

PROPAGATORS' QUESTION BOX SESSIONS

Two Question Box Sessions were run, during which technical questions posed by members attending the Conference were answered from the floor by other members. The report below is not intended to be a verbatim record but a summary of the questions posed and the points raised.

Readers are reminded that the information aired during the question box sessions does not constitute advice. Readers should use their own judgment and exercise due diligence if acting upon it.

PERSISTENT OR SYSTEMIC PESTICIDES AND INTEGRATED PEST MANAGEMENT

Does anyone have any information about the safety of the aphicide imidacloprid incorporated in compost to beneficial agents used in IPM?

Paul Howling, Howard and Kooij Nurseries

Imidacloprid has generally been regarded as safe with IPM but this season failures have been reported with the use of *Encarsia* (the beneficial organism used to control whitefly). This is unusual and could be an effect of weather conditions or could have been caused by imidacloprid residues.

Imidacloprid has no effect on mites, so should not affect the use of *Phytoseiulus*.

Intercept (which contains imidacloprid) appears to control mealy bug if that pest is concealed in the leaf folds of, for example, *Phormium*, but may also affect the mealybug predator used in IPM.

John Adlam, Dove Associates

What is the activity and persistence of Intercept? If used to control vine weevil, can I also use nematodes?

David Hide, Royal Horticultural Society Gardens, Wisley

SusCon Green (which contains the active ingredient chlorpyrifos) is said to have a 2-year life. Intercept 5 GR, when incorporated in compost, is said to last 12 months from the date of incorporation. A liquid drench of Intercept 70 WG does not last as long. For vine weevil you would need to apply during larval activity, say from March to June and then again in September. If an Intercept drench was applied in spring you could use nematodes in the autumn.

John Adlam

LAVENDERS AND VINE WEEVIL RESISTANCE

We are interested in growing lavender (*Lavandula*) without using SusCon Green. Does anyone know if the high essential oil content in the root is a deterrent to vine weevil?

Patrick Fairweather

We've never found vine weevil in lavender or choisya (*Choisya*) but that is only anecdotal.

Alistair Hazell, Darby Nursery Stock

We find the larvae feed less on aromatic herbs than on other subjects, and there is no sign of adult feeding damage on such plants.

Pandora Thorsby, Yorkstock

EFFECTS OF POTASSIUM ON FLOWERING AND HARDINESS

Does anyone have experience on the benefits of potassium on flowering and hardiness in nursery stock or herbaceous subjects?

Patrick Fairweather, Aline Fairweather Nurseries

We use potassium nitrate for camelias and rhododendrons during August and believe that it is beneficial.

David Hide

Rhododendron sets flower in July so that would be a better time to feed with potassium. It is true that the harder you make the plant the more flower buds you will get next year.

Try drying the plants off and feeding with potash to get improved bud initiation and improved colour. Potash also hardens the cell walls which is good for winter hardiness. Recently we have seen compost temperatures as high as 15°C in November and if you use a controlled-release fertiliser with high nitrogen then you will certainly get very lush growth, too late, which will negate the potash effects.

John Adlam

EXPERIENCES WITH ROOTING HORMONES

Availability of some rooting hormones is becoming restricted in Ireland. What are members' experiences with different products and mixture strengths?

Philip Moreau

A kilo tub of products such as Seradix lasts ages and obviously the strength deteriorates over time. If we've had Seradix No.3 for more than a year we use it as if it was Seradix No.2. Ideally we need to get suppliers to make things like this available in smaller quantities.

Mike Farmer

Indolebutyric acid (IBA) is light sensitive, rather than time sensitive, so if it is being weakened during storage it is because it is being exposed to light. Synergol lasts well as a stock solution in the dark and in a fridge.

John Adlam

Seradix may be withdrawn soon.

Margaret Scott, Horticultural Research International, Efford

I've found IBA is sensitive to both temperature and light. It is worth keeping it in the fridge in the dark.

Greg McPhee, Nursery Industry Association of Australia

CRINODENDRON FROM SEED

Crinodendrons (*Crinodendron*) have set plenty of seed in Cornwall this year. Does anyone have any experience of growing it from seed?

Mike Farmer, Rosewarne, Cornwall

I've found it germinates very easily in the spring after vernalisation, but have not had to give it any other special treatment.

Tom Wood, Oakover Nurseries

We use seed rather than cuttings for this plant because it avoids problems with spider mite being carried over from the stock plants. It takes longer than cuttings but it is easier and you get cleaner plants.

Philip Moreau, Glenbrook Nurseries

As you say there is plenty of seed it would be worth doing some trials so you will know what the optimum method is under your own conditions. Try different cold treatments on small batches in a cold store or fridge and germinate them. There is plenty of time to do this before you have to decide how to plan production of a crop.

Dennis Fordham, Oakover Nurseries

If you collect and sow too early you can get problems with contamination by mould fungi.

Therese Landers, Green Avenue Nurseries

ROOTING CEANOTHUS 'PUGET BLUE'

Does anyone have any tips on rooting *Ceanothus* 'Puget Blue' consistently?

Alan Hargreaves, Hargreaves Plants

We find it roots ok in September and October in Grodan blocks. We water in well but then neglect and they respond well. Don't get it too wet and use a firm, semi-ripe cutting.

David Hide

The source of cuttings material might affect results. One nursery I know had good results using cuttings taken from stock plants in 3-litre containers grown under plastic and rooted in mist in Ellepots — but this would tend to go against what David just said.

Annette Wickham

GROWING *Clematis armandii*

Does anyone have any tips on rooting and growing *C. armandii*?

David Hide

We grow *C. armandii* 'Apple Blossom' from internodal cuttings with one leaf removed, taken in early September.

Margaret Sheward, Avonbank Nurseries, Pershore College

Does anyone know why the leaves of *C. armandii* sometimes become puckered?

Margaret Sheward

The early season use of Flexidor (contains isoxaben) can cause this, or, if you are growing under polythene, it may be an effect of the leaf expanding in temperatures which fluctuate widely between night and day, upsetting the chemical balance in the leaf. You see this in *Rhododendron*, *Mahonia*, and laurels, too.

John Adlam

We used to see it on tea plantations, where it was known as "hot and cold disease".

Pat Scarborough

ROOTING PITTOSPORUM

I find *Pittosporum* tricky to root. Does anyone have any tips?

Paul Green, Wyevale Nurseries

Pittosporum grows in flushes and you get good results if you take cuttings from the first flush, once the second flush is finished. Aim to take quite hard growth. Wounding is beneficial but don't use heat. Propagators use heat too much for a great many subjects that don't really need it.

Philip Moreau

In New Zealand growers avoid heat on pittosporum cuttings till they have callused, then use heat. But it is crucial to use strong material, and take from stock plants not from liners. I know growers in New Zealand who get 90% to 100% take even from purple-leaved cultivars.

I agree with Philip's point about flushes. You can tell if the second flush has stopped because if the leaves are folded it is still growing. On small-leaved types, if you can pull the leaves off easily the cutting will have been poor quality anyway.

Direct sticking also works well with pittosporum.

Therese Landers, Green Avenue Nurseries

LEAF DROP IN HOLLY CUTTINGS

Why do holly (*Ilex*) cuttings loose their leaves in some years and not others?

David Hide

It can be related back to the stock plant, especially in a dry year, and there is also an effect of hormone level. It is worth irrigating the stock plants during early growth flushes.

Margaret Scott

ROLE OF MYCORRHIZAE IN PROPAGATION AND CONTAINER PRODUCTION

How much faith should be put in the use of mycorrhizal inoculation in growing media, does anyone have any experience?

Ian Martin, Eden Project, Cornwall

A new 2-year programme of Horticultural Development Council trials has been started on this at Efford. We think some 95% of nursery stock subjects could benefit. A lot of production in the U.S.A. now uses mycorrhizae and there is some evidence it promotes growth and may cut pesticide use. So far there have been a lot of claims but little in the way of independent trials.

Margaret Scott

PREVENTION OF WINDBLOW IN TALL CONTAINER CROPS

Just a tip, really, having tried many different ways of trying to prevent tall container plants being blown over on the nursery. On our standing area we have placed trellis horizontally and supported on plastic pipe so that it is about 2 to 3 cm above the ground to make a grid that the pots are stood down into. Make sure the trellis grid is the right size for the pots you are using.

Robert Hudson, Lilyhurst Plants