

Veltheimia from contrasting habitats

There are only two species of *Veltheimia* in South Africa and, although they are closely related, they occur in two completely different climatic zones and habitats, writes **Cameron McMaster**.

A fine stand of *Veltheimia bracteata* near Kidds Beach in the Eastern Cape.

PHOTO: MARY BURSEY



- There are only two species of *Veltheimia* and, although unrelated, they resemble aloes and pokers.
- Both species have large pear-shaped bulbs with a whorl of fairly broad leaves.
- The seeds develop in large, paper-like capsules.

IT'S UNUSUAL IF THERE ARE only two species of plants in a particular genus, yet this is the case in the genus *Veltheimia*, where the two representatives occur in widely different habitats.

Veltheimia bracteata occurs in forest and woodland areas up the east coast from Humansdorp to the Wild Coast and is known by the common names forest lily or *boslelie* in Afrikaans. The other species, *Veltheimia capensis*, commonly referred to as the sand lily, occurs in the much drier winter rainfall region from Namaqualand south and eastwards to Potberg and the little Karoo.

Veltheimia are among the most showy members of the family Hyacinthaceae and the genus was named after Count Frederich von Veltheim, a German patron of botany.

Although they're in no way related, the resemblance of *Veltheimia*'s flower spikes to aloes and pokers is striking and is a prime example of convergent evolution. *Veltheimia*'s large heads of

'This growth pattern seems to suggest it may have migrated from the west in ages past.'

tubular flowers, even similar in coloration, are adapted to sunbird pollination.

Both *Veltheimia* species have large, pear-shaped bulbs with a whorl of fairly broad leaves sometimes with crisped or undulate margins. The many mottled pink, tubular flowers are borne on thick stems up to 50cm tall, and arranged in neat aloe-like heads. After pollination, the seeds develop in large paper-like capsules, usually with only a few fairly large, black seeds in each one.

Veltheimia bracteata, the forest lily, is an Eastern Cape species commonly occurring in dune forest near the coast. It's adapted to shady situations under the forest canopy, where it shares this habitat with other well-known forest bulbous species such as *Scadoxus* and *Clivia*.

Nearly all the patches of bush within a few kilometres of the coast in the Kowie and Bathurst area, south of Grahamstown, and through to East London, have patches of these plants. I have even observed them growing on roadside cuttings near Kenton and there are extensive populations around Kidds Beach.

Although the forest lily occurs in a summer rainfall region it has virtually retained a winter growth pattern and has a short dormancy in late summer. Its leaves develop in early winter and it flowers in late winter and early spring. This growth pattern suggests it may have migrated from the west in ages past, gradually adapting to a new environment, and changing into a species different from its original ancestor.

The distribution and migration of plants over time is a fascinating subject for which there are very few clear answers. Why, for instance, while growing in the summer rainfall area, does the forest lily choose to grow and flower at the driest time of the year?

I was once surprised to find fairly substantial populations of *Veltheimia bracteata* in thick bush, on steep, shady south-facing cliffs in the Kei River gorge in the Sutterheim district, at least 80km from its usual coastal habitat and extending the range quite remarkably. What's interesting is that these inland populations have a similar growth pattern to the winter rainfall species, flowering in April and May, months earlier than coastal populations.

Different in many ways

The western species, *Veltheimia capensis*, the sand lily, must have been discovered in the 1700s during the pioneering trips of early botanists from the Cape into the interior. It occurs in rocky outcrops in suitable habitats and, compared to its eastern relation, it's adapted to much lower rainfall regimes and full sun. One of the easiest places to see them is in the Wild Flower Reserve at Nieuwoudtville in the Northern Cape.

Their leaves are tougher and inclined to be more bluish-grey than bright green, possibly an adaptation to the drier and hotter environment. This is strictly a deciduous plant, flowering in autumn

and early winter after the first rains and before the leaves have fully developed. Most of its growth and seed production take place in winter, fittingly for a plant growing in the winter rainfall region. This is almost a similar growth pattern to the inland populations of the forest lily.

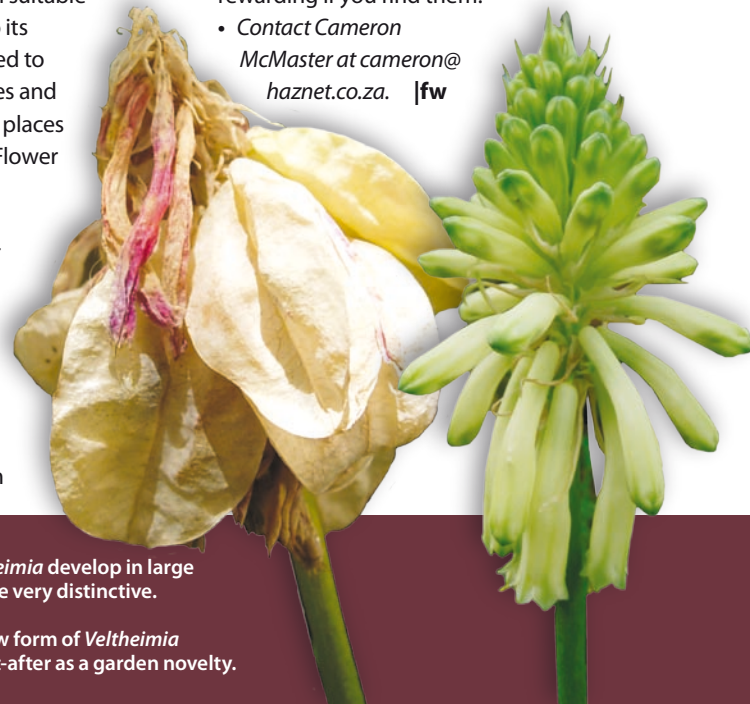
Both species make very suitable garden subjects in the appropriate climatic zones to which they are adapted. The forest lily is very useful for shady gardens and flowers dependably, with long-lasting and attractive blooms. After flowering the bright-green, shiny leaves are equally attractive.

Occasionally bulbs form offsets and multiply into fairly large clumps. They're equally at home in the ground or containers. Both species grow readily from seed and mature to flowering size in a few years. It's interesting to note that the seed retains its viability for several years.

There is a rare, yellow- to lime-coloured form of *Veltheimia bracteata* which is reputed to have been collected near Port Elizabeth. It's highly sought after as a novelty plant and is scarce because it's very shy to set seed, making propagation problematic.

If you have land with forest and bush patches near the coast in the Eastern Cape, you're very likely to find *Veltheimia bracteata* populations. If you are in the region inhabited by *Veltheimia capensis*, which is much more widespread, the search may be more difficult – but very rewarding if you find them.

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RIGHT: The seeds of *Veltheimia* develop in large paper-like capsule that are very distinctive.

FAR RIGHT: The rare yellow form of *Veltheimia bracteata* is highly sought-after as a garden novelty.

PHOTOS: CAMERON McMASTER