

PROPAGATION OF PROTEACEAE BY CUTTINGS

B. L. McKENZIE

Topline Nurseries
Auckland

Cuttings of *Protea*, *Leucadendron* and *Leucospermum* are taken from mid-summer to early winter. These are approximately 4-5" in length (depending a little on the cultivar) and the lower two thirds is stripped of leaves. Cuttings are then treated with IBA 0.3%, quick dip, this giving better results than the Seradix No. 2 powder, formerly used.

The rooting medium I use consists of peat and sand, 1:1 and, as our nursery produces liner crops only, 90% of the plants are rooted directly in tubes. This also reduces root disturbance which is particularly important with Proteaceous plants. Certain small-leaved cultivars are rooted in small tubes and, when rooted, transferred into larger tubes. The potting mix here comprises 2 parts soil, 1 part peat, and 1 part sand, sterilized with M.B.C. and contains the following fertilizer per cubic yard: lb. Uramite, $\frac{3}{4}$ lb. superphosphate, 1 oz. potassium nitrate, 1 oz. potassium sulfate. No lime is used but supplementary liquid feeding is given.

Our aim throughout rooting and growing on is to have a maximum airflow with a minimum of water. We achieve this by placing the cuttings in outdoor frames using P.V.C. cover as a rain shield over which heavy shade is placed during the brightest part of the day (9 a.m. to 4 p.m.). Water is applied by hand 2-3 times a day under hot conditions but only when absolutely necessary. As rooting commences both shade and watering are progressively reduced.

GRAFTING ORNAMENTAL CEDARS

N. PARR

Lyndale Nurseries
Auckland

I would like to speak of my experience with the grafting of three cedar cultivars — *Cedrus deodara* 'Aurea', *C. atlantica* 'Glaucua' and *C. atlantica* 'Aurea'.

The understock used is *C. deodara* seedlings about 18 months old and grown in small containers where a vigorous root growth is maintained through liquid feeding. The plants are brought into the glasshouse for several weeks prior to grafting to stimulate root activity. This is usually about mid-March (early autumn) or when the scion wood is considered mature.