A native of New Zealand, the evergreen species thrives in the south of Ireland on a range of soils and particularly in coastal locations. The small, glossy, bright unmarked foliage is what the customer demands where the stems are used as ‘fillers’ in mixed flower bouquets.

**SITE:** Elevated sites sheltered from prevailing winds and with relative freedom from frost. While a south-facing aspect is desirable it is not essential. The south west and east of Ireland appears to be a very suitable production area. The site must be accessible.

**SOIL & PH:** The soil must be deep and well drained. Aim for a pH of 6.0-6.5

**SYSTEM:** The crop can be planted on the flat but a slightly raised large drill or ridge can also be used.

**CULTIVARS:** The main variety cultivated is *Pittosporum tenuifolium*. There are other cultivars of *P. tenuifolium* such as ‘Silver Queen’ or ‘Garnettii’ which would be the preferred selections where variegated leaves are cultivated.

**NUTRITION:** A soil test is necessary to accurately determine rates of P and K. The use of nitrogen will result in good growth response. Apply top dressing of up to 70 - 100 kg/ha nitrogen in the Spring.

**PLANTS** Plants are produced from cuttings taken in the late Autumn. Good strong bushy 7 cm liner size plants should be planted in the late Spring.

**PLANTING** Planting is carried out in rows 2m apart, with plants also 2m apart in the row. This gives an overall plant density of approximately 2200 trees per ha. A 3m wide tramline should be left every 10-12 meters, depending on tractor and sprayer widths, to facilitate tractor operations and ease of harvesting. Higher density systems can be used but a more intense level of plantation management is then required.

**WEEDS:** It is critically important to keep plantations free of weeds. The site has first been cleared of perennial weeds by spraying off, using a mixture of Glyphosate (Roundup) and Carfentrozone-Ethyl (Spotlight Plus).
While the use of a plastic membrane on the planted row in conjunction with a mowed grass or cultivated strip between rows can be used as a weed control measure, the most common method is the use of carefully chosen residual and selective contact herbicides. The choice of herbicides to maintain clean plantations depends on the weed spectrum, but products such as Stomp Aqua (pendimethalin), Ronstar liquid (oxadiazon), Venzar
(Lenacil) and Kerb 50 W (Propyzamide) have label recommendations for overall or directed application. Spot treatment of perennial weeds with Roundup or hormone weedkillers is sometimes necessary in foliage plantations, even when crops are well established.

**PRUNING:** Centre stem type of plant is favoured. Centre of plant can be cut out in the second winter to form an open centred bush. Some cut the third winter and then fairly freely. Cut hard and leave enough growth to harden and grow for next year. If there are too many spindly shoots, these should be thinned out.

**PESTS:** The Pittosporum Psyllid (*Trioza viteoradiata*) can damage foliage by causing small pale yellow lumps on the leaves which can render the stems unmarketable. Insecticidal treatment may be warranted on some sites to cope with this. Aphids can be problematic in some seasons and will require treatment. Slugs have been found to be problematic particularly in wet seasons in the early establishment years. Rabbits/hares can sometimes pose a threat so the site may require fencing.

**DISEASES:** A black spotting which appears in the late winter/early spring can be unsightly and in some cases can render stems unmarketable. While the disease *Phomopsis* has been implicated, the problem is most likely to be physiological in nature.

**HARVEST:** Pittosporum is normally harvested during October through April. Research has shown that a bonus summer harvest can also be taken between mid June and early August. All harvesting is done using a hand held secateurs. Generally well-furnished stems, 60cm in length, should be carefully selected for quality of leaf and shoot balance. Whilst some first harvest stems are not cut until the third growing season, the crop reaches full cropping potential from the fourth year onwards, when up to 150,000 stems per hectare can be harvested. Cropping can continue for a further 10 years if plantations are well maintained and managed. In most cases all grading is carried out in the field. Stems are bunched in 10’s and then transported to the packing shed where they are stood in water before packing. The 10 stem bunches are bundled in bigger bundles of 150 stems and placed in a bucket containing 1 inch of water which are in turn placed on Danish trolleys for transport to market.

**COSTS & RETURNS:** From an initial investment of €3000 per ha, a gross return of €6000 per ha is achievable from the fourth year onwards. Net return depends on the grower’s involvement as most of the annual plantation cost is labour (maintenance & harvest). Even when labour for harvest is included a net return of €1750 to €2000 per ha is achievable.

*Further information: Andy Whelton, Teagasc Horticultural Development Unit. Tel: 087 7848065*