



AIRMID INSTITUTE

Airmid Biannual List

July 1, 2024 – December 31, 2024

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Please note that IUCN Red List evaluation which Airmid Institute relies heavily on to create this list, is applied to populations which are wild. There is a continuum of management intensities, ranging from captive populations in zoos, aquariums, and botanical gardens to species that receive no conservation efforts. Clearly, confined populations are not "wild" and would be eliminated from a Red List assessment (i.e., data from such populations are not used when establishing the status of a species, save for Extinct in the Wild [EW]). Conversely, subpopulations of a great number of species depend on conservation measures (such as protected areas) that are primarily aimed at minimizing human impacts. These subpopulations are generally regarded as "wild," and their data are utilized in Red List assessments. These are separated by subpopulations controlled with moderate levels of intensity. For these subpopulations, the notion of "wild" may be determined by the degree of management and the subpopulation's predicted viability absent management (IUCN, 2022).

Reference: IUCN (2022). Guidelines for Using the IUCN Red List Categories and Criteria. Version 15.1

It is also important to note that many of these plants occur naturally in other parts of the world and are widely distributed globally. The National and Regional section of this list provides information on plants where they've been assessed in specific locations to give you guidance as to where not to source from. "Please note that the archive site has not been updated since 2019 and results of the search are likely be an underestimate" (Personal communication, ZSL and IUCN National Red List Working Group, 2023).

Yours in Nature,
Kelly & The Airmid Team



Airmid Institute Biannual List of Wild Threatened, Near Threatened, and CITES-Protected Plants, Mammals, Fungi, and Seaweed Species Used in Aromatherapy, Perfumery, and Aromatic Herbalism (July 1, 2024 – December 31, 2024)

GLOBAL

Common name	Latin name	Location	Conservation status; CITES*	Population Trend	Year Assessed
Fraser fir	<i>Abies fraseri</i>	Global	Endangered	↓	2011
Himalayan fir needle	<i>Abies spectabilis</i>	Global	Near Threatened	↓	2010
Chinese rice flower	<i>Aglaia odorata</i>	Global	Near Threatened	↔	2010
Angelica (Himalayan)	<i>Angelica glauca</i>	Global	Endangered	↓	2014
Rosewood	<i>Aniba rosaeodora</i>	Global	*Endangered	↓	2021
Agarwood	<i>Aquilaria crassna</i>	Global	*Critically Endangered	↓	2017
Agarwood	<i>Aquilaria malaccensis</i>	Global	*Critically Endangered	↓	2018
Agarwood	<i>Aquilaria rostrata</i>	Global	*Critically Endangered	↓	2017
Agarwood	<i>Aquilaria sinensis</i>	Global	*Vulnerable	↓	2018
Argan	<i>Argania spinosa</i>	Global	Vulnerable	↓	2021
Frankincense	<i>Boswellia carteri</i> syn. <i>sacra</i>	Global	Near Threatened	↔	1998
Muhuhu	<i>Brachylaena huillensis</i>	Global	Near Threatened	↔	1998
Linaloe	<i>Bursera aloexylon</i>	Global	Vulnerable	↓	2019
Taiwan incense cedar	<i>Calocedrus formosana</i>	Global	Endangered	↓	2010
Elemi (Piling-liitan)	<i>Canarium luzonicum</i>	Global	Near Threatened	↓	2019
Cedrela (Spanish cedar)	<i>Cedrela odorata</i>	Global	*Vulnerable	↓	2017
Atlas cedarwood	<i>Cedrus atlantica</i>	Global	Endangered	↓	2013
Cedar of Lebanon	<i>Cedrus libani</i>	Global	Vulnerable	↓	2011
Taiwan cypress	<i>Chamaecyparis formosensis</i>	Global	Endangered	?	2010
Siam Wood/Fujian cypress	<i>Chamaecyparis hodginsii</i>	Global	Vulnerable	?	2010

Port Orford cedarwood	<i>Chamaecyparis lawsoniana</i>	Global	Near Threatened	↑	2011
Hinoki cypress	<i>Chamaecyparis obtusa</i> ; <i>C. obtusa</i> var. <i>obtusata</i>	Global	Near Threatened	?	2011 2010
Lawang	<i>Cinnamomum culilaban</i>	Global	Endangered	?	2020
Coffee	<i>Coffea arabica</i>	Global	Endangered	↓	2018
Sweet myrrh	<i>Commiphora guidotti</i>	Global	Vulnerable	↓	2018
Guggul (Common myrrh)	<i>Commiphora wightii</i>	Global	Critically Endangered	↓	2014
Massoy	<i>Cryptocarya massoy</i>	Global	Near Threatened	?	2019
Japanese cedar	<i>Cryptomeria japonica</i>	Global	Near Threatened	—	2010
Gurjum	<i>Dipterocarpus turbinatus</i>	Global	Vulnerable	↓	2017
Borneo camphor	<i>Dryobalanops aromatica</i>	Global	Vulnerable	↓	2017
Eucalyptus (Red river gum)	<i>Eucalyptus camaldulensis</i>	Global	Near Threatened	—	2019
Camden wollybutt	<i>Eucalyptus macarthurii</i>	Global	Vulnerable	—	2019
Eucalyptus (Narrow-leaved peppermint)	<i>Eucalyptus radiata</i>	Global	Near Threatened	—	2019
Guaiacwood	<i>Gonopterodendron sarmientoi</i>	Global	*Endangered	↓	2017
Macadamia	<i>Macadamia integrifolia</i>	Global	Vulnerable	?	2019
Macadamia	<i>Macadamia ternifolia</i>	Global	Endangered	↓	2019
Spikenard	<i>Nardostachys jatamansi</i> syn: <i>N. grandiflora</i>	Global	*Critically Endangered	↓	2020
Araucaria	<i>Neocallitropsis pancheri</i>	Global	Endangered	↓	2009
Brazilian Sassafras	<i>Ocotea pretiosa</i>	Global	Vulnerable	↔	1998
Phoebe	<i>Oreodaphne porosa</i>	Global	Vulnerable	↔	1998
Cretan dittany	<i>Origanum dictamnus</i>	Global; Europe; Mediterranean	Near Threatened	?	2011
Serbian spruce	<i>Picea omorika</i>	Global	Endangered	↓	2016
Ravensara	<i>Ravensara aromatica</i>	Global	Near Threatened	↓	2020
Sandalwood (Iliahi)	<i>Santalum freycinetianum</i>	Global	Endangered	?	2016
Sandalwood (East Indian)	<i>Santalum album</i>	Global	Vulnerable	↓	2018

Sandalwood (New Caledonia)	<i>Santalum austrocaledonicum</i>	Global	Near Threatened	↓	2019
Sandalwood (Mountain)	<i>Santalum paniculatum</i>	Global	Vulnerable	?	2017
Sandalwood (Western Australian)	<i>Santalum spicatum</i>	Global	Vulnerable	↓	2021
Costus	<i>Saussurea costus</i>	Global	*Critically Endangered	↓	2014
Oriental arborvitae	<i>Thuja orientalis</i>	Global	Near Threatened	?	2011
Hemlock spruce	<i>Tsuga canadensis</i>	Global	Near Threatened	↓	2011
Vanilla	<i>Vanilla planifolia</i>	Global	*+Endangered	↓	2017
Baboonwood	<i>Virola surinamensis</i>	Global	Endangered	↔	1998
Shea (African)	<i>Vitellaria paradoxa</i> <i>V. paradoxa</i> subsp. <i>nilotica</i>	Global	Vulnerable	?	1998

NATIONAL & REGIONAL

Common name	Latin name	Location	Conservation status; CITES*	Population Trend (N/A)	Year Assessed
Ambrette seed	<i>Abelmoschus moschatus</i>	Sri Lanka	Near Threatened		2012
Calamus	<i>Acorus calamus</i>	India (Kerala)	Endangered		2000
Calamus	<i>Acorus calamus</i>	India (Tamil Nadu); Switzerland; Mongolia	Vulnerable		2000 2002 2011
Calamus	<i>Acorus calamus</i>	Norway	Near Threatened		2006
Calamus	<i>Acorus calamus</i>	Hungary	Near Threatened		2007
Aloe	<i>Aloe vera</i>	Malta	Vulnerable		1989
Wormwood	<i>Artemisia absinthium</i>	Ireland	Vulnerable		2016
Frankincense	<i>Boswellia serrata</i>	Sri Lanka; India	Critically Endangered		2012 2015
Cinnamon	<i>Cinnamomum verum</i>	Sri Lanka	Vulnerable		2012

Cistus	<i>Cistus ladanifer</i>	France (continental)	Near Threatened		2019
Coconut	<i>Cocos nucifera</i>	Colombia	Near Threatened		2005
Saffron	<i>Crocus sativus</i>	Switzerland	Vulnerable		2002
Cardamom	<i>Elettaria cardamomum</i>	Sri Lanka	Vulnerable		2012
Hyssop	<i>Hyssopus officinalis</i>	Norway	Vulnerable		2013
Shikimi	<i>Illicium anisatum</i>	South Korea	Near Threatened		2012
Elecampane	<i>Inula helenium</i>	United Kingdom	Near Threatened		2014
Juniper berry	<i>Juniperus communis</i>	Albania	Vulnerable		2013
Juniper berry	<i>Juniperus communis</i>	United Kingdom	Near Threatened		2014
Linseed (Flax)	<i>Linum usitatissimum</i>	Switzerland	Endangered		2002
Honeysuckle	<i>Lonicera caprifolium</i>	Switzerland	Near Threatened		2002
Black cumin	<i>Nigella sativa</i>	Croatia	Near Threatened		2007
Brazilian Sassafras	<i>Ocotea pretiosa</i>	Brazil	Endangered		2013
Sandalwood, East African	<i>Osyris lanceolata</i>	Burundi; Ethiopia; Kenya; Rwanda; Uganda; United Republic of Tanzania	*Protected by CITES although conservation status is Least Concern		2013
Moroccan oregano	<i>Origanum compactum</i>	Spain	Vulnerable		2008
Oregano	<i>Origanum vulgare</i>	Albania	Endangered		2013
Spruce (Norway)	<i>Picea abies</i>	Albania	Critically Endangered		2013
Black pepper	<i>Piper nigrum</i>	Southern India	Near Threatened		2000
Sweet almond	<i>Prunus dulcis</i>	Switzerland	Vulnerable		2002
Rose root**	<i>Rhodiola rosea</i>	Bulgaria; Czech Republic	Critically Endangered		2011 2012
Rose root**	<i>Rhodiola rosea</i>	Mongolia	Vulnerable		2011
Sandalwood (Lanai)	<i>Santalum haleakalae</i> var. <i>lanaiense</i>	Hawaii	Endangered		2013
Sandalwood (North Queensland)	<i>Santalum lanceolatum</i>	Australia (Victoria)	Endangered		2014
Winter savory	<i>Satureja montana</i>	Albania	Vulnerable		2013
Benzoin	<i>Styrax benzoin</i>	Singapore	Vulnerable		1994
Comfrey	<i>Symphytum officinale</i>	Albania	Vulnerable		-----

Blue tansy	<i>Tanacetum annuum</i>	France (continental)	Critically Endangered		2012
Valerian	<i>Valeriana officinalis</i>	Albania	Vulnerable		2013
Valerian	<i>Valeriana officinalis</i>	Norway; United Kingdom	Near Threatened		2013 2014
East African greenheart	<i>Warburgia ugandensis</i>	Uganda	Vulnerable		2016

ANIMAL FIXATIVES

Common name	Latin name	Location	Conservation status; CITES*	Population Trend	Year Assessed
Siberian musk deer	<i>Moschus moschiferus</i>	Global	*Vulnerable	↓	2014
Sperm whale	<i>Physeter macrocephalus</i>	Global	*++Vulnerable	↓	2008

AIRMID'S WATCHFUL EYE

Common name	Latin name	Location	Research
Argan	<i>Argania spinosa</i>	Morocco	Sinsin et al., 2020
Palo santo	<i>Bursera graveolens</i>	Ecuador; Peru	Personal communication, Professor M. Puentes Chully, 2024
Roman chamomile	<i>Chamaemelum nobile</i>	UK	Kew Royal Botanic Garden, 2021
Oakmoss	<i>Evernia prunastri</i>	Iceland	Natural History Institute of Iceland, 1996
Olive	<i>Olea europaea</i>	Lebanon; Turkey; Greece	Kaniewski et al., 2023
Cretan marjoram	<i>Origanum microphyllum</i>	Greece	Kougioumoutzis et al., 2021
Black spruce	<i>Picea mariana</i>	Canada	Baltzer et al., 2021
Almond	<i>Prunus dulcis</i>	Global	Freitas et al., 2023

White sage	<i>Salvia apiana</i>	Southern California	UpS At-Risk Working Committee, 2021; Personal communication A. Sanchez, 2024
Valerian	<i>Valeriana jatamansi</i>	Nepal	Rana et al., 2020

Species in red have been noted by the IUCN as being threatened by the trade of their extract/oil.

population trend unspecified = green opposing arrows
population trend decreasing = green arrow pointing down
population trend increasing = green arrow pointing up
population trend unknown = green question mark
population trend stable = green line

*CITES-protected species

**If sourcing rose root (*Rhodiola rosea*), please contact Airmid Institute.

*†Although protected by CITES, *in vitro* plant cultures of legal origin, cut flowers from naturalized or artificially propagated plants and cultivated vanilla seedpods are CITES-exempt.

*††Although protected by CITES, ambergris itself is CITES-exempt; however, its trade is still heavily regulated within certain countries.

Content is derived from IUCN, CITES, Inventaire National du Patrimoine Naturel, and US F&W unless otherwise noted.

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