

## NT PLANT QUARANTINE & BIOSECURITY GUIDANCE NOTE

### NUMBER 2a – HANDLING BROUGHT-IN PLANTS AND QUARANTINE AREAS – General advice

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#### 1.0 Background

Incoming plants are the single most frequent way in which pests and diseases are introduced into a garden. Therefore, it is important that you take sensible precautions to reduce the risk of inadvertently introducing pests and diseases on brought-in plants. Below are some guiding principles on handling brought-in plants and plant quarantine.

#### 2.0 On arrival

- Competent staff should inspect all plants carefully on arrival.
- Only accept the delivery if you are content that the plants are free from pests, diseases and weeds.
- Inform your supplier immediately of any problems – this will be so much easier if your requirements were specified on the purchase order.
- Check all necessary documentation – compliance to your order, and, if one is needed, its plant passport number (e.g. “*EC Plant Passport UK/EW 12345*”)
- Sign, date and retain your copy of the delivery note.
- Record as an accession on plant database.

#### 3.0 Quarantine areas

A quarantine area is likely to range from a separate part of an outdoors plant holding area, a modified section of an existing glasshouse, right through to a purpose-built glasshouse or poly-tunnel.

The following guidance is offered for advice. It is suggested that head gardeners read the guidance and do what is practicable.

##### 3.1 Location

- A quarantine area should be ‘isolated’ in some way from the rest of the nursery/garden. Preferably, a quarantine area should be sited well away from the main garden, public areas and any plant production or retail plant sales areas – if possible, outer boundary locations are ideal. Otherwise, ‘isolation’ should be achieved by other means e.g. access restrictions etc.

##### 3.2 Structure

- Preferably, a permanent, weatherproof, watertight glasshouse with a sealed solid concrete floor (which can be easily disinfected and provides a barrier to prevent entry of ground water, soil, nematodes or fungal pathogens soil or ground water impervious to water).

- Other structures such as polytunnels can be used, or even a separate outside standing area if nothing else is available.

### 3.3 *Security*

- Ideally, access should be restricted to a few nominated staff.
- Limit the quarantine area to one entrance only and if possible lock the entrance door to prevent unwanted entry.
- Otherwise put up signs to restrict unwanted access.

### 3.4 *Drainage*

- Prevent water running into and from the quarantine area to prevent the spread of pathogens into and out of the area.

### 3.5 *People (staff, volunteers, contractors and visitors)*

- Require that people clean and disinfect their footwear before entering the quarantine area (see NTGN Number 4).
- At the entrance, provide a washing bowl filled with soapy and a long-bristle brush for people remove soil and debris from their footwear.
- Replace the soapy water at least once a day or more frequently if it is visibly contaminated with soil and debris.
- Try to ensure that people follow a sequence of moving from 'clean' to 'dirty' areas but not back again!

### 3.6 *Benches, plant pots, trays, trolleys etc.*

- Benches should be brushed clean of debris between batches of plants.
- Capillary matting should be brushed clean of debris between batches of plants and should be disinfected with 'Jet 5' preferably between batches of plants or at least once a year. Covering the matting with a protective layer such as "Mypex" will help to protect it from wear and tear, and with careful cleaning and disinfection, the matting may last 5 years or more.
- For new batches of plants, either use new pots, trays etc. or, if reusing old ones, they must be brushed free from all organic matter, washed in soapy water and disinfected.
- It is inadvisable to reuse wooden canes as they may be difficult to sterilise completely and can aid transmission of such pests as root mealy bug and fungal pathogens. They also act as over-wintering sites for common pests, such as red spider mite.

### 3.7 *Tools (e.g. pruning knives, secateurs, saws, hoses, lances, dustpans, brooms, bins etc.)*

- Ideally use dedicated tools and equipment in the quarantine area to prevent cross-contamination.
- Clean and disinfect tools, such as secateurs, knives and saws, regularly between cuts, and especially between different plants.
- It is advisable that volunteers do not bring their own tools from home.
- Mark tools clearly to prevent them being removed mistakenly or 'borrowed' for use in other growing areas.

### 3.8 *Weed control*

- Control weeds in and around the quarantine area because weeds may harbour many pests and diseases.

### 3.9 *Pest control*

- There should be effective control of glasshouse pests (both vertebrate and invertebrate).

### 3.10 *Growing conditions*

- Space plants adequately to ensure they are not touching.
- Avoid plants being in direct contact with the ground.
- Avoid over-watering to prevent any unnecessary run-off or overspill.
- Wherever possible, try to avoid overhead watering because this can spread pathogens in particular.
- Consider not using fungicides and insecticides in order to allow pest and disease attack to be clearly seen and to avoid infested but symptomless plants being planted out in the garden. For plants susceptible to *Phytophthora ramorum/kernoviae*, a period of 6 weeks is suggested.

### 3.11 *Plant monitoring*

- Try to hold plants for as long as possible: at least two weeks is suggested for small, container grown plants; six weeks is advised for plants of special conservation significance or for larger material.
- Check the plants carefully and monitor them weekly or daily if possible.
- Where available, make use of diagnostic test kits to identify certain pathogens (e.g. *Phytophthora* species; see NT Guidance Note 3).

### 3.12 *Plant waste*

- Collect all waste plant material and debris in bins (any infested material should be first placed in a bag and sealed to avoid the risk of spreading infestations to wider areas).
- Destroy the waste either by composting e.g. in a closed vessel composter, by burning, or by deep burial as non-hazardous waste at a local authority approved landfill site.

## **Conservation Directorate Guidance Note Information**

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