	Cortaderia jubata					X	X	
28	Cortaderia selloana		X		X	X	X	
29	Crassula helmsii					X	X	
30	Cylindropuntia spp.	X			X	X	X	Only <i>C. pallida</i> is considered invasive by Sáez & Aymerich (2021) and by EXOCAT, among the species of this genus found in Catalonia, a plant that the LIFE medCLIFFS project also monitors / Invasive plants of Spain (Sáez <i>et al.</i> , 2004).
31	Delairea odorata	X	X	X	X	X		
32	Disphyma crassifolium	X				X		
33	Drosanthemum floribundum	X				X		
34	Egeria densa					X	X	
35	Ehrharta calycina					X	X	
36	Elodea canadensis				X	X	X	
37	Elodea nuttallii		X			X	X	
38	Fallopia baldschuanica		X	X	X	X	X	
39	Fallopia japonica (syn. Reynoutria japonica)	X	X	X	X	X	X	
40	Gazania rigens	X				X		It is sold both as a pot plant and as a seed mix, where many hybrid forms appear as well. It is one of the target species of Life medCLIFFS, and affects endemisms such as several species of the genus <i>Limonium</i> .

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		1	2	3	4	5	6	
41	<i>Gunnera tinctoria</i>					X	X	
42	<i>Gymnocoronis spilanthoides</i>					X	X	
43	<i>Hakea sericea</i>					X	X	
44	<i>Hedychium gardnerianum</i>					X	X	
45	<i>Helianthus tuberosus</i>		X	X	X	X	X	
46	<i>Heracleum mantegazzianum</i>			X		X	X	
47	<i>Heracleum persicum</i>					X	X	
48	<i>Heracleum sosnowskyi</i>					X	X	
49	<i>Humulus scandens</i>					X	X	
50	<i>Hydrocotyle ranunculoides</i>					X	X	
51	<i>Impatiens glandulifera</i>		X	X		X	X	
52	<i>Kalanchoe × houghtonii</i>	X	(X)			X		
53	<i>Kalanchoe daigremontiana</i>		(X)	X		X		From all listed <i>Kalanchoe</i> , only this species is listed as invasive by EXOCAT, likely because of a confusion with the hybrid taxon <i>K. × houghtonii</i>
54	<i>Kalanchoe tubiflora</i> <i>(syn. K. delagoensis)</i>	X				X		
55	<i>Koenigia polystachya</i>					X	X	
56	<i>Lagarosiphon major</i>					X	X	
57	<i>Lespedeza cuneata</i>					X	X	
58	<i>Leucaena leucocephala</i>				X	X		
59	<i>Ludwigia</i> spp.		X			X	X	Excepting <i>L. palustris</i> and <i>L. peploides</i> subsp. <i>montevidensis</i> , according to Sáez & Aymerich (2021) and EXOCAT
60	<i>Lygodium japonicum</i>					X	X	
61	<i>Lysichiton americanus</i>					X	X	
62	<i>Malephora purpureo-crocea</i>					X		
63	<i>Mesembryanthemum cordifolium</i>	X				X		Including the hybrid <i>M. × haeckelianum</i> . The very similar hybrid <i>Mesembryanthemum × vascosilvae</i>

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		1	2	3	4	5	6	
								(formerly <i>Aptenia</i> 'Red Apple') should also be included. Both plants are grown interchangeably.
64	<i>Microstegium vimineum</i>					X	X	
65	<i>Myoporum laetum</i>					X	X	According to order TED/339/2023, it has been added to the list of invasive species of the RD 139/2011 and the annex to the RD 630/2013
66	<i>Myriophyllum aquaticum</i>					X	X	
67	<i>Myriophyllum heterophyllum</i>					X	X	
68	<i>Nymphaea mexicana</i>					X	X	
69	Opuntia aurantiaca	X		X		X		
70	<i>Opuntia dillenii</i>				X	X	X	
71	<i>Opuntia engelmannii</i>				X	X		
72	Opuntia ficus-indica (syn. <i>O. maxima</i>)	X	X	X	X	X	X	
73	Opuntia lindheimeri (var. "linguiformis")	X			X	X		
74	<i>Opuntia mesacantha</i> subsp. <i>mesacantha</i> (sin. <i>O. humifusa</i>)		X	X	X	X		
75	<i>Opuntia phaeacantha</i>		X	X	X	X		
76	Opuntia stricta	X	X	X	X	X	X	
77	Oxalis pes-caprae	X		X	X	X	X	There is no certainty of its commercialization, but it likely appears as a contamination of gardening substrates. It is also monitored in LIFE medCLIFFS.
78	<i>Parthenium hysterophorus</i>					X	X	
79	<i>Paspalum notatum</i>					X		
80	<i>Persicaria perfoliata</i> (syn. <i>Polygonum perfoliatum</i>)					X	X	
81	<i>Pistia stratiotes</i>					X	X	
82	Pittosporum tobira	X		X		X		Clearly invasive in the Costa Brava and targeted by LIFE medCLIFFS. Likely, var.

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		1	2	3	4	5	6	
								<i>nanum</i> does not show invasiveness.
83	<i>Pontederia crassipes</i> (syn. <i>Eichhornia crassipes</i>)				X	X	X	
84	<i>Prosopis juliflora</i>					X	X	
85	<i>Pueraria montana</i> var. <i>lobata</i> (syn. <i>P. lobata</i> ; <i>P. thunbergiana</i>)					X	X	
86	<i>Salvinia</i> spp.					X	X	Typically, <i>Salvinia molesta</i> .
87	<i>Senecio angulatus</i>	X		X		X		Locally transforming invasive, expanding throughout the coast.
88	<i>Senecio inaequidens</i>	X	X	X	X	X	X	
89	<i>Senecio pterophorus</i>	X	X	X		X		
90	<i>Spartina alterniflora</i>				X	X	X	
91	<i>Spartina densiflora</i>					X	X	
92	<i>Spartina patens</i> (syn. <i>Sporobolus pumilus</i>)		X		X	X	X	
93	<i>Tradescantia fluminensis</i>		X	X	X	X	X	
94	<i>Triadica sebifera</i>					X	X	