fered to one gallon containers. As rapid root development takes place in early spring these stock are ready to bud with stored budwood by late October or early November. Three weeks after budding remove any ties or tapes. Shorten the height of the stock by 50%. As the bud develops, remove the remainder of the stock. Understocks must not be allowed to dry at any time during the first three weeks of budding — any stress during this period will greatly reduce the "take" or bud survival. This method will produce a sturdy saleable tree, in a container, by mid-summer.

Okinawa is a stock that commences growth early after a very short dormancy period and when autumn-budded it will produce trees by spring (late October), especially when budded with cultivars such as Maravilha or Flordasun. Stocks for this are produced by the method described above during spring and summer. Care must be taken to ensure that stocks are kept in a vigorous growing condition at all times.

Peach stocks produced by this method include: Nemaguard, Okinawa, Golden Queen, American Red, and Elberta.

A METHOD FOR PROPAGATING PITTOSPORUM EUGENIOIDES 'VARIEGATUM'

ROSS G. BURGESS

Ross Burgess Container Nursery Melbourne, Victoria

The genus *Pittosporum* provides us with some 160 species endemic only to the southern hemisphere. One such cultivated species is *Pittosporum* eugenoides 'Variegatum.' This handsome creamy-white margined form is one of the finest of hardy variegated plants. It has become widely propagated by Australian nurseries since its introduction.

The cuttings are collected in winter, from early June to late July, once the autumn growth has firmed. The current season's growth is collected from the stock bushes in the early morning with the aid of secateurs and placed into disposable polythene bags.

The cuttings are placed in a Captan dip and are prepared with sharpened surgical scissors. These are very light and easy to use; you are not pushing against a spring so they are less tiring than secateurs and they are easier to keep sharp. Bottom leaves are pulled off and a basal cut is made below a node, where last season's growth matured. A wound approximately 2cm long is made on either side of the bud exposing the cambium and phloem tissues. The leaves at the top of the cutting are trimmed

back by a third, in order to stop excessive transpiration; this allows easier placement into the cutting trays.

The wounded section of the cutting is treated with a basal dip of Seradix 3 and immediately inserted into the rooting medium. Cuttings may vary in size somewhat, depending on the type of growth collected; between 6 and 10 cm is ideal.

The cuttings are then placed in Speedling Cellupak polystyrene trays of 60 cubicles. The striking medium in these trays consists of 3 parts coarse river sand, 1 part peat moss and 1 part perlite, which has been pasteurized with a steam-air treatment. The cutting mix also includes Terrazole at 100 gms per m³.

The trays are placed in an igloo on raised sand beds with bottom heat at 23°C under intermittent mist. Leaf drop is reduced by weaning the mist off as soon as the cuttings strike, generally after 6 to 8 weeks, and then adopting hand watering.

Once the majority of cuttings have struck it is important to transfer the trays as soon as possible to a shade house, as day temperatures often reach 35° to 40°C in the igloo.

A regular liquid feeding routine is adopted to force both top and root growth. It is especially important to develop a good root growth in order to take advantage of the Speedling system.

The pittosporum cuttings are generally ready to remove from the trays when a developed root system is evident. This enables one to pot in summer, around mid-December. They are transferred into 15cm rigid plastic pots containing a soilless growing medium and a slow-release fertilizer. The potting medium consists of milled pine bark, scoria (a volcanic derivative), and ligna peat (coal dust.)

For the next 8 to 9 months the plants require little attention other than a regular spray program with both non-residual and systemic fungicides and insecticides. Some trimming may be necessary to promote apical dominance and a top dressing of a 3 to 4 month slow-release fertilizer in mid-winter is recommended.

The Pittosporum eugenoides 'Variegatum' cuttings grow to a saleable size by early spring and are merchandised with a bamboo stake and quality label.

THE USE OF ATRINAL ON MARGURITE DAISY

BRUCE C. NAYLOR

Kirramar Nursery Calamvale, Brisbane, Queensland

Since the concentration rates of Atrinal reported in the Schering information sheet vary from 5 to 10 ml per litre over a