

on plant leaves as it condenses on plants.

Nozzles in our units are supplied by Spraying Systems Co. of USA and are type ¼ in. with integral filters.

The compressor was run on a time clock from 8 a.m. to 4 p.m. daily; solenoids are set from main control console where interval of 5 minutes and duration 60 seconds of fog was set for daytime. It was found that we required fog at night, 60 seconds every 1 hour.

Two nozzles can maintain fog in a 60 × 20 ft. house, but a more satisfactory operation would be obtained from four nozzles.

REFERENCES

1. Mee, T. Fog Propagation. *Florists Review* 164 (4249), pp. 116-117, 169-171
2. Press, T. 1983. Propagation by fog, not mist. *Proc. Inter. Plant Prop. Soc.* 33:100-109.
3. Spraying Systems Industrial Catalogue, No. 27.

A SHORT HISTORY OF THE PRIMROSE AND POLYANTHUS

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Pukekohe, R.D. 2

“And in the wood where you and I upon faint primrose beds were want to lie”.

Did I say a short history? Mention of these plants goes back to the earliest herbals, and “Will” Shakespeare uses them in botanical ramblings throughout his works. I can only manage a scant 40 years love affair with them. Collecting flowers and plants as a small child, the wonder of finding clumps of softest yellow flowers nestling in the long grass beneath hazel coppices and that delicious fragrance: — still eagerly awaited every spring. “Will” mentions the cowslip and oxlip too.

Hands up, those of you who do not know where the bee sucks?

And of the oxlip — “I know a bank where the wild thyme blows, where oxlip and the nodding violet grows quite overcanopied with luscious woodbine, with sweet musk rose and with eglantine”.

<i>Primula vulgaris</i> [syn. <i>P. acaulis</i>]	Primrose
<i>Primula vulgaris</i> ‘Rubra’	Primrose (Asia Minor)
<i>Primula veris</i>	Cowslip
<i>Primula elatior</i>	Oxlip

Are these the parents of the modern-day gaudy polyanthus

hybrids, *Primula* × *polyantha*? It would seem so but it has taken many years of work by bee and man to achieve. Wild primroses and cowslips rarely have bronzy colour forms and these variants have always been eagerly sought, equally by the early peasants and the modern-day gardener.

By the 17th century a small polyanthus type flower with reddish brown flowers was grown; a hundred years or so later, gold lace polyanthus were being grown and became a mania with the population in the mid to north of England where “every man and his dog” had his own named variety, these being grown to rigid standards for competition — the craze passed and they almost went into oblivion.

In 1870, Miss Gertrude Jekyll began to select and work on a strong yellow form, this being a cross from ‘Golden Plover’ and a near white type, and in the 1880’s she introduced her Munstead polyanthus in white and yellows. Selection work seemed to take about 10 years for each new form to become apparent.

Anthony Waterer was breeding red types in the 1890’s and with Miss Jekyll’s plants, produced crimsons, magenta, and muddy pinks. By the late 1920’s many seed firms had their own “special strains”. Mr. G.F. Wilson, who owned Wisley Gardens was working on the blue side of things and developed violet-blue-purples, not quite the true blue we now know. In the mid 1930’s, Florence Bellis started her years of dedicated work and this resulted in perhaps the finest of clear colours ever grown. This was possibly the first concentrated effort in the USA on these plants; her colours included true blues, clear pinks, and sunsets. She also worked on the Cowichan polyanthus with hardly any eye, solid pools of colour and bronze leaves. In my opinion her major work was with the double primroses. From the old Marie Crousse, the silver-edged ‘Magenta Double’, she created by the 1960’s a range of colours never dreamed of, all frost hardy and most heavily scented.

The Pacific Giants came into being in California, grown by Frank Reinelt, his work being done under glass — great strong plants, brilliant colours, sold in tens of thousands all over the world. A severe winter in the 1960’s nearly wiped out the Giants for they had become soft and lost their frost resistance and for a few years seed was hard to come by.

Over the years odd types have appeared:

Hose in Hose: Each flower held by another instead of a calyx.

Jack in the Green: Buds like moss roses and a green ruff.

Jackanapes: With a coloured ruff, striped green.

Gally Gaskins: With a large calyx.
and many others, collectors items, all.
Still the work goes on by patient pollinators, to mention a few:

Jared Sinclair, heir to the Florence Bellis collection.

Our own: Noel McMillan, with his strange char-
treuses, grey blues, and others.

And even from Japan, brilliant colours, once again mostly for pot work and not long-lived. I wonder what "Will" S. would have made of them for his were "faint and pale".

"Perchance in pair of glassed 'sun'
their brightness maketh my eyes to run".

REFERENCES

- Shakespeare, W.
A Midsummer Night's Dream, II ii 249
A Midsummer Night's Dream, I i 3
The Tempest, V i 88

POLYANTHUS PONDERINGS

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I will restrict this paper to areas that will be most useful for people having a go at producing polyanthus (*Primula* × *polyantha*) from seed and, judging by last spring supplies, must number thousands.

SEED GERMINATION

Polyanthus seed is very expensive to produce and likewise to purchase. To pay, one must maximise germination rates. I find that no matter the size of the seed or the rate of germination, the resulting plantlets always grow to presentable plants. The main factor affecting size of plants is the type of growing season in the autumn and how long this lasts. Planting dates do not seem to matter as much, but there is an optimum time to allow for the vagaries of the weather. We find early summer, November to December, with a preference for the second week in December, is best for us. This allows sufficient time to mature seed and avoids a bottleneck of freshly germinated seedlings waiting to be pricked out when the staff and family are away for Christmas vacations. A further planting is done in fortnightly batches to the end of