

South African *Ericas* in the Wild: Observations from a British Heather Society Study Tour[©]

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INTRODUCTION

In Autumn 1999 I was invited to join a study tour to the Western Cape Province of South Africa, organised by the British Heather Society. Tour guides were Ted Oliver — the world's leading expert on South African *Erica* and Inge Oliver who has worked alongside Ted for many years and shares his knowledge and enthusiasm for South African plants in general and ericas in particular. They were joined by local experts at various locations throughout the trip, which included a diverse range of habitats and excellent specimens of many *Erica* species.

The Cape Province of South Africa is the main centre of diversity for the world's *Erica* species with more than 625 recorded species (compared with 21 species in the whole of Europe). More are still being discovered as people visit remote locations at different times of year.

I had expected to see expanses of heathers on the scale of the *Calluna* species in the Scottish highlands, with the hope that forms found at altitude would be hardy and possibly suitable for outdoor cultivation in the U.K. However in reality most species were found in small pockets or as isolated plants dotted around. Only occasionally were drifts seen and very rarely large expanses.

Having seen Cape heaths in cultivation in the past the most striking features are the bright colours and the size of the flowers. In the wild, the colours are even more striking because of the high spring light levels. Many species can be found growing together in small areas but very little natural hybridising is known to occur. They generally have long flowering seasons and there will be several species in flower every month of the year.

RELATING NATURAL ENVIRONMENT TO PROPAGATION AND CULTIVATION

Three different pollination strategies are known for *Erica*, and there are correspondingly three different flower types. Insect pollination is most common, but some species are wind pollinated, and others bird pollinated. The bird-pollinated species tend to have the most spectacular flowers, with long tubular corollas, often with two or more colours. The main pollinating bird is the orange-breasted sunbird and some *Erica* species have curved corollas which match the sunbird's curved beak.

Fynbos is the natural vegetation found throughout the Southern Cape and consists mainly of Proteaceae, Restionaceae, and Ericaceae. The soil is generally well drained, acidic, and with very low nutrient levels. Cape heaths benefit from their association with these other genera for the protection provided from winds. Fires are a common feature of the fynbos in the long hot dry summers of the region and *Erica* species have adapted to this and regenerate either from seed or in some species by reshooting from the base. There is a danger of extinction of the species that grow in confined locations if the fires are too frequent as they do not have time to mature, flower, and set seed.

The study tour combined long walks to see *Erica* species at various locations in the wild, with visits to Botanic Gardens, Nature Reserves, and a research station. The tour members had a collecting permit so were able to bring back small batches of cutting material of some species, taking care to avoid vulnerable or rare species. On our return the material was divided among tour members with propagation facilities and some of it rooted and is now growing on.

Kirstenbosch Botanic Gardens and the ARC Fynbos Research Unit at Elsenberg both followed similar procedures for rooting *Erica* cuttings. Small semi-ripe cuttings taken in July or August (late winter) are dipped in IBA at 2000 ppm and inserted in a compost of polystyrene : bark (v/v). These are placed in a mist unit with bottom heat and mid-summer shading.

We also observed *Erica* species being raised from seed. Washed river sand either alone or with Canadian peat was used to simulate the soils of their natural habitats. One small nursery visited obtained good germination of most species with a very basic technique, but at Kirstenbosch improved results were obtained by using smoke to trigger germination. Propagators at Kirstenbosch find the best time to sow is in March and April (autumn). Some species germinate within a month but others can be very variable, sometimes taking more than a year.

SOUTH AFRICAN ERICAS WITH COMMERCIAL POTENTIAL

There are several species in cultivation in Australia, New Zealand, and Japan but apart from the ubiquitous *E. gracilis* I am not aware of widespread use in Europe.

Much work would be needed to find the best methods of production and application but I am convinced the shapes, colours, and length of flowering period of these plants must have commercial value.

The ARC Fynbos Research Unit has identified some plants with potential for cut flowers including a golden form of *Erica coccinea* and a hybrid called 'Fairy Bells'.

Research is needed to establish hardiness levels for Cape heaths in the U.K. garden but they were very popular in Victorian times as conservatory plants, so with the present high demand for conservatory and patio plants they could make a comeback. Listed below are some species which I believe have potential. The heights and flowering times are for plants in the wild, variations may occur in cultivation:

Erica bauera. 1.5 m, grey-green leaves, white/pink tubular flowers from spring to autumn.

Erica cerinthoides. 1.8 m, clusters of red tubular flowers all year.

Erica coccinea. 1.2 m, tubular flowers in a range of colours including red, orange, green, pink, and yellow, all year.

Erica curviflora. 1.8 m., curved tubular flowers in yellow, orange, or red borne all year.

Erica daphniflora. 1.8 m., white, yellow, green, or pink flowers all year.

Erica mammosa. 1.8 m, flowers dark red, orange-red, pink, green, cream, or white with pink tips, borne summer to autumn.

Erica nana. 0.5 m with spreading habit and a profusion of yellow tubular flowers in spring.

Erica patersonia. 0.8 m, closely packed spikes of yellow tubular flowers from spring to autumn.

Erica peziza. 0.6 m, numerous small white cup-shaped flowers in autumn.

Erica regia. 0.5 m, flowers tubular, borne all year, and normally crimson-red but other forms occur including var. *variegata* with a white corolla turning red at the tip.

Erica versicolor. 3 m, tubular flowers with red base and greenish to white tip, borne all year.

Erica vestita. 0.9 m, tubular flowers red, white or pink in spring and autumn.

Erica walkeria. 1.2 m., masses of pink to red flowers in autumn.

Acknowledgements. I would like to take this opportunity to thank our hosts for making the trip so enjoyable, and David Small and Ted Oliver for their excellent organisation and assistance. If anyone has the chance to visit South Africa I thoroughly recommend it.

ADDITIONAL READING

Schumann, D., G. Kirsten, and E.G.H. Oliver. 1995. *Ericas of South Africa*. Fernwood Press. PO Box 15344, 8018 Vlaeberg, South Africa