

Gladiolus – The summer rainfall species

With great diversity the stately *Gladiolus* is a wonder to witness in its natural environment writes **Cameron McMaster**.

THE DAYS I HAVE SPENT IN THE veld searching for, recording and photographing wild flowers have afforded me an enormous amount of pleasure, satisfaction and excitement over the years. Most of my experience has been in the summer rainfall region, primarily in the Eastern Cape where most of my life has been spent. Observing the march of seasons and the growth cycles of plants from the spring flush through flowering, seed ripening and dormancy has been a familiar routine in the areas I regularly monitor. The *Gladiolus* genus has always been one of my favourite groups. Moving to Napier in the Western Cape some years ago significantly broadened my experience of South African wild flowers, introducing me to a whole new and exciting range of flora.

A wide distribution

Compared with the winter-rainfall region there are fewer species of *Gladiolus* in the summer rainfall region. Of the 165 species in Southern Africa, 55 occur in the summer rainfall region with two or three of these extending into central Africa and one, *Gladiolus dalenii*, extending as far as Arabia and Madagascar. There are a further 84 species further north in Africa, all fully documented in the book titled *Gladiolus in Tropical Africa* by Peter Goldblatt, published in 1996 by Timber Press.

Among the South African summer rainfall species, the best known and most widespread is undoubtedly *Gladiolus dalenii*, also known by various common names such as parrot lily, Natal lily and sword lily. It's a large plant with an impressive spike of colourful flowers varying from red, orange and yellow to mottled brown colours, usually with a green or yellow throat. Flowering is from November to late summer. It's a striking and popular ornamental

plant in gardens, being hardy, dependable and easy to propagate. More important however is its role in the breeding of modern *Gladiolus* hybrids. It was discovered in KwaZulu-Natal (KZN) in the early 1800s and when introduced into Europe was one of the species used to produce the multicoloured, large-flowered *Gladiolus* hybrids that are today the basis of an enormous international cut flower industry. *Gladiolus dalenii* is also an important medicinal plant, used as a traditional remedy for various ailments, to the extent that in parts of Africa it's cultivated for this purpose.

The other parent of the modern *Gladiolus* hybrids is the impressive *Gladiolus oppositiflorus*, confined to the Eastern Cape and southern KZN. Two distinct forms occur: a tall pink evergreen form that flowers in early summer, found in the coastal and riverine thicket vegetation of the Border and Transkei regions, while a shorter, beautiful salmon-coloured form, flowers in late

'There are a further 84 species further north in Africa'

January and February at higher altitudes in the north eastern Cape and also in KZN.

A similar but smaller species with large pink to salmon coloured flowers, *Gladiolus mortonius*, occurs in rocky grassland in the central area of the Eastern Cape from Somerset East to Penhoek Pass and southwards. It's particularly common in the Thomas River area of the Cathcart district where it makes a great show when it flowers in February and March. Residents of the district have claimed it for themselves, calling it the Thomas River lily.

Undoubtedly the most flamboyant of our summer rainfall *Gladiolus* is the striking scarlet *Gladiolus saundersii*. It has

FROM TOP TO BOTTOM:

- *Gladiolus saundersii* which occurs in the north eastern Cape highland region is one of the most flamboyant in the genus.
- *Gladiolus ecklonii* is a small species widespread in summer rainfall grasslands.
- *Gladiolus dalenii* is the most widespread of the summer rainfall species. This specimen was photographed near Lady Grey in the north eastern Cape.



LEFT: *Gladiolus papilio* occurs in KZN, Lesotho, the north eastern Free State and Mpumalanga.

BOTTOM: The salmon-coloured *Gladiolus oppositiflorus* occurs in the north eastern Cape.

large floppy red flowers with the lower petals streaked with white. It's adapted for pollination by the large intrepid butterfly, the Table Mountain beauty, *Aeropetes tulbaghia*, one of the main pollinators of red flowers.

Gladiolus saundersii occurs at high altitudes from Lady Grey and Barkly East through Lesotho to Clarens in the eastern Free State. It prefers

'The productivity of these areas is in rapid decline.'

gravelly ledges and disturbed areas and in fact is quite adapted to survive in cultivated patches in Lesotho. Its corms readily sprout each year after the fields are ploughed. Herdboys in Lesotho informed me that the flowers are edible and promptly munched a few to prove it!

Gladiolus papilio, a tall and stately golden-yellow species with dark purple markings is similarly adapted to survive cultivation and is often seen as a companion to *Gladiolus saundersii* in cultivated patches in Lesotho. It's however very much more widespread extending from KZN, Lesotho and Swaziland across Mpumalanga to the northern provinces.

A select few

Some *Gladiolus* species occupy special niches and are consequently rare and localised such as the exceptionally beautiful and seldom seen bright red *Gladiolus flanaganii* that grows on damp cliffs in the high Drakensberg from Sani Pass to Sentinel Peak. *Gladiolus microcarpus* occurs in similar habitats, but its distribution is even more restricted. The high Drakensberg is an important centre of diversity for *Gladiolus* with 16 species occurring there, four of which are endemic.

Another major centre of diversity for *Gladiolus* is the Mpumalanga Highland Centre with a total

of 18 species, eight of which are endemic. There are a large number of less striking, yet really beautiful species of *Gladiolus* in the summer rainfall region. Most are found in moist grassland, very large areas which are often severely degraded as a result of heavy grazing by domestic livestock. Mismanagement and overstocking is taking an inexorable toll on not only *Gladiolus*, but on all our grassland species.

Even high altitude alpine grassland, which is particularly rich in biodiversity and is home to many rare species is being systematically overstocked with sheep and cattle and there is evidence of severe loss of grass cover and erosion.

In Lesotho, even the declared nature reserves are unfenced and continue to be heavily stocked. One has only to travel over Naudes Nek or to the ski resort at Tiffindell to see how overstocking is affecting these sensitive areas. Of most concern are communally owned areas such as in Lesotho, Swaziland and the homelands in all provinces, where no one is responsible and where the deterioration is by now irreversible. Not only has the rich biodiversity been lost, but the productivity of these areas is in rapid decline. More sustainable management practises will need to be implemented if we wish to preserve what we still have. – Contact Cameron McMaster at cameron@haznet.co.za |fw



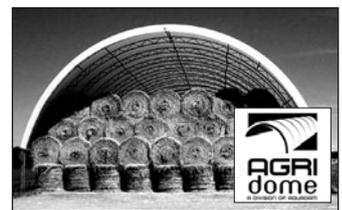
When it comes to your needs....

We have the solutions to have them filled!



Future Tanks

Groundbreaking materials, guaranteed not to rust



Agri Dome

Smart solution to steel structures



Gunite Reservoirs

High quality, durable and cost effective



Engineered Films & Linings

Super puncture resistance laminates

AQUADAM
A holding promise of quality

Aquadam will fill all your requirements with our range of innovative and high quality products, produced locally, offering you competitive prices and excellent after sales support.

Tel: (012) 804 0875
Fax: (012) 804 0876
www.aquadam.co.za