

Mesures phytosanitaires par marchandise
Commodity-specific phytosanitary measures**PM 8/2 (3) Coniferae****Specific scope**

The purpose of the EPPO Standard on Coniferae is to recommend to EPPO Member Governments the phytosanitary measures which they should use or require for Coniferae plants and plant products moving in international trade in order to prevent the introduction and spread of quarantine pests. Some of these recommendations are addressed to all EPPO Member Governments, and others are addressed only to countries considered to face a certain level of risk from the introduction and spread of the regulated pests concerned. All these recommendations were derived from:

- EPPO Standards PM 1/2 (EPPO A1 and A2 Lists) and the former EPPO Standards PM 2 (pest-specific phytosanitary measures), or
- Pest Risk Analysis carried out or reviewed by EPPO, or
- the Working Party on Phytosanitary Regulations.

For wood packaging material, recommendations are based on ISPM 15 *Regulation of wood packaging material in international trade*.

Specific approval and amendment

First approved in 2009-09.

Revised in 2014-09 and in 2018-09

1. Plants and commodities concerned

This Standard relates to all plants and plant products of the Coniferae subkingdom (phylum).

The Standard concerns the commodities that are regularly traded, i.e. wood (including untreated wood in manufactured articles), bark, plants for planting and cut branches. Wood packaging material, although not a commodity *per se*, is also included. Plants for planting are considered in general at the genus level. Coniferae wood may be traded as pure or mixed consignments, for example wood chips obtained from woody plants of different genera. Since the genus should be indicated on the phytosanitary certificate, every genus present should be specified in the case of mixed consignments. Such consignments should satisfy all the requirements for every genus present.

Commodities concerned

Wood (as a commodity class): commodities such as round wood, sawn wood, wood chips and wood residue, with or without bark, excluding wood packaging material, processed wood material and bamboo products (ISPM 5).

Round wood: wood not sawn longitudinally, carrying its natural rounded surface, with or without bark (ISPM 5). Branches of woody plants used for bioenergy production should be considered under this category of commodities.

Sawn wood: wood sawn longitudinally, with or without its natural rounded surface with or without bark (ISPM 5).

Processed wood material: products that are a composite of wood constructed using glue, heat and pressure, or any combination thereof (ISPM 5).

Manufactured wood items: to be added when defined under the ISPM (under development) on ‘International movement of wood products and handicrafts made of wood’.

Harvesting residues: wood material consisting of any parts of trees left on the site after round wood harvesting (EPPO *Study on Wood Commodities other than Round Wood, Sawn Wood and Manufactured Items*).

Processing wood residues: parts of wood and bark that are left after the process of transforming round wood into sawn wood and further transformation of sawn wood (EPPO *Study on Wood Commodities other than Round Wood, Sawn Wood and Manufactured Items*).

Wood chips: wood with or without bark in the form of pieces with a definable particle size produced by mechanical treatment with sharp tools (EPPO *Study on Wood Commodities other than Round Wood, Sawn Wood and Manufactured Items*).

Hogwood: wood with or without bark in the form of pieces of varying particle size and shape, produced by crushing with blunt tools such as rollers, hammers or flails (EPPO *Study on Wood Commodities other than Round Wood, Sawn Wood and Manufactured Items*).

Post-consumer scrap wood: a wide variety of wood material from ex-commercial, industrial and domestic use made available for recycling (EPPO *Study on Wood Commodities other than Round Wood, Sawn Wood and Manufactured Items*).

Wood packaging material: wood or wood products (excluding paper products) used in supporting, protecting or carrying a commodity (includes dunnage) (ISPM 5). Because this is not a commodity *per se* it is separated from wood. It includes wooden structures that accompany traded commodities such as pallets, boxes, crates, spools and dunnage (maintain as in ISPM 15).

Cut branches (including coppiced stems): defined in ISPM 5 as ‘a commodity class for fresh parts of plants intended for decorative use and not for planting’.

Bark (as a commodity): bark separated from wood (ISPM 5). Bark may contain pieces of wood with it.

Plants for planting: plants intended to remain planted, to be planted or replanted (ISPM 5). This commodity type includes nursery plants such as seedlings (1–5 years old, used for reforestation) and seeds. It also includes quite large trees (<20 years) for transplanting to gardens, amenity plantings or architectural plantings, and includes naturally or artificially dwarfed plants (bonsais). The risks of transporting regulated pests are different for trees of different ages.

Other definitions

Bark: the layer of a woody trunk, branch or root outside the cambium (ISPM 5).

Bark-free wood: wood from which all bark, except ingrown bark around knots and bark pockets between rings of annual growth, has been removed (ISPM 5).

Debarked wood: wood that has been subjected to any process that results in the removal of bark (debarked wood is not necessarily bark-free wood) (ISPM 5).

Debarking: a process designed to remove a large majority of the bark, thereby producing debarked wood.

Heat treatment: the process in which a commodity is heated until it reaches a minimum temperature for a minimum period of time according to an official technical specification (ISPM 5).

2. Pests of Coniferae recommended for regulation

This Standard relates to the EPPO A1 and A2 pests which are recommended for regulation as quarantine pests (EPPO Standard PM 1/2) for which Coniferae can be a significant pathway of introduction. The phytosanitary measures described in the Standard are primarily aimed at preventing the introduction and spread of these specific pests in the EPPO region. Details on these pests can be found on the EPPO website (<https://www.eppo.int/>), in *Quarantine Pests for Europe* (EPPO/CABI, 1997) or in *Bulletin OEPP/EPPO Bulletin* for more recent additions to the lists.

2.1 Pests of Coniferae

Abies

A1 pests

Insects

Acleris gloverana
Acleris variana
Choristoneura freemani
Choristoneura fumiferana
Dryocoetes confusus
Gnathotrichus sulcatus
Malacosoma disstria
Monochamus spp. (vectors of *Bursaphelenchus xylophilus*):
Monochamus alternatus
Monochamus marmorator
Monochamus obtusus
Monochamus scutellatus
Monochamus titillator
Orgyia pseudotsugata

Fungi and fungus-like organisms

Phellinus weirii

Parasitic plants

Arceuthobium abietinum
Arceuthobium douglasii
Arceuthobium laricis

A2 pests

Insects

Dendrolimus sibiricus
Dendrolimus superans
Ips hauseri
Ips subelongatus
Sirex ermak
Tetropium gracilicorne
Polygraphus proximus (vector of *Grosmannia aoshimae*)

Fungi and fungus-like organisms

Heterobasidion irregulare
Melampsora medusae
Phytophthora ramorum

Nematodes

Bursaphelenchus xylophilus

*Chamaecyparis**A1 pests*

Acari
Oligonychus perditus

Insects
Monochamus spp. (vectors of *B. xylophilus*)

Fungi and fungus-like organisms
Phellinus weirii

A2 pests

Nematodes
Bursaphelenchus xylophilus

Fungi and fungus-like organisms
Phytophthora lateralis
Phytophthora ramorum

*Cryptomeria**A1 pests*

Acari
Oligonychus perditus

Insects
Monochamus spp. (vectors of *B. xylophilus*)

A2 pests

Nematodes
Bursaphelenchus xylophilus

*Juniperus**A1 pests*

Acari
Oligonychus perditus

Fungi and fungus-like organisms
Phellinus weirii
Gymnosporangium clavipes
Gymnosporangium globosum
Gymnosporangium juniperi-virginianae
Gymnosporangium yamadai

A2 pests

Fungi and fungus-like organisms
Heterobasidion irregulare

*Larix**A1 pests*

Insects
Choristoneura freemani
Choristoneura fumiferana
Gnathotrichus sulcatus
Malacosoma disstria
Monochamus spp. (vectors of *Bursaphelenchus xylophilus*):
Monochamus alternatus
Monochamus scutellatus
Strobilomyia viaria

Fungi and fungus-like organisms
Mycosphaerella laricis-leptolepidis
Phellinus weirii

Parasitic plants
Arceuthobium laricis
Arceuthobium pusillum

A2 pests

Insects
Dendrolimus sibiricus
Dendrolimus superans
Ips hauseri
Ips subelongatus
Scolytus morawitzi
Sirex ermak
Tetropium gracilicorne
Xylotrechus altaicus
Polygraphus proximus (vector of *Grossmannia aoshimae*)

Fungi and fungus-like organisms
Botryosphaeria laricina
Heterobasidion irregulare
Melampsora medusae
Phytophthora ramorum

Nematodes
Bursaphelenchus xylophilus

*Picea**A1 pests*

Insects

Acleris gloverana
Acleris variana
Choristoneura freemani
Choristoneura fumiferana
Dendroctonus frontalis
Dendroctonus rufipennis
Gnathotrichus sulcatus
Malacosoma disstria
Monochamus spp. (vectors of *Bursaphelenchus xylophilus*):
Monochamus alternatus
Monochamus marmorator
Monochamus scutellatus
Monochamus titillator
Pissodes nemorensis
Pissodes strobi

Fungi and fungus-like organisms

Chrysonyxa arctostaphyli
Phellinus weirii

Parasitic plants

Arceuthobium douglasii
Arceuthobium larici
Arceuthobium pusillum
Arceuthobium tsugense

A2 pests

Insects

Dendrolimus sibiricus
Dendrolimus superans
Ips hauseri
Ips subelongatus
Sirex ermak
Tetropium gracilicorne
Polygraphus proximus (vector of *Grosmannia aoshimae*)

Fungi and fungus-like organisms

Heterobasidion irregulare
Melampsora medusae
Phytophthora ramorum

Nematodes

Bursaphelenchus xylophilus

*Pinus**A1 pests*

Insects

Choristoneura fumiferana
Dendroctonus adjunctus
Dendroctonus brevicomis
Dendroctonus frontalis
Dendroctonus ponderosae
Gnathotrichus sulcatus
Ips calligraphus
Ips confusus
Ips grandicollis
Ips lecontei
Ips paraconfusus
Ips pini
Ips plastographus
Malacosoma disstria
Monochamus spp. (vectors of *Bursaphelenchus xylophilus*):
Monochamus alternatus
Monochamus carolinensis
Monochamus mutator
Monochamus nitens
Monochamus notatus
Monochamus obtusus
Monochamus scutellatus
Monochamus titillator
Pissodes nemorensis
Pissodes strobi
Pissodes terminalis

A2 pests

Insects

Dendrolimus sibiricus
Dendrolimus superans
Ips hauseri
Ips subelongatus
Sirex ermak
Tetropium gracilicorne
Polygraphus proximus (vector of *Grosmannia aoshimae*)

Fungi and fungus-like organisms

Cronartium kamschaticum
Fusarium circinatum
Heterobasidion irregulare
Lecanosticta acicola
Melampsora medusae

Nematodes

Bursaphelenchus xylophilus

(continued)

A1 pests

Fungi and fungus-like organisms

Atropellis pinicola
Atropellis piniphila
Cronartium coleosporioides
Cronartium comandrae
Cronartium comptoniae
Cronartium fusiforme
Cronartium himalayense
Cronartium quercuum
Endocronartium harknessii
Mycosphaerella gibsonii
Ophiostoma wageneri
Phellinus weirii

Parasitic plants

Arceuthobium americanum
Arceuthobium campylopodum
Arceuthobium laricis
Arceuthobium minutissimum
Arceuthobium occidentale
Arceuthobium pusillum
Arceuthobium tsugense
Arceuthobium vaginatum

A2 pests

*Pseudotsuga**A1 pests*

Insects

Acleris gloverana
Choristoneura freemani
Choristoneura fumiferana
Dendroctonus pseudotsugae
Gnathotrichus sulcatus
Malacosoma disstria
Monochamus obtusus (vectors of *Bursaphelenchus xylophilus*)
Orgyia pseudotsugata

Fungi and fungus-like organisms

Ophiostoma wageneri
Phellinus weirii

Parasitic plants

Arceuthobium douglasii

A2 pests

Fungi and fungus-like organisms

Botryosphaeria laricina
Dendrolimus sibiricus
Fusarium circinatum
Heterobasidion irregulare
Melampsora medusae
Phytophthora ramorum

Nematodes

Bursaphelenchus xylophilus

*Taxus**A1 pests*

Acari

Oligonychus perditus

A2 pests

Fungi and fungus-like organisms

Phytophthora lateralis
Phytophthora ramorum

(continued)

*Thuja**A1 pests*

Fungi and fungus-like organisms
Phellinus weirii

A2 pests

Fungi and fungus-like organisms
Heterobasidion irregulare
Phytophthora lateralis

*Tsuga**A1 pests*

Insects
Acleris gloverana
Choristoneura freemani
Choristoneura fumiferana
Gnathotrichus sulcatus
Monoctonus spp. (vectors of *Bursaphelenchus xylophilus*)

Fungi and fungus-like organisms
Melampsora farlowii
Phellinus weirii

Parasitic plants
Arceuthobium laricis
Arceuthobium tsugense

A2 pests

Insects
Dendrolimus sibiricus
Dendrolimus superans
Polygraphus proximus

Fungi and fungus-like organisms
Heterobasidion irregulare
Phytophthora ramorum

Nematodes
Bursaphelenchus xylophilus

The above lists cover all pests which are recommended for regulation by EPPO and for which Coniferae commodities are significant potential pathways of introduction.

They do not necessarily cover all regulated pests which have been recorded on Coniferae.

New emerging pest situations, based on pest risk analysis (PRA), may lead to addition of pests to the Standard.

3. Commodity-specific phytosanitary requirements for Coniferae

Each pest recommended for regulation has been considered by the EPPO Working Party on Phytosanitary Regulations and pest-specific phytosanitary requirements were recommended (EPPO Standards PM2, withdrawn in 2006). These former pest-specific requirements have been analysed and their content reviewed and rearranged into recommended commodity-specific requirements for Coniferae. Phytosanitary measures for recently EPPO listed (A1 or A2) pests were taken from the pest risk management part of PRA performed by the EPPO Expert Working Groups and rearranged in a consistent way by the EPPO Panel on Quarantine Pests for Forestry.

The commodity-specific requirements also include general measures for polyphagous, contaminating and other

non-indigenous pests which may be associated with consignments of Coniferae.

In many places, the commodity-specific requirements refer to specific phytosanitary procedures. These are described in detail in separate EPPO Standards or in appendices to this Standard.

Normally it is recommended that the requirements fulfilled by the exporting countries and stated on the phytosanitary certificate are accepted by the importing country. However, in certain cases where the trade is new, there remains a degree of uncertainty about the adequacy of the application of the measures, which can only be resolved by following appropriate transitional procedures. These procedures should be developed in the framework of transitional arrangements (EPPO Standard under development). Cases where such special procedures apply may be specifically identified in this section, and the corresponding requirements are preceded by the phrasing: 'subject, where appropriate, to special procedures under transitional arrangements'.

Regulation of Coniferae pests

A1 pests

All EPPO countries are recommended to regulate as quarantine pests the Coniferae pests in the EPPO A1 List (see Section 2).

A2 pests

For EPPO A2 pests recommended for regulation (see Section 2), EPPO countries where a given A2 pest does not occur, or where it is not widely distributed, are recommended to regulate it as a quarantine pest. If they do, they are recommended to make the requirements specified for this pest.

4. List of recommended phytosanitary measures

Please note that for the tables below when 'OR' or 'AND' is written in capitals they separate two sections of options.

When 'or' or 'and' is not in capitals they separate only one option from another.

4.1. General requirements for Coniferae

Plants for planting of Coniferae	Phytosanitary certificate (PC) and, if appropriate, re-export phytosanitary certificate (RC).
Plants for planting of Coniferae other than seeds and plants in tissue culture	Dormant, clean (i.e. free from plant debris), flowers and seeds Grown in nurseries Inspected prior to export and found free from bacteria, viruses and virus-like organisms, or subjected to appropriate treatment to eliminate such organisms
Plants for planting (except seeds) of Coniferae originating in countries where <i>Phellinus weirii</i> is present	Pest-free area for <i>Phellinus weirii</i>
Plants for planting of Coniferae with soil and growing medium attached or associated	Grown according to EPPO Standard PM 3/54
Plants for planting of Coniferae in tissue culture	Grown in approved tissue culture facilities under sterile conditions The plants and growing medium inspected prior to export and found free from bacteria, viruses and virus-like organisms, or subjected to appropriate treatment to eliminate such organisms
Plants for planting (except seeds) of Coniferae (except <i>Thuja</i> and <i>Taxus</i>) originating in countries where <i>Bursaphelenchus xylophilus</i> is present	Pest-free area for <i>Bursaphelenchus xylophilus</i> or The host plants should have been tested and found free from <i>Bursaphelenchus xylophilus</i> and its vectors and produced under vector-proof conditions AND Transported outside of <i>Monochamus</i> flight period or Not transported through areas infested with <i>Bursaphelenchus xylophilus</i> or Transported closed to prevent infestation
Plants for planting (except seeds) of Coniferae originating in countries where <i>Heterobasidion irregulare</i> is present	Pest-free area for <i>Heterobasidion irregulare</i> or Grown under complete physical isolation according to EPPO Standard PM 5/8 or Plants younger than 5 years grown in pots in sterilized substrate at least 20 km from the closest infestation (or, if a containment plan is applied, at least 10 km from the demarcated infested area), wounds avoided, and intensive monitoring in the space between the nursery and the closest infestation
Cut branches (including cut Christmas trees without roots or soil) of Coniferae	PC and, if appropriate, RC
Cut branches (including cut Christmas trees without roots or soil) of Coniferae (except <i>Thuja</i> and <i>Taxus</i>) originating in countries where <i>Bursaphelenchus xylophilus</i> is present	Pest-free area for <i>Bursaphelenchus xylophilus</i> or Tested and found free from <i>Bursaphelenchus xylophilus</i> and its vectors and must come from a place of production whose immediate vicinity was free from <i>Bursaphelenchus xylophilus</i> according to EPPO National Regulatory Control System no. 9/1 AND Transported outside of the <i>Monochamus</i> flight period or

(continued)

Cut branches (including cut Christmas trees without roots or soil) of Coniferae originating in countries where <i>Heterobasidion irregulare</i> is present	<p>Not transported through areas infested with <i>Bursaphelenchus xylophilus</i> or</p> <p>Transported closed, to prevent infestation</p> <p>Pest-free area for <i>Heterobasidion irregulare</i> or</p> <p>Grown under complete physical isolation according to EPPO Standard PM 5/8 or</p> <p>Plants younger than 5 years grown in pots in sterilized substrate at least 20 km from the closest infestation (or, if the proposed containment plan is applied, at least 10 km from the demarcated infested area), wounds avoided and intensive monitoring in the space between the nursery and the closest infestation</p>
Wood of Coniferae Wood of Coniferae originating in countries where <i>Heterobasidion irregulare</i> is present	<p>PC and, if appropriate, RC</p> <p>Pest-free area for <i>Heterobasidion irregulare</i> or</p> <p>Heat-treated, while fresh to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of wood (this heat treatment is only efficient when the moisture content of wood is high. Therefore, wood should not be kiln-dried or air-dried before the heat treatment)</p>
Wood of Coniferae (except <i>Cryptomeria</i> and <i>Taxus</i>) originating in countries where <i>Phellinus weirii</i> is present	<p>Pest-free area for <i>Phellinus weirii</i> or</p> <p>Heat-treated according to EPPO Standard PM 10/6 or</p>
Round wood and sawn wood of Coniferae (except <i>Thuja</i> and <i>Taxus</i>) originating in countries where <i>Bursaphelenchus xylophilus</i> is present	<p>Appropriate fumigation, details to be specified on the PC</p> <p>Debarked and heat-treated according to EPPO Standard PM 10/6 or</p> <p>Treated with ionizing radiation according to EPPO Standard PM 10/8 or</p> <p>Appropriate fumigation, details to be specified on the PC</p> <p>OR</p> <p>Pest-free area for <i>Bursaphelenchus xylophilus</i></p> <p>AND</p> <p>Transported outside of <i>Monochamus</i> flight period or</p> <p>Not transported through areas infested with <i>Bursaphelenchus xylophilus</i> or</p> <p>Transported closed, to prevent infestation</p>
Particle wood (wood chips, hogwood), harvesting and processing residues of Coniferae (except <i>Thuja</i> and <i>Taxus</i>) originating in countries where <i>Bursaphelenchus xylophilus</i> is present	<p>Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the wood</p> <p>OR</p> <p>Pest-free area for <i>Bursaphelenchus xylophilus</i></p> <p>AND</p> <p>Transported outside of the <i>Monochamus</i> flight period or</p> <p>Not transported through areas infested with <i>Bursaphelenchus xylophilus</i> or</p>
Wood packaging material of Coniferae	<p>Transported closed, to prevent infestation</p> <p>Requirements of ISPM 15</p>

Isolated bark of Coniferae Isolated bark of Coniferae originating in countries where <i>Heterobasidion irregulare</i> is present	PC and, if appropriate, RC Pest-free area for <i>Heterobasidion irregulare</i> or Heat-treated, while fresh to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark (this heat treatment is only efficient when the moisture content of wood is high. Therefore, wood should not be kiln-dried or air-dried before the heat treatment)
Isolated bark of Coniferae (except <i>Cryptomeria</i> and <i>Taxus</i>) originating in countries where <i>Phellinus weirii</i> is present	Pest-free area for <i>Phellinus weirii</i> or Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark
Isolated bark of Coniferae originating in countries where <i>Bursaphelenchus xylophilus</i> or its vectors are present	Pest-free area for <i>Bursaphelenchus xylophilus</i> or Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark

4.2. Genus-specific requirements for Coniferae

Requirements for *Abies*

Plants for planting (except seeds) of <i>Abies</i> originating in countries where any of the following pests are present: <i>Acleris gloverana</i> <i>Acleris variana</i> <i>Arceuthobium abietinum</i> <i>Arceuthobium douglasii</i> <i>Arceuthobium laricis</i> <i>Choristoneura freemani</i> <i>Choristoneura fumiferana</i> <i>Dryocoetes confusus</i> <i>Ips hauseri</i> <i>Ips subelongatus</i> <i>Malacosoma disstria</i> <i>Melampsora medusae</i> <i>Orgyia pseudotsugata</i> <i>Phellinus weirii</i> <i>Polygraphus proximus</i> <i>Sirex ermak</i> <i>Tetropium gracilicorne</i>	Pest-free area for the relevant pests listed in the left column
Plants for planting (except seeds) of <i>Abies</i> originating in countries where <i>Dendrolimus sibiricus</i> or <i>Dendrolimus superans</i> is present	Free from soil according to EPPO Standard PM 3/54 AND Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> and <i>Dendrolimus superans</i> or Grown according to EPPO Standard PM 5/8 on the phytosanitary measure 'plants grown under complete physical isolation'
Plants for planting (except seeds) of <i>Abies</i> originating in countries where <i>Phytophthora ramorum</i> is present	Pest-free area for <i>Phytophthora ramorum</i> or Pest-free place of production for <i>Phytophthora ramorum</i> and appropriate buffer zone with regular surveys and exclusion measures for running water
Cut branches (including cut Christmas trees without roots or soil) of <i>Abies</i> originating in countries where any of the following pests is present: <i>Acleris gloverana</i> <i>Acleris variana</i> <i>Arceuthobium abietinum</i> <i>Arceuthobium douglasii</i>	Pest-free area for the relevant pests listed in the left column

(continued)

Arceuthobium laricis
Choristoneura freemani
Choristoneura fumiferana
Dryocoetes confusus
Malacosoma disstria
Melampsora medusae
Phellinus weirii
Orgyia pseudotsugata
Polygraphus proximus
Tetropium gracilicorne

Cut branches (including cut Christmas trees without roots or soil) of *Abies* originating in countries where *Dendrolimus sibiricus* or *Dendrolimus superans* is present

Harvested and imported only in the period between 1 October and 31 March
 or
 Pest-free area for *Dendrolimus sibiricus* and *Dendrolimus superans*
 or
 Originating from plants grown according to EPPO Standard PM5/8 on the phytosanitary measure 'plants grown under complete physical isolation'

Wood (except packaging wood) of *Abies* originating in countries where the following *Monochamus* spp. (vectors of *Bursaphelenchus xylophilus*) are present:

Monochamus alternatus
Monochamus marmorator
Monochamus obtusus
Monochamus scutellatus
Monochamus titillator

Pest-free area for specified *Monochamus* spp.
 or
 Debarked and heat-treated according to EPPO Standard PM 10/6
 or
 Treated with ionizing radiation according to EPPO Standard PM 10/8
 or
 Appropriate fumigation, details to be specified on the PC
 AND
 Transported outside of specified *Monochamus* spp. flight period
 or
 Not transported through areas infested with specified *Monochamus* spp.
 or
 Transported closed, to prevent infestation

Round wood and sawn wood of *Abies* originating in countries where *Gnathotrichus sulcatus* is present other than harvesting wood residues, processing wood residues, wood chips and hogwood

Heat-treated according to EPPO Standard PM 10/6
 or
 Appropriate fumigation, details to be specified on the PC
 or
 Treated with ionizing radiation according to EPPO Standard PM 10/8
 OR
 Pest-free area for *Gnathotrichus sulcatus*
 AND
 Transported outside of *Gnathotrichus sulcatus* flight period
 or
 Not transported through areas infested with *Gnathotrichus sulcatus*
 or
 Transported closed, to prevent infestation

Round wood (except packaging wood) of *Abies* originating in countries where *Tetropium gracilicorne* is present

Debarked and heat-treated according to EPPO Standard PM 10/6
 or
 Treated with ionizing radiation according to EPPO Standard PM 10/8
 or
 Appropriate fumigation, details to be specified on the PC
 OR
 Pest-free area for *Tetropium gracilicorne*
 AND
 Transported outside of *Tetropium gracilicorne* flight period
 or
 Not transported through areas infested with *Tetropium gracilicorne*
 or
 Transported closed, to prevent infestation

Round wood (except packaging wood) of *Abies* originating in countries where *Sirex ermak* is present

Heat-treated according to EPPO Standard PM 10/6
 or
 Appropriate fumigation, details to be specified on the PC

(continued)

	<ul style="list-style-type: none"> or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Sirex ermak</i> AND Transported outside of <i>Sirex ermak</i> flight period or Not transported through areas infested with <i>Sirex ermak</i> or Transported closed, to prevent infestation
Round wood (except packaging wood) of <i>Abies</i> originating in countries where <i>Dendrolimus sibiricus</i> or <i>Dendrolimus superans</i> is present	<ul style="list-style-type: none"> Debarbed or Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> and <i>Dendrolimus superans</i> or Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC
Round wood (except packaging wood) of <i>Abies</i> other than harvesting wood residues, processing wood residues, wood chips and hogwood originating in countries where <i>Dryocoetes confusus</i> , <i>Ips hauseri</i> , <i>Ips subelongatus</i> or <i>Polygraphus proximus</i> is present	<ul style="list-style-type: none"> Bark-free or Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Dryocoetes confusus</i>, <i>Ips hauseri</i>, <i>Ips subelongatus</i> and <i>Polygraphus proximus</i> AND Transported outside of <i>Dryocoetes confusus</i>, <i>Ips hauseri</i>, <i>Ips subelongatus</i> and <i>Polygraphus proximus</i> flight period or Not transported through areas infested with <i>Dryocoetes confusus</i>, <i>Ips hauseri</i>, <i>Ips subelongatus</i> and <i>Polygraphus proximus</i> or Transported closed, to prevent infestation
Sawn wood (except packaging wood) of <i>Abies</i> originating in countries where <i>Tetropium gracilicorne</i> is present	<ul style="list-style-type: none"> Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Tetropium gracilicorne</i> AND Transported outside of <i>Tetropium gracilicorne</i> flight period or Not transported through areas infested with <i>Tetropium gracilicorne</i> or Transported closed, to prevent infestation
Sawn wood (except packaging wood) of <i>Abies</i> originating in countries where <i>Sirex ermak</i> is present	<ul style="list-style-type: none"> Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Sirex ermak</i> AND Transported outside of <i>Sirex ermak</i> flight period or

(continued)

Harvesting wood residues, processing wood residues, wood chips and hogwood of <i>Abies</i> originating in countries where <i>Gnathotrichus sulcatus</i> is present	<p>Not transported through areas infested with <i>Sirex ermak</i> or Transported closed, to prevent infestation</p> <p>Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the wood OR Pest-free area for <i>Gnathotrichus sulcatus</i> AND Transported outside of <i>Gnathotrichus sulcatus</i> flight period or Not transported through areas infested with <i>Gnathotrichus sulcatus</i> or Transported closed, to prevent infestation</p>
Harvesting wood residues, processing wood residues, wood chips and hogwood of <i>Abies</i> originating in countries where <i>Dryocoetes confusus</i> , <i>Ips hauseri</i> , <i>Ips subelongatus</i> or <i>Polygraphus proximus</i> is present	<p>Produced from debarked wood or Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the wood OR Pest-free area for <i>Dryocoetes confusus</i>, <i>Ips hauseri</i>, <i>Ips subelongatus</i> and <i>Polygraphus proximus</i> AND Transported outside of <i>Dryocoetes confusus</i>, <i>Ips hauseri</i>, <i>Ips subelongatus</i> and <i>Polygraphus proximus</i> flight period or Not transported through areas infested with <i>Dryocoetes confusus</i>, <i>Ips hauseri</i>, <i>Ips subelongatus</i> and <i>Polygraphus proximus</i> or Transported closed, to prevent infestation</p>
<p>Isolated bark of <i>Abies</i> originating in countries where any of the following pests is present: <i>Choristoneura freemani</i> <i>Choristoneura fumiferana</i></p>	Pest-free area for the relevant pests listed in the left column
Isolated bark of <i>Abies</i> originating in countries where <i>Dryocoetes confusus</i> , <i>Gnathotrichus sulcatus</i> , <i>Ips hauseri</i> , <i>Ips subelongatus</i> , <i>Malacosoma disstria</i> , <i>Polygraphus proximus</i> or <i>Tetropium gracilicorne</i> are present	<p>Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile each piece of the bark OR Pest-free area for relevant pests listed in the left column AND Transported outside of the flight period of the relevant pests listed in the left column or Not transported through areas infested with relevant pests listed in the left column or Transported closed, to prevent infestation</p>
Isolated bark of <i>Abies</i> originating in countries where the following <i>Monochamus</i> spp. (vectors of <i>Bursaphelenchus xylophilus</i>) are present: <i>Monochamus alternatus</i> <i>Monochamus marmorator</i> <i>Monochamus obtusus</i> <i>Monochamus scutellatus</i> <i>Monochamus titillator</i>	<p>Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark OR Pest-free area for specified <i>Monochamus</i> spp. AND Transported outside of specified <i>Monochamus</i> spp. flight period or Not transported through areas infested with specified <i>Monochamus</i> spp. or Transported closed, to prevent infestation</p>

Requirements for Chamaecyparis

Plants for planting (except seeds) of <i>Chamaecyparis</i> originating in countries where <i>Oligonychus perditus</i> is present	Pest-free area for <i>Oligonychus perditus</i> or Place of production freedom for <i>Oligonychus perditus</i>
Plants for planting (except seeds) of <i>Chamaecyparis</i> originating in countries where <i>Phytophthora lateralis</i> or <i>Phytophthora ramorum</i> is present	Pest-free area for <i>Phytophthora lateralis</i> and <i>Phytophthora ramorum</i> or Place of production freedom and appropriate buffer zone for <i>Phytophthora lateralis</i> and <i>Phytophthora ramorum</i> or Pest-free place of production for <i>Phytophthora lateralis</i> and <i>Phytophthora ramorum</i> and exclusion measures for running water

Requirements for Cryptomeria

Plants for planting (except seeds) of <i>Cryptomeria</i> originating in countries where <i>Oligonychus perditus</i> is present	Pest-free area for <i>Oligonychus perditus</i> or Place of production freedom for <i>Oligonychus perditus</i>
---	---

Requirements for Juniperus

Plants for planting (except seeds) of <i>Juniperus</i> originating in countries where <i>Oligonychus perditus</i> is present	Place of production freedom for <i>Oligonychus perditus</i> or Pest-free area for <i>Oligonychus perditus</i>
Plants for planting (except seeds) of <i>Juniperus</i> originating in countries where <i>Gymnosporangium clavipes</i> , <i>Gymnosporangium globosum</i> , <i>Gymnosporangium juniperi-virginianae</i> or <i>Gymnosporangium yamadae</i> are present	Pest-free area for the relevant pests listed in the left column or Pest-free place of production for the relevant pests listed in the left column or Post entry quarantine for at least one growing season
Cut branches (including cut Christmas trees without roots or soil) of <i>Juniperus</i> originating in countries where <i>Gymnosporangium clavipes</i> , <i>Gymnosporangium globosum</i> , <i>Gymnosporangium juniperi-virginianae</i> or <i>Gymnosporangium yamadae</i> are present	Pest-free area for the relevant pests listed in the left column or Pest-free place of production for the relevant pests listed in the left column

Requirements for Larix

Plants for planting (except seeds) of <i>Larix</i> originating in countries where any of the following pests is present: <i>Arceuthobium pusillum</i> <i>Botryosphaeria loricata</i> <i>Choristoneura freemani</i> <i>Choristoneura fumiferana</i> <i>Ips hauseri</i> <i>Ips subelongatus</i> <i>Malacosoma disstria</i> <i>Melampsora medusae</i> <i>Mycosphaerella laricis-leptolepidis</i> <i>Orgyia pseudotsugata</i> <i>Polygraphus proximus</i> <i>Scolytus morawitzi</i> <i>Sirex ermak</i> <i>Tetropium gracilicorne</i> <i>Xylotrechus altaicus</i>	Pest-free area for the relevant pests listed in the left column
Plants for planting (except seeds) of <i>Larix</i> (except seedlings) accompanied by soil or other growing medium originating in countries where <i>Strobilomyia viaria</i> is present	Pest-free area for <i>Strobilomyia viaria</i> or Free from cones and grown according to EPPO Standard PM 3/54 <i>Growing Plants in growing medium prior to export</i>

(continued)

Plants for planting (except seeds) of <i>Larix</i> originating in countries where <i>Dendrolimus sibiricus</i> or <i>Dendrolimus superans</i> is present	Free from soil according to EPPO Standard PM 3/54 AND Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> and <i>Dendrolimus superans</i> or Grown according to EPPO Standard PM5/8 on the phytosanitary measure 'plants grown under complete physical isolation'
Plants for planting (except seeds) of <i>Larix</i> originating in countries where <i>Phytophthora ramorum</i> is present	Pest-free area for <i>Phytophthora ramorum</i> or Place of production freedom and appropriate buffer zone for <i>Phytophthora ramorum</i> or Pest-free place of production for <i>Phytophthora ramorum</i> and exclusion measures for running water
Cut branches of <i>Larix</i> originating in countries where any of the following pests is present: <i>Arceuthobium pusillum</i> <i>Botryosphaeria larincola</i> <i>Choristoneura freemani</i> <i>Choristoneura fumiferana</i> <i>Malacosoma disstria</i> <i>Melampsora medusae</i> <i>Mycosphaerella laricis-leptolepidis</i> <i>Orgyia pseudotsugata</i> <i>Polygraphus proximus</i> <i>Tetropium gracilicorne</i> <i>Xylotrechus altaicus</i>	Pest-free area for the relevant pests listed in the left column
Cut branches of <i>Larix</i> originating in countries where <i>Dendrolimus sibiricus</i> or <i>Dendrolimus superans</i> is present	Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> and <i>Dendrolimus superans</i> or Originating from plants grown according to EPPO Standard PM 5/8 on the phytosanitary measure 'plants grown under complete physical isolation'
Wood (except packaging wood) of <i>Larix</i> originating in countries where the following <i>Monochamus</i> spp. (vectors of <i>Bursaphelenchus xylophilus</i>) are present: <i>Monochamus alternatus</i> <i>Monochamus scutellatus</i>	Debarked and heat-treated according to EPPO Standard PM 10/6 or Treated with ionizing radiation according to EPPO Standard PM 10/8 or Appropriate fumigation, details to be specified on the PC OR Pest-free area for specified <i>Monochamus</i> spp. AND Transported outside of specified <i>Monochamus</i> spp. flight period or Not transported through areas infested with specified <i>Monochamus</i> spp. or Transported closed, to prevent infestation
Wood (except packaging wood, harvesting wood residues, processing wood residues, wood chips and hogwood) of <i>Larix</i> originating in countries where <i>Gnathotrichus sulcatus</i> is present	Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Gnathotrichus sulcatus</i> AND Transported outside of <i>Gnathotrichus sulcatus</i> flight period or Not transported through areas infested with <i>Gnathotrichus sulcatus</i> or Transported closed, to prevent infestation
Round wood (except packaging wood) of <i>Larix</i> originating in countries where <i>Tetropium gracilicorne</i> or <i>Xylotrechus altaicus</i> is present	Debarked and heat-treated according to EPPO Standard PM 10/6 or

(continued)

Round wood (except packaging wood) of <i>Larix</i> originating in countries where <i>Sirex ermak</i> is present	<p>Treated with ionizing radiation according to EPPO Standard PM 10/8 or Appropriate fumigation, details to be specified on the PC OR Pest-free area for <i>Tetropium gracilicorne</i> AND Transported outside of <i>Tetropium gracilicorne</i> and <i>Xylotrechus altaicus</i> flight period or Not transported through areas infested with <i>Tetropium gracilicorne</i> and <i>Xylotrechus altaicus</i> or Transported closed, to prevent infestation Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the phytosanitary certificate or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Sirex ermak</i> AND Transported outside of <i>Sirex ermak</i> flight period or Not transported through areas infested with <i>Sirex ermak</i> or Transported closed, to prevent infestation</p>
Round wood (except packaging wood) of <i>Larix</i> originating in countries where <i>Dendrolimus sibiricus</i> or <i>Dendrolimus superans</i> is present	<p>Debarked or Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> and <i>Dendrolimus superans</i> or Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC</p>
Round wood (except packaging wood) of <i>Larix</i> originating in countries where <i>Ips hauseri</i> , <i>Ips subelongatus</i> , <i>Polygraphus proximus</i> or <i>Scolytus morawitzi</i> is present other than harvesting wood residues, processing wood residues, wood chips and hogwood	<p>Bark-free or Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Ips hauseri</i>, <i>Ips subelongatus</i>, <i>Polygraphus proximus</i> and <i>Scolytus morawitzi</i> AND Transported outside of <i>Ips hauseri</i>, <i>Ips subelongatus</i>, <i>Polygraphus proximus</i> and <i>Scolytus morawitzi</i> flight period or Not transported through areas infested with <i>Ips hauseri</i>, <i>Ips subelongatus</i>, <i>Polygraphus proximus</i> and <i>Scolytus morawitzi</i> or Transported closed, to prevent infestation</p>
Sawn wood (except packaging wood) of <i>Larix</i> originating in countries where <i>Tetropium gracilicorne</i> or <i>Xylotrechus altaicus</i> is present	<p>Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR</p>

(continued)

Sawn wood (except packaging wood) of <i>Larix</i> originating in countries where <i>Sirex ermak</i> is present	Pest-free area for <i>Tetropium gracilicorne</i> and <i>Xylotrechus altaicus</i> AND Transported outside of <i>Tetropium gracilicorne</i> and <i>Xylotrechus altaicus</i> flight period or Not transported through areas infested with <i>Tetropium gracilicorne</i> and <i>Xylotrechus altaicus</i> or Transported closed, to prevent infestation Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Sirex ermak</i> AND Transported outside of <i>Sirex ermak</i> flight period or Not transported through areas infested with <i>Sirex ermak</i> or Transported closed, to prevent infestation
Harvesting wood residues, processing wood residues, wood chips and hogwood of <i>Larix</i> originating in countries where <i>Gnathotrichus sulcatus</i> is present	Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the wood OR Pest-free area for <i>Gnathotrichus sulcatus</i> AND Transported outside of <i>Gnathotrichus sulcatus</i> flight period or Not transported through areas infested with <i>Gnathotrichus sulcatus</i> or Transported closed, to prevent infestation
Harvesting wood residues, processing wood residues, wood chips and hogwood of <i>Larix</i> originating in countries where <i>Ips hauseri</i> , <i>Ips subelongatus</i> , <i>Polygraphus proximus</i> or <i>Scolytus morawitzi</i> is present	Produced from debarked wood or Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the wood OR Pest-free area for <i>Ips hauseri</i> , <i>Ips subelongatus</i> , <i>Polygraphus proximus</i> and <i>Scolytus morawitzi</i> AND Transported outside of <i>Ips hauseri</i> , <i>Ips subelongatus</i> , <i>Polygraphus proximus</i> and <i>Scolytus morawitzi</i> flight period or Not transported through areas infested with <i>Ips hauseri</i> , <i>Ips subelongatus</i> , <i>Polygraphus proximus</i> and <i>Scolytus morawitzi</i> or Transported closed, to prevent infestation
Isolated bark of <i>Larix</i> originating in countries where any of the following pests is present: <i>Choristoneura freemani</i> <i>Choristoneura fumiferana</i> Isolated bark of <i>Larix</i> originating in countries where <i>Dryocoetes confusus</i> , <i>Gnathotrichus sulcatus</i> , <i>Ips hauseri</i> , <i>Ips subelongatus</i> , <i>Malacosoma disstria</i> , <i>Polygraphus proximus</i> , <i>Scolytus morawitzi</i> , <i>Tetropium gracilicorne</i> or <i>Xylotrechus altaicus</i> is present	Pest-free area for the relevant pests listed in the left column Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark OR Pest-free area for the relevant pests listed in the left column AND Transported outside of the flight period of the relevant pests listed in the

(continued)

<p>Isolated bark of <i>Larix</i> originating in countries where the following <i>Monochamus</i> spp. (vectors of <i>Bursaphelenchus xylophilus</i>) are present: <i>Monochamus alternatus</i> <i>Monochamus scutellatus</i></p>	<p>left column or Not transported through areas infested with the relevant pests listed in the left column or Transported closed, to prevent infestation Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark OR Pest-free area for specified <i>Monochamus</i> spp. AND Transported outside of specified <i>Monochamus</i> spp. flight period or Not transported through areas infested with specified <i>Monochamus</i> spp. or Transported closed, to prevent infestation</p>
---	--

Requirements for *Picea*

<p>Plants for planting (except seeds) of <i>Picea</i> originating in countries where any of the following pests is present: <i>Acleris gloverana</i> <i>Acleris variana</i> <i>Arceuthobium abietinum</i> <i>Arceuthobium douglasii</i> <i>Arceuthobium laricis</i> <i>Choristoneura freemani</i> <i>Choristoneura fumiferana</i> <i>Chrysomyxa arctostaphyli</i> <i>Dendroctonus frontalis</i> <i>Dendroctonus rufipennis</i> <i>Ips hauseri</i> <i>Ips subelongatus</i> <i>Malacosoma disstria</i> <i>Melampsora medusae</i> <i>Orgyia pseudotsugata</i> <i>Pissodes nemorensis</i> <i>Pissodes strobi</i> <i>Polygraphus proximus</i> <i>Sirex ermak</i> <i>Tetropium gracilicorne</i></p>	<p>Pest-free area for the relevant pests listed in the left column</p>
<p>Plants for planting (except seeds) of <i>Picea</i>, originating in countries where <i>Dendrolimus sibiricus</i> or <i>Dendrolimus superans</i> is present</p>	<p>Free from soil according to EPPO Standard PM 3/54 AND Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> and <i>Dendrolimus superans</i> or Grown according to EPPO Standard PM 5/8 on the phytosanitary measure 'plants grown under complete physical isolation'</p>
<p>Plants for planting (except seeds) of <i>Picea</i> originating in countries where <i>Phytophthora ramorum</i> is present</p>	<p>Pest-free area for <i>Phytophthora ramorum</i> or Place of production freedom and appropriate buffer zone for <i>Phytophthora ramorum</i> or Pest-free place of production for <i>Phytophthora ramorum</i> and exclusion measures for running water</p>

Pest-free area for the relevant pests listed in the left column

(continued)

Cut branches (including cut Christmas trees without roots or soil) of *Picea* originating in countries where any of the following pests is present:

Acleris gloverana
Acleris variana
Arceuthobium abietinum
Arceuthobium douglasii
Arceuthobium laricis
Choristoneura freemani
Choristoneura fumiferana
Dendroctonus frontalis
Dendroctonus rufipennis
Malacosoma disstria
Orgyia pseudotsugata
Pissodes nemorensis
Pissodes strobi
Polygraphus proximus
Tetropium gracilicorne

Cut branches (including cut Christmas trees without roots or soil) of *Picea* originating in countries where *Chrysomyxa arctostaphyli* or *Melampsora medusae* is present

Cut branches (including cut Christmas trees without roots or soil) of *Picea* originating in countries where *Dendrolimus sibiricus* or *Dendrolimus superans* is present

Pest-free area for *Chrysomyxa arctostaphyli* and *Melampsora medusae*

Harvested and imported only in the period between 1 October and 31 March
 or
 Pest-free area for *Dendrolimus sibiricus* and *Dendrolimus superans*
 or
 Originating from plants grown according to EPPO Standard PM 5/8 on the phytosanitary measure 'plants grown under complete physical isolation'

Wood (except packaging wood) of *Picea* originating in countries where following *Monochamus* spp. (vectors of *Bursaphelenchus xylophilus*) are present:

Monochamus alternatus
Monochamus marmorator
Monochamus scutellatus
Monochamus titillator

Wood (except packaging wood, harvesting wood residues, processing wood residues, wood chips and hogwood) of *Picea* originating in countries where *Gnathotrichus sulcatus* is present

Round wood (except packaging wood) of *Picea* originating in countries where *Pissodes nemorensis*, *Pissodes strobi* or *Tetropium gracilicorne* is present

Debarked and heat-treated according to EPPO Standard PM 10/6
 or
 Treated with ionizing radiation according to EPPO Standard PM 10/8
 or
 Appropriate fumigation, details to be specified on the PC
 OR
 Pest-free area for specified *Monochamus* spp.
 AND
 Transported outside of specified *Monochamus* spp. flight period
 or
 Not transported through areas infested with specified *Monochamus* spp.
 or
 Transported closed, to prevent infestation
 Heat-treated according to EPPO Standard PM 10/6
 or
 Appropriate fumigation, details to be specified on the PC
 or
 Treated with ionizing radiation according to EPPO Standard PM 10/8
 OR
 Pest-free area for *Gnathotrichus sulcatus*
 AND
 Transported outside of *Gnathotrichus sulcatus* flight period
 or
 Not transported through areas infested with *Gnathotrichus sulcatus*
 or
 Transported closed, to prevent infestation
 Debarked and heat-treated according to EPPO Standard PM 10/6
 or
 Treated with ionizing radiation according to EPPO Standard PM 10/8
 or

(continued)

	Appropriate fumigation, details to be specified on the PC
	OR
	Pest-free area for the relevant pests listed in the left column
	AND
	Transported outside of the flight period of the relevant pests listed in the left column
	or
	Not transported through areas infested with the relevant pests listed in the left column
	or
	Transported closed, to prevent infestation
Round wood (except packaging wood) of <i>Picea</i> originating in countries where <i>Sirex ermak</i> is present	Heat-treated according to EPPO Standard PM 10/6
	or
	Fumigated according to EPPO Standard PM 3/51
	or
	Treated with ionizing radiation according to EPPO Standard PM 10/8
	OR
	Pest-free area for <i>Sirex ermak</i>
	AND
	Transported outside of <i>Sirex ermak</i> flight period
	or
	Not transported through areas infested with <i>Sirex ermak</i>
	or
	Transported closed, to prevent infestation
Round wood (except packaging wood) of <i>Picea</i> originating in countries where <i>Dendrolimus sibiricus</i> or <i>Dendrolimus superans</i> is present	Debarked
	or
	Harvested and imported only in the period between 1 October and 31 March
	or
	Pest-free area for <i>Dendrolimus sibiricus</i> and <i>Dendrolimus superans</i>
	or
	Heat-treated according to EPPO Standard PM 10/6
Round wood (except packaging wood) of <i>Picea</i> originating in countries where <i>Dendroctonus frontalis</i> , <i>Dendroctonus rufipennis</i> , <i>Ips hauseri</i> , <i>Ips subelongatus</i> or <i>Polygraphus proximus</i> is present other than harvesting wood residues, processing wood residues, wood chips and hogwood	Bark-free
	or
	Heat-treated according to EPPO Standard PM 10/6
	or
	Appropriate fumigation, details to be specified on the PC
	or
	Treated with ionizing radiation according to EPPO Standard PM 10/8
	OR
	Pest-free area for the relevant pests listed in the left column
	AND
	Transported outside of the flight period of the relevant pests listed in the left column
	or
	Not transported through areas infested with the relevant pests listed in the left column
	or
	Transported closed, to prevent infestation
Sawn wood (except packaging wood) of <i>Picea</i> originating in countries where <i>Tetropium gracilicorne</i> is present	Heat-treated according to EPPO Standard PM 10/6
	or
	Appropriate fumigation, details to be specified on the PC
	or
	Treated with ionizing radiation according to EPPO Standard PM 10/8
	OR
	Pest-free area for <i>Tetropium gracilicorne</i>
	AND
	Transported outside of <i>Tetropium gracilicorne</i> flight period
	or
	Not transported through areas infested with <i>Tetropium gracilicorne</i>
	or
	Transported closed, to prevent infestation

(continued)

Sawn wood (except packaging wood) of <i>Picea</i> originating in countries where <i>Sirex ermak</i> is present	Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Sirex ermak</i> AND Transported outside of <i>Sirex ermak</i> flight period or Not transported through areas infested with <i>Sirex ermak</i> or Transported closed, to prevent infestation
Harvesting wood residues, processing wood residues, wood chips and hogwood of <i>Picea</i> originating in countries where <i>Gnathotrichus sulcatus</i> is present	Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the wood OR Pest-free area for <i>Gnathotrichus sulcatus</i> AND Transported outside of <i>Gnathotrichus sulcatus</i> flight period or Not transported through areas infested with <i>Gnathotrichus sulcatus</i> or Transported closed, to prevent infestation
Harvesting wood residues, processing wood residues, wood chips and hogwood of <i>Picea</i> originating in countries where <i>Dendroctonus frontalis</i> , <i>Dendroctonus rufipennis</i> , <i>Ips hauseri</i> , <i>Ips subelongatus</i> , <i>Pissodes nemorensis</i> , <i>Pissodes strobi</i> or <i>Polygraphus proximus</i> is present	Produced from debarked wood or Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the wood OR Pest-free area for the relevant pests listed in the left column AND Transported outside of the flight period of the relevant pests listed in the left column or Not transported through areas infested with the relevant pests listed in the left column or Transported closed, to prevent infestation
Isolated bark of <i>Picea</i> originating in countries where any of the following pests is present: <i>Choristoneura freemani</i> <i>Choristoneura fumiferana</i>	Pest-free area for the relevant pests listed in the left column:
Isolated bark of <i>Picea</i> originating in countries where <i>Dendroctonus frontalis</i> , <i>Dendroctonus rufipennis</i> , <i>Gnathotrichus sulcatus</i> , <i>Ips hauseri</i> , <i>Ips subelongatus</i> , <i>Malacosoma disstria</i> , <i>Pissodes nemorensis</i> , <i>Pissodes strobi</i> , <i>Polygraphus proximus</i> or <i>Tetropium gracilicorne</i> is present	Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark OR Pest-free area for the relevant pests listed in the left column AND Transported outside of the flight period of the relevant pests listed in the left column or Not transported through areas infested with the relevant pests listed in the left column or Transported closed, to prevent infestation
Isolated bark of <i>Picea</i> originating in countries where following <i>Monochamus</i> spp. (vectors of <i>Bursaphelenchus xylophilus</i>) are present:	Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each

(continued)

<i>Monochamus alternatus</i>	piece of the bark
<i>Monochamus marmorator</i>	OR
<i>Monochamus saltuarius</i>	Pest-free area for specified <i>Monochamus</i> spp.
<i>Monochamus scutellatus</i>	AND
<i>Monochamus titillator</i>	Transported outside of specified <i>Monochamus</i> spp. flight period
	or
	Not transported through areas infested with specified <i>Monochamus</i> spp.
	or
	Transported closed, to prevent infestation

Requirements for *Pinus*

Plants for planting (except seeds) of *Pinus* originating in countries where any of the following pests is present: Pest-free area for the relevant pests listed in the left column

<i>Arceuthobium americanum</i>	
<i>Arceuthobium campylopodum</i>	
<i>Arceuthobium laricis</i>	
<i>Arceuthobium minutissimum</i>	
<i>Arceuthobium occidentale</i>	
<i>Arceuthobium pusillum</i>	
<i>Arceuthobium tsugense</i>	
<i>Arceuthobium vaginatum</i>	
<i>Atropellis pinicola</i>	
<i>Atropellis piniphila</i>	
<i>Choristoneura fumiferana</i>	
<i>Cronartium coleosporioides</i>	
<i>Cronartium comandrae</i>	
<i>Cronartium comptoniae</i>	
<i>Cronartium fusiforme</i>	
<i>Cronartium himalayense</i>	
<i>Cronartium kamschaticum</i>	
<i>Cronartium quercuum</i>	
<i>Dendroctonus adjunctus</i>	
<i>Dendroctonus brevicomis</i>	
<i>Dendroctonus frontalis</i>	
<i>Dendroctonus ponderosae</i>	
<i>Endocronartium harknessii</i>	
<i>Fusarium circinatum</i>	
<i>Ips calligraphus</i>	
<i>Ips confusus</i>	
<i>Ips grandicollis</i>	
<i>Ips lecontei</i>	
<i>Ips paraconfusus</i>	
<i>Ips pini</i>	
<i>Ips plastographus</i>	
<i>Ips hauseri</i>	
<i>Ips subelongatus</i>	
<i>Lecanosticta acicola</i>	
<i>Malacosoma disstria</i>	
<i>Melampsora medusae</i>	
<i>Mycosphaerella gibsonii</i>	
<i>Ophiostoma wagneri</i>	
<i>Orgyia pseudotsugata</i>	
<i>Pissodes nemorensis</i>	
<i>Pissodes strobi</i>	
<i>Pissodes terminalis</i>	
<i>Polygraphus proximus</i>	
<i>Sirex ermak</i>	
<i>Tetropium gracilicorne</i>	
Plants for planting (except seeds) of <i>Pinus</i> , originating in countries where <i>Dendrolimus sibiricus</i> or <i>Dendrolimus superans</i> is present	Free from soil according to EPPO Standard PM 3/54 AND

(continued)

	Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> and <i>Dendrolimus superans</i> or Grown according to EPPO Standard PM 5/8 on the phytosanitary measure 'plants grown under complete physical isolation'
Seeds of <i>Pinus</i> originating in countries where <i>Fusarium circinatum</i> is present	Pest-free area for <i>Fusarium circinatum</i>
Cut branches (including cut Christmas trees without roots or soil) of <i>Pinus</i> originating in countries where any of the following pests is present: <i>Arceuthobium americanum</i> <i>Arceuthobium campylopodum</i> <i>Arceuthobium laricis</i> <i>Arceuthobium minutissimum</i> <i>Arceuthobium occidentale</i> <i>Arceuthobium pusillum</i> <i>Arceuthobium tsugense</i> <i>Arceuthobium vaginatum</i> <i>Atropellis pinicola</i> <i>Atropellis piniphila</i> <i>Choristoneura fumiferana</i> <i>Cronartium coleosporioides</i> <i>Cronartium comandrae</i> <i>Cronartium comptoniae</i> <i>Cronartium fusiforme</i> <i>Cronartium himalayense</i> <i>Cronartium kamschaticum</i> <i>Cronartium quercuum</i> <i>Dendroctonus adjunctus</i> <i>Dendroctonus brevicomis</i> <i>Dendroctonus frontalis</i> <i>Dendroctonus ponderosae</i> <i>Endocronartium harknessii</i> <i>Fusarium circinatum</i> <i>Ips calligraphus</i> <i>Ips confusus</i> <i>Ips grandicollis</i> <i>Ips lecontei</i> <i>Ips paraconfusus</i> <i>Ips pini</i> <i>Ips plastographus</i> <i>Ips hauseri</i> <i>Ips subelongatus</i> <i>Lecanosticta acicola</i> <i>Malacosoma disstria</i> <i>Melampsora medusae</i> <i>Mycosphaerella gibsonii</i> <i>Ophiostoma wagneri</i> <i>Orgyia pseudotsugata</i> <i>Pissodes nemorensis</i> <i>Pissodes strobi</i> <i>Pissodes terminalis</i> <i>Polygraphus proximus</i> <i>Tetropium gracilicorne</i>	Pest-free area for the relevant pests listed in the left column

(continued)

Cut branches (including cut Christmas trees without roots or soil) of <i>Pinus</i> originating in countries where <i>Dendrolimus sibiricus</i> or <i>Dendrolimus superans</i> is present	Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> and <i>Dendrolimus superans</i> or Originate from plants grown according to EPPO Standard PM 5/8 on the phytosanitary measure 'plants grown under complete physical isolation'
Cones of <i>Pinus</i> originating in countries where <i>Fusarium circinatum</i> is present	Pest-free area for <i>Fusarium circinatum</i> OR Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the cone
Wood (except packaging wood) of <i>Pinus</i> originating in countries where following <i>Monochamus</i> spp. (vectors of <i>Bursaphelenchus xylophilus</i>) are present: <i>Monochamus alternatus</i> <i>Monochamus carolinensis</i> <i>Monochamus mutator</i> <i>Monochamus nitens</i> <i>Monochamus notatus</i> <i>Monochamus obtusus</i> <i>Monochamus scutellatus</i> <i>Monochamus titillator</i>	Debarked and heat-treated according to EPPO Standard PM 10/6 or Treated with ionizing radiation according to EPPO Standard PM 10/8 or Appropriate fumigation, details to be specified on the PC OR Pest-free area for specified <i>Monochamus</i> spp. AND Transported outside of specified <i>Monochamus</i> spp. flight period or Not transported through areas infested with specified <i>Monochamus</i> spp. or Transported closed, to prevent infestation
Wood (except packaging wood) of <i>Pinus</i> originating in countries where <i>Cronartium fusiforme</i> or <i>Cronartium quercuum</i> is present	Pest-free area for <i>Cronartium fusiforme</i> and <i>Cronartium quercuum</i> or Debarked or Heat-treated according to EPPO Standard PM 10/6
Wood (except packaging wood, harvesting wood residues, processing wood residues, wood chips and hogwood) of <i>Pinus</i> originating in countries where <i>Gnathotrichus sulcatus</i> is present other than harvesting wood residues, processing wood residues, wood chips and hogwood	Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Gnathotrichus sulcatus</i> AND Transported outside of <i>Gnathotrichus sulcatus</i> flight period or Not transported through areas infested with <i>Gnathotrichus sulcatus</i> or Transported closed, to prevent infestation
Round wood (except packaging wood) of <i>Pinus</i> originating in countries where <i>Atropellis pinicola</i> or <i>Fusarium circinatum</i> is present	Pest-free area for <i>Atropellis pinicola</i> and <i>Fusarium circinatum</i> or Heat-treated according to EPPO Standard PM 10/6
Round wood (except packaging wood) of <i>Pinus</i> originating in countries where <i>Pissodes nemorensis</i> , <i>Pissodes strobi</i> , <i>Pissodes terminalis</i> or <i>Tetropium gracilicorne</i> is present	Debarked and heat-treated according to EPPO Standard PM 10/6 or Treated with ionizing radiation according to EPPO Standard PM 10/8 or Appropriate fumigation, details to be specified on the PC OR Pest-free area for the relevant pests listed in the left column AND Transported outside of the flight period of the relevant pests listed in the left column or Not transported through areas infested with the relevant pests listed in the left column

(continued)

Round wood (except packaging wood) of <i>Pinus</i> originating in countries where <i>Sirex ermak</i> is present	<p>or Transported closed, to prevent infestation Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Sirex ermak</i> AND Transported outside of <i>Sirex ermak</i> flight period or Not transported through areas infested with <i>Sirex ermak</i> or Transported closed, to prevent infestation</p>
Round wood (except packaging wood) of <i>Pinus</i> originating in countries where <i>Dendrolimus sibiricus</i> or <i>Dendrolimus superans</i> is present	<p>Debarked or Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> and <i>Dendrolimus superans</i> or Heat-treated according to EPPO Standard PM 10/6</p>
Round wood (except packaging wood) of <i>Pinus</i> originating in countries where <i>Dendroctonus adjunctus</i> , <i>Dendroctonus brevicomis</i> , <i>Dendroctonus frontalis</i> , <i>Dendroctonus ponderosae</i> , <i>Ips calligraphus</i> , <i>Ips confusus</i> , <i>Ips grandicollis</i> , <i>Ips lecontei</i> , <i>Ips paraconfusus</i> , <i>Ips pini</i> , <i>Ips plastographus</i> , <i>Ips hauseri</i> , <i>Ips subelongatus</i> or <i>Polygraphus proximus</i> is present other than harvesting wood residues, processing wood residues, wood chips and hogwood	<p>Bark-free or Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for the relevant pests listed in the left column AND Transported outside of the flight period of the relevant pests listed in the left column or Not transported through areas infested with the relevant pests listed in the left column or Transported closed, to prevent infestation</p>
Sawn wood (except packaging wood) of <i>Pinus</i> originating in countries where <i>Tetropium gracilicorne</i> is present	<p>Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Tetropium gracilicorne</i> AND Transported outside of <i>Tetropium gracilicorne</i> flight period or Not transported through areas infested with <i>Tetropium gracilicorne</i> or Transported closed, to prevent infestation</p>
Sawn wood (except packaging wood) of <i>Pinus</i> originating in countries where <i>Sirex ermak</i> is present	<p>Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Sirex ermak</i> AND Transported outside of <i>Sirex ermak</i> flight period or Not transported through areas infested with <i>Sirex ermak</i></p>

(continued)

Harvesting wood residues, processing wood residues, wood chips and hogwood of *Pinus* originating in countries where *Gnathotrichus sulcatus* is present

or
 Transported closed, to prevent infestation
 Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the wood
 or
 Appropriate fumigation, details to be specified on the PC
 OR
 Pest-free area for *Gnathotrichus sulcatus*
 AND
 Transported outside of *Gnathotrichus sulcatus* flight period
 or
 Not transported through areas infested with *Gnathotrichus sulcatus*
 or
 Transported closed, to prevent infestation
 Produced from debarked wood
 or
 Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the wood
 OR
 Pest-free area for the relevant pests listed in the left column
 AND
 Transported outside of the flight period of the relevant pests listed in the left column
 or
 Not transported through areas infested with the relevant pests listed in the left column
 or
 Transported closed, to prevent infestation

Harvesting wood residues, processing wood residues, wood chips and hogwood of *Pinus* originating in countries where *Dendroctonus adjunctus*, *Dendroctonus brevicomis*, *Dendroctonus frontalis*, *Dendroctonus ponderosae*, *Ips calligraphus*, *Ips confusus*, *Ips grandicollis*, *Ips lecontei*, *Ips paraconfusus*, *Ips pini*, *Ips plastographus*, *Ips hauseri*, *Ips subelongatus*, *Pissodes nemorensis*, *Pissodes strobi*, *Pissodes terminalis* or *Polygraphus proximus* is present

Pest-free area for *Choristoneura fumiferana*
 Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark
 OR
 Pest-free area for the relevant pests listed in the left column
 AND
 Transported outside of the flight period of the relevant pests listed in the left column
 or
 Not transported through areas infested with the relevant pests listed in the left column
 or
 Transported closed, to prevent infestation
 Pest-free area for the relevant pests listed in the left column
 or
 Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark
 Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark
 OR
 Pest-free area for specified *Monochamus* spp.
 AND
 Transported outside of specified *Monochamus* spp. flight period
 or
 Not transported through areas infested with specified *Monochamus* spp.

Isolated bark of *Pinus* originating in countries where *Choristoneura fumiferana* is present

Isolated bark of *Pinus* originating in countries where *Cronartium fusiforme*, *Cronartium quercuum*, *Dendroctonus adjunctus*, *Dendroctonus brevicomis*, *Dendroctonus frontalis*, *Dendroctonus ponderosae*, *Gnathotrichus sulcatus*, *Ips calligraphus*, *Ips confusus*, *Ips grandicollis*, *Ips lecontei*, *Ips paraconfusus*, *Ips pini*, *Ips plastographus*, *Ips subelongatus*, *Malacosoma disstria*, *Pissodes nemorensis*, *Pissodes strobi*, *Pissodes terminalis*, *Polygraphus proximus* or *Tetropium gracilicorne* is present

Isolated bark of *Pinus* originating in countries where *Atropellis pinicola* or *Atropellis piniphila* is present

Isolated bark of *Pinus* originating in countries where the following *Monochamus* spp. (vectors of *Bursaphelenchus xylophilus*) are present:
Monochamus alternatus
Monochamus carolinensis
Monochamus mutator
Monochamus nitens
Monochamus notatus
Monochamus obtusus
Monochamus scutellatus
Monochamus titillator

(continued)

Isolated bark of <i>Pinus</i> originating in countries where <i>Fusarium circinatum</i> is present	or Transported closed, to prevent infestation Pest-free area for <i>Fusarium circinatum</i> or Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark
--	--

Requirements for *Pseudotsuga*

Plants for planting (except seeds) of <i>Pseudotsuga</i> originating in countries where any of the following pests is present: <i>Acleris gloverana</i> <i>Arceuthobium douglasii</i> <i>Botryosphaeria laricina</i> <i>Choristoneura freemani</i> <i>Choristoneura fumiferana</i> <i>Dendroctonus pseudotsugae</i> <i>Malacosoma disstria</i> <i>Melampsora medusae</i> <i>Ophiostoma wagneri</i> <i>Orgyia pseudotsugata</i> <i>Phellinus weirii</i>	Pest-free area for the relevant pests listed in the left column
Plants for planting (except seeds) of <i>Pseudotsuga menziesii</i> originating in countries where <i>Dendrolimus sibiricus</i> is present	Free from soil according to EPPO Standard PM 3/54 AND Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> or Grown according to EPPO Standard PM 5/8 on the phytosanitary measure 'plants grown under complete physical isolation'
Plants for planting (including seeds) of <i>Pseudotsuga menziesii</i> originating in countries where <i>Fusarium circinatum</i> is present	Pest-free area for <i>Fusarium circinatum</i>
Plants for planting (except seeds) of <i>Pseudotsuga</i> originating in countries where <i>Phytophthora ramorum</i> is present	Pest-free area for <i>Phytophthora ramorum</i> or Place of production freedom and appropriate buffer zone for <i>Phytophthora ramorum</i> or Pest-free place of production for <i>Phytophthora ramorum</i> and exclusion measures for running water

Cut branches (including cut Christmas trees without roots or soil) of <i>Pseudotsuga</i> originating in countries where any of the following pests is present: <i>Acleris gloverana</i> <i>Arceuthobium douglasii</i> <i>Botryosphaeria laricina</i> <i>Choristoneura freemani</i> <i>Choristoneura fumiferana</i> <i>Dendroctonus pseudotsugae</i> <i>Malacosoma disstria</i> <i>Ophiostoma wagneri</i> <i>Orgyia pseudotsugata</i>	Pest-free area for the relevant pests listed in the left column
Cut branches (including cut Christmas trees without roots or soil) of <i>Pseudotsuga menziesii</i> originating in countries where <i>Dendrolimus sibiricus</i> is present	Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> or Originating from plants grown according to EPPO Standard PM 5/8 on the phytosanitary measure 'plants grown under complete physical isolation'

(continued)

Cut branches (including cut Christmas trees without roots or soil) of <i>Pseudotsuga</i> originating in countries where <i>Melampsora medusae</i> is present	Pest-free area for <i>Melampsora medusae</i>
Cut branches (including cut Christmas trees without roots or soil) of <i>Pseudotsuga menziesii</i> originating in countries where <i>Fusarium circinatum</i> is present	Pest-free area for <i>Fusarium circinatum</i>
Wood (except packaging wood) of <i>Pseudotsuga</i> originating in countries where <i>Monochamus obtusus</i> (vector of <i>Bursaphelenchus xylophilus</i>) is present	Debarked and heat-treated according to EPPO Standard PM 10/6 or Treated with ionizing radiation according to EPPO Standard PM 10/8 or Appropriate fumigation, details to be specified on the PC OR Pest-free area for specified <i>Monochamus</i> spp. AND Transported outside of <i>Monochamus obtusus</i> flight period or Not transported through areas infested with <i>Monochamus obtusus</i> or Transported closed, to prevent infestation
Wood (except packaging wood, harvesting wood residues, processing wood residues, wood chips and hogwood) of <i>Pseudotsuga</i> originating in countries where <i>Gnathotrichus sulcatus</i> is present	Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Gnathotrichus sulcatus</i> AND Transported outside of <i>Gnathotrichus sulcatus</i> flight period or Not transported through areas infested with <i>Gnathotrichus sulcatus</i> or Transported closed, to prevent infestation
Round wood (except packaging wood) of <i>Pseudotsuga</i> originating in countries where <i>Dendroctonus pseudotsugae</i> is present other than harvesting wood residues, processing wood residues, wood chips and hogwood	Bark-free or Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Dendroctonus pseudotsugae</i> AND Transported outside of <i>Dendroctonus pseudotsugae</i> flight period or Not transported through areas infested with <i>Dendroctonus pseudotsugae</i> or Transported closed, to prevent infestation
Round wood (except packaging wood) of <i>Pseudotsuga menziesii</i> originating in countries where <i>Dendrolimus sibiricus</i> is present	Debarked or Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> or Heat-treated according to EPPO Standard PM 10/6
Round wood (except packaging wood) of <i>Pseudotsuga menziesii</i> originating in countries where <i>Fusarium circinatum</i> is present	Pest-free area for <i>Fusarium circinatum</i> or Heat-treated according to EPPO Standard PM 10/6

(continued)

Harvesting wood residues, processing wood residues, wood chips and hogwood of <i>Pseudotsuga</i> originating in countries where <i>Gnathotrichus sulcatus</i> is present	Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the wood OR Pest-free area for <i>Gnathotrichus sulcatus</i> AND Transported outside of <i>Gnathotrichus sulcatus</i> flight period or Not transported through areas infested with <i>Gnathotrichus sulcatus</i> or Transported closed, to prevent infestation
Harvesting wood residues, processing wood residues, wood chips and hogwood of <i>Pseudotsuga</i> originating in countries where <i>Dendroctonus pseudotsugae</i> is present	Produced from debarked wood or Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the wood OR Pest-free area for <i>Dendroctonus pseudotsugae</i> AND Transported outside of <i>Dendroctonus pseudotsugae</i> flight period or Not transported through areas infested with <i>Dendroctonus pseudotsugae</i> or Transported closed, to prevent infestation
Isolated bark of <i>Pseudotsuga</i> originating in countries where any of the following pests is present: <i>Choristoneura freemani</i> <i>Choristoneura fumiferana</i>	Pest-free area for the relevant pests listed in the left column
Isolated bark of <i>Pseudotsuga</i> originating in countries where <i>Dendroctonus pseudotsugae</i> or <i>Gnathotrichus sulcatus</i> is present	Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark OR Pest-free area for <i>Dendroctonus pseudotsugae</i> and <i>Gnathotrichus sulcatus</i> AND Transported outside of <i>Dendroctonus pseudotsugae</i> and <i>Gnathotrichus sulcatus</i> flight period or Not transported through areas infested with <i>Gnathotrichus sulcatus</i> or Transported closed, to prevent infestation
Isolated bark of <i>Pseudotsuga menziesii</i> originating in countries where <i>Fusarium circinatum</i> is present	Pest-free area for <i>Fusarium circinatum</i> or Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark
Isolated bark of <i>Pseudotsuga</i> originating in countries where <i>Monochamus obtusus</i> (vectors of <i>Bursaphelenchus xylophilus</i>) is present:	Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark OR Pest-free area for <i>Monochamus obtusus</i> AND Transported outside of <i>Monochamus obtusus</i> flight period or Not transported through areas infested with <i>Monochamus obtusus</i> or Transported closed, to prevent infestation

Requirements for Taxus

Plants for planting (except seeds) of <i>Taxus</i> originating in countries where <i>Oligonychus perditus</i> is present	Pest-free area for <i>Oligonychus perditus</i> or Pest-free place of production for <i>Oligonychus perditus</i>
Plants for planting (except seeds) of <i>Taxus brevifolia</i> originating in countries where <i>Phytophthora lateralis</i> is present	Pest-free area for <i>Phytophthora lateralis</i> or Pest-free place of production and appropriate buffer zone for <i>Phytophthora lateralis</i>
Plants for planting (except seeds) of <i>Taxus</i> originating in countries where <i>Phytophthora ramorum</i> is present	Pest-free area for <i>Phytophthora ramorum</i> or Place of production freedom and appropriate buffer zone for <i>Phytophthora ramorum</i> or Pest-free place of production for <i>Phytophthora ramorum</i> and exclusion measures for running water

Requirements for Thuja

Plants for planting (except seeds) of <i>Thuja</i> originating in countries where <i>Oligonychus perditus</i> is present	Pest-free area for <i>Oligonychus perditus</i> or Pest-free place of production for <i>Oligonychus perditus</i>
Plants for planting of <i>Thuja</i> originating in countries where <i>Sirex ermak</i> is present	Pest-free area for <i>Sirex ermak</i>
Plants for planting (except seeds) of <i>Thuja</i> originating in countries where <i>Phytophthora lateralis</i> is present	Pest-free area for <i>Phytophthora lateralis</i> or Pest-free place of production and appropriate buffer zone for <i>Phytophthora lateralis</i>

Round wood (except packaging wood) of <i>Thuja</i> originating in countries where <i>Sirex ermak</i> is present	Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Sirex ermak</i> AND Transported outside of <i>Sirex ermak</i> flight period or Not transported through areas infested with <i>Sirex ermak</i> or Transported closed, to prevent infestation
--	---

Requirements for Tsuga

Plants for planting (except seeds) of <i>Tsuga</i> originating in countries where any of the following pests is present: <i>Acleris gloverana</i> <i>Arceuthobium laricis</i> <i>Arceuthobium tsugense</i> <i>Choristoneura freemani</i> <i>Choristoneura fumiferana</i> <i>Melampsora farlowii</i> <i>Melampsora medusae</i> <i>Orgyia pseudotsugata</i> <i>Polygraphus proximus</i>	Pest-free area for the relevant pests listed in the left column
Plants for planting (except seeds) of <i>Tsuga</i> originating in countries where <i>Sirex ermak</i> is present	Pest-free area for <i>Sirex ermak</i>

(continued)

Plants for planting (except seeds) of <i>Tsuga</i> , originating in countries where <i>Dendrolimus sibiricus</i> or <i>Dendrolimus superans</i> is present	Free from soil according to EPPO Standard PM 3/54 AND Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> and <i>Dendrolimus superans</i> or Grown according to EPPO Standard PM 5/8 on the phytosanitary measure 'plants grown under complete physical isolation'
Plants for planting (except seeds) of <i>Tsuga</i> originating in countries where <i>Phytophthora ramorum</i> is present	Pest-free area for <i>Phytophthora ramorum</i> or Place of production freedom and appropriate buffer zone for <i>Phytophthora ramorum</i> or Pest-free place of production for <i>Phytophthora ramorum</i> and exclusion measures for running water
Cut branches (including cut Christmas trees without roots or soil) of <i>Tsuga</i> originating in countries where any of the following pests is present: <i>Acleris gloverana</i> <i>Arceuthobium laricis</i> <i>Arceuthobium tsugense</i> <i>Choristoneura freemani</i> <i>Choristoneura fumiferana</i> <i>Orygia pseudotsugata</i> <i>Polygraphus proximus</i>	Pest-free area for the relevant pests listed in the left column
Cut branches (including cut Christmas trees without roots or soil) of <i>Tsuga</i> originating in countries where <i>Dendrolimus sibiricus</i> or <i>Dendrolimus superans</i> is present	Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> and <i>Dendrolimus superans</i> or Originate from plants grown according to EPPO Standard PM 5/8 on the phytosanitary measure 'plants grown under complete physical isolation'
Cut branches (including cut Christmas trees without roots or soil) of <i>Tsuga</i> originating in countries where <i>Melampsora farlowii</i> or <i>Melampsora medusae</i> is present	Pest-free area for <i>Melampsora farlowii</i> and <i>Melampsora medusae</i>
Wood (except packaging wood, harvesting wood residues, processing wood residues, wood chips and hogwood) of <i>Tsuga</i> originating in countries where <i>Gnathotrichus sulcatus</i> is present	Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Gnathotrichus sulcatus</i> AND Transported outside of <i>Gnathotrichus sulcatus</i> flight period or Not transported through areas infested with <i>Gnathotrichus sulcatus</i> or Transported closed, to prevent infestation
Round wood (except packaging wood) of <i>Tsuga</i> originating in countries where <i>Dendrolimus sibiricus</i> or <i>Dendrolimus superans</i> is present	Debarked or Harvested and imported only in the period between 1 October and 31 March or Pest-free area for <i>Dendrolimus sibiricus</i> and <i>Dendrolimus superans</i> or Heat-treated according to EPPO Standard PM 10/6

(continued)

Round wood (except packaging wood) of <i>Tsuga</i> originating in countries where <i>Sirex ermak</i> is present	Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Sirex ermak</i> AND Transported outside of <i>Sirex ermak</i> flight period or Not transported through areas infested with <i>Sirex ermak</i> or Transported closed, to prevent infestation
Round wood (except packaging wood) of <i>Tsuga</i> originating in countries where <i>Polygraphus proximus</i> is present other than harvesting wood residues, processing wood residues, wood chips and hogwood	Bark-free or Heat-treated according to EPPO Standard PM 10/6 or Appropriate fumigation, details to be specified on the PC or Treated with ionizing radiation according to EPPO Standard PM 10/8 OR Pest-free area for <i>Polygraphus proximus</i> AND Transported outside of <i>Polygraphus proximus</i> flight period or Not transported through areas infested with <i>Polygraphus proximus</i> or Transported closed to prevent infestation
Harvesting wood residues, processing wood residues, wood chips and hogwood of <i>Tsuga</i> originating in countries where <i>Polygraphus proximus</i> is present	Produced from debarked wood or Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the wood OR Pest-free area for <i>Polygraphus proximus</i> AND Transported outside of <i>Polygraphus proximus</i> flight period or Not transported through areas infested with <i>Polygraphus proximus</i> or Transported closed, to prevent infestation
Harvesting wood residues, processing wood residues, wood chips and hogwood of <i>Tsuga</i> originating in countries where <i>Gnathotrichus sulcatus</i> is present	Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the wood OR Pest-free area for <i>Gnathotrichus sulcatus</i> AND Transported outside of <i>Gnathotrichus sulcatus</i> flight period or Not transported through areas infested with <i>Gnathotrichus sulcatus</i> or Transported closed, to prevent infestation

Isolated bark of *Tsuga* originating in countries where any of the following pests is present: Pest-free area for the relevant pests listed in the left column
Choristoneura freemani
Choristoneura fumiferana

(continued)

Isolated bark of <i>Tsuga</i> originating in countries where <i>Gnathotrichus sulcatus</i> or <i>Polygraphus proximus</i> is present	Heat-treated to achieve a minimum temperature of 56°C for a minimum duration of 30 continuous minutes throughout the entire profile of each piece of the bark OR Pest-free area for <i>Gnathotrichus sulcatus</i> and <i>Polygraphus proximus</i> AND Transported outside of <i>Gnathotrichus sulcatus</i> and <i>Polygraphus proximus</i> flight period or Not transported through areas infested with <i>Gnathotrichus sulcatus</i> and <i>Polygraphus proximus</i> or Transported closed, to prevent infestation
--	---

5. List of associated Standards

It is proposed that individual phytosanitary procedures would be maintained as separate EPPO Standards, but that they should be part of a package that will always accompany the forestry standard when approved.

The following Standards are referred to:

EPPO Standards PM 3: Phytosanitary procedures

PM 3/29 (1)	<i>General export inspection procedure for glasshouse and nursery enterprises</i>
PM 3/54 (1)	<i>Growing plants in growing medium prior to export</i>
PM 3/60 (1)	<i>Testing growing medium and plants in growing medium</i>

EPPO Standards PM 5: Pest risk analysis

PM 5/8 (1)	<i>Guidelines on the phytosanitary measure 'Plants grown under complete physical isolation'</i>
------------	---

EPPO Standards PM 10: Phytosanitary treatments

PM 10/6 (1)	<i>Heat treatment of wood to control insects and wood-borne nematodes</i>
PM 10/ 8 (1)	<i>Disinfestation of wood with ionizing radiation</i>

International Standards for Phytosanitary Measures

ISPM 4	<i>Requirements for the establishment of pest-free areas</i> , 1996. FAO, Rome
ISPM 5	<i>Glossary of phytosanitary terms</i> , 2015. FAO, Rome
ISPM 10	<i>Requirements for the establishment of pest-free places of production and pest-free production sites</i> , 1999. FAO, Rome
ISPM 15	<i>Regulation of wood packaging material in international trade</i> , 2013. FAO, Rome

Other documents referred to:

EPPO 'Study on Wood Commodities other than Round Wood, Sawn Wood and Manufactured Items', 2015	https://www.eppo.int/media/uploaded_images/RESOURCES/eppo_publications/td_1071_study_wood_commodities.pdf
EPPO PRAs	https://www.eppo.int/QUARANTINE/Pest_Risk_Analysis/PRA_intro.htm
