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BULBS FOR THE FUTURE

TERRY HATCH

Joy Plants

R.D. No. 2, Pukekohe East

Much work has been done collecting and growing bulbs, corms, and tubers of all kinds. The work of raising hybrids from these plants in many cases has progressed slowly and much material has been lost over the years. Hybrids of the smaller scented species gladiolus are a case in point.

Raising hybrids of these types of plant takes many years as each generation may require 4 to 12 years to flower from seeds. Many of the bulb breeders I have met are in the older age bracket, 70 years or more, and many of them are amateurs; much of their work never gets into circulation and disappears when they pass on.

As this is such a vast subject, I shall discuss just two plants that have been studied and are now at the point of commercial production with the advent of micropropagation.

ZANTEDESCHIA SPECIES AND HYBRIDS (CALLA)

These now come in many colours — reds, violets, pinks, yellows, and all shades in between. There is still much opportunity for breeding, however, and following are some specifications for selection:-

1. *As cut flowers*

Plants must be free-flowering in open ground, tough, hardy, and disease resistant.

Colour — Attractive under artificial light and in demand by consumers. Clear, intense colours without the basal blotch. My own preference is for pastels, but the orange and reds are popular and a good blue would be useful.

Flower shape — Sculptured, even, traditional, or possibly more open flowers, provided they are easy to pack, with stems that are in proportion and do not detract from the flower; also lightweight for freighting — 60 to 70 cm are preferred at present for export to Japan and there should be a demand for small, medium, and large flowers in the future.

Vase life must be as long as possible — trials of vase life, weight, and packing are needed. And for the future, perhaps scented flowers and other novelty lines — we have some with golden edges on violet, but need more selection yet.

2. *Pot plants and small garden plants*

The total effect is important with as many flowers as possible, stem and leaves in proportion, the flowers standing clear of foliage; coloured leaves are a bonus, intensifying the effect (the leaf colours, i.e. orange or red variegation could result from gibberellic acid treatment).

Pot plants must be attractive under artificial light.

As garden plants, colour depends on customer preferences. At present they are yellow, orange, apricot, pink-salmon, scarlet, ice white with pale green tinge, also bicolours with the ability to flower over a long period without gibberellic acid treatment.

3. *Larger garden plants*

As for small garden plants but with larger flowers and leaves in proportion.

NERINE SPECIES AND HYBRIDS

We have some very good cultivars now in New Zealand, with potential for a large export market. Breeding can still be of great importance as there are many other traits that could be included, i.e.

1. Longer stems

2. Multiflowering bulbs — 2 or 3 stems per bulb thereby increasing cut per sq.m.

3. Other colours — better quality whites, yellows, lemons, golds and good blues. More candystripes in other colours.
4. Larger flowers that fold their heads well, all with free-flowering habit.
5. Spring-flowering types, or extended flowering.

The list is endless, and the market I feel, is unlimited for bulbs and flowers of nerines, although they still take time to reach flowering size.

There are many other plants of this type for climates such as ours which have had little work done on them and could be, in time, well worth growing: A few, for example, are:

<i>Brunsvigia</i>	<i>Sparaxis</i>
<i>Haemanthus</i>	<i>Ixia</i>
<i>Ornithogalum</i>	<i>Clivia</i>