## REPORT OF I.P.P.S. TOUR OF ENGLAND AND EUROPE

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A tour of 4 weeks duration departed Australia for London in May 1977; 33 members of the Australian Region of I.P.P.S. participated. Countries visited include England, Germany, Denmark, Holland and France. The majority of tour members took the opportunity to take individual side tours before returning to Australia. We visited wholesale and retail nurseries, horticultural research institutions, colleges of horticulture, commercial horticultural laboratories, ornamental trial and foundation gardens, educational exhibition gardens and some truly magnificent examples of both formal and informal landscaping.

The two major highlights for me personally were Boskoop, Holland and Giesenheim, Germany, Boskoop being the birth-place of so many of our propagating techniques. This district has supported a nursery industry for more than 500 years, with some 400 open ground nurseries. The Viticultural Research Station in Giesenheim in the Rhine Valley is the Mecca of grape-vine breeders and propagators, hence of immense personal interest.

Tissue Culture. Advances in tissue culture technique, as exhibited by the commercial operation of Twyford Laboratories are of great significance to the plant propagation world. Twyford Laboratories offer a service of plant reproduction from parent material supplied by their clients. We visited a number of specialist nurseries who grow-on the product of this form of plant multiplication.

Hydroponic Plant Culture. We were introduced to a new era of hydroponic plant culture at Rotchfords Nursery. They were the largest growers of indoor plants in England. Rotchfords rigid adherence to hygenic cultural practices is most impressive. Their hydroponic system utilizes a circulating solution on both propagating and acclimatization beds. After pottong-on to a L.E.C.A. (lightest expanded clay aggregate) medium, nutrients are supplied by an ionic exchange resin. Plants sold in this medium are guaranteed viable for 6 to 12 months.

Mechanization in the Nursery. Mobile benches in glasshouses were impressive in Holland. These are under experimentation as a means to increase space utilization. Myer, Jarvo and Planterex potting machines are in wide use.

Chelsea Flower Show. Chelsea flower show is a magnificent spectacle. It is breathtaking in its vastness and perfection of plantsmanship. This exhibition and our tour of England in general left me with a great respect for the Englishman's regard for the finished product. The propagation of a species seems to be less of a challenge to him than its culture through to maturity. Due to the destructive ice ages, England has very few indigenous plant species. Hence the Englishman is an avid plant collector and he derives a great deal of satisfaction in establishing introduced species in new environments.

Marketing. Aalsmeer Co-operative flower and plant market is a revelation in marketing technique. The system not only assures quality production from growers, for unsold plants are destroyed, but also circumvents the middleman commission agent. All plants are purchased by merchants on the day of sale. Plants are sold under auction on a diminishing value system which precludes buyers from "fence sitting". The mechanization and efficiency of the market is such that the Co-operative is financed by 4-1/2% of gross turn-over. Most Australian agents charge 10 to 15% for the service of selling, without accepting any risk.

As a group we are endebted to our tour organizers headed by Mary and Ed Bunker, Thomas Chang who was our host in France and, particularly, Ann and Richard Martyr of Pershore College, England, who spared no effort to make our tour the success it was. We gained greatly in knowledge and even more importantly in friendship.

## A WORLD TOUR OF COMMERCIAL NURSERIES USING TISSUE CULTURE PROPAGATION

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Tissue Culture Propagation Overseas is Expensive. One over-riding impression that I gained from visiting nurseries using tissue culture techniques was the large financial investments made in them and the apparent lack of thought and planning relative to cost-cutting methods. Investments of \$50,000 were common and several nurseries had invested in excess of \$100,000. The nurseries I had visited were, ipso facto, still in business and according to them business was not only good, it was very good. The majority of these nurseries tissue culture propagated for themselves, i.e. plants from culture were potted up in their nursery section and sold along with plants propagated by other means. One nursery that I visited propagated all of its plants by tissue culture; most nurseries propagated part only of their plants by tissue culture.