

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



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THE HISTORY AND CHALLENGES OF AGARWOOD AND CITES

1. This document has been prepared by the Royal Botanic Gardens Kew, United Kingdom of Great Britain, and Northern Ireland*.
2. This document presents supporting information for the working document “The history and challenges of agarwood and CITES” CoP19 Doc 62.2.

* *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

Annex 1: *Aquilaria* and *Gyrinops* accepted species on the Plants of the World Online and IUCN Red List status. *Gyrinops* assessments are provisional and have been submitted to IUCN (POWO 2021; IUCN 2022)

Species name	Red List Status	Year assessment published
<i>Aquilaria apiculata</i>	Data Deficient	2018
<i>Aquilaria baillonii</i>	Data Deficient	2018
<i>Aquilaria banaense</i>	Vulnerable	2018
<i>Aquilaria beccariana</i>	Vulnerable	2018
<i>Aquilaria brachyantha</i>	Data Deficient	2018
<i>Aquilaria citrinicarpa</i>	Data Deficient	2018
<i>Aquilaria crassna</i>	Critically Endangered	2018
<i>Aquilaria cumingiana</i>	Vulnerable	2018
<i>Aquilaria decemcostata</i>	Not Evaluated (assessed as part of <i>A. cumingiana</i>)	
<i>Aquilaria filaria</i>	Vulnerable	2018
<i>Aquilaria hirta</i>	Vulnerable	2018
<i>Aquilaria khasiana</i>	Critically Endangered	2018
<i>Aquilaria malaccensis</i>	Critically Endangered	2018
<i>Aquilaria microcarpa</i>	Endangered	2018
<i>Aquilaria parvifolia</i>	Data Deficient	2018
<i>Aquilaria rostrata</i>	Critically Endangered	2018
<i>Aquilaria rugosa</i>	Vulnerable	2018
<i>Aquilaria sinensis</i>	Vulnerable	2018
<i>Aquilaria subintegra</i>	Data Deficient	2018
<i>Aquilaria urdanetensis</i>	Data Deficient	2018
<i>Aquilaria yunnanensis</i>	Vulnerable	2018
<i>Gyrinops caudata</i>	Vulnerable	Provisional, submitted to IUCN
<i>Gyrinops decipiens</i>	Endangered	Provisional, submitted to IUCN
<i>Gyrinops ledermannii</i>	Endangered	Provisional, submitted to IUCN
<i>Gyrinops moluccana</i>	Endangered	Provisional, submitted to IUCN
<i>Gyrinops podocarpa</i>	Vulnerable	Provisional, submitted to IUCN
<i>Gyrinops salicifolia</i>	Endangered	Provisional, submitted to IUCN
<i>Gyrinops versteegii</i>	Vulnerable	Provisional, submitted to IUCN
<i>Gyrinops vidalii</i>	Critically Endangered	Provisional, submitted to IUCN
<i>Gyrinops walla</i>	Vulnerable	Provisional, submitted to IUCN

Annex 2: Figures summarising legal trade of *Aquilaria* and *Gyrinops* from CITES Trade Database data (accessed 14th April 2022).

Data was searched on the CITES Trade Database for the years 2011-2020. There were 8484 records during this period for both genera, 1216 records had quantities recorded by both the importer and exporter countries, 5316 records had quantities recorded by the exporter but no quantities recorded from the importer, whilst 1952 records had quantities recorded by the importer, but no quantities recorded from the exporter. Due to these differences overall trade is difficult to accurately quantify and analyse, and the figures below are either based on all records or only those records with quantities recorded by importers. Also due to the variety of products traded internationally and the different units used, analysing the total quantity of agarwood in trade is difficult.

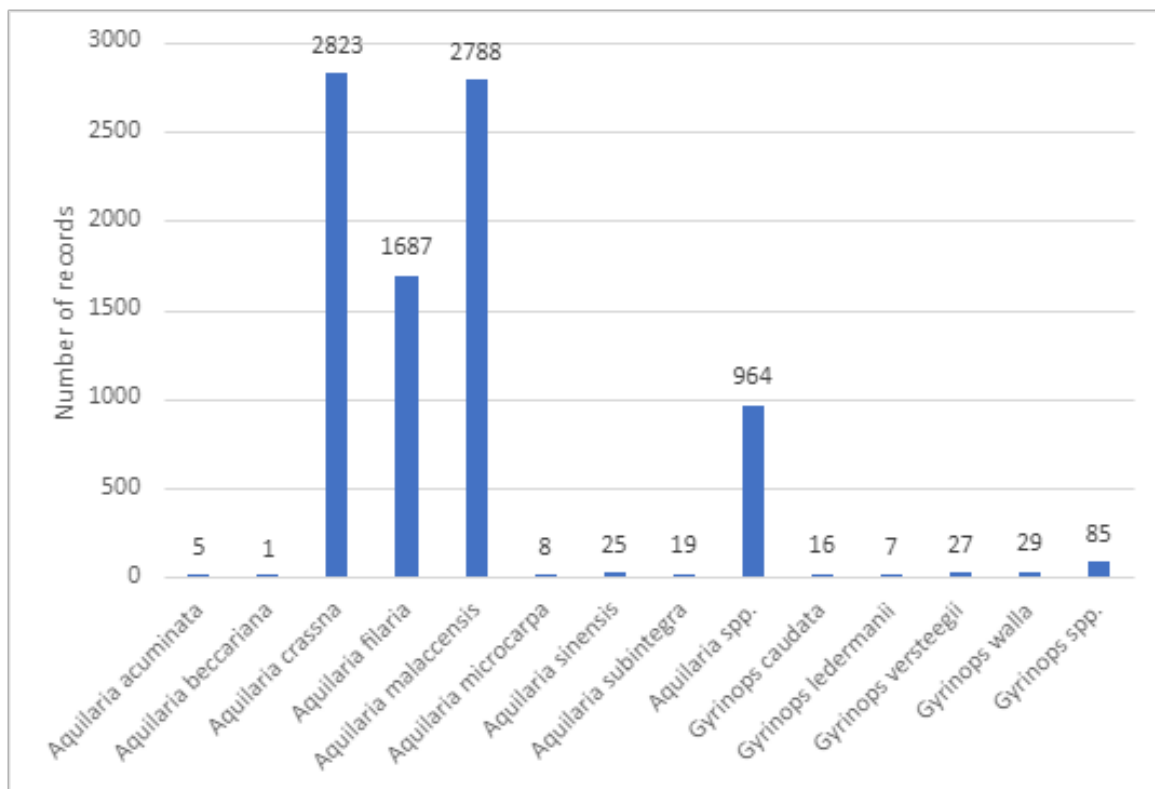


Figure 1: Total number of records for *Aquilaria* and *Gyrinops* species recorded by the CITES Trade Database 2011-2020 (based on all records).

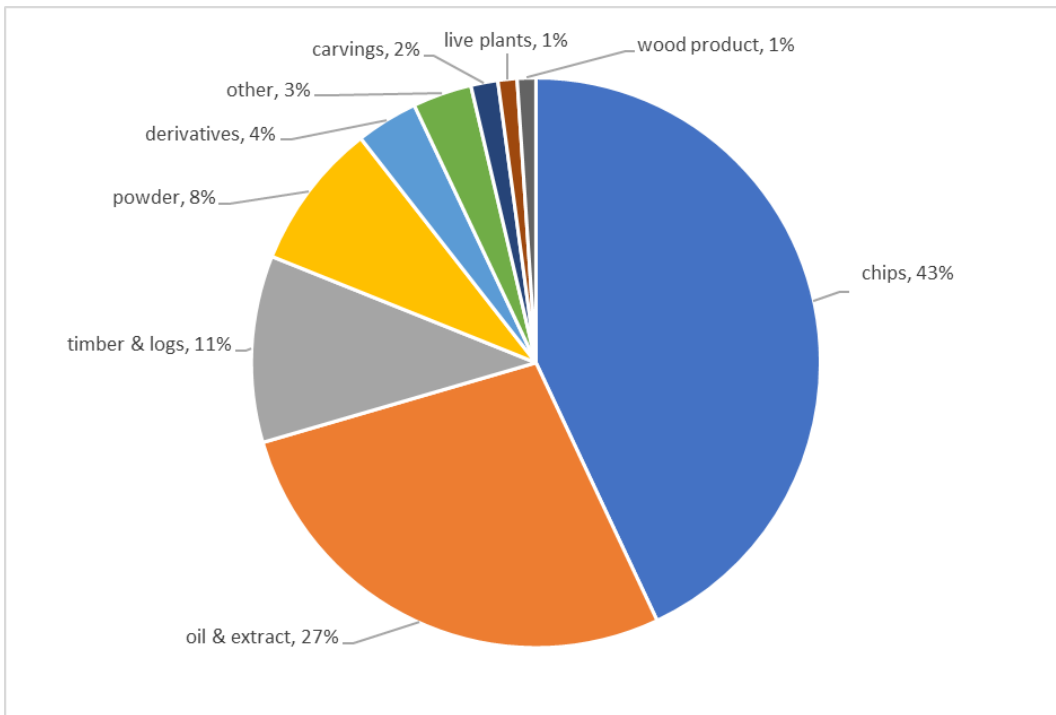


Figure 2: Types of commodities of *Aquilaria* and *Gyrinops* recorded in the CITES Trade Database 2011-2020 (based on all records). “Other” includes bark, cosmetics, dried plants, flowers, gall, jewellery, leaves, medicine, roots, seeds, specimens, stems, unspecified specimens, veneer and wax. “Timber & logs” includes timber, timber pieces, logs and sawn wood.

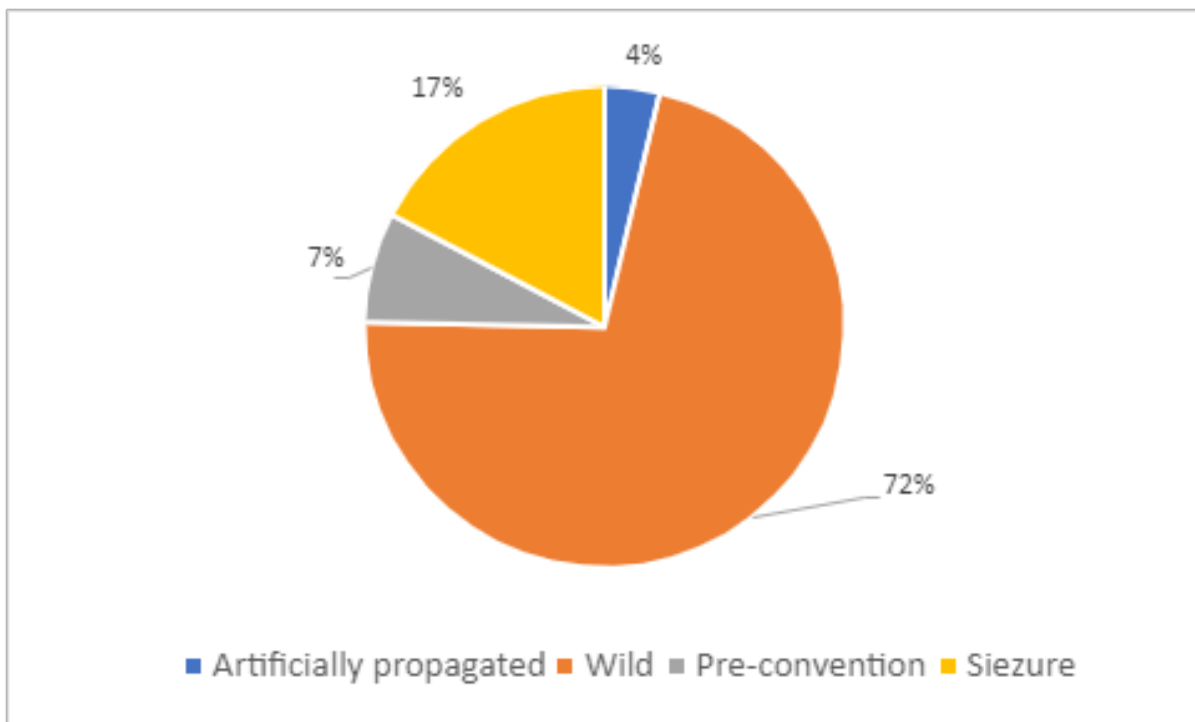


Figure 3: Source of *Gyrinops* recorded by Importers in the CITES Trade Database 2011-2020. Seizure data is likely to be an underestimate as only a few countries have submitted seizure data for *Gyrinops*

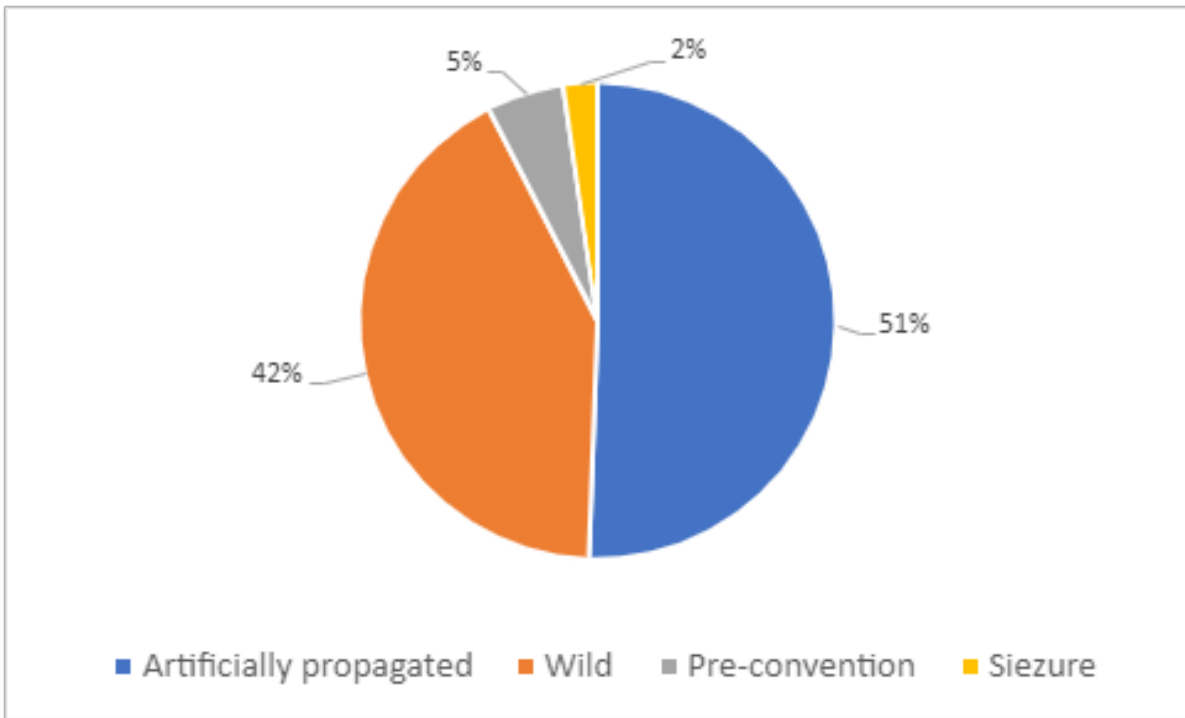


Figure 4: Source of *Aquilaria* reported by Importers in the CITES Trade Database 2011-2020. Seizure data is likely to be an underestimate as only a few countries have submitted seizure data for *Aquilaria*.

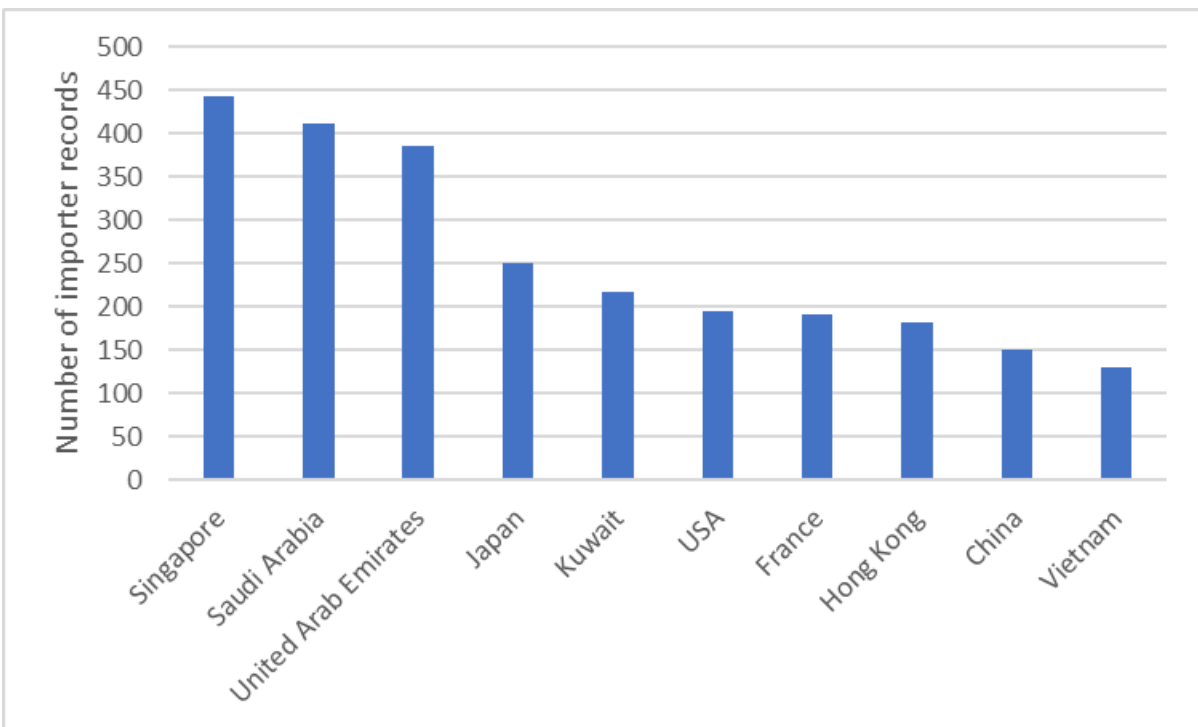


Figure 5: Top ten importers of *Aquilaria* and *Gyrinops* recorded by Importers in the CITES Trade Database 2011-2020.

Analysing all the records from this time period, 93 countries have imported either or both genera, with many of the countries having only imported small quantities. However, only looking at records with quantities recorded by importers, only 39 countries are listed, with the top 10 countries displayed in this graph. Although there is this difference in the data the top 10 importers when analysing all records is Saudi Arabia, United Arab Emirates, Singapore, Kuwait, China, Japan, Taiwan, USA, Hong Kong and France, which is very similar to Figure 5.

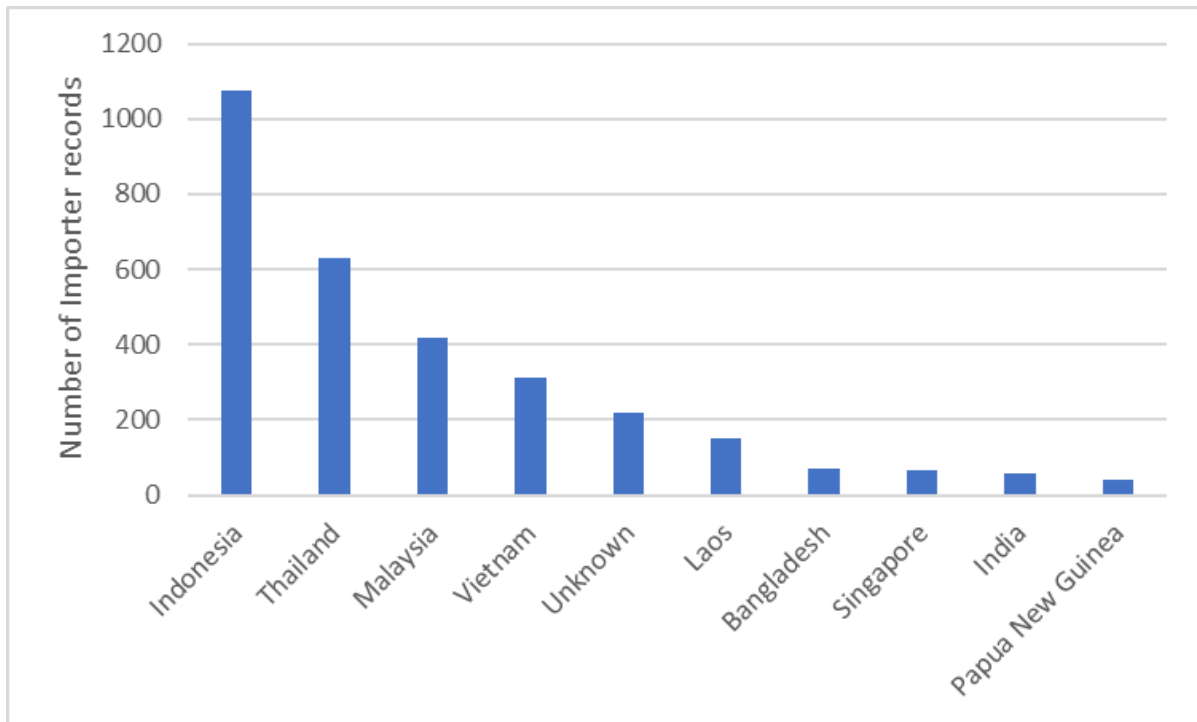
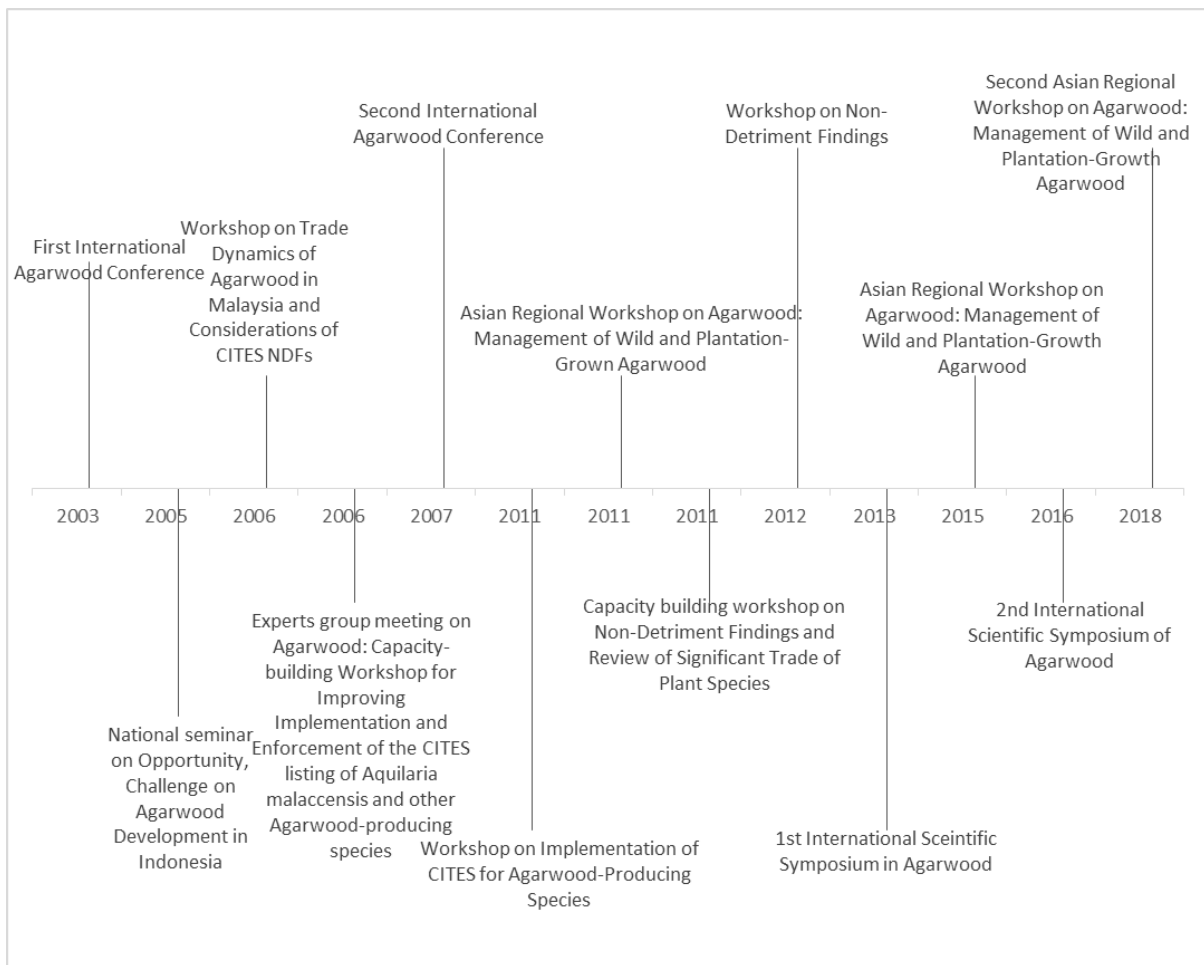


Figure 6: Main country of origin of *Aquilaria* and *Gyrinops* as recorded by Importers in the CITES Trade Database 2011-2020 (based on Importer records with country of origin recorded, or if no country of origin the exporter country).

Annex 3: Timeline of key workshops and meetings concerning the conservation and management of agarwood-producing species, and year they were held



Annex 4: History of CITES annotations for *Aquilaria* and *Gyrinops* with the date the annotation took effect and description of the annotation (Summarised from (UNEP-WCMC 2022a, b).

Date	Species	Annotation	Description
16/02/1995	<i>Aquilaria malaccensis</i>	#1	Designates all parts and derivatives, except: a) seeds, pores and pollen (including pollinia); and b) seedlings or tissue cultures obtained <i>in vitro</i> , in solid or liquid media, transported in sterile containers.
12/01/2005	<i>Aquilaria</i> spp. and <i>Gyrinops</i> spp.	#1	Designates all parts and derivatives, except: a) seeds, pores and pollen (including pollinia); b) seedlings or tissue cultures obtained <i>in vitro</i> , in solid or liquid media, transported in sterile containers; and c) cut flowers of artificially propagated plants.
13/09/2007	<i>Aquilaria</i> spp. and <i>Gyrinops</i> spp.	#1	Designates all parts and derivatives, except: a) seeds, spores and pollen (including pollinia); b) seedling or tissue cultures obtained <i>in vitro</i> , in solid or liquid media, transported in sterile containers; c) cut flowers of artificially propagated plants; and d) fruits and parts and derivatives thereof of artificially propagated plants of the genus <i>Vanilla</i> .
23/06/2010	<i>Aquilaria</i> spp. and <i>Gyrinops</i> spp.	#4	Designates all parts and derivatives, except: a) seed (including seedpods of Orchidaceae), spores and pollen (including pollinia). The exemption does not apply to seeds from Cactaceae spp. exported from Mexico, and to seeds from <i>Beccariophoenix madagascariensis</i> and <i>Neodypsis decaryi</i> exported from Madagascar; b) seedlings or tissue cultures obtained <i>in vitro</i> , in solid or liquid media, transported in sterile containers; c) cut flowers of artificially propagated plants; d) fruits and parts and derivatives thereof of naturalized or artificially propagated plants of the genus <i>Vanilla</i> (Orchidaceae) and of the family Cactaceae; e) stems, flowers, and parts and derivatives thereof of naturalized or artificially propagated plants of the genera <i>Opuntia</i> subgenus <i>Opuntia</i> and <i>Selenicereus</i> (Cactaceae); and f) finished products of <i>Euphorbia antisyphilitica</i> packaged and ready for retail.
12/06/2013	<i>Aquilaria</i> spp. and <i>Gyrinops</i> spp.	#14	Designates all parts and derivatives, except: a) seeds and pollen; b) seedling or tissue cultures obtained <i>in vitro</i> , in solid or liquid media, transported in sterile containers; c) fruits; d) leaves; e) exhausted agarwood powder, including compressed powder in all shapes; and f) finished products packaged and ready for retail trade, this exemption does not apply to beads, prayer beads and carvings.
02/01/2017	<i>Aquilaria</i> spp. and <i>Gyrinops</i> spp.	#14	All parts and derivatives except: a) seeds and pollen; b) seedling or tissue cultures obtained <i>in vitro</i> , in solid or liquid media, transported in sterile containers; c) fruits; d) leaves; e) exhausted agarwood powder, including compressed powder in all shapes; and

			f) finished products packaged and ready for retail trade; this exemption does not apply to wood chips, beads, prayer beads and carvings.
CoP17 Res. Conf. 13.7 (Rev. CoP17)	<i>Aquilaria</i> spp. and <i>Gyrinops</i> spp.	Explanation added to annotation #14	'Up to 1 kg of woodchips, 24 ml of oil and two sets of beads or prayer beads (or two necklaces or bracelets) per person' are exempt from regulations as personal effects'.

Annex 5: Quota tables for *Aquilaria* and *Gyrinops* species (summarised from (UNEP-WCMC 2022c).

Table 1. Quotas for *Gyrinops*. “Genus *Gyrinops*” refers to quotas for *Gyrinops caudata*, *G. decipiens*, *G. ledermanii*, *G. moluccana*, *G. podocarpus*, *G. salicifolia* and *G. versteegii*. No quotas for *G. versteegii* for 2022 have been published (3rd August 2022)

Year	Country	Quota (kg)	Species or Genus	Specimen notes
2005	Indonesia	5,000	<i>G. versteegii</i>	
2006	Indonesia	25,000	<i>G. versteegii</i>	
2007	Indonesia	356,449	<i>G. versteegii</i>	Stockpile to be exported in 2005, 2006, 2007. Agarwood packed in sealed pouch carrying a wire-lead seal and a Management Authority stamp- quota applies to a combination of <i>Aquilaria filaria</i> & <i>Gyrinops versteegii</i>
2007	Indonesia	100,000	<i>G. versteegii</i>	Agarwood- quota applies to combination of <i>A. filaria</i> and <i>Gyrinops</i> spp.
2008	Indonesia	22,500	Genus <i>Gyrinops</i>	Chips, blocks, powder & oil
2009	Indonesia	455,000	Genus <i>Gyrinops</i>	Agarwood (tbc)- quota applies to combination of <i>A. filaria</i> and <i>Gyrinops</i> spp.
2010	Indonesia	427,000	Genus <i>Gyrinops</i>	Agarwood- quota applies to combination of <i>A. filaria</i> and <i>Gyrinops</i> spp.
2011	Indonesia	473,400	Genus <i>Gyrinops</i>	Agarwood- quota applies to combination of <i>A. filaria</i> and <i>Gyrinops</i> spp.
2012	Indonesia	520,740	Genus <i>Gyrinops</i>	Agarwood- quota applies to combination of <i>A. filaria</i> and <i>Gyrinops</i> spp.
2013	Indonesia	5,000	Genus <i>Gyrinops</i>	
2014	Indonesia	5,000	Genus <i>Gyrinops</i>	
2015	Indonesia	5,000	Genus <i>Gyrinops</i>	
2016	Indonesia	5,000	Genus <i>Gyrinops</i>	
2017	Indonesia	5,000	<i>G. versteegii</i>	
2018	Indonesia	4,500	<i>G. versteegii</i>	
2019	Indonesia	3,825	<i>G. versteegii</i>	
2020	Indonesia	3,251	<i>G. versteegii</i>	
2020	Indonesia	75,000	<i>G. decipiens</i>	Decaying logs
2021	Indonesia	3,000	<i>G. versteegii</i>	

Table 2: Quotas for *Aquilaria*

Year	Country	Quota (kg unless specified as other)	Species	Specimen notes
1999	Indonesia	270,000	<i>A. malaccensis</i>	
2002	Indonesia	75,000	<i>A. malaccensis</i>	
2003	Indonesia	50,000	<i>A. malaccensis</i>	
2004	Indonesia	50,000	<i>A. malaccensis</i>	
2005	Indonesia	50,000	<i>A. malaccensis</i>	
2005	Indonesia	356,449	<i>A. filaria</i>	Stockpile to be exported in 2005, 2006, 2007. Agarwood packed in sealed pouch carrying in a wire-lead seal and a Management Authority stamp
2005	Indonesia	120,000	<i>A. filaria</i>	
2006	Indonesia	50,000	<i>A. malaccensis</i>	
2006	Indonesia	356,449	<i>A. filaria</i>	Stockpile to be exported in 2005, 2006, 2007. Agarwood packed in sealed pouch carrying in a wire-lead seal and a Management Authority stamp
2006	Indonesia	100,000	<i>A. filaria</i>	
2007	Indonesia	30,000	<i>A. beccariana</i> , <i>A. cumingiana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. malaccensis</i> , <i>A. microcarpa</i> , <i>A. moszkowskii</i> , <i>A. secunda</i> and <i>A. tomentosa</i>	Genus <i>Aquilaria</i>
2007	Indonesia	356,449	<i>A. filaria</i>	Stockpile to be exported in 2005, 2006, 2007. Agarwood packed in sealed pouch carrying in a wire-lead seal and a Management Authority stamp. Quota applies to a combination of <i>Aquilaria filaria</i> and <i>Gyrinops versteegii</i>
2007	Indonesia	100,000	<i>A. filaria</i>	Agarwood- quota applies to a combination of <i>Aquilaria filaria</i> and <i>Gyrinops versteegii</i>
2007	Malaysia- Sarawak	10,000	<i>A. malaccensis</i>	Powder & wood chips
2007	Malaysia- Peninsular & Sabah	190,000	<i>A. malaccensis</i>	Powder & wood chips
2008	Indonesia	27,000	<i>A. beccariana</i> , <i>A. cumingiana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. malaccensis</i> , <i>A. microcarpa</i> , <i>A. moszkowskii</i> , <i>A. secunda</i> and <i>A. tomentosa</i> .	Genus <i>Aquilaria</i>
2008	Indonesia	585,000	<i>A. filaria</i>	Chips, blocks, powder & oil
2008	Malaysia- Sarawak	10,000	<i>A. malaccensis</i>	Powder & wood chips
2008	Malaysia- Peninsular & Sabah	170,000	<i>A. malaccensis</i>	Powder & wood chips
2009	Indonesia	173,250	<i>A. beccariana</i> , <i>A. cumingiana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. malaccensis</i> , <i>A. microcarpa</i> , <i>A. moszkowskii</i> , <i>A. secunda</i> and <i>A. tomentosa</i> .	Genus <i>Aquilaria</i>

Year	Country	Quota (kg unless specified as other)	Species	Specimen notes
2009	Indonesia	455,000	<i>A. filaria</i>	Agarwood (tbc)- quota applies to a combination of <i>Aquilaria filaria</i> and <i>Gyrinops versteegii</i>
2009	Malaysia- Sarawak	5,000	<i>A. malaccensis</i>	Powder & wood chips
2009	Malaysia- Peninsular & Sabah	200,000	<i>A. malaccensis</i>	Powder & wood chips
2010	Indonesia	146,250	<i>A. beccariana</i> , <i>A. cumingiana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. malaccensis</i> , <i>A. microcarpa</i> , <i>A. moszkowskii</i> , <i>A. secunda</i> and <i>A. tomentosa</i> .	Genus <i>Aquilaria</i>
2010	Indonesia	427,000	<i>A. filaria</i>	Agarwood- quota applies to a combination of <i>Aquilaria filaria</i> and <i>Gyrinops versteegii</i>
2010	Malaysia- Sarawak	5,000	<i>A. malaccensis</i>	Powder & wood chips
2010	Malaysia- Peninsular & Sabah	200,000	<i>A. malaccensis</i>	Powder & wood chips
2011	Indonesia	162,256	<i>A. beccariana</i> , <i>A. cumingiana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. malaccensis</i> , <i>A. microcarpa</i> , <i>A. moszkowskii</i> , <i>A. secunda</i> and <i>A. tomentosa</i> .	Genus <i>Aquilaria</i>
2011	Indonesia	473,400	<i>A. filaria</i>	Agarwood- quota applies to a combination of <i>Aquilaria filaria</i> and <i>Gyrinops versteegii</i>
2011	Malaysia- Sarawak	5,000	<i>A. malaccensis</i>	Powder & wood chips
2011	Malaysia- Peninsular & Sabah	200,000	<i>A. malaccensis</i>	Powder & wood chips
2012	Indonesia	178,482	<i>A. beccariana</i> , <i>A. cumingiana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. malaccensis</i> , <i>A. microcarpa</i> , <i>A. moszkowskii</i> , <i>A. secunda</i> and <i>A. tomentosa</i> .	Genus <i>Aquilaria</i>
2012	Indonesia	520,740	<i>A. filaria</i>	Agarwood- quota applies to a combination of <i>Aquilaria filaria</i> and <i>Gyrinops versteegii</i>
2012	Malaysia- Sarawak	5,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil Genus <i>Aquilaria</i>
2012	Malaysia- Peninsular & Sabah	200,000	<i>A. malaccensis</i>	Wood chips, wood blocks & essential oil
2013	Indonesia	178,500	<i>A. beccariana</i> , <i>A. cumingiana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. malaccensis</i> , <i>A. microcarpa</i> , <i>A. moszkowskii</i> , <i>A. secunda</i> and <i>A. tomentosa</i> .	Genus <i>Aquilaria</i>
2013	Indonesia	515,800	<i>A. filaria</i>	
2013	Malaysia- Sarawak	5,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil Genus <i>Aquilaria</i>
2014	Indonesia	178,500	<i>A. filaria</i> and <i>A. beccariana</i>	Wood chips, wood blocks & essential oil Genus <i>Aquilaria</i>
2014	Indonesia	515,800	<i>A. filaria</i>	

Year	Country	Quota (kg unless specified as other)	Species	Specimen notes
2014	Malaysia- Sarawak	5,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil Genus <i>Aquilaria</i>
2014	Malaysia-Peninsular & Sabah	200,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil Genus <i>Aquilaria</i>
2015	Indonesia	178,500	<i>A. filaria</i> and <i>A. beccariana</i>	Wood chips, wood blocks & essential oil Genus <i>Aquilaria</i>
2015	Indonesia	515,800	<i>A. filaria</i>	
2015	Malaysia- Sarawak	5,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil Wild specimens (<i>A. rostrata</i>) Genus <i>Aquilaria</i>
2015	Malaysia-Peninsular & Sabah	200,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil Genus <i>Aquilaria</i>
2016	Indonesia	178,500	<i>A. filaria</i> and <i>beccariana</i>	Wood chips, wood blocks & essential oil Genus <i>Aquilaria</i>
2016	Indonesia	515,800	<i>A. filaria</i>	
2016	Malaysia- Sarawak	5,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil Wild specimens (<i>A. rostrata</i>) Genus <i>Aquilaria</i>
2016	Malaysia-Peninsular & Sabah	150,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil Genus <i>Aquilaria</i>
2017	Indonesia	178,500	<i>A. malaccensis</i>	
2017	Indonesia	515,800	<i>A. filaria</i>	
2017	Malaysia- Sarawak	5,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil Wild specimens (<i>A. rostrata</i>) Genus <i>Aquilaria</i>
2017	Malaysia-Peninsular & Sabah	150,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil Genus <i>Aquilaria</i>
2018	Indonesia	151,725	<i>A. malaccensis</i>	
2018	Indonesia	490,010	<i>A. filaria</i>	
2018	Malaysia- Sarawak	5,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil Wild specimens (<i>A. rostrata</i>) Genus <i>Aquilaria</i>
2018	Malaysia-Peninsular & Sabah	150,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil Genus <i>Aquilaria</i>

Year	Country	Quota (kg unless specified as other)	Species	Specimen notes
2019	Indonesia	116,069	<i>A. malaccensis</i>	
2019	Indonesia	490,010	<i>A. filaria</i>	
2019	Malaysia- Sarawak	5,000	<i>A. beccariana, A. filaria, A. hirta, A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil Genus <i>Aquilaria</i>
2019	Malaysia-Peninsular & Sabah	150,000	<i>A. beccariana, A. filaria, A. hirta, A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil. Wild specimens Wild specimens (<i>A. beccariana, A. filaria</i> and <i>A. malaccensis</i>) Genus <i>Aquilaria</i>
2020	Indonesia	101,000	<i>A. malaccensis</i>	
2020	Indonesia	490,010	<i>A. filaria</i>	
2020	Lao PDR	523.602	<i>A.crassna</i>	Wood powder, artificially propagated for commercial purposes
2020	Lao PDR	208 L	<i>A.crassna</i>	Wood oil, artificially propagated for commercial purposes
2020	Lao PDR	12,178.02	<i>A.crassna</i>	Wood chips, artificially propagated for commercial purposes
2020	Lao PDR	119.014 m3	<i>A.crassna</i>	Logs, artificially propagated for commercial purposes
2020	Malaysia- Sarawak	5,000	<i>A. beccariana, A. filaria, A. hirta, A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil. Wild specimens Genus <i>Aquilaria</i>
2020	Malaysia- Peninsular	150,000	<i>A. beccariana, A. filaria, A. hirta, A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil. Wild specimens Genus <i>Aquilaria</i>
2021	India	1,500	<i>A. khasiana</i> & <i>A. malaccensis</i>	Agar oil Genus <i>Aquilaria</i>
2021	India	25,000	<i>A. khasiana</i> & <i>A. malaccensis</i>	Agarwood, chips and powder- artificially propagated Genus <i>Aquilaria</i>
2021	Indonesia	101,000	<i>A. malaccensis</i>	
2021	Indonesia	490,010	<i>A. filaria</i>	
2021	Lao PDR	75,700	<i>A.crassna</i>	Wood powder, artificially propagated for commercial purposes
2021	Lao PDR	2,770 L	<i>A.crassna</i>	Wood oil, artificially propagated for commercial purposes
2021	Lao PDR	62,950	<i>A.crassna</i>	Wood chips, artificially propagated for commercial purposes
2021	Lao PDR	7,050 m3	<i>A.crassna</i>	Logs, artificially propagated for commercial purposes
2021	Malaysia- Sarawak	5,000	<i>A. beccariana, A. filaria, A. hirta, A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil. Wild specimens Genus <i>Aquilaria</i>
2021	Malaysia- Peninsular	150,000	<i>A. beccariana, A. filaria, A. hirta, A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil. Wild specimens Genus <i>Aquilaria</i>
2022	Lao PDR	42,000	<i>A.crassna</i>	Wood powder, artificially propagated for commercial purposes
2022	Lao PDR	1,910 L	<i>A.crassna</i>	Wood oil, artificially propagated for commercial purposes
2022	Lao PDR	134,000	<i>A.crassna</i>	Wood chips, artificially propagated for commercial purposes

Year	Country	Quota (kg unless specified as other)	Species	Specimen notes
2022	Lao PDR	7,600 m3	<i>A. crassna</i>	Logs, artificially propagated for commercial purposes
2022	Malaysia- Sarawak	5,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil. Wild specimens Genus <i>Aquilaria</i>
2022	Malaysia- Peninsular	50,000	<i>A. beccariana</i> , <i>A. filaria</i> , <i>A. hirta</i> , <i>A. microcarpa</i> and <i>A. rostrata</i>	Wood chips, wood blocks & essential oil. Wild specimens Genus <i>Aquilaria</i>

Annex 6: Conservation management legislation for agarwood

An online literature search for documents on national legislation on agarwood in range States was undertaken. Only documents in English are included but we acknowledge that range States may have other documentation not available on the internet, or in another language. Countries are presented alphabetically. Excerpts from legislation relevant to agarwood has been extracted and are presented as bullet points for each country.

Bangladesh

- Yearly harvest from plantations are not recorded (Mahmood et al. 2021).

Bhutan

- There has been a ban on Agarwood export since 1990. Bhutan has also placed Agarwood in *Schedule I of Forest and Nature Conservation Rules and Regulation 2017* (CITES 2003a; Rabgay et al. 2020).

Cambodia

- Illegal to fell a tree in a protected area
- In 2006, banned all logging in natural forests for commercial purposes except for use by local communities and private forest that is registered by the government. Government has prohibited export of the following products (timber and NTFP for export and import):
 - Logs whether debarked or not
 - Crude or rough sawn timber
 - Squared logs with a thickness or width of more than 25cm, even when smoothed
 - Fire and charcoal from natural forests (TTP 2022).

China

- *A. sinensis* has been listed in the second-class category of the *National List of Local Protected Flora* as issued by the Chinese government (Yin et al. 2016).

India

- The export of *A. malaccensis* was prohibited in 1991, however the export of oil is allowed, which included wild sourced oil as was detailed in CITES data 1999 and 2000 (CITES 2003a).
- India does not permit harvesting of wild Agarwood- producing species (CITES 2011).
- Each State in India has different measures for protecting agarwood-producing species:
 - Harvesting *A. malaccensis* from Arunachal Pradesh, Assam and Meghalaya is prohibited due to State bans (*Indian Forest Act 1927*).
 - Harvesting in Manipur is restricted by an administrative order.
 - In Tripura, since 1994, harvesting from government lands has been prohibited, but private lands allowed with a harvesting permit.
 - Mizoram and Nagaland leased harvesting privileges; Mizoram from 1990-1993 and Nagaland from 1991-1992. It is unknown if these were renewed (Barden et al. 2000; CITES 2003a).

Indonesia

- Agarwood use is regulated by Decree No.8/1999 on Wild Flora and Fauna Exploitation (Barden et al. 2000). Permits are required to harvest agarwood from State forests (*Forestry Regulation No. 28 of 1985*). It is mentioned in the Review of Significant Trade for *A. malaccensis* that harvest quotas are distributed among Regional Forest Offices in regions where agarwood is produced, who then distribute the quotas amongst traders (CITES 2003a).

Lao PDR

- *Aquilaria* spp. Is protected by Lao PDR's Forestry Law 2019. It appears on Tree List I (updated 2021- Decision No. 0448/MAF/2021) (MOAF 2021). Tree list I: "refers to species that are rare, have medicinal properties, are at risk of extinction, grow or can be cultivated only in a particular area, have slow growth, have a unique wood texture, and produce a highly durable wood" (LNA 2019).

Malaysia

- The Government requires permits from each State Forestry Department to harvest and trade agarwood and harvesting from National Parks is prohibited (CITES 2003a).
- Peninsular Malaysia - *National Forestry Act 1984* prohibits felling of *A. malaccensis* from State Forests or Permanent Forest Estates. A 'removal of minor forest product' permit is required to harvest all *Aquilaria* spp. There is also an additional royalty fee on top of the collector's fee for all *Aquilaria* spp. (Barden et al. 2000; CITES 2003a).
- Sarawak- *A. malaccensis*, *A. beccariana* and *A. microcarpa* are protected under the *Wildlife Protection Ordinance 1998* and *Forest Ordinance 1958*. Harvesting from National Parks or wildlife sanctuaries is prohibited under *Wildlife Protection Ordinance 1998* and *National Parks and Reserved Ordinance 1998* unless a license has been issued (Barden et al. 2000; CITES 2003a).
- Sabah- *A. malaccensis* felling is subject to *Forest Enactment 1968*. Harvesting from State Land is prohibited by *Parks Enactment Act 1984*. Searching and harvesting for CITES listed plants requires a plan collection license, issued by the director of the Sabah wildlife department under wildlife conservation bill (Barden et al. 2000).

Myanmar

- Harvest of all *Aquilaria* is prohibited under the protection of *Wildlife and wild plants and conservation of natural areas law 1994* (Barden et al. 2000).

Papua New Guinea

- It has been stated that no specific national protection of agarwood-producing species is in place (Zich & Compton 2002), however, the National Forest Service has specified that to export agarwood, a certificate of company registration is needed, along with a forest industry participant certificate, a timber license (plus PGK50,000 bond) and an export license.

Philippines

- Permits are needed to harvest and export raw and processed agarwood –Executive Order no 247 and act 3983. Regulate harvest and trade of all protected wild plants (Barden et al. 2000).

Singapore

- The harvest of *A. malaccensis* is prohibited, as the species is protected under the *Singapore National Parks Act*. (CITES 2003b).

Sri Lanka

- It is prohibited to strip bark or leaves from, or girdle, lop, tap, burn or other damage any tree in a reserved forest. It is prohibited to fell, cut, saw, convert, collect, remove or transport any trees or timber or collect, remove or transport any forest produce or has in his possession, custody or control any tree, timber or forest produce (UNDRR 2022).
- In conservation forests, fells, cuts, marks, lops, girdles, saw converts, collects or removal any plant, tree or any other forest produce or wilfully strips off the bark or from, or otherwise damages or interferes with, any trees. These rules can be done in regulation from the Minister or permission in writing from a forest officer empowered by the minister (UNDRR 2022).

Thailand

- CITES requirements for *Aquilaria malaccensis* are implemented in Thailand by the Plants Act, B.E. 2535 of 1992, which prohibits the import, export and trans-shipment of all CITES-listed plants, except with the permission of the Agriculture Director-General. The Plants Act regulates the artificial propagation of CITES-listed plants through a nursery registration system (Barden et al. 2000; CITES 2003b).

Viet Nam

- Only the harvesting and trade of *A. crassna* is prohibited in Vietnam, by Decree No. 18 (HDBT) Vietnam Wildlife Protection, 1992.
- The Chairman of the Council of Ministers, in accordance with the Minister of Forestry, may permit the exploitation of *A. crassna* under special circumstances, such as scientific research.
- The export of agarwood oil is not prohibited (Barden et al. 2000).

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