Introduction and background

Cut foliage production is a new, innovative market-led sector of commercial Irish horticulture. It is vegetation that is cultivated or harvested from woodlands and used in large quantities as a source of decoration on its own, or in association with flowers in bouquets and floral arrangements to provide texture, interest and fill. The range is large and evergreen plants with green, silver or variegated leaves are usually used, but subjects with attractive flowers, buds, bark, berries and scents are also used. Adding value to foliage by painting, glittering and dying material is a feature gaining in popularity with processors and end users.

Worldwide demand in developed countries is increasing. The European flower industry is worth €2.5bn, with foliage estimated at 10% of this, or €250m. UK and Dutch packers and distributors require high volumes all year round, with peak demand at the key Christmas, Valentine's and Mother's Day periods.

The south of Ireland has long been recognised as an ideal location for the production of foliage because of its mild and moist climate. A plentiful supply of water, rich organic soils, and the short distance to



Field of Ozothamnus cut foliage.

market are all major advantages Ireland has over competitors from Israel, Italy and developing countries.

The Irish industry is valued at €7m, with over 200ha of production concentrated in counties Cork, Kerry, Waterford, Wexford, Wicklow and Dublin.

Eucalyptus, Pittosporum and Prunus are the predominant species cultivated, with a range of other species also grown in smaller quantities.

Markets

While traditional high street florists continue to use large quantities of foliage, the most significant change in recent years has been the rapid increase in supermarket, mail order and online sales. Important requirements in accessing markets are:

- regular supply of a fixed volume;
- good consistent quality with fixed specification; and,
- fixed price.

For the producer, foliage plants must:

- be capable of rapid regeneration after cutting;
- have low susceptibility to pests and diseases;
- have long vase life.

Satisfying the above criteria has been the focus of the industry in Ireland to date, and continuing to meet the changing requirements of the market will be the greatest challenge going forward. Customers are constantly looking for something new and different, so it is essential to have constant contact with buyers and regular market monitoring. Ireland's unique climate is able to offer new species of interest to customers and there are opportunities for new entrantsinto the enterprise in a number of ways, whether in production, harvesting or processing.



Establishment

Given a suitable local climate for the species to be grown, the site should be readily accessible and sheltered. For the majority of subjects, the land must be well drained, yet sufficiently retentive of moisture and nutrients to maintain steady growth.

Neutral or slightly acidic soils are preferable for most species grown for foliage.

Most plant material is raised from cuttings, with planting taking place during the late spring or early summer period.

Plant density varies from 2,250 to 7,000 plants per hectare, depending on the species and market outlet.

A higher density is normally adopted for small

shrubby plant material grown on an intensive bed system, with the main tree species like *Eucalyptus*, grown on a more extensive system. The site should be cleared of perennial weeds prior to planting and a programme for sustainable weed control implemented. Annual pruning is essential for most species to help maintain health, vigour and plant shape, and to ensure annual production of saleable stems.

Some species can be susceptible to particular pests and diseases, and programmes for control may sometimes be justified. Regular crop walking and monitoring is therefore necessary to ensure quality stem production.

Costs and returns



Selection of Irish cut foliage.

It is important to bear in mind that while some species reach economic cutting size after two growing seasons, most subjects require three or up to four growing seasons

in the field.

Levels of annual production vary according to subject, age and vigour of the plantation, and returns/ha will depend on market outlet. While a small but rewarding local market exists, over 90% of Irish foliage is exported for the mass bouquet market.

Eucalyptus cut foliage, for example, produces on average 100,000 stems per ha from the third year onwards, and has a lifespan of at least 12 years if managed correctly. Capital investment of \in 6,000 per ha will deliver a gross margin of \in 8,000 per ha, and after the biggest cost – labour for harvest – is accounted for, a net average return of \in 2,000/ha is achievable annually.

Harvesting and processing



Harvesting Pittosporum cut foliage in Kildalton, Co. Kilkenny.

All harvesting is done by hand using secateurs. Well-furnished sprays 45-70cm long with stems of pencil thickness are ideal and should be carefully selected for quality of leaf and shoot balance. Stems are either bunched in the field if destined for the processing market,

or alternatively cut loose, and graded in a warehouse into bunches weighing 200g or 400g if destined for the wholesale florist market. They should be stood in water overnight where possible and kept cool at 1-3°C prior to packing and transport.

Further information

For further information please contact Andy Whelton, Vegetable and Cut Foliage Specialist Advisor at:

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The following resources is also helpful:

www.teagasc.ie/crops/horticulture/cut-foliage/publications/



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