Growing Media and AD Guidance for Exports to the EU

Growing media attached to or associated with plants will need to meet the EU's third country import requirements (see below) from 1 Jan 2021. Below are several options that are available to exporters to enable them to meet these requirements, as well as some treatment methods for certain options. Exporters should still check with the importing Member State prior to export to ensure that their goods have met the below requirements.

Plants Products and other objects	Origin	Special Requirement
Growing medium, attached to or associated with plants, intended to sustain the vitality of the plants, with the exception of sterile medium of *in-vitro* plants	Third countries other than Switzerland	Official statement that: (a) the growing medium, at the time of planting of the associated plants: (i) was free from soil and organic matter and had not been previously used for growing plants or for any other agricultural purposes, or (ii) was composed entirely of peat or fibre of *Cocos nucifera* L. and had not been previously used for growing plants or for any other agricultural purposes, or (iii) was subjected to effective fumigation or heat treatment to ensure freedom from pests and which is indicated on the phytosanitary certificate referred to in Article 71 of Regulation (EU) No 2016/2031, under the rubric 'Additional declaration', or (iv) was subjected to effective systems approach to ensure freedom from pests and which is indicated on the phytosanitary certificate referred to in Article 71 of Regulation (EU) No 2016/2031, under the rubric 'Additional declaration'; and in all the cases mentioned in points (i) to (iv) was stored and maintained under appropriate conditions to keep it free from quarantine pests and (b) since planting: (i) appropriate measures have been taken to ensure that the growing medium has been kept free from Union quarantine pests, including at least: — physical isolation of the growing medium from soil and other possible sources of contamination, — hygiene measures, — using water free from Union quarantine pests;

		or (ii) within two weeks prior to export the growing medium including, where appropriate, soil has been completely removed by washing using water free from Union quarantine pests. Replanting may be performed in the growing medium that meets the requirements laid down in point (a). Appropriate conditions shall be maintained to keep freedom from Union quarantine pests, as provided for in point (b).

At the time of planting:

(i) was free from soil and organic matter and had not been previously used for growing plants or for any other agricultural purposes

Options that will meet the above requirements:

- Bare rooted plants
- Plants planted in rock wool
- Plants planted in vermiculite and Perlite
- Any inorganic growing media which has not been used for agricultural purposes

(ii) was composed entirely of peat or fibre of *Cocos nucifera* L. and had not been previously used for growing plants or for any other agricultural purposes

Options that will meet this requirement:

- Growing media entirely composed of peat
- Growing media entirely composed of coir
- Growing media entirely composed of peat and coir

(iii) was subjected to effective fumigation or heat treatment to ensure freedom from pests and which is indicated on the phytosanitary certificate referred to in Article 71 of Regulation (EU) No 2016/2031, under the rubric 'Additional declaration'

Options that will meet this requirement:

- Steaming - will eliminate plant pests and pathogens from horticultural waste if all parts of the material reach 80°C for at least one hour.
- Boiling - will eliminate most plant pests and pathogens from solid waste, providing all material is held at boiling temperature for an appropriate period (between 10-30 minutes) depending on particle size.
- Dry heat - for a minimum temperature of 120°C is required for at least 1 hour. An alternative option is to autoclave at 121°C (15psi) for 30 minutes.

(iv) was subjected to effective systems approach to ensure freedom from pests and which is indicated on the phytosanitary certificate referred to in Article 71 of Regulation (EU) No 2016/2031, under the rubric 'Additional declaration'

Options that will meet this requirement

- Compost made to the PAS 100 standard (BSI PAS 100:2018)
- Bulking agents added to compost must meet the below requirements (see table below)

Bulking agents

Main bulking agents are:

- Wood fibre - will have undergone a heat extruding process (see below)
- Bark – Must not contain prohibited species as listed in Annex VI of Commission implementing Regulation 2019/2072 AND must be heat treated (see process below)

Wood Fibre extruding Process

Generally there are two processes used to create wood fibre, both of which are acceptable treatments.

1) Steam Explosion - timber-derived product, manufactured from expanded white wood chips. Steamed (to at least 150°C), conditioned and processed under pressure (to at least 1.3 bar) and required to be extruded between plates. The fibres will then need to have been shredded.

2) Mechanical extrusion – two counter rotating augurs where the wood fibre reaches a minimum of 120 °C.

Bark Heat Treatment

Bark must have undergone an appropriate heat treatment to achieve a minimum temperature of 56˚C for a minimum duration of 30 minutes.

Growing Medium	**Meets Requirements (Y/N)**
PAS 100 & wood fibre (treated to the above standard)	Y
PAS 100 & treated bark (treated to the above standard)	Y
PAS 100 & Peat	Y
PAS 100 & Coir	Y
PAS 100 & Sand	Y
PAS 100 & Clay	Y
PAS 100 & Sepiolite	Y
PAS 100 & Untreated Bark	N
PAS 100 & Humates	N

Fertiliser that contains animal by products*	N
Bark (treated)	Y
Bark (untreated)	N
Green Waste (not PAS 100)	N
Other Organic substances	N

* May be subject to other regulatory controls

Growing media will also be subject to a physical inspection prior to export by the relevant plant health services.

Stored and maintained under appropriate conditions to keep it free from quarantine pests

- The growing medium must not be stored in a way that may cause its phytosanitary status to change.

Since planting:

(i) appropriate measures have been taken to ensure that the growing medium has been kept free from quarantine pests, including at least:

- physical isolation of the growing medium from soil and other possible sources of contamination

Options include:

On Benches:

- Raised benches will act as physical separation from the soil or on concrete.

Pots, trays and saucers:

- Pots trays and saucers with no drainage holes sat on the soil. For pots with drainage holes these would need to be sat on an impermeable layer, such as plastic or on a tray/saucer.

Impermeable membrane

- Plastic sheeting that is impermeable separating the soil from the growing medium will be acceptable.

Grown in the Floor

- Plants would need to meet option (ii) below

Options not appropriate for this measure

- Plants planted with a permeable Mypex membrane between the growing medium and the soil
- Plants planted in sand

- hygiene measures

Hygiene measures should be good enough to achieve a fairly sterile growing environment practically free from visible weeds, algae, pests and diseases. Regular cleaning, sterilization of and/or replacement of flooring, matting and growing surfaces would help to achieve this.

- using water free from quarantine pests

Water could be sterilised, filtered or a water-based nutrient solution (ISPM 40). Water can be used from mains, borehole or rainwater collected from glasshouse roofs.

(ii) within two weeks prior to export the growing medium including, where appropriate, soil has been completely removed by washing using water free from Union quarantine pests. Replanting may be performed in the growing medium that meets the requirements laid down in point (a). Appropriate conditions shall be maintained to keep freedom from Union quarantine pests, as provided for in point (b).

If the plants had been grown in the same medium at the time of planting and not been subject to contamination then there won't be a need to fulfil this option as it would meet (b)(i).