# AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

## Other Proposals

#### A. PROPOSAL

Inclusion of Aquilaria malaccensis in Appendix II.

B. PROPONENT

India.

# C. SUPPORTING STATEMENT

1. <u>Taxonomy</u>

11. Class: Dicotyledoneae

12. Order: Thymeleales

13. <u>Family</u>: Thymelaeaceae/Aquilariaceae

14. Scientific Name: Aquilaria malaccensis Lamk., Encycl. 1: 49. 1783

15. Scientific Synonyms: Aquilaria agallocha Roxb.

16. <u>Common Names</u>: English: Agar-wood, Eagle Wood

French: Spanish:

Asm: Sasi

Beng.: Agaru, Agar

Guj. &

Hindi: Agar Sans.: Agaru

Tam.: Aggalichandanam

Tel.: Agru Trade: Agar

# 17. Code Numbers:

## 2. Biological Data

- 21. Population Status: Rare.
- 22. Population Trend: Vulnerable.
- 23. <u>Distribution</u>: North-eastern India (Arunachal Pradesh, Assam, Meghalaya, Manipur, Tripura, West Bengal, Mizoram, Nagaland, Sikkim).

Bhutan, Myanmar, Malaysia, Thailand, Lao PDR, Viet Nam.

24. <u>Habitat Availability</u>: In evergreen forests along the foot hill ranges of north-eastern India at altitude ca 1000 m.

- 25. Geographic Trend: From north-eastern India extending south-east to Philippines.
- 26. <u>Threats</u>: Vulnerable in wild due to habitat destruction and indiscriminate cutting of the trees for the collection of fungal infested wood and sometimes felling of younger, uninfested trees by unskilled labourers.

## 3. Utilization and Trade:

- 31. <u>National Utilization</u>: The fungal infested part of wood is used for incense called "Agar", in traditional medicines and as an insect repellant.
- 32. <u>Legal International Trade</u>: Agar-wood and the extract is exported from India to different neighbouring countries, mainly the Arabian countries since a long time ago. Recent figures are recorded as follows:

1989/90	1990/91	1991/92	1992/93
305.967 MT	432.37 MT	320.458 MT	186.415 MTonnes.

33. <u>Illegal Trade</u>: A study by TRAFFIC-India reports illegal trade in the species in India. In Vietnam people have been caught and arrested for smuggling agarwood. All of the wood illegally taken in Lao PDR is exported to Vietnam for re-export. Agarwood exports during 1982-87 in Indonesia and Malayasia (Sarawak) as follows were:

Indonesia (USD)	Malaysia (M.Ringgit)
	60,788
121,361	46,770
805,304	34,874
441,864	1,889
109,703	
179,741	
	 121,361 805,304 441,864 109,703

- 34. Actual Potential Trade Impact: The species has got high potential trade impact for its fungal infested wood deep within the trunk producing an oleoresin from which the commercial incense "Agar" is obtained. The quantity and quality of oleoresin depend on the maturity of the plant and degree of infection. In the year 1990-1991 an amount of ca 4,32,370 kg of agar-wood valued Rs. 6,223,447 was exported from India to different countries all over the world. The highest grade of agar-wood sells for about USD 2400 a kilo in Viet Nam. Elsewhere strict enforcement of laws banning harvesting has resulted in some people, mainly Lao, giving up this trade recently.
- 35 <u>Captive Breeding and Artificial Propagation</u> (outside country of origin): Not known.

# 4. Conservation and Management:

## 41. Legal Status:

- 411. National: Banned or regulated extraction statewise under Indian Forest Act and Administration Order of State Forest Department. Export status ambiguous -covered under item 7 of para 158 of prohibited items yet exports remain officially recorded.
- 412. International: None.

#### 42. Species Management:

- 421. Population Monitoring: Being undertaken.
- 422. <u>Habitat Conservation</u>: The Namdapha National Park, Arunachal Pradesh includes some of its original habitats, thus giving the species *in situ* conservation and protection.
- 423. <u>Management Measures</u>: It is a freely regenerating species so more area of its original habitat will be protected. Measures are being taken to train the labourer so that young and uninfested trees are not destroyed at random.

#### 43. Control Measures:

- 431. <u>International Trade</u>: Should be included in Appendix II of CITES immediately and the export should be properly regulated.
- 432. <u>Domestic Measures</u>: Due to over-exploitation the species is threatened in its natural zone of occurrence, as such measures are being taken to regulate collection from wild sources.

# 5. Information on Similar Species

- 51. <u>Similarity in Appearance</u>: By habit *Aquilaria malaccensis* (*Aquilaria agallocha*) is similar to another species namely *Aquilaria khasiana* but there is no report of fungal infestation in the wood of the later species and hence of no commercial importance.
- 52. Nature of Specimen in Trade: Fungal infected wood.
- 53. Appendix Listing: None.

#### 6. Comments from Countries of Origin

Export figures available for Indonesia and Malaysia 1982-1987 as given in 33.

#### 7. Additional Remarks

<u>Description</u>: Large evergreen tree, 18-25(-40) m high and 1.5-2.5 m in girth, stem usually straight and often fluted, younger parts silky; leaves 5-10 cm long and 2-5 cm broad. Flowers white, silky hair outside and densely villous inside, 5-lobed. Capsules (fruits) 3.5-5 cm long, densely hairy. The richest content of "agar" is obtained from the tree aged about 80 years, yielding 6.9-9 kg, but commercially 20-50 years old trees are generally being exploited for this purpose. Out of the 4 qualities of agar in the trade the best one is called "black-agar" - extracted from the heartwood resembling black stone.

### 8. References

Anonymous 1952. *The Wealth of India*, C.S.I.R., New Delhi. Vol. 1: A. 328-330. 1985 (Rev. ed.).

Ding Hou in Blumea 12: 286. 1964.

Hook.f., Fl. Brit. India 5: 200. 1886.

TRAFFIC-India, Trade in Agarwood, 1994. In press.

de Beer, J.H., Mcdermott, M.J., 1989. The Economic Value of Non-timber Forest Products in Southeast Asia. Netherlands Committee for IUCN.