Australian Floriculture—A Blooming Field

The cut-flower and potted plant industries in Australia have traditionally been based on exotic species. However, native Australian plants have gradually assumed greater importance—particularly in the expanding export trade, but also on local markets. Floriculture is practiced in all Australian states, with the major production areas for exotic cut-flowers (e.g., roses, carnations) and potted plants being close to the state capital cities. The cultivation of native Australian flowers and foliage exports increased by more than 40% from 1982-83 and 1985-86, the value of cut-flower exports. In addition to expanding Australian exports, there is also potential for import replacement. In 1986-87, flower imports were equivalent in value to 49% of cut-flower exports. Similarly, there is scope for accelerating the increase in local demand for flowers. Industry estimates suggest that Australian consumers spend only 20% as much on flowers each year as do European consumers.

About Our Cover

Although well-established as an industry, floriculture continues to increase in importance in Australia. For example, between 1982-83 and 1985-86, the value of cut-flower and foliage exports increased by more than 75%. While native Australian flowers and a variety of “common” exotic flowers such as roses and carnations are exported, it is interesting to note that orchids (mostly cymbidiums) accounted for 18% of the value of 1986-87 cut-flower exports. Europe, Asia, and North America are important markets for Australian cut-flower exports. In addition to expanding Australian exports, there is also potential for import replacement. In 1986-87, flower imports were equivalent in value to 49% of cut-flower exports. Similarly, there is scope for accelerating the increase in local demand for flowers. Industry estimates suggest that Australian consumers spend only 20% as much on flowers each year as do European consumers.

Australia lies in the southern hemisphere, and most flower production areas are in the lower latitudes. This geographical situation is advantageous for both Australian growers/exporters and their colleagues in other places where native Australian species are cultivated (e.g., California and Israel). The diverse growing conditions lead to extended periods of availability of Australian flowers, and the unique location means that Australian flowers are available when other countries are not producing the same lines. Continuity of availability is important in gaining and maintaining consumer confidence.

As Australia’s floriculture industry matures, it is developing an international reputation as a reliable supplier of quality flowers. Associated with the growth of the industry is an upsurge in grower/exporter demand for support. Members of industry are tending to work closer together than in the past. More highly trained personnel are being sought, as is expert advice on practices ranging from plant selection and cultivation to postharvest handling and marketing. To meet these demands, centers of expertise in floriculture are being developed in most Australian states. All state departments of agriculture (e.g., Western Australia, Victoria) have committed funds for floriculture research and extension. Some colleges of advanced education (e.g., Queensland Agricultural College, Queensland) and universities (e.g., Sydney Univ., New South Wales) have established reputations for producing competent graduates trained in floriculture. Others are developing floriculture courses (e.g., Murdoch Univ., Western Australia). Less sophisticated training (e.g., floristry) is being offered through technical and further-education schools. Industry, too, is making a strong commitment to research in floriculture (e.g., Calgene-Pacific, Victoria). The need to support research and training in floriculture has been recognized by national, state, and industry bodies responsible for the allocation of funds for research.

Numerous projects have been or are being undertaken in Australia to cover all aspects of Australian floriculture (Fig. 1). Organizations as diverse as the Australian Trade Commission (Austrade), which gauges and provides information on market requirements for exporters, and the Western Australian Dept. of Conservation and Land Management, which is concerned with regulation of the bush-picked wildflower industry, are involved with floriculture.

Research activities in Australia cover many areas of plant biology pertaining to ornamental species. Some major ongoing projects include: a) nutrition of native Australian species (Western Australia), b) selection and breeding of Geraldton waxflowers (New South Wales), c) transport of potted plants in sea containers (Victoria), d) insect disinfestation of cut-flowers (Western Australia), e) post-
harvest handling procedures for fresh and
dried flowers (Victoria, Western Australia),
and f) molecular biology of flower senes-
cence (Victoria).

In the general area of cultural practices (Fig. 1),
work is being conducted on the following
topics: a) tissue culture of hard-to-propagate
species, b) improved potting mixtures, c)
undercover (plastic, shade cloth) cropping,
d) application of growth regulators to control
plant form, e) pruning of tree crops, f) water
use efficiency and salinity tolerance, and g)
native insect control. Great progress has been
made in native plant nutrition, with many
species unexpectedly responding favorably
to high rates of the macronutrients (N, P, and
K). Much of this work is with Australian
species and is being conducted by the vari-
ous state departments of agriculture in close
cooparation with industry.

It is probable that floriculture in Australia
will continue to grow at a rapid rate. Aus-
tralian products help maintain the year-long
supply of fresh flowers and foliage to world
markets. Native Australian species are grown
for timber and landscape purposes and as pot
plants in many countries. Consequently, there
is overseas demand for the export of prop-
agation material and live plants. The
introduction of plant variety rights (PVR)
legislation in Australia may limit the general
distribution of native Australian plants in the
future. Events such as the recent patenting
of selections of waratah, the floral emblem
of New South Wales, in another country have
created something of an urgency for the in-
troduction of PVR regulations covering na-
tive Australian ornamentals. The proposed
schedule for the coverage of various genera/
species allows for seven genera of native
Australian species in 1988 and a further 11
genera in 1989. From Mar. 1990, it is en-
visaged that all native and exotic ornamen-
tals will be included in the regulations under
the Plant Variety Rights Act 1987. Two pos-
itive aspects of the PVR legislation are a)
that the selection and breeding of native
Australian plants should be encouraged, and
b) that Australian growers will have greater
access to patented exotic cultivars because
their suppliers will have greater confidence
that their ownership rights are protected.

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