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

Twenty-fifth meeting of the Plants Committee
Online, 2-4, 21 and 23 June 2021

GUIDANCE ON THE TERM 'ARTIFICIALLY PROPAGATED

1. This document has been submitted by the Secretariat in relation agenda item 22 *on Guidance on the term 'artificially propagated*.'* It contains the report submitted by UNEP-WCMC entitled 'Guidance on Terms related to the Artificial Propagation of CITES Regulated Plants.'

* *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.*

UNEP-WCMC **technical report**

GUIDANCE ON TERMS RELATED TO THE ARTIFICIAL PROPAGATION OF CITES REGULATED PLANTS

UN environment programme

WCMC

Contents

Introduction

Recent meetings of the Conference of the Parties (CoP) have adopted a number of Decisions on issues relating to artificial propagation of CITES regulated plants. At its 18th meeting (CoP18, Geneva, 2019) the Conference of the Parties adopted Decision 18.178 on *Guidance on the term 'artificially propagated'* as follows:

> ***18.178 Directed to the Secretariat***
>
> *The Secretariat shall, subject to external funding:*
>
> *a) commission the preparation of guidance materials for the Parties on aspects of artificial propagation including the terms 'under controlled conditions', 'cultivated parental stock' and the new source code or such terms as may be adopted at CoP18, to supplement the publication* A Guide to the application of CITES source codes*;*
>
> *b) report to the Plants Committee at its 26th meeting on progress on paragraph a); and*
>
> *c) after review and revision by the Plants Committee, if directed by the Plants Committee, publish the final guidance on the CITES website.*

Current Resolutions that are core to issues relating to artificial propagations are Resolution Conf. 11.11 (Rev. CoP18) on *Regulation of trade in plants*, Resolution Conf. 10.13 (Rev. CoP18) on *Implementation of the Convention for tree species* and Resolution Conf. 16.10 on *Implementation of the Convention for agarwoodproducing taxa*. The range of source codes and purpose of transaction codes are outlined in Resolution Conf. 12.3 (Rev. CoP18) on *Permits and Certificates*.

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This guidance [which addresses paragraph a) of Decision 18.178], aims to explain the terminology used[1] in the Resolutions relevant to source codes A, D and Y and to help CITES Authorities understand how these Resolutions are applied to plants. *A Guide to the application of CITES source codes*[2] was produced by IUCN for CITES in 2017. The current guidance covers flora species only and updates, expands and complements the work carried out by IUCN.

Since the first formal definition of artificial propagation was adopted in Resolution Conf. 2.12 in 1979, the CoP have amended and expanded ~~this text~~ the definition to adapt to new ~~listings~~ technologies/methodologies~~on the Appendices and new challenges~~ in propagation of CITES listed plants~~techniques~~, and dealt with specific challenges by adopting new Resolutions. At its 24th meeting, the Plants Committee was invited to discuss options for a new source code and consolidate some definitions into Resolution Conf. 11.11 (Rev. CoP17) (PC 24 Doc. 16.1). An informative overview of the evolution of Resolution Conf. 11.11 (Rev. CoP18) on the *Regulation of trade in plants* is given in information document PC24 Inf.1 and on the discussions on plant productions systems in information document PC24 Inf.8. CoP18 Doc. 59.2 looked at *Source Codes for Plant Specimens in Trade* recommending a new intermediary source code between A and W to be termed Y to cover "assisted production" (the rationale beyond the development of a new source code and proposed the new source code and other changes which were, with some amendments, adopted in Resolution Conf. 11.11 (Rev. CoP18)). CoP18 Doc. 59.1 on *Guidance on the Term "Artificially Propagated"* explored a range of issues including the need for guidance to help Parties clearly understand and apply some of the requirements around the definition of artificial propagation, in particular in relation to the terms "cultivated parental stock" and "under controlled conditions" and also guidance on the new source code Y for assisted production.

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[1] Terminology provided is for guidance only and does not represent a legal interpretation of these terms.
[2] https://cites.org/sites/default/files/eng/prog/captive_breeding/E-Souce%20codes%20booklet%20%20April%2017.pdf

Terminology

The following terms and excerpts from key CITES Resolutions form the framework for understanding how CITES interprets artificial propagation. Text in *italics* indicates a direct excerpt from the relevant CITES Resolution. The Annex to this document provides a visual guide to terms and definitions.

'Artificially propagated'

Resolution Conf. 11.11 (Rev. CoP18), paragraph 2, determines that the term '*artificially propagated*' shall be interpreted to refer to plants specimens that are: *"a) grown under controlled conditions; and*

b) grown from seeds, cuttings, divisions, callus tissues or other plant tissues, spores or other propagules that are either exempt from the provisions of the Convention or have been derived from cultivated parental stock;"

'Under controlled conditions'

Paragraph 1 a) of Resolution Conf. 11.11 (Rev. CoP18) adopts the following definition for the terms 'under controlled conditions':

"a) 'under controlled conditions' means in a non-natural environment that is intensively manipulated by human intervention for the purpose of plant production. General characteristics of controlled conditions may include but are not limited to tillage, fertilization, weed and pest control, irrigation, or nursery operations such as potting, bedding or protection from weather."

The term '*under controlled conditions*' (Resolution Conf. 11.11 (Rev. CoP18), paragraph 2 a) refers to plants that are ~~manipulated~~ propagated and grown in a *non-natural environment* that is intensively manipulated to promote optimal~~prime~~ growing conditions and exclude predators and pests (see Annex: Figures A, B). A ~~well-managed traditional~~ nursery or glasshouse is *controlled conditions*. Temporary annexation or appropriation of a piece of natural or semi-natural vegetation where wild plants occur is not *controlled conditions*. Such annexation might occur when a field boundary is moved to incorporate adjacent wild habitat in which the targeted species occurs; this area then receives little or no management until harvest occurs, after which the original field boundary is restored.

The key element of the term '*under controlled conditions*' is that there is a management regime in place for the cultivation of the plants ~~involved~~ in an environment which is clearly distinct from their natural habitat. Such a regime has in place clear boundaries from the natural environment~~, and the growing plants are isolated from nature~~, with procedures to enhance growth and prevent loss of plants to pests and diseases. Such conditions would probably create a relatively high maintenance environment, where the controls to enhance production are evident throughout the life cycle of the plants involved. Such management would be expected to have some level of record keeping in place, ensuring that the management regime is maintained to an adequate level and that the plants produced are of high quality.

! Wild-collected plants are considered wild even if they have been maintained in *controlled conditions* for some time, e.g., from several weeks to years, and this will be dependent on the plant group concerned.

'Cultivated parental stock'

Resolution Conf. 11.11 (Rev. CoP18), paragraph 1 b) adopts the following definition for the terms 'cultivated parental stock':

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the guidance interprets intensive human intervention as forming clear boundaries and making plants isolated from nature environments is not easy to understand. Some intensive human interventions such as desertification controls and afforestation as mentioned in CoP 17 Doc. 43, as well as reforestations, these practices may not form clear boundaries and isolation. In addition, there are still differences in definitions of the term of artificial propagation between resolutions Conf. 10.13 (Rev. CoP18) and Conf.16.10. Therefore, the existing explanations cannot meet the needs for understanding non-natural environment. We suggested that the relevant paragraphs need to be revised.

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Consider referring readers to section on assisted production for more information

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We are not sure if this statement is true in this absoluteness. Couldn't such plants be also considered Y under some certain circumstances?
The examples and explanations given in the below chapter ''Plant obtained through assisted production' – Source Code Y' do imply this…

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As I understand, this statement means that the wild collected plants will never turn into A plants. And we would very much appreciate to keep this statement here. However, I would agree with David, that in case of Y they do, since the wild harvested plants could be used to start the assisted production, also, in case of replenishment from the wild. This is quite clear in my view, but may be expressed more clearly to avoid misunderstanding.

"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;"

The term '*cultivated parental stock*' refers to the ensemble of plants grown under controlled conditions that are used for reproduction.

The *cultivated parental stock* must have been *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*[3].

Simply stated, this stock must have been obtained legally in CITES terms (i.e., must have met the legal acquisition requirements according to CITES Resolution Conf. 18.7 on Legal acquisition findings) and in terms of any national laws in the country of origin (see Annex: Figures A, B). There must be evidence that the plants have been acquired legally, for example, copies of permits phytosanitary certificates, invoices, or authorization for collection by relevant authoritiesor formal statements from the relevant authority. In addition, the term *established … in a manner not detrimental to the survival of the species in the wild* indicates that a nondetriment finding is required for the parental stock that is being set up (see Annex: Figure A).

The term '*cultivated parental stock*' is used in order to indicate that some addition of fresh wild collected plants is permissible following the establishment of the original parental stock. This should occur only *as "an exception and be limited to the amount necessary to maintain the [genetic] vigour and productivity* of the *cultivated parental stock"*. Clearly, such addition of wild plants needs to be managed, limited, legally acquired and not detrimental to the survival of the species in the wild if the plants are to be considered 'cultivated parental stock'.

Resolution Conf. 11.11 (Rev. CoP18) does not indicate what frequency of addition of fresh stock is appropriate, nor what level of addition is appropriate. Requirements can differ between the wide range of plant groups included in the CITES Appendices regulated by CITES, and it is left to the relevant Scientific Authority to give appropriate advice. In practical terms, the Scientific Authority can base their advice on information supplied by experts (such as horticulturalists from a botanic garden) on the plant group concerned and, for example, by liaising with other Parties that have addressed the same issues. Such addition of fresh stock should be *an exception and limited.*

Source codes applicable to artificially propagated plants: A and D

Codes 'A' and 'D' are used on permits and certificates to indicate the source of artificially propagated plant species. In both cases, plants are artificially propagated in accordance with the definitions contained in Resolution Conf. 11.11 (Rev. CoP18), paragraph 1 a) and b); however, the decision on applicability of the two source codes relies on an assessment of the purpose of the transaction (commercial or non-commercial), and is dependent on the CITES Appendix noting that artificially propagated hybrids of unannotated Appendix I plant species are to be treated as Appendix II plant species .

[3] Paragraph 1, b i) of Resolution Conf. 11.11 (Rev. CoP18).

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The only cultivated stock of interest from a CITES perspective is "wild stock brought into cultivation"

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Suggest - Parental stock which has originated from wild collected material must have been established etc..

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Suggest "parental stock of wild origin"

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The UK agrees with Germany's comments above. In practice, we find that Parties interpret and apply source codes A and D differently. This can create inconsistences between export and import permits, and could lead to differences in reporting to the CITES trade database. Additional guidance on the purpose of source D, its interpretation, and how it should be applied to CITES permits would be useful to help Parties to reach a common understanding. One example, would be to clarify how source D should be used in relation to the trade in hybrids produced from Appendix I parental stock, and how this should be reflected on CITES permits and within the CITES trade database. Other points that may be useful to clarify, are whether there is a requirement for nurseries to be CITES registered in order to use source D, and to contrast this with the use of source D for fauna captive breeding operations.

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Resolution Conf. 12.3 (Rev. CoP18), paragraph 3, j) recommends that codes A and D be used to indicate the following source of the plant specimens:

> **A** '*plants that are artificially propagated in accordance with Resolution Conf. 11.11 (Rev. CoP18), as well as parts and derivatives thereof, exported under the provision of Article VII, paragraph 5 (specimens of species included in Appendix I that have been propagated artificially for 'non-commercial purposes', and specimens of species included in Appendix II and III)*';
>
> **D** *'Appendix-I plants artificially propagated 'for commercial purposes', as well as part and derivatives thereof, exported under the provisions of Article VII, paragraph 4, of the Convention'*.

In summary:

- **Source code D** should be used for artificially propagated plant specimens, their parts and derivatives, of Appendix I species that are traded for commercial purposes (e.g. purpose code T);
- **Source code A** should be used for all remaining artificially propagated plant specimens, their parts and derivatives, of 1) Appendix I species propagated and traded for non-commercial purposes, and 2) ~~for all specimens of species included in~~ Appendix II and III species, irrespective of the purpose of the propagation and trade~~transaction~~.

Trees and artificial propagation

As the criteria for artificial propagation laid down in Resolution Conf. 11.11 (Rev. CoP18) were originally designed with horticultural plants in mind, ~~problems~~ issues with determining source codes arose when the first commercially traded timber trees were listed. Applying these "horticultural" criteria to trees and plantations posed ~~problems~~ challenges for CITES Authorities.

The Conference of the Parties took a pragmatic approach to defining "artificially propagated" in Resolution Conf. 10.13 (Rev. CoP18) on *Implementation of the Convention for tree species* (see Annex: Figure C) stating that [paragraph 1. f)]:

> *Timber or other parts or derivatives of trees grown in monospecific plantations be considered as being artificially propagated in accordance with the definition contained in* Resolution Conf. 11.11 (Rev. CoP18).

Simply stated, timber or other parts or derivatives taken from trees planted and grown in a monospecific (single species) plantation are considered artificially propagated if the seeds or other propagules from which the trees are grown were legally acquired and obtained in a non-detrimental manner as outlined in Resolution Conf. 11.11 (Rev. CoP18)~~in place of the definition of 'artificially propagated' outlined in Resolution Conf. 11.11 (Rev. CoP18), trees growing in monospecific (single species) plantations and their timber or other parts or derivatives are considered to be artificially propagated~~. This definition of artificial propagation applies only to tree species (source codes A or D apply as described above).

Special cases and exceptions:

Araucaria araucana: The Monkey Puzzle or Puhúen tree is the national tree of Chile; it is an iconic and highly valued species for Chile's indigenous people. This tree produces large seeds – *piñones* - which are edible and an important food source. The trees are ~~cultivated~~ grown from wild-collected seeds in nurseries, and the resultant ~~seedlings~~ plants have been exported internationally since 2004~~for generations~~. As they were grown directly from wild seeds, the Appendix I seedlings could not be legally exported for trade because they did not fulfil the then definition of artificially propagated. The Parties therefore sought a solution to support sustainable harvest and trade of the species.

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the definition of source code D on page 4 of the report also needs a more detailed explanation.
We believe the nursery, which propagates plants listed on Appendix I, is crucial to the source code D in order to export them for commercial purposes according to the resolution Conf. 9.19 (Rev. CoP15); therefore, for the description of the source code D, we need to consider whether to include some citations from the aforementioned resolution

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Parties and stakeholders would benefit from a clear understanding why shipment of App. I plant species requires a separate source code 'D', contrary from using the regular 'A'.
It would help to make the rationale of source code 'D' more clear in this chapter. As the purpose code ('T') is provided in CITES documents anyways it might be unclear why, additionally, the source code must be modified as well, without any further meaning or information.
Explanation on this aspect would ensure better understanding and implementation.

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Letters a and b)
We support the publication of this guide as soon as possible, which will be very useful to guide Parties on the term "artificially propagated", as well as other terms, including CITES usage codes and regulatory aspects of trade. However, we understand that much information in this guide is already covered in parallel by other working groups of the Plants Committee.
We would appreciate further clarification on the Y code, since, for example, within the Terminology chapter, in the definition of a controlled environment ("Under controlled conditions"), in its last paragraph (page 2) "Wild-collected plants are considered wild even if they have been maintained in controlled conditions for some time, eg, from several weeks to years, and this will be dependent on the plant group concerned "), we found that the definition of the Y code can cause confusion.
Additionally, in the definition of a plant produced through assisted production ("Plant obtained through assisted production"), in its last paragraph (page 6): "In many cases, such assisted production is" low technology "cultivation being carried out by local communities where it may be a significant source of cash income ", we would appreciate supplementing the term" low technology ", as the level of intervention is not clearly specified.
Regarding the exceptional case of the Araucaria Araucana, we request to specify in detail what concerns paragraph 4 of Resolution Conf. 11.11 (Rev. CoP18); Although, we know that said paragraph is ...

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The original version of current paragraph 4 of Resolution Conf. 11.11 (Rev. CoP18) was adopted at CoP13 in 2004 based on document CoP13 Doc. 51 and related to the example of A. araucaria. Today, paragraph 4 recommends that a limited exception may be granted for some Appendix I specimens of some long-lived, late-maturing Appendix-I species (where "for the taxon involved, establishment of a cultivated parental stock presents significant difficulties in practice because specimens take a long time to reach reproductive age, as for many tree species"), allowing qualifying specimens to be deemed to be artificially propagated, if specific criteria are met. The criteria include that the Appendix-I material is grown under controlled conditions in a range State from propagules collected from the wild within that same range State (the country of origin of the propagules), determined by the Management Authority to be legally-acquired and by the Scientific Authority to be both non-detrimental and beneficial to the conservation of wild populations. Additional specifications are found in paragraph 4.~~The original version of Resolution Conf. 11 was amended at CoP13 in 2004 based on document CoP13 Doc. 51, so that Appendix I material grown from wild collected *seeds* or *spores* (later changed to propagules) within a range State and deemed by the Management and Scientific Authorities to be legal and non-detrimental, could be considered artificially propagated. This is reflected in paragraph 4 of the current version, which is now Resolution Conf. 11.11 (Rev. CoP18).~~

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Any range State using this exception is required to register the nurseries concerned with the CITES Secretariat and fulfil the criteria outlined in paragraph 4. of Resolution Conf. 11.11 (Rev. CoP18).

beads

***Aquilaria* spp. and *Gyrinops* spp. (Agarwood):** Agarwood specimens are highly traded CITES nontimber forest products. Trade in agarwood specimens includes extract, oils, perfumes, chips, and powder. The origin of agarwood is fungi-infected tree heartwood.

Range States of agarwood-producing tree species proposed that cultivation of the trees is very different from that of conventional forestry, and the ~~that current~~ CITES definitions of artificial propagation were inadequate. As a result, at its sixteenth meeting (CoP16, Bangkok, 2013), the Conference of the Parties adopted Resolution Conf. 16.10 on *Implementation of the Convention for agarwood-producing taxa*, adopting a definition of "artificially propagated specimens" specifically for agarwood-producing taxa as follows:

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As already highlighted by WCMC, this is a cross-cutting issue, with the source code to use for Agarwood (A or Y), currently under consideration by the Aquilaria WG.

Regarding artificially propagated specimens

1. *Agrees that:*
   a) *the current definition of 'artificially propagated' in Resolution Conf. 11.11 (Rev. CoP18) does not meet the circumstances of agarwood-producing taxa, due to the definition of the term 'under controlled conditions', and the source of parental stock is not suitable and fully complied with the plantation activities of agarwood-producing taxa; and*
   b) *the source of seeds or propagules for cultivation of agarwood-producing species may be obtained from the wild according to the definition of 'cultivated parental stock' in Resolution Conf. 11.11 (Rev. CoP18);*

2. *Adopts the following definition for terms used in this Resolution:*

   For agarwood-producing taxa, 'under controlled conditions' means in a tree plantation, including other non-natural environment, that is manipulated by human intervention for the purpose of producing plants of plant parts and derivatives;

3. *Determines that the term' artificially propagated' shall be interpreted to refer to plant specimens of agarwood as follow:*

a) *grown under controlled conditions; and*
b) *grown from seeds, seedlings, saplings, cuttings, grafting, marcotting/air-layering, divisions, plant tissues or other propagules that have been derived from wild or cultivated parental stocks, according to the definition of cultivated parental stock in Resolution Conf. 11.11 (Rev. CoP18).*

4. *Agrees that trees of agarwood-producing taxa grown in cultivation such as:*

a) *gardens (home and/or community garden); and*
b) *state, private or community production plantation, monospecific or mixed species, shall be considered to be artificially propagated in accordance with the definition above.*

These changes significantly extended the definition of artificial propagation for agarwood-producing taxa for example, allowing material agarwood derived from trees grown in gardens and mixed species plantations grown from wild-collected seeds, plant parts and saplings can to be considered artificially propagated.

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Agarwood is a very special case and Im not sure if we have fully dealt with the various cultivation methods adequately in this section. Also methods or harvesting and transfer of the fungal inoculum from source trees may also cause an issue. Lots more discussion needed for this whole section on Agarwood

! Resolution Conf. 16.10 should be referred to when considering the issue of artificial propagation of agarwood, which is currently listed in CITES Appendix II as *Aquilaria* spp. and *Gyrinops* spp. (see Annex: Figure D).

Other plant tissues and other propagules

Paragraph 2 b) of Resolution Conf. 11.11 (Rev. CoP18) states that artificially propagated shall refer to plant specimens that are, *inter alia*, *"grown from seeds, cuttings, divisions, callus tissues or other plant tissues, spores or other propagules that are either exempt from the provisions of the Convention or have been derived from cultivated parental stock"*[4].

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Suggest "derived from parental stock of wild origin".

This list of terms has been interpreted by the Parties to embrace the range of plant parts used in propagation and the range of propagation techniques. The terms *other plant tissues* and *other propagules* are not formally defined. The termuse of *other propagules* in this text goes all the way back to the originated Resolution Conf 2.12 on *Regulating trade in artificially propagated specimens under the Convention*, adopted in San Jose, Costa Rica, in 1979. The means by which plants can be propagated and the range of potential source material from which plants can be reproduced has expanded dramatically since that time. The terms *other plant tissues* and *other propagules*, in effect, have been interpreted by Parties to reflect such changescater for such evolution. This seems practical, givenas any attempt to name the expanding range of source material and procedures for artificially propagationwould be an endless task.

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In the case of CITES Appendix-I listed plants, the individual plant, "alive or dead" and "any readily recognizable part or derivative" are covered under CITES is subject to regulation[5]. In effect, everything is covered. In the case of Appendix II and I -listed plant species, speciemns covered under CITES includethe regulation is confined to plants "alive or dead" and "any readily recognizable part or derivative thereof specified in Appendices II and III in relation to the species". The parts and derivatives covered or exempt are specified in the Appendices by an annotation to the relevant listing. For example, in the case of the Appendix II medicinal plant *Hydrastis canadensis* (Goldenseal or Yellow root), only trade in the underground parts of the plant, as specified in the Annotation #8 are covered underregulated by CITES. All other parts and derivates are not specified in the example given of *Hydrastis canadensis* and are thus not covered by the Convention.

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[4] Paragraph 2, b of Res. Conf. 11.11 (Rev. CoP18).
[5] Article 1 (b) (iii) of the text of the CITES Convention.

In accordance with paragraph 2 b), source material for artificial propagation should be either exempt from CITES or should *have been derived from cultivated parental stock*. This stock should be managed under the terms of Resolution Conf. 11.11 (Rev. CoP18).

'Plant obtained through assisted production' – Source Code Y

'*Plant obtained through assisted production*' refers to a plant or parts or derivatives thereof that ~~only partially fulfils~~does not meet the definition of artificial propagation and therefore does not qualify for the source code A. However, it is not a wild plant ~~in the traditional sense due to the fact that there has been~~because it was propagated or planted in an environment with some human intervention in its cultivation or production.

Take, for example, bulbs grown in a hillside field in the Caucasus as a second crop under maize. In this situation, the parent stock has been originally sourced from the wild (exact timing unclear); there is some management by villagers; and harvest of the bulbs takes place after the maize has been cleared. There is limited record keeping, and the boundaries with nearby wild populations may not be fully clear. The bulbs reproduce very well in these partially managed cultivation fields and are harvested and sold to middlemen acting for bulb exporters. A similar situation may occur with a village garden of orchids in South-East Asia – where epiphytic orchid stock is collected from natural habitat and cultivated on trees and rocks adjacent to a village. In both the examples, the criterion of "controlled conditions" is not met.

~~In many cases, such *assisted production* is "low technology" cultivation being carried out by local communities where it may be a significant source of cash income.~~ However, assisted production on a commercial scale and with technologically advanced methods and high investments is already existing and might increase in importance in the future, e.g. when plants or propagules produced by biotechnological means are introduced into a natural or semi-natural environment with the purpose of later harvesting

The Conference of the Parties at its 18th meeting (CoP18, Gebenva 2019) amended Resolution Conf. 11.11 (Rev. CoP18)[6] to address alternative plant production systems~~cater for~~ '*plants obtained through assisted production*' – these are defined as plants or specimens thereof that:

i) *do not fulfil the definition of "artificially propagated", and*

ii) *are considered not to be "wild"* due to some ~~the~~ level~~s~~ of *human intervention*;

Propagation material can come from a range of sources, including from the wild, as long as that collection is legally acquired and non-detrimental to the survival of the species in the wild.

The exact amount of human intervention to qualify as assisted production~~for~~ (source code Y) is not defined in Resolution Conf. 11.11 (Rev. CoP18) and is~~the~~ determin~~edation is left to~~ by the national Scientific Authority. ~~In the examples given above on bulbs and orchids, the key element is the level of "controlled conditions" and the source of "cultivated parental stock".~~ The key element for plants obtained through 'assisted production' is that such specimens can be propagated from plant material that is collected sustainably from wild populations plants grown in an environment with some level of human intervention 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. It is likely that there will be a range of plant production systems that qualify as 'assisted production' ~~these will also be key to any assessment of~~ and the use of source code Y. Referring back to the example given earlier of the temporary annexation of a portion of wild habitat to provide material for harvest at the end of one season, this is clearly source code W – there is no real management of this plant material. However, ~~if the boundaries were made more permanent and some controlled conditions were put in place~~

[6] and accordingly, Resolution Conf. 12.3 (Rev. CoP18) on *Permits and Certificates*

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Consider including text to explain exempt propagules referred to in 2b) of Res. Conf. 11.11 (Rev. CoP18).

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We agree with the necessity of supplementing the source code Y.
We agree with the comments that the description of source code Y needs to be supplemented.
As you all know, it is a new source code, so it had a lot of difficulties in actual application.

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We would appreciate further clarification on the Y code, since, for example, within the Terminology chapter, in the definition of a controlled environment ("Under controlled conditions"), in its last paragraph (page 2) "Wild-collected plants are considered wild even if they have been maintained in controlled conditions for some time, eg, from several weeks to years, and this will be dependent on the plant group concerned "), we found that the definition of the Y code can cause confusion.

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Consider revising paragraph

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These two examples are only on wild-collected plants that are transplanted. However, assisted production in 'uncontrolled conditions' could well be done with artificially propagated (according to CITES definitions) plants, seeds, seedlings as well.
I have tried to include this in the text within the below suggested insertion.

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Currently, seems that the understanding of the assisted production is based on these two cases and the guidance on Y code sounds reasonable for us.
However, it would be useful to collect more case- ...

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Consider revising or deleting paragraph

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~~over a period of time,~~ if plants are propagated from or derived from plant material that is exempt, or artificially propagated, or plant propagation material that is collected sustainably from wild populations, and plants grow in an environment with some level of human assistance for the purpose of plant production, it might then be considered appropriate for 'assisted production and source code Y~~It might then be considered appropriate to attribute source code Y code to the stock~~.

In effect, the situation in relation to the application of source codes W and Y is a gradient or cline, and it is ~~unlikely that hard boundaries~~ can be identified as easily as those between source codes A and W. In effect, the source code Y was adopted by Parties to allow them to assess situations that fall within this cline and apply the new source code as they determine to be appropriate. Further examples of the suitability 'assisted production' and ~~of~~ source code Y are likely to be available in a few years' time when Parties have implemented its application more widely.

Export permits can be granted for specimens produced by assisted production methods if[7]:

a) *A Management Authority of the State of export is satisfied that the specimen to be exported was* obtained legally; and

b) *A Scientific Authority of the State of export has advised that the export will not be detrimental to the survival of the species.*

For this group of *assisted production* plants, the new source code "Y" can now be used. This allows Parties to permit "low technology" cultivation which produces plants which do not ~~formally~~ qualify as artificially propagated and the subsequent use of source code "A" which no longer need to be traded as wild (see Annex: Figure E).

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Interpretation and application of source codes for plants

Source codes on CITES permits and certificates are reported as a one-letter code (see column 'Codes' in Table 1). According to Resolution Conf. 12.3 (Rev. CoP18) on *Permits and certificates*, there are seven options to indicate the original source in permits and certificates of the specimen of a plant species being traded (W, Y, D, A, U, I and O); all of these except the new source code Y are reflected in current version of '*A Guide to the application of CITES source codes*'[8].

[7] Paragraph 10 a) and b) of Res. Conf. 11.11 (Rev. CoP18)

[8] The guidance provided herein complements and expands upon the guidance provided within the relevant Resolutions and the 2017 IUCN Guide to provide further clarity to Parties on the use of plant source codes.

When determining~~choosing~~ a source code, careful consideration should be given to the origin of the species, the purpose of the transaction (e.g., specimens traded for commercial or non-commercial purpose, such as for a botanic garden) and to the CITES Appendix in which the taxon concerned is listed.

Descriptions of the range of sources of plant specimens and guidance on the use of source codes are provided in Table 1. If a non-detriment finding (NDF) is required, this is also indicated in Table 1 (see also Figure 1).

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Table 1. List of source codes for plants and parts and derivatives thereof, their definition and application, and interpretation of the NDF requirements under the provisions of Articles III and IV of the Convention. Underlined text refers to the purpose of the transaction; **bold** text indicates the CITES Appendix. Unless otherwise indicated by a footnote, all definitions are sourced from Resolution Conf. 12.3 (Rev. CoP18) on *Permits and certificates*.

Source codes	Description	Definition	Application	Requirement for a nondetriment finding (NDF)	Requirement for a Legal Acquisition Finding (LAF) or other legal finding[9]
A	Artificially propagated plant	Plants that are artificially propagated in accordance with Resolution Conf. 11.11 (Rev. CoP18), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5 (specimens of species included in **Appendix I** that have been propagated artificially for non-commercial purposes and specimens of species included in **Appendices II and III**). Artificially propagated hybrids of Appendix I plant species are treated as Appendix II for purposes of Article VII, paragraph 5.	To be used for: **App I** - non-commercial purposes **App II** and **III**: all purposes.	Yes: only for founder stock of **Appendix I and II** listed plants used to establish the cultivated parental stock in the propagation system involved[10].	Yes: for founder stock of **Appendix I, II and III** listed plants used to establish the cultivated parental stock in the propagation system involved[11].
D	Artificially propagated plant	**Appendix-I** plants artificially propagated for commercial purposes, as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 4, of the Convention.	To be used only for: **App I** – commercial purposes.	Yes: for founder stock of **Appendix I** listed plants used to establish the cultivated parental stock in the propagation system involved[9].	Yes: for founder stock of **Appendix I** listed plants used to establish the cultivated parental stock in the propagation system involved[12]. Yes: NDF is required for the issuance of an export permit for the qualifying specimens intended for international trade that are treated as Appendix II under Art. VII(4) and exported under Art. IV.
I	Confiscated or seized	Specimens that were acquired illegally; imported or (re-)exported in violation of the Convention[13].	**All Appendices.**	Not applicable, except for export or re-export of confiscated specimens, under limited circumstances in accordance with Resolution Conf. 17.8.	Not applicable, except for export or re-export of confiscated specimens, under limited circumstances in accordance with Resolution Conf. 17.8. An NDF is required by the Party that confiscated the specimen if it allows the specimen to enter back

[9] Resolution Conf. 18.7 on Legal acquisition findings.
[10] Resolution Conf. 11.11 (Rev. CoP18).
[11] Resolution Conf. 11.11 (Rev. CoP18).
[12] Resolution Conf. 11.11 (Rev. CoP18).
[13] Resolution Conf. 17.8 on Disposal of illegally traded and confiscated specimens of CITES-listed species.

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Suggest adding a new column titled: Requirement for a legal acquisition finding (LAF) Resolution Conf. 18.7 on Legal acquisition finding was adopted at CoP18..
Example of including LAF requirements in Table 1:.
A Yes: for founder stock used to establish the cultivated parental stock in the propagation system involved; and for re-export to ensure prior trade was in compliance with CITES.
D Yes: for founder stock used to establish the cultivated parental stock in the propagation system involved; and for the issuance of the export permit for qualifying specimens in accordance with Article IV, paragraph 2 b), and for re-export to ensure prior trade was in compliance with CITES..
I Res. Conf. 17.8 ¶ 8. b)
O Res. Conf. 18.7 Annex 2 ¶ 2
U Yes: see W. Without knowing whether the source may be wild, it is treated as wild, and subject to LAF requirements.
W Yes: in accordance with Article III, paragraph 2 b), Article IV, paragraph 2 b), and Article V, paragraph 2 a) for exports of Appendix I, II, and III listed plants. and for re-export to ensure prior trade was in compliance with CITES.
Y Yes: same as W.

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We support the addition of LAF requirements to this guidance.

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Commented [DM65]: INDONESIA
Explanation in this row for source code A shall encompass all provisions currently in place, particularly on different definition that is applied for tree species as refer to Res. Conf. 10.13 (Rev. CoP18) and agarwood producing species as in Res. Conf 16.10, either incorporated in the cell or shortly indicated with a footnote.
Proposed footnote: Definition of artificial propagated specimen for agarwood species must refer to Res. ...

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Specimens treated as Appendix-II species for purposes of authorizing trade and export under Art. IV requirement

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					into trade, see Res. Conf. 17.8 paragraph 8.
O	Pre-Convention	Specimens that were acquired before the provisions of the Convention applied to that specimen[14].	Source code O may be used with other source codes. To be used only in preConvention certificates. Date of acquisition is defined in Resolution Conf. 13.6 (Rev. CoP18). **All Appendices.**	All Appendices. Source code O may be used with other source codes. To be used only in pre-Convention certificates. Date of acquisition is defined in Resolution Conf. 13.6 (Rev. CoP18). ~~Not applicable~~.	Verification of date of acquisition, as defined in Resolution Conf. 13.6 (Rev. CoP18).
U	Unknown	Source code U must be justified.	**All Appendices.**	Not applicable.	Source code U must be justified. Yes: for exports of Appendix I and II listed plants12; Yes: for imports of Appendix I listed plants13.
W	Wild	Specimens taken from the wild.	**All Appendices.**	Yes: for exports of **Appendix I** and **II** listed plants[15]; Yes: for **Appendix I** imports of listed plants[13].	Yes: for exports of plants in **all Appendices** exported under Articles III, IV and V.
Y	Assisted production	Specimens of plants that fulfil the definition for 'assisted production' in Resolution Conf. 11.11 (Rev. CoP18) as well as parts and derivatives thereof.	**All Appendices.**	Yes: for exports of **Appendix I and II** listed plants. Yes: for imports of **Appendix I** listed plants.	Yes: for exports of plants in **all Appendices** exported under Articles III, IV and V. Yes: for exports of Appendix I and II listed plants12. Yes: for imports of Appendix I listed plants13

Figure 1. Flow chart differentiating the source codes that can be used for CITES-listed plants.

[14] Article VII, paragraph 2 of the CITES Convention.
[15] Article III 2 (a) and Article IV 2 (a) of the CITES Convention.
Resolution Conf. 13.6 (Rev. CoP18).
[13] Article III 3 (a) of the CITES Convention.

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The definition should include reference to the resolution; at a minimum in footnote 11, need to include reference to Resolution Conf. 13.6 (Rev. CoP18): "11 Article VII, paragraph 2 of the CITES Convention; Resolution Conf. 13.6 (Rev. CoP18)".

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Commented [DM75]: USA
Specimens to be traded under source code "U" are treated same as source code "W."

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Commented [DM78]: UK
If appropriate, this text could also encompass imports, as Parties which issue import permits for Appendix II / III specimens (e.g. UK/EU member states) would also apply this to NDFs made in response to import permit applications.

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Commented [DM80]: UK
If appropriate, this text could also encompass imports, as Parties which issue import permits for Appendix II / III specimens (e.g. UK/EU member states) would also apply this to NDFs made in response to import permit applications.

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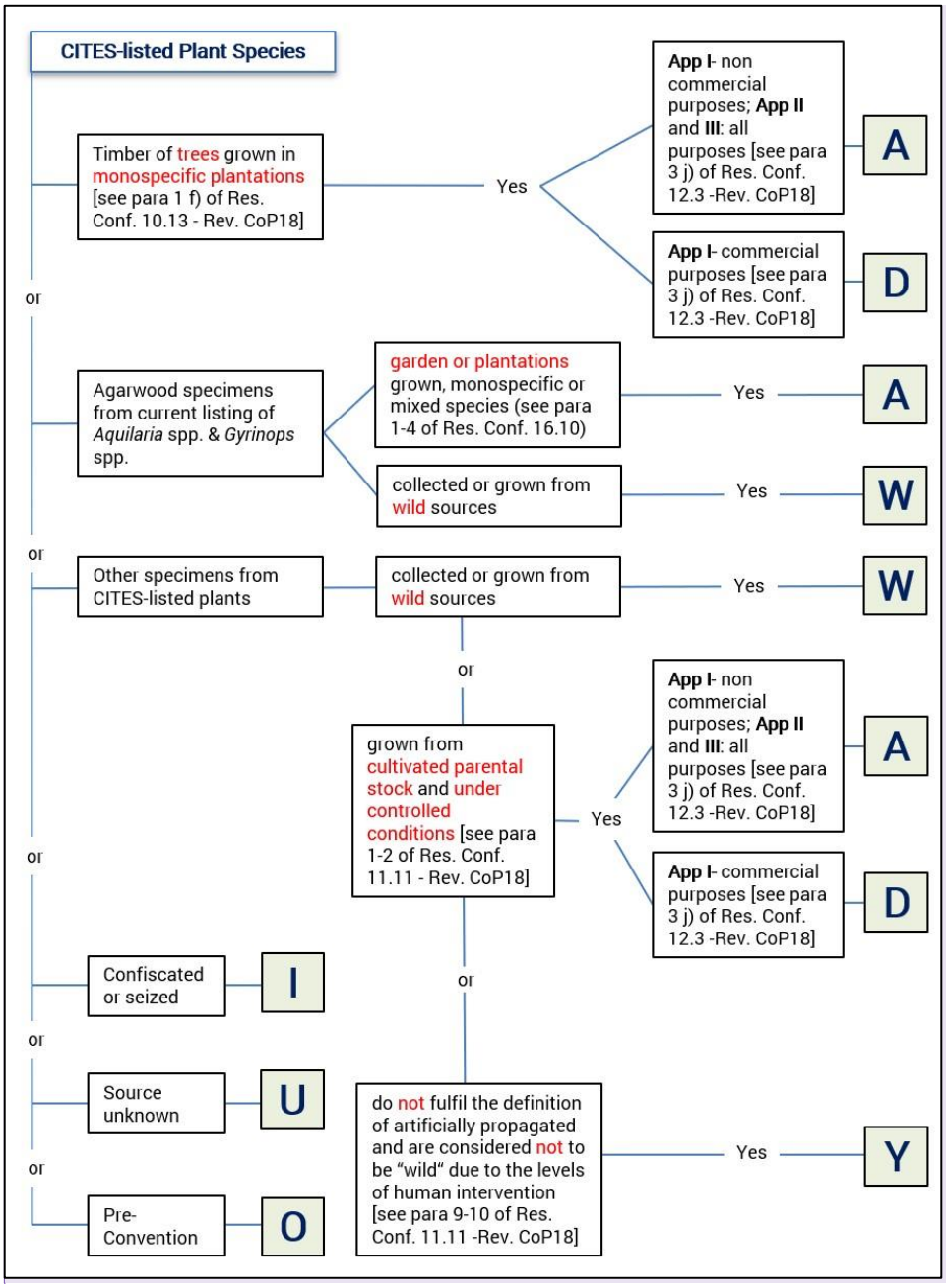

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Diagram may require updating for Agarwood, depending on outcome of WG discussions.

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Box in the middle part of this flow chart for agarwood species, that reads "collected or grown from wild sources" lead to source code "W" should be corrected by omitting the word "grown" and reads just "collected from wild sources". Agarwood is traded for its resin which is not exactly "grown".

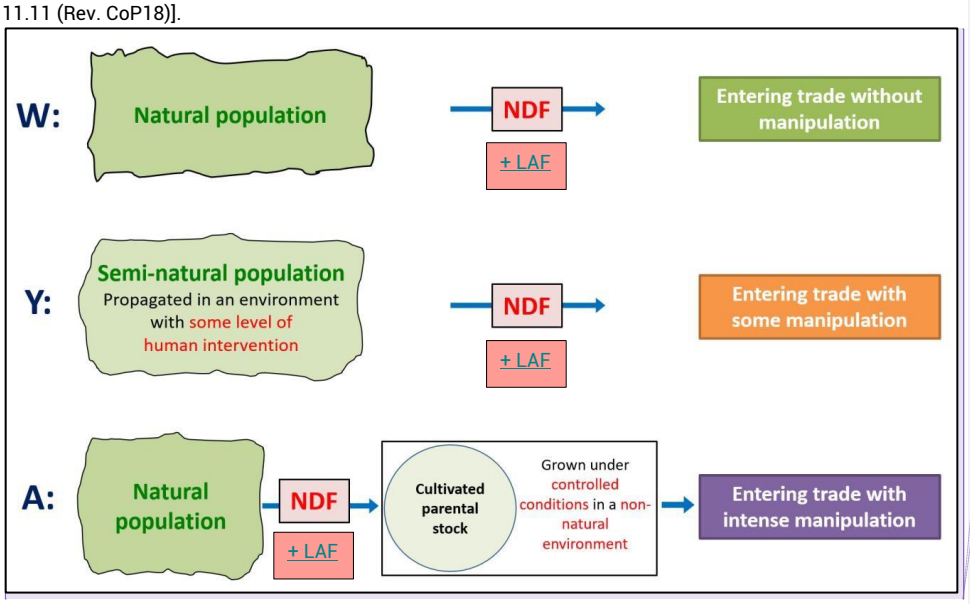
Paragraph 3 in Res. 16.10, as also presented in figure D page 13, provide complete definition of "artificially propagated" term applied for agarwood species. Point b) of this paragraph indicate that specimen grown from seedling or propagule derived from wild stock (shown with red bold font) is fall under this category.

Correspondingly, the middle box leads to source code "A" for agarwood species sufficient by referring to paragraph 1-4 Res. Conf. 16.10.

IRELAND
For Agarwood would suggest Y if mixed semi natural environment

Annex A visual guide to terms and definitions

Figure A: A visual overview of the differences between the source codes and the stage at which a legal acquisition finding (LAF) is required by a Management Authority and a non-detriment findings (NDF) is required by a Scientific Authority are required for trade in CITES-listed plants under source codes 'W', 'Y' and 'A'. Source codes reflect the diversity of cultivation of parental stock used to produce plant material for trade [Resolution Conf.
11.11 (Rev. CoP18)].



Note: The requirement for an NDF and LAF for the founder stock for source code A is equally applicable to source code D. NDF and LAF is also required for the issuance of an export permit for the qualifying source code D specimens intended for international trade that are treated as Appendix II under Art. VII(4) and traded under Art. IV Legal acquisition findings (LAFs) are required for all original collections of parental stock as well as acquisition of cultivated parental stock from suppliers that produce specimens that are propagated in accordance with Resolution Conf. 11.11 (Rev. CoP18).

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the overview of Figure A in the annex oversimplifies the conditions of different sources, which may mislead related operations.

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Resolution Conf. 18.7 on Legal acquisition finding was adopted at CoP18

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W and Y. Consider revising and using a different word than manipulation.
Y: Using the term "semi-natural population" would introduce a new and undefined term to the definition and to CITES.
A: Consider revising and using a different word than manipulation.

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Figure B: The main terms concerningunderlying source code 'A' for "artificially propagated" plants are: 'under controlled conditions' and 'cultivated parental stock' [Resolution Conf. 11.11 (Rev. CoP18)].

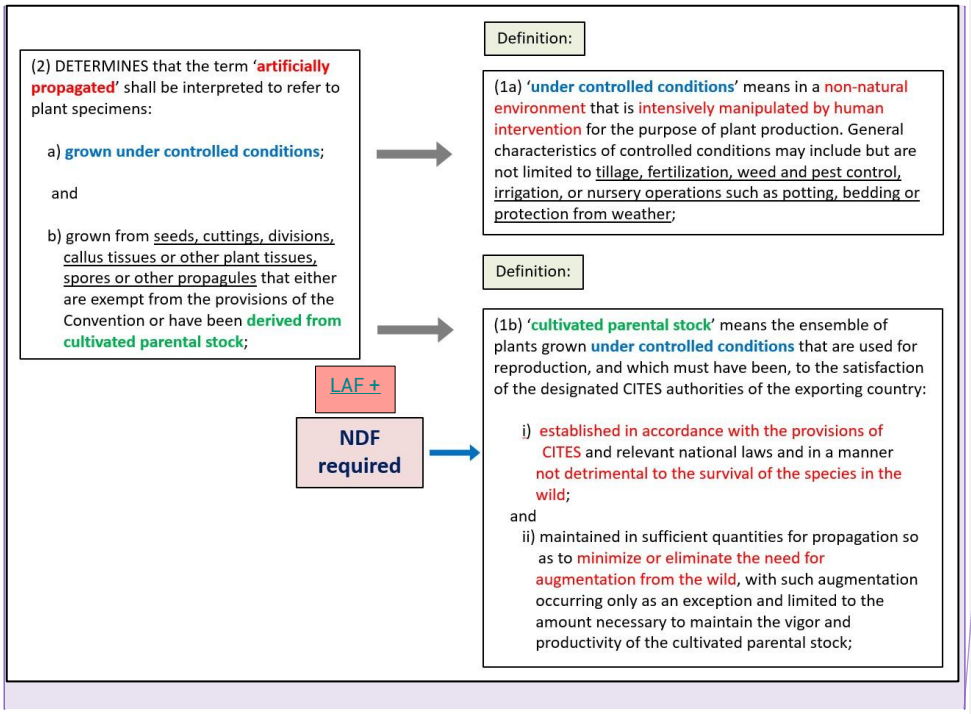
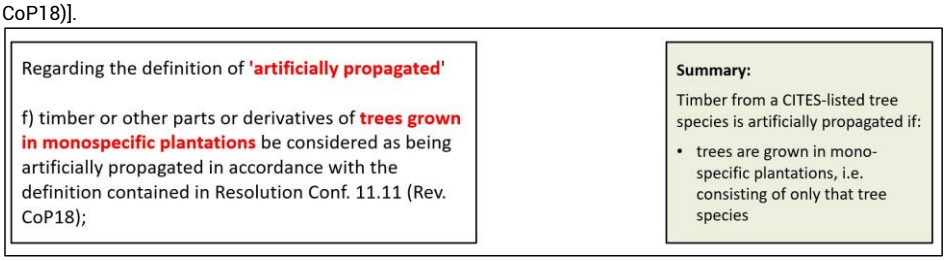


Figure C: Definition of "artificially propagated" for timber producing trees [Resolution Conf. 10.13 (Rev. CoP18)].



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Move NDF box so that it applies to both 1b. i) and ii) not only i).

Commented [DM93]: IRELAND
would suggest "parental stock of wild origin"

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Figure D: Definition of "artificially propagated specimens" for agarwood-producing taxa of the genera *Aquilaria* and *Gyrinops* (Resolution Conf. 16.10).

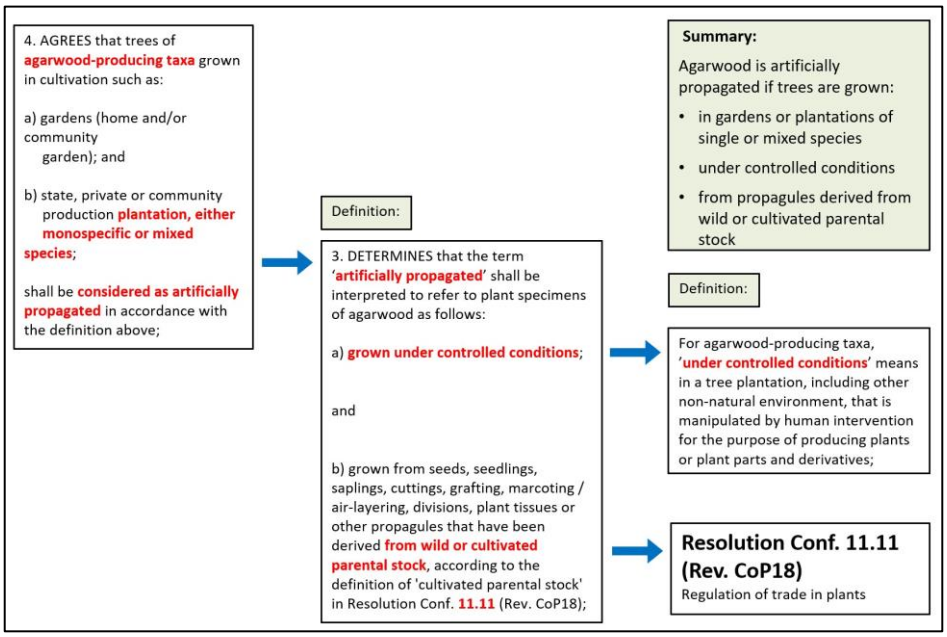

Figure E: Main criteria for plants (including parts and derivatives thereof) obtained through 'assisted production' (source code Y) is that plants are propagate or planted in an environment with some level of human intervention for the purpose of plant production ~~underlying source code Y for "assisted production" are that 'plants do not fulfil the definition of artificially propagated' and are 'not considered to be wild'~~ [Resolution Conf. 11.11 (Rev. CoP18)].

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Summary last bullet- from propagules derived from legally acquired wild or cultivated parental stock, according to definition of 'cultivated parental stock'
B) … derived from legally acquired wild or cultivated parental stock, according to definition of 'cultivated parental stock'

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(5) ADOPTS the following definition for the terms used in this Resolution:

a) 'assisted production' shall be used to refer to plant specimens that:

i) do **not** fall within the definition of 'artificially propagated',

and

ii) are considered **not** to be 'wild' because they are propagated or planted in an environment with some level of human intervention for the purpose of plant production;

b) material used to produce plant specimens from 'assisted production' systems can be ...

... derived from plant material that is exempt from the provisions of the Convention, or

... derived from artificially propagated plants, or

... derived from plants grown in an environment with some level of human intervention or

... derived from plant materials collected sustainably from wild populations 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;

Summary

Assisted production means that specimens are not in CITES terms:

- artificially propagated or
- wild-collected

But are:

- subject to some level of cultivation and care
- Sourced legally and non-detrimentally to wild populations

LAF +

NDF required

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