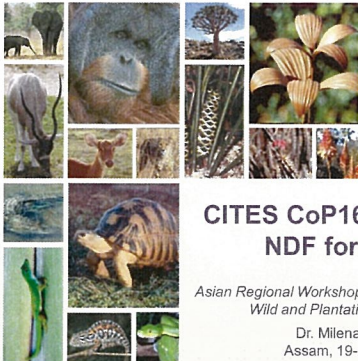


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**CITES CoP16 Decisions and NDF for agarwood**

Asian Regional Workshop on Agarwood Management of Wild and Plantation Sourced Agarwood  
Dr. Milena Sosa Schmidt  
Assam, 19-23 January 2015

Convention on International Trade in Endangered Species of Wild Fauna and Flora

## CONTENT


- NDF in CITES
- NDF for agarwood
- Artificial propagation definition/ plantations
- Decision 15.95 (Rev. CoP16)
- Objectives of the workshop
- Summary

## THE CITES NON-DETRIMENT FINDING

- Article IV (Appendix II)
  - An export permit shall only be granted when ... a Scientific Authority of the State of export has advised that such export will not be detrimental to the survival of that species


**Scientific Authority**

Species of concern	Information sources	Ref.	Plantations
<b>Endangered</b> Species for which the species is in serious danger of extinction	Consult the list of the species in the Appendix and whether the species is included in the Appendix or not. If not, consult the list of the species in the Appendix and whether the species is included in the Appendix or not.	2	N/A
<b>Population risks</b> Species for which the species is in serious danger of extinction	Consult the list of the species in the Appendix and whether the species is included in the Appendix or not. If not, consult the list of the species in the Appendix and whether the species is included in the Appendix or not.	1	N/A



**Art. IV**

**Management Authority**



## OVERVIEW

- *Aquilaria malaccensis* was the first agarwood producing species listed in CITES in 1995
- Today we have the whole genus *Aquilaria* plus other two genera listed in the same Appendix II
- We will focus on *Aquilaria* and *Gyrinops* since *Gonystylus* is not used for its agarwood but for its timber

## NDF IN CITES

A non-detriment finding is a decision that can take many forms

- A **written advice** from the Scientific Authority
- A **verbal advice** from the Scientific Authority
- A **quota** agreed by the Scientific Authority for a specific time period

CITES national export quotas for 2014 (excluding quotas for Acipenseriformes)  
CITES nacionales de exportación para 2014 (salvo los cupos para los Acipenseriformes)  
quotas nationales CITES pour 2014 (à l'exception des quotas d'Acipenseriformes)

## NDF IN CITES

**Voluntary CITES export quotas** should be, and in many instances are, an outcome of:

- **effective national conservation management programmes** designed to prevent unsustainable harvesting of wild populations; and
- a determination by the Scientific Authority that the number of specimens that may be exported as part of a quota will **not be detrimental to the survival of that species**

## NDF IN CITES

- When all the details on population size, productivity, other threats to the population than trade, national use etc. are available, the making of a non-detriment finding is easy
- Unfortunately, in many instances such information is only fragmentary or not available

WHEN THE AMOUNT OF INFORMATION AVAILABLE UPON WHICH TO BASE A NON-DETRIMENT FINDING IS LESS THAN ONE WOULD WISH, THEN...

- Adaptive Management
- Remedial Measures

## NDF IN CITES

- Adaptive management monitors the responses of a biological resource to a management regime, taking timely corrective action to ensure that the resource is not overexploited
- Advantages of this approach:
  - the inherent variability of natural ecosystems and the resource can be accounted for more effectively
  - knowledge about the ecosystem and the resource concerned can be accumulated

## NDF IN CITES

- One of the most important aspects of pragmatic management is **MONITORING**
- This means that, despite **the absence of sufficient scientific information** to make a comprehensive non-detriment finding, the CITES Authorities **make a serious effort to collect such data** while trade takes place, and to **consider the impact of any trade**

## ...NDF IS ABOUT MANAGEMENT

We currently have five Decisions (16.155 to 16.157, 15.95 (Rev. CoP16) & 16.158 ) that focus on the work that Parties are doing in order to well manage and use sustainably their populations of agarwood-producing taxa. In other words, they aim at strengthening capacities to formulate NDFs.

## NDF for agarwood

RESOLUTION 16.10 IMPLEMENTATION OF THE CONVENTION FOR AGARWOOD-PRODUCING TAXA

ENCOURAGES RANGE STATES TO MAKE USE OF THE AGARWOOD NDF GUIDANCE AS A REFERENCE WHILE MAKING NDFS FOR WILD HARVEST OF AGARWOOD-PRODUCING TAXA....

COP16 INF 11. PROPOSED GUIDANCE FOR MAKING NON-DETRIMENT FINDINGS FOR AGARWOOD-PRODUCING SPECIES

## NDF FOR AGARWOOD

Proposed Guidance for making non-detriment findings for agarwood-producing species

Factors of sustainability	Information sources	Ref.	Plantations
Biological characteristics	<ul style="list-style-type: none"> <li>- Scientific literature</li> <li>- Expert (including collector) knowledge</li> <li>- Field observations</li> </ul>	1	✓
Population status			
Harvest management			Plantation management
Control of harvest			
Monitoring of harvest			NA

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## ...NDF IS ABOUT IDENTIFICATION

- *Aquilaria malaccensis*
- *Aquilaria beccariana*
- *Aquilaria hirta*
- *Aquilaria microcarpa*
- *Aquilaria cumingiana*
- *Aquilaria oudate*
- *Aquilaria brachyantha*
- *Aquilaria urdanetensis*
- *Aquilaria citrinaecarpa*
- *Aquilaria parvifolia*
- *Aquilaria rostrata*
- *Aquilaria crassna*
- *Aquilaria bannaense*
- *Aquilaria khasiana*
- *Aquilaria subintegra*
- *Aquilaria filaria*
- *Aquilaria grandiflora*
- *Aquilaria secundana*
- *Aquilaria moszkowskii*
- *Aquilaria tomentosa*
- *Aquilaria bailonii*
- *Aquilaria sinensis*
- *Aquilaria apiculata*
- *Aquilaria acuminata*
- *Aquilaria yunnanensis*
- *Gyrinops versteegii*
- *Gyrinops moluccana*
- *Gyrinops decipiens*
- *Gyrinops ledermanii*
- *Gyrinops salicifolia*
- *Gyrinops caudate*
- *Gyrinops podocarpus*

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## NDF FOR AGARWOOD - IDENTIFICATION

- Molecular-based identification
- Using DNA markers to discriminate cultivated from wild agarwood
- Distinguishing wild from cultivated agarwood (*Aquilaria* spp.) using direct analysis in real time and time-of-flight mass spectrometry



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## NDF FOR AGARWOOD - PARTS AND DERIVATIVES

The listing of *Aquilaria* spp. and *Gyrinops* spp. in Appendix II includes all parts and derivatives, except:

- seeds, spores and pollen (including pollinia)
- seedling or tissue cultures obtained *in vitro*, in solid or liquid media, transported in sterile containers and
- Fruits, leaves, exhausted agarwood powder, including compressed powder in all shapes; and
- finished products packaged and ready for retail trade, this exemption does not apply to beads, prayer beads and carvings.



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## AGARWOOD IN TRADE

- Trunk, branch sections
- Chips and flakes (most common)
- Powder / dust
- Oil
- Finished products (perfumes, incense, medicines, etc)

Powder and wood chips are usually the type of specimens found on the export quotas



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## NDF FOR AGARWOOD

- The easiest available monitoring tool is the analysis of CITES trade data
- This not only provides information on trade trends, but also on quota management and CITES implementation
- Though easily available, this information is frequently ignored

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## NDF FOR AGARWOOD - REPORTING

Due to the complex nature of this trade, on the annual reports **little agarwood trade is being reported**



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## NDF – ARTIFICIALLY PROPAGATED - PLANTED MATERIAL

Resolution 16.10 *Implementation of the Convention for agarwood-producing taxa...*

➤ 'CONSIDERING that the current definition of 'artificially propagated', in Resolution Conf. 11.11 (Rev. CoP15), cannot be applied to tree plantations;

➤ RECOGNIZING that, for a plant species artificially propagated, and for a part of such plant, the provisions of Article VII, paragraph 5), of the Convention will apply:

5. Where a Management Authority of the State of export is satisfied that any specimen of an animal species was bred in captivity or any specimen of a plant species was artificially propagated, or is a part of such an animal or plant or was derived therefrom, a certificate by that Management Authority to that effect shall be accepted in lieu of any of the permits or certificates required under the provisions of Article III, IV or V.

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## NDF – ARTIFICIALLY PROPAGATED - PLANTED MATERIAL

➤ according to the definition of 'cultivated parental stock' in Resolution Conf. 11.11 (Rev. CoP15): ...

➤ b) 'cultivated parental stock' means the ensemble of plants grown under controlled conditions that are used for reproduction, and which must have been, to the satisfaction of the designated CITES authorities of the exporting country:

i) established in accordance with the provisions of CITES and relevant national laws and in a manner not detrimental to the survival of the species in the wild; and

ii) maintained in sufficient quantities for propagation so as to minimize or eliminate the need for augmentation from the wild, with such augmentation occurring only as an exception and limited to the amount necessary to maintain the vigour and productivity of the cultivated parental stock.

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## NDF – ARTIFICIALLY PROPAGATED - PLANTED MATERIAL

➤ Resolution Conf. 11.11 (Rev. CoP15): ...

...specimens deemed to be artificially propagated if grown from wild-collected seeds ... if, for the taxon involved:...

iv) the relevant Scientific Authority of that range State has determined that:

A. collection of the seeds ... was not detrimental to the survival of the species in the wild; and

B. allowing trade in such specimens has a positive effect on the conservation of wild populations...

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## ...NDF IS ABOUT MANAGEMENT

**Dec. 15.95 (Rev. CoP16)** brings us today to Assam:

*.... the Secretariat shall ... organize a workshop to share experiences, discuss management of wild and plantation-source agarwood, identify and agree on strategies that balance the conservation and use of the wild populations, while relieving the pressure on these by using the planted material*

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## NDF FOR AGARWOOD

For discussions on Dec. 19.95 (Rev.CoP16), reports produced in the past may result useful:

- 1- Report on Indonesia (2003)
- 2- PC14 Doc. 9.2.2 Annex 2 (2004)
- 5- ID of Aquilaria and Gyrinops (2006)
- 7- NDF methodology (2008)
- 12- Management of Wild and Plantation-Grown Agarwood Trees (2011)

Of particular relevance is doc. CoP16 Inf 11. on Proposed guidance for making non-detriment findings for agarwood-producing species.

The numbering above matches the number of the report mentioned on the Overview – introduction to CITES and Agarwood, that you received in hard copy

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## OBJECTIVES OF THE WORKSHOP

we need to learn:

- ... in which range States there is agarwood natural forest;
- ... in which range States there are plantations;
- ... about the production systems for agarwood from both types of forests;
- ... which are the advantages of the wild and of the planted agarwood as a valuable product worldwide; and
- ... how to articulate the management plans for both natural forest and plantations that produce agarwood.

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## WORKING GROUPS

The main document to consider on both working groups is CoP16 Inf 11. **Proposed guidance for making non-detriment findings for agarwood-producing species**

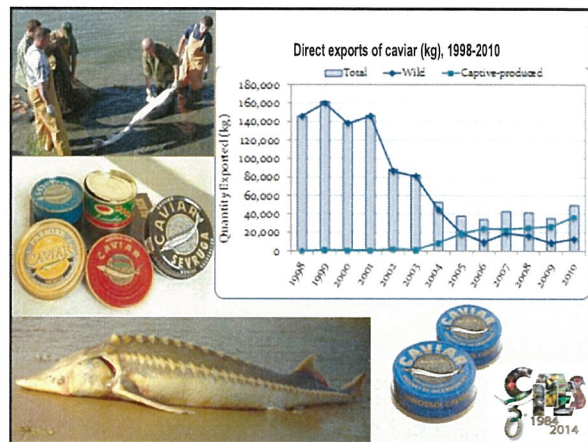
- WG 1 – will focus on NDF and Nat. Forest
- WG2 – will focus on NDF and Plantations

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## OBJECTIVES OF THE WORKSHOP

- Provide a report and formulate recommendations to be considered at PC22;
- Identify recommendations to be considered and agreed at CoP17 (South Africa, October, 2016); and
- ID gaps and consider the ITTO-CITES programme as a source of possible funding – submit proposals for possible cycle 2017 onwards.

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## FINAL CONSIDERATIONS

- Every transfer of a species from Appendix II to Appendix I because of lack of determination that trade is not detrimental can be considered as a failure of the Parties to fulfill their obligations under the Convention;
- Replacing the natural forest with plantations is also a failure of management. The genetic vigor can't be maintained in the long term without the natural forest.
- By promoting only plantations we may lose the natural forest that ensures genetic diversity and vigor and, without the natural forest we risk losing the plantations in the long term.

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The world population will continue growing



The agarwood demand will grow according



The forest cover will be reduced



The plantations cover will increase



The genetic vigour of the agarwood populations will be at risk



**There is an increasing need to articulate both managements of natural forest and plantations in a single national management plan**

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## THE NON-DETRIMENT FINDING

*“The fact that, under the provisions of the Convention, a Management Authority cannot issue permits in the absence of positive advice from the Scientific Authority cannot be stressed enough.”*

Willem Wijnstekers  
Evolution of CITES  
8<sup>th</sup> Edition 2006

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Young *Aquilaria* trees in the natural forest of Papua New Guinea are being used to test agarwood inducing methods. Older *Aquilaria* trees are not used and they remain to provide seeds.

[forestpathology.cfans.umn.edu](http://forestpathology.cfans.umn.edu)

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Thank you

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