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

Fourteenth meeting of the Plants Committee
Windhoek (Namibia), 16-20 February 2004

Follow-up of CoP12 Decisions

AQUILARIA SPP. (DECISIONS 12.66-12.71): PROGRESS REPORT

1. This document has been prepared by TRAFFIC South-east Asia and the regional representative for Oceania.

2. Six Decisions concerning *Aquilaria* spp. were adopted by the Conference of the Parties at its 12th meeting (CoP12, Santiago, 2002). These Decisions, all of which are directed to the Plants Committee, are as follows:

   12.66 The DNA work currently being undertaken by the National Herbarium of the Netherlands under contract with the Secretariat should continue and should be aimed at investigating the options for the development of identification tools based on molecular analysis.

   12.67 More detailed information on the distribution of species should be compiled and assessed as an aid to better trade reporting, using point-of-origin data.

   12.68 As the trade is in the readily identifiable product of agarwood, studies should include all known agarwood-producing taxa and not only the CITES-listed species A. malaccensis*.*

   12.69 IUCN should be invited to re-evaluate the threatened status of all agarwood-producing taxa according to the 2000 IUCN criteria.

   12.70 A standard method for determining the population status of CITES-listed agarwood-producing taxa should be developed to assist Scientific Authorities in advising that exports will not be detrimental to the survival of the species in compliance with Article IV of the Convention. Such a standard method could be used to verify populations across all agarwood-producing areas, and allow not only the setting of appropriate quotas but also the verification of species being harvested.

   12.71 Further field research should be conducted on trade dynamics, including in the major import and re-exporting States and territories (Japan, Saudi Arabia, Singapore, Taiwan, province of China, and the United Arab Emirates).

3. Concerning Decision 12.66, it is noted that although the pilot study indicated that DNA/molecular techniques could provide a means of identifying species traded at product level (depending on the freshness of the material) there has been no further funding to progress this work. An identification tool for determining dry-wood chips to species level is still urgently required. The pilot study would need to be extended in order to develop an operational molecular test and to examine applicability. More plastid gene regions need to be sequenced and if possible nuclear genes as well to create a necessarily robust data-set for the development of the molecular test, and would be very useful to produce an evolutionary classification. The first phase of the project made preliminary conclusions

that the genus Aquilaria was polyphyletic rather than monophyletic, but more molecular data are needed to clarify this hypothesis. The identification techniques already developed by the National Herbarium of the Netherlands could be immediately utilized, however, to solve the long-standing debate over whether *Aquilaria agallocha* is synonymous with *A. malaccensis*, or is in fact a separate species. It is recommended that the Plants Committee endorses this activity as one key component of a broader project to continue the development of identification tools based on molecular analysis, subject to funding being identified.

4. The distributional data resulting from the implementation of Decision 12.67 would provide not only an aid to identification, but would also be a valuable contribution to the re-evaluation requested in Decision 12.69. While Range States can provide data and information, the task requires coordination and leadership. It is recommended that the Plants Committee seeks both funding and a coordinator to implement this Decision. There are no activities currently undertaken specifically to implement Decision 12.67.

5. It is recommended that the Secretariat should continue to strive to ensure that, where appropriate, any work undertaken on behalf of the Plants Committee is sufficiently funded in order to incorporate research on all agarwood-producing taxa as required in Decision 12.68. With regard to work currently underway, it is worth noting that this Decision was taken into consideration in the Review of Significant Trade questionnaire developed by TRAFFIC Southeast Asia for *A. malaccensis*. The questionnaire requested information on agarwood-producing taxa other than *A. malaccensis* (refer to Review of Significant Trade results published in document PC14 Doc. 9.2.2, Annex 2). It is recommended that the Plants Committee consider further discussion on whether a listing of all agarwood-producing taxa on CITES Appendix II would help harmonize management of harvest and trade in agarwood products – and thereby would aid in the development of a long-term sustainable industry.

6. The evaluation of the Red List categories for agarwood-producing taxa flagged as a possible side event during the First International Agarwood Conference (Ho Chi Minh City and An Giang Province, Viet Nam, 10-15 November 2003), did not occur. It is recommended that the Plants Committee endorse the re-evaluation as defined in Decision 12.69 as a much-needed activity, and that the evaluation process be coordinated by IUCN-SSC, with specific input from the recently formed IUCN-SSC Global Trees Specialist Group. Parties interested in supporting this initiative are encouraged to contact IUCN-SSC. The lack of funding has impeded further progress.

7. Concerning Decision 12.70, despite initial discussions between TRAFFIC Southeast Asia and the CITES Management and Scientific Authorities of Indonesia (including the Asian representative for the Plants Committee), and the agreement to work with the Indonesian Gaharu (agarwood) Traders' Association (ASGARIN) to plan field assessments in key harvesting areas and to work collaboratively towards the objectives of Decision 12.70, no progress has been achieved since PC13. Further discussions between these collaborators, and other stakeholders, are planned for later in 2004 to select a number of priority population sites in Indonesia in order to enable field-testing of appropriate methodologies for making non-detriment findings for agarwood producing-taxa. There is no reason that these guidelines or checklist(s) should be developed in isolation, and the field-testing of such methodologies in more than one range State could enable the results to be both practical and verifiable. By extension, once these approaches are developed and tested, they could be applied to all of the agarwood-producing taxa, and take into account both *in situ* and *ex situ* production systems (i.e. including plantations and the use of 'treatment' technology to induce agarwood formation). It is therefore recommended that a working group be convened, including experts from both Indonesia and Malaysia, relevant representatives of the CITES Plants Committee, and experts from other relevant range States for agarwood-producing species. TRAFFIC Southeast Asia and the IUCN/SSC Wildlife Trade Programme, along with the CITES Secretariat, are still trying to secure additional funding to produce standard guidelines for monitoring the status of *A. malaccensis*, and to guide the making of non-detriment findings. The report (document PC14 Doc. 9.2.2, Annex 2) explains the urgent need for this development of non-detriment finding protocols. Parties interested in supporting this initiative are encouraged to approach these organizations. In Papua New Guinea, the Non-Wood Forest Products programme of FAO has initiated a 20-month Technical Cooperation Programme with the PNG Forest Authority, in order to develop sustainable harvest and trade management systems for eaglewood (agarwood), focused on the species *Gyrinops ledermannii*. Technical collaboration and information-sharing with this project is also encouraged.

8. The Secretariat has contracted TRAFFIC Southeast Asia to begin implementing Decision 12.71, with the Review of Significant Trade (document PC14 Doc 9.2.2) deriving some key recommendations pertaining also to 12.70. Preliminary examination of agarwood volumes imported into Taiwan, Province of China, have shown consistently high imports from Viet Nam and Thailand, from where agarwood exports are currently banned. While links have been made with contacts in Singapore and Taiwan, province of China, the efforts to document trade dynamics accurately in these trading entities are expected to take more time to derive a greater understanding of the role of these re-exporting and consuming markets – thus no additional reports are available for the 14th meeting of the Plants Committee on this work. Additional funding will be critical towards understanding the nature of demand – and by association, the cultural, medicinal and religious importance of securing long-term agarwood supply – in not only East Asia but also in the Middle East (focused on Saudi Arabia and the United Arab Emirates as the largest importers of *A. malaccensis*). This work incorporates research on all agarwood-producing taxa, and therefore also contributes to the implementation of Decision 12.68.

9. As part of its research under Decision 12.71, TRAFFIC Southeast Asia participated in the First International Agarwood Conference (Ho Chi Minh City and An Giang Province, Viet Nam, 10-15 November 2003). At that conference, many facets of the agarwood industry were represented (including soil scientists, wood pathologists, molecular biologists, foresters, perfumers, medicinal traders, exporters/re-exporters, and incense manufacturers). TRAFFIC's presentation (focused on the dynamics of the trade, as well as the need for multi-stakeholder cooperation to ensure long-term supply from legal and sustainable sources) was well received. Dialogue at the conference made clear that the many physical/aromatic characteristics of agarwood, and the geographic source, are often more important than scientific species definition in determining price and product demand. While Indonesia and Malaysia remain the largest sources by volume of *A. malaccensis* in trade, the threat posed to wild populations of *A. crassna* in the Lao People's Democratic Republic, Thailand and Viet Nam would appear to be even more significant and thus deserves focused attention. The much-anticipated presentations on research to induce oleoresin production in agarwood-producing taxa were highlights of the conference. Results showed great progress on methodologies or 'treatments' to inhibit the tree's ability to close physical wounds, and thus cause the fragrant oleoresin to be produced as a secondary response to natural fungi entering the wound. These techniques will be crucial in further development of *in situ* and *ex situ* production systems and sustainable management frameworks.