

produced in its turn a mature-form rosette with only 5 leaves - a much smaller plant than that produced by the 5 mm tuber at the beginning of the study. This was in fact its last gasp. No new tuber formed and the plant died.

The pollination mechanism is insect-attractive but on some sites, notably the western and southern coastal aspects of the Waitakere Ranges, the plants are subjected to severe wind-buffeting which is more than enough to shake the pollinia loose and deposit some grains on the stigma. Be this as it may, all the flowering plants I observed set seed.

REFERENCES

- Hatch, E.D. 1949 Trans. R.S.N.Z. 77: p. 238.
 1971 Auck. Bot. Soc. Newsletter Nov. p. 5.
 1984 Auck. Bot. Soc. Newsletter 39: Jan. p.18.

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A SHOWY LILY (LILIUM FORMOSANUM) ON THE MOVE?

E.K. Cameron

In mid February 1986 on the Coromandel Peninsula, I was struck by the showy, roadside and sand dune weed, Formosa lily (Lilium formosanum). It was present from the eastern end of the Kopu-Hikua Road, north to Cooks Beach (just south of Whitianga), being more common north of Tairua. Along the highway it was growing in roadside gravel, usually in small groups of separate plants, many kilometres apart. On the sand dunes at Cooks and Hotwater Beaches the lilies were locally abundant and often close together.

Flowering stems were about 0.5 m tall (sand dune plants up to 1 m) and had 1-2-(4) horizontally held, slender funnel-shaped flowers, 14-18 cm long; making it one of N.Z.'s longest flowered, wild plants. (Though it does not match the long-pendulous, white flowers of the angel trumpet (Brugmansia candida) which measure some 25 cm in length.) Leafy stems of Formosa lily are obvious in December and the flowers open January-March, flowers on the same stem open within days of each other. The flowers are scented, white, many streaked with purple on the outside and last some six days. The seed capsules are about 8 cm long; take about three months to ripen and are packed with small winged seeds. Wind and humans are probably the main dispersal agents of the seed but vehicle tyres (graders?) possibly assist.

The variety pricei is described by Syngé (1980) as a hardy dwarf usually less than 60 cm tall, flowering quickly from seed and with flowers which are more deeply suffused purple-chocolate (although this character is variable). Some flower within six months from seed (Harrison 1971). It also has fewer flowers (Bailey & Bailey 1976). Price collected this variety in 1912 at 2950 m A.S.L. on a Taiwanese mountain. The hardy plants of the eastern Coromandel and also of Auckland appear to be this variety, though some lack the dark streaked corolla.

Healy and Edgar (1980) give the naturalised New Zealand distribution of this lily as Kerikeri, Auckland City, Cooks Bay and Whakatane. It is still present in at least the first three of these sites and extensions of this range include:

- a) West of Warkworth (A.E. Esler pers. comm., 1986).
- b) West Auckland roadsides:
 - Between Parau and Cornwallis (A.E. Esler pers. comm., 1986).
 - Waiatarua (AK*154848, J. Mackinder, March 1980).
 - Konini Road, Titirangi (AKU*19296, E. Cameron, March 1986).
- c) South of Cooks Beach to at least the Hikuai-Kopu Road (AKU 19298, March 1986).
- d) Just out of Tauranga on a roadside cutting, February 1966 (Mullon 1966). The first record of this plant growing wild in N.Z.?

The Cooks Beach Formosa lilies appear to be the largest and longest established wild population of this species in New Zealand. Jean Aldred explained to Joy Amos that in about 1960 Alma Rydon bought 10 acres at Cooks Beach, above the road, and sowed seed of Formosa lily in rows between planted shrubs, where they grew, seeded and filled the whole section and down to the beach. This then appears to be the likely source of the Coromandel populations.

Jean Aldred also told Joy Amos that in the late 1940s Dr Parr of Auckland was known as Dr Formosanum when he distributed seed of Formosa lily liberally from a sugarbag full, to entice people to join the new Auckland Lily Society. As with the Cooks Beach plants, human involvement is suspected in starting most of the new populations. Stand up the new Dr Formosanum! The wild plants I have seen are all in very accessible places. By studying existing populations, time will tell whether these showy plants are naturally on the move or are being assisted.

Note - some garden varieties may grow to 2.5 m tall and possess 10-(30) flowers per stem; though to date, this less hardy plant has not naturalised in New Zealand.

* Abbreviations of herbaria for voucher specimens quoted:

AK Auckland Institute and Museum
AKU Botany Department, University of Auckland.

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REFERENCES

- Bailey, L.H & Bailey, E.Z. 1976: Hortus Third, MacMillan Publishing Co., New York. 1290p.
- Harrison, R.E. 1971: Know your lilies. A.H. & A.W. Reed, Auckland. 84p.
- Healy, A.J. & Edgar, E. 1980: Flora of New Zealand. Vol. III. Government Printer, Wellington. 220p.
- Mullon, F. 1966: Lilies that have naturalised. Auckland Lily Society Bulletin 3 (5):7.
- Syngé, P.M. 1980: Lilies. Universal Books, New York. 276p.

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