

BPG's Propagation Processes for 2009

INTRODUCTION

BPG is aware of the risk of spreading dieback through poor propagation practices. A recent Western Australian article claimed up to 1/3 of outer Perth Metro Gardens are infected with dieback.

Advice was sought from Men of the Trees in Rockingham and Hazelmere. Practices at these sites were confirmed by information received from the Nursery & Garden Industry Australia, who provided a Technical Nursery Paper on Hygiene in plant propagation¹. BPG has adopted processes consistent with Men of the Trees and the Industry association.

BPG's POT CLEANING PROCESS

BPG uses 125mm forestry tubes exclusively and recycles the tubes from year to year. In order to prepare these tubes for the year's planting, BPG undertook the following steps:

1. **Pot Washing:** BPG built two tube washers. These consist of 100litre plastic tubs. In the bottom of each tub is a rectangle formed of PVC pipe, drilled at intervals. The pipe rectangle is plumbed to the outside of the tub to a forge blower. 150 tubes are loaded into the washer with 1½ cups of dishwashing detergent (not soap). The blower is turned on and the air agitates the water so the tubes circulate and scrape together. BPG has found that in 20 minutes, the tubes are clean and even lime scale is largely removed.
2. **Pot Sterilization:** Industry practice calls for a 20-minute soak in a fresh 1% sodium hypochlorite solution. Household bleach is typically 3 to 4% strength so is impractical to use in any volume. BPG purchased industrial strength 12.5% bleach and mixed 6.4 litres with 73.6 litres water to create 80 litres of the 1% solution. All tubes were soaked for 20 minutes. After soaking they were rinsed in fresh water and left to dry on an elevated metal rack.

BPG's PROPAGATION SOIL

BPG buys their soil from RichGro, the same source as Men of the Trees, and mixed to the same recipe. BPG buys the soil in 30litre plastic sacks. The plastic sacks are not opened until the soil is required, and leftover soil is not returned to the sack. Unused sacks are stored off the ground.

BPG's PROPAGATION RACKS

BPG uses galvanized metal frames designed and supplied by Men of the Trees. Each frame holds up to 600 125mm forestry tubes. The bed of the frame is open wire mesh. The 125mm forestry tubes are held in 5x5 tube trays that are formed from bent wire mesh. The opening in the wire mesh is sized to fit the forestry tube. Using this systems, the forestry tubes are suspended in the wire mesh trays above the open wire mesh bed of the frame. This prevents any water from pooling and provides no surface for soil to build up on.

TOOLS and EQUIPMENT

Hamilton planters are either soaked in bleach solution or washed and sprayed down with methylated spirits between planting days. Tubs to hold the soil when filling tubes and any tools required are disinfected with bleach.

¹ December 2004 Issue no. 11 Technical Nursery papers Hygiene in plant propagation.