

South Africa's Scarlet Pimpernel

In search of *Gladiolus stokoei*



South Africa's Scarlet Pimpernel, *Gladiolus stokoei*. Photo: John Manning.



ABOVE: Colour plate 1004 accompanied the original description of *Gladiolus stokoei* by G. J. Lewis in *Flowering Plants of Africa* 26 (1947), and was reproduced from an original watercolour painted by Lewis herself. This copy of the plate, now held at the Compton Herbarium, was Thomas Stokoe's own.

by John Manning, Compton Herbarium, South African National Biodiversity Institute

If a single group of plants can justly lay claim to the crown in a family renowned throughout the world for the beauty and elegance of its many species, then that group is the genus *Gladiolus*. With more than 255 known species, it is rivalled in richness only by *Moraea* in the south, and by *Iris* in the Northern Hemisphere. The great majority of gladiolus species are found naturally only in Africa south of the Sahara, with their centre of diversity in temperate southern Africa, and more particularly the extreme south-west. This biological hotspot at the southern tip of the continent, known to botanists as the Cape Floral Region, is home to the richest temperate flora in the world. Dominated by evergreen shrubs with leathery, often small leaves, the fynbos vegetation that characterizes the region is also uniquely blessed with bulbous plants. The various types of bulbs that abound here account for upwards of 16% of all the species in the region. This is several times the proportion recorded in other bulb-rich regions of the world. Numbering prominently among them are more than 100 species of gladiolus.

Species of gladiolus were among

the very first native plants to attract the attention of European botanists and travellers to South Africa. Some of the earliest recorded observations were made during Commander Simon van der Stel's expedition to the copper mines near Springbok in 1685. This expedition, which left the Fort of Good Hope on the morning of 25 August of that year, included the artist and apothecary Heinrich Claudius, who was tasked with illustrating plants and animals of interest. His drawings of *Gladiolus caryophyllaceus* and *G. speciosus* are among the first made of any South African gladiolus species. By the early 1700s scarcely a half-dozen or so Cape gladioli were known to European botanists. Not surprisingly, most of these were species that grew (and still do, although in much diminished numbers) around Cape Town itself. By 1750 the number of gladiolus species that had been discovered in the south-western Cape had crept up to a dozen but thereafter their discovery accelerated markedly. Over the next two centuries new species of gladiolus were being uncovered at the rate of around twenty species every fifty years. Two especially productive periods span the second

half of the eighteenth century and the first half of the twentieth. The first of these coincides with the presence in the Cape of the Swedish botanist, Carl Peter Thunberg, justly known as the Father of South African Botany and responsible for the discovery of no less than thirteen new species of gladiolus. The second period of exceptional botanical activity followed the establishment in the first decades of the century of both the University of Cape Town, with two chairs of Botany, and Kirstenbosch Botanical Gardens. The activities of these two institutions stimulated an interest in botany throughout the south-western Cape, encouraging many residents to explore the mountains and valleys around them for new or unusual plants.

Thomas Pearson Stokoe (1868–1959) was one of those who responded to the enthusiasm for natural history that was prevalent in the first half of the century — with significant results for Cape botany. Joining the Mountain Club in 1913, he explored the mountains of the south-western Cape for the next forty five years, venturing onto their slopes right up to the time of his death at the age of ninety-one. During this time he collected many new species and is commemorated in the names of some thirty of them, including *Brunia stokoei*, *Erica stokoei*, *Mimetes stokoei* and *Protea stokoei*. One of the most spectacular, however, is *Gladiolus stokoei*.

This extraordinary species was first collected by Stokoe in the autumn of 1930 on the farm Oubos, which runs up the southern foothills of Pilaarkop, the highest peak in the eastern reaches of the Riviersonderend Mountains. Little more than 80 km in length, and reaching over 1 500 m above sea level, the Riviersonderend Mountains project as a short spoke from the great mountain complex that forms the hub of the Cape Fold Mountains. Their precipitous southern slopes overlook the rolling forelands of the Overberg and the river at their feet from which they take their name. They are sundered from neighbouring mountain ranges by low-lying valleys or plains on all sides, and millennia of isolation have encouraged the evolution of a host of distinct species that are found only on their upper slopes. *Gladiolus stokoei* is one of these.

Stokoe knew at once that he had discovered something unusual, and immediately set about sketching the flowers on the mountainside where

he had found them. These drawings are preserved, along with his original collection, in the Bolus Herbarium at the University of Cape Town. The first trained botanist to see his collection was Harriet Margaret Louisa Bolus (1877–1970), who had been appointed as Curator of the Bolus Herbarium in 1903 by her great-uncle, Harry Bolus (1834–1911) himself. She immediately appreciated the significance of Stokoe's discovery, and expressed her intention of describing it as a new species by annotating the herbarium sheet '*G. stokoei* L. Bolus'. Unfortunately something must have intervened and it fell to one of her students, Gwendolyne Joyce Lewis, to name the species in 1947. The stimulus for this was once again provided by Stokoe, who in 1945 returned to Pilaarkop and re-collected the species. This collection formed the basis for the colour illustration, painted by Lewis herself, which accompanied the description. The species then disappeared from sight until 1972, when Georges Delpierre and Neil du Plessis re-visited the type locality in search of it during the preparation of their handbook *The winter-growing gladioli of South Africa* (Tafelberg 1973).

It was a similar quest that led Peter Goldblatt and myself to contact Professor Delpierre in the mid 1990s. At that time we were immersed in the writing of *Gladiolus in southern Africa* (Fernwood Press 1998) and also wished to find *G. stokoei* in order to have it illustrated. Out of 160 South African species that we recognized in this work, just ten eluded us. *G. stokoei* was one of these. Three times over the following few years we hiked up the slopes of Pilaarkop in search of it, but although we encountered other local rarities like *Endonema retzioides*, not a trace of Stokoe's gladiolus could we find, and the book appeared without an illustration of the elusive plant. By now I had given up hope of seeing the species. Plants introduced into cultivation from Delpierre's collection had disappeared and so too the immediate incentive to climb the forbidding slopes.

In April this year a group of us boarded a helicopter on a quest to relocate a mysterious *Nivenia* species that had been photographed high on the Riviersonderend Mountains the previous year. Within an hour of lifting off from Cape Town Airport we had been whisked over the top of the mountains and deposited on a spur running down from the summit of Pilaarkop. I

searched through several rocky outcrops that protruded from the swathe that mantled the spur without success, and disappointment was setting in when a flutter of scarlet among the boulders and vegetation attracted my eye. A solitary stem, bearing two flowers, protruded from alongside the arching leaves of bergpalmiet, *Tetralix thermalis*. Cupped like a perfect tulip, the brilliant red petals were burnished with golden flecks in the raking sunlight. *Gladiolus stokoei* had been found again after a second lapse of thirty years. 🌷



ABOVE: *Gladiolus stokoei* flowering in the Riviersonderend Mountains. Photo: John Manning.

BELOW: The forbidding slopes of the Riviersonderend Mountains from the air. Photo: John Manning.

