## Melbourne: a haven for South African flora

## by Arthur Paul, Box Hill, Victoria, Australia

 ${f S}_{
m outh}$  Africa and Australia have a long horticultural relationship extending back over 200 years. Southern Australia has a comparable climate and range of soils to those of the Western Cape and southern parts of the Eastern Cape, and all major components of the Cape flora are grown extensively in southern Australian gardens. As many Australian plants have become disastrous weeds in South Africa, so too have a wide range of South African plants grown out of control in Australia. Some are attractive and relatively harmless garden escapes, but others compete with our native flora, or contaminate pastures and crops, often with disastrous results.

Melbourne, the capital of Victoria, is a large city situated at the apex of Port Philip Bay. Sprawling suburbs extend around the bay and inland, including many hilly areas in the east. These areas have a forest flora dominated by Eucalyptus species, and may have rainfall exceeding forty inches per annum. Flat volcanic soils in the west and north, with rainfall as low as eighteen inches per annum, support grassland and 'herbland' vegetation. The extensive sandy coastal strip, the banks of our rivers and numerous creeks, and the verges of our suburban railway network, all provide a haven for South African flora.

Around the margins of the bay, the shrubby *Polygala myrtifolia* is a major weed, together with the Cape ivy *Delairea odorata* (formerly know as *Senecio mikanioides*). This is a fast growing, twining composite which shades and smothers underlying vegetation.

Bulbous plants and their relatives are frequent garden escapes. *Chasmanthe* species are common along railway verges where their corms have been dumped. Freesias and white flowered *Sparaxis* are exceedingly common in sandy soils. Ixias, babianas and the small flowered *Gladiolus* species are far less common. In hilly forest country *Crocosmia*, a rapidly spreading problem, adorns the roadside with its bright orange flowers in summer. Colonies of Ornithogalum longibracteatum (pregnant onion) are prominent in steep, shaded railway verges. Watsonia meriana var. bulbillifera is a major weed of most situations such as swamps, drains, dams and lake verges in and around Melbourne. Cape tulips (Homeria species, now all sunk into the genus Moraea), which are poisonous to stock, are seen on grazing areas on the suburban fringe. A universal weed is Romulea rosea, with its numerous varieties. This small iridaceous plant, with its needle-like leaves, contaminates lawns, nature strips, sporting fields and verges throughout Melbourne. The purple, star-shaped flowers are common in spring, and the immature seed capsules are regularly eaten by children.

The worst South African bulbous weed is the yellow-flowered Oxalis pescaprae. This plant is found throughout Victoria and continues to spread dramatically. The species is capable of reproducing by bulbs, bulbils, root tubers and rhizomes. It may form a complete groundcover in such diverse habitats as lawns, orchards, nurseries, market gardens, cemeteries and pasture. Oxalis purpurea, with a range of flower colours, is also common in lawns.

Agapanthus species and cultivars are surely our most common and popular summer flowers, but they too are causing concern, particularly in southern coastal areas. They are often dumped along railway lines and creeks, where they become prominent weeds.

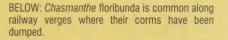
Gazania rigens, an extremely popular garden daisy, frequents coastal sandy soils. Chrysanthemoides monilifera, or boneseed, is a shrubby, yellow-flowered daisy bush originating in the Eastern Cape. It was introduced as a garden plant in 1858, and was later used to stabilize sandy roadsides and coastal dunes. It is now found in large infestations around the coast and in hilly country, where nearly all the native flora is obliterated by it. It is a declared noxious weed for the entire state. Although it can grow to about twelve feet in height, it is a shallow-rooted plant that can easily be pulled up. Conservation groups regularly remove infestations of this species by hand pulling. Several follow-up visits are required to remove successive crops of seedlings. (See cover photo).

Three shrubby genera, Melianthus,

Sparrmannia and Tecoma are sometimes seen as garden escapes in the outer suburbs. The white arum, Zantedeschia aethiopica is naturalized throughout Victoria, and is extremely common in shady, damp areas around Melbourne.

Two South African grasses are common throughout Melbourne. My worst garden weed is a small grass called Ehrharta erecta or panic veldgrass. This grass had invaded all of Melbourne's urban parks and wasteland areas. Clumps grow rapidly in wet weather, producing seed all year round. It grows through my ornamental grasses and bulbs and under my most prickly succulents. I never have it under control. Even during periods of drought, tiny plants survive and still produce seed. Ehrharta longiflora or annual veldgrass is taller and more robust. It is common around rubbish dumps and in disturbed soils around the suburbs. A robust rhizomatous grass, Pennisetum macrourum, the African feather grass, is sometimes grown as a garden ornamental. It is a declared noxious weed, because it has invaded and affected grazing areas.

As more South African plants arrive here via seed exchange programmes and other seeds are imported by nurseries and private collectors, our garden flora will be augmented. In time so will our weed flora. ())



MIDDLE: Annual veldgrass *Ehrharta longiflora* in a suburban park.

BOTTOM: *Oxalis pes-caprae* dominating coastal vegetation.





Further reading Parsons, W. T. 1973. *Noxious weeds of Victoria*. Inkata Press, Melbourne and Sydney.

## The author

Arthur Paul is a retired Plant Science lecturer with major interests in mycology, plant pathology, phycology and flowering plant taxonomy. A keen gardener and member of the Botanical Society of South Africa, he grows many South African shrubs and bulbs and has impressive *Aloe* and *Haworthia* collections in his home in Melbourne.