

Africa's flourishing red hot poker

Red hot poker belongs to the genus *Kniphofia* and they occur in many habitats, but prefer semi-moist vleis where they flower singularly or in clusters, writes Cameron McMaster.



- It's important for conservation for landowners to know which species occur on their farms.
- The flowers are adapted to sunbird pollination.
- Many species have a preference for moist wetlands.

COMMONLY KNOWN AS RED HOT POKERS (*Vuurpyle*), these striking flowers are a familiar sight in many gardens, parks and public places not only in South Africa, but throughout the world. Like so many of our unique and spectacular wild flowers they made a strong impression on early botanical explorers and collectors and were introduced into Europe as hybrids and rapidly became popular garden subjects, however they are essentially flowers of the African veld.

Growing in different colours

Despite their common name, poker are not all red and some species have yellow and even white flowers. There are many different species that vary considerably in size, flower shape, flowering time and habitat preference.

All our poker belong to the genus *Kniphofia*, named after Johannes Kniphof (1704-1763) who was a professor of medicine at Erfurt University in Germany. He was also intensely interested in botany. This a

genus of about 70 species distributed in eastern and southern Africa, with one species in Madagascar and another in southern Arabia. Their close affinity to aloes is obvious and both aloes and *Kniphofias* are classified in the family *Asphodelaceae*. However, whereas aloes have succulent leaves, *Kniphofias* have channeled, fibrous leaves, nearly always V-shaped in a cross section.

While many botanists have contributed to our knowledge and understanding of the various species of *Kniphofia*, there is still a lot of work to be done.

The last full revision of the species was published in the Botanical Research Institute's *Bothalia*, volume 9, part 3 and 4 by Dr LE Codd in 1968. He lists 45 species in a revision of the latest *Checklist of Plants of Southern Africa*, an annotated checklist (*Strelitzia* volume 14 2003).

Most *Kniphofias* are found in moister, eastern summer rainfall regions at higher elevations, but some species are found near the coast. However, there are five species in the Western Cape, including *Kniphofia sarmentosa* which was one of the first to be discovered by eighteenth century plant explorers and occurs in the drier areas of the Hex River and the Western Karoo mountains. Many species have a preference for moist wetlands, seeps and vleis. They can occur as widely scattered individual plants or in dense clusters when they make spectacular mass displays at flowering time. The flower heads consist of clusters of tubular flowers, arranged in inflorescences that vary from cylindrical and elongated,

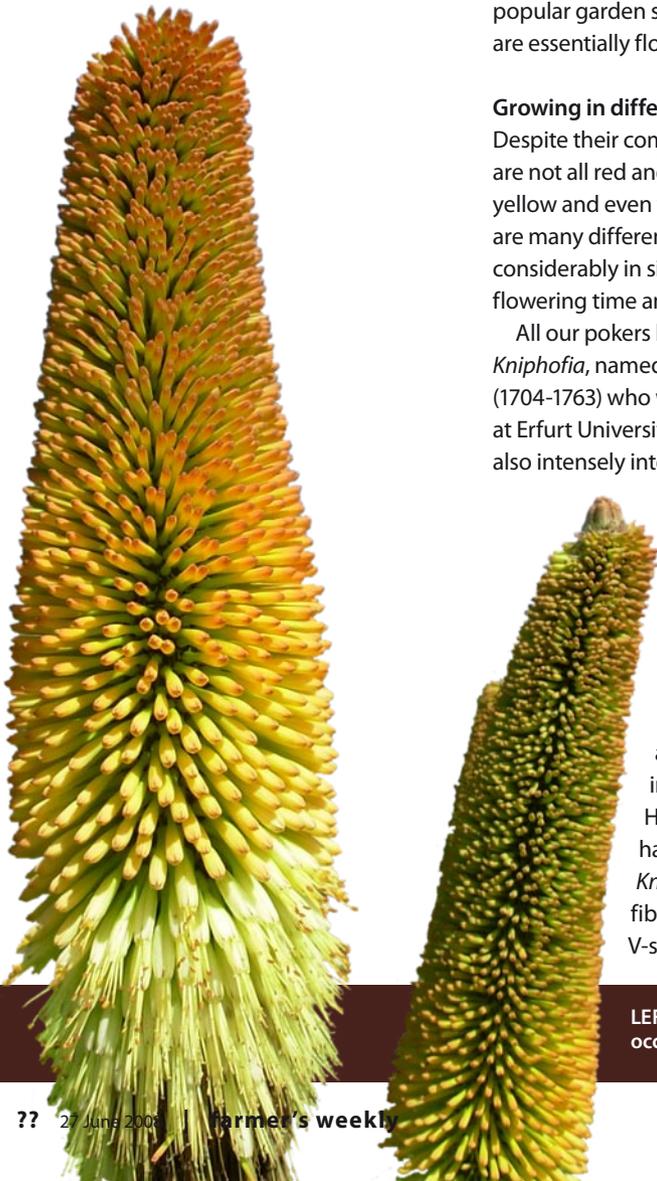
'It's fascinating to observe how different species are adapted.'

to more compact ball shapes. Most are red and bright orange when immature and the flowers of some species change to bright yellow or even white as they mature, giving that striking bicolor effect.

Adapted to survival

The flowers are adapted to sunbird pollination and the malachite sunbird is a familiar sight around poker flowers. However, the Table Mountain Beauty butterfly *Aeropetes tulbaghia* is always attracted to red flowers and it's often seen sucking nectar on *Kniphofias*.

Finding, recording and photographing the many species of *Kniphofia* is an exciting spin-off for those of us who love hiking and exploring in the veld. It's fascinating to observe how different species are adapted to particular habitats and to speculate



LEFT: *Kniphofia bruceae* has massive flowers on 2½ meter long stems. It occurs naturally in the Komga and Kei road districts of the Eastern Cape



A mass display of *Kniphofia caulescens* near Tiffindell Ski Resort in the North Eastern Cape



Kniphofia acraea is a rare endemic from the Bosberg mountains above Somerset East. It's conserved in the Waainek Wild Flower Reserve.



The dainty small *Kniphofia triangularis* being visited by the butterfly *Aeropetes tulbaghia*, one of the main pollinators of red flowers

on why some are confined to such small areas and others are widespread.

Why, for instance is *Kniphofia acraea* a white flowered species, confined to the high mountains in the Cradock and Somerset East districts and nowhere else. Philip Erasmus who farms on the Bosberg above Somerset East has set a fine example by setting aside a small portion of his farm, where the plant occurs, as a wild flower reserve. Most farms in the grassland regions would have one or two species and it's important for landowners to know which species occur on their farms and make sure they are safe.

A regional diversity

Species that flower en masse in vleis are *Kniphofia linearifolia* at lower elevations, and *Kniphofia caulescens*, which flower in January at high altitudes in the Drakensberg and Lesotho. Another spectacular mountain species is *Kniphofia northiae*, a large species with tough, broad greyish leaves which flowers in November and it's distributed from near Hogsback, through the southern Drakensberg to Lesotho.

Some of the smaller species that occur in highland grassland are both dainty and exquisite. The tiny *Kniphofia triangularis* with grass-like leaves is named for the shape of its flower head, it's widespread in damp spots at altitudes above 1 200m.

It's always bright, orange-red and it doesn't change colour as the flowers mature. In contrast, another small species, *Kniphofia thodei* changes colour to white as the flowers mature, the contrasting white and red of the flower heads make it one of the most lovely of the genus. I have observed them flowering on the slopes of Sentinel Peak near Witzieshoek. Some of the larger species occur along the

eastern coastal regions. *Kniphofia praecox* occurs from Knysna eastwards. Further east, *Kniphofia rooperi* occurs near East London and along the Wild Coast, followed by *Kniphofia tysonii* in KwaZulu-Natal. This group flowers mostly in autumn and early winter when little else is in flower.

An interesting species in this complex from the Komga district, previously confused with *Kniphofia praecox*, was recognised as a different species by Eileen Bruce. She was seconded from Kew Gardens in the UK in the 1950s to the Pretoria herbarium.

A single herbarium sheet of a plant collected in 1894, by that intrepid Komga farmer and plant collector George Henry Flanagan, caught her attention and she travelled to Komga to locate the original population. She collected a plant which flowered the following year and it was recognised as a distinct species and named *Kniphofia bruceae* after her.

This is an amazing plant which has flowers of up to 2,5m tall. It's probably the largest in the genus. We tracked it down and collected seed from which we have introduced plants into horticulture, calling it "The Elusive Giant". It's rare and confined to bush-clad hillsides in the Komga and Kei Road district.

One of the most widespread and common species is *Kniphofia uvaria*, a very attractive plant which occurs from the Western Cape near Cape Town, to the Eastern Cape. It flowers in autumn, but will flower profusely at any time after fires.

Kniphofias are attractive, hardy garden subjects, requiring little attention and care. They grow easily from seed and flower within three years of sowing. There are numerous wild species and cultivars from which to choose, many available from wild flower nurseries and garden centres.

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ABOVE: The contrasting colours of *Kniphofia thodei* photographed on the slopes of Sentinel Peak, make it one of the most beautiful in the genus.

LEFT: The diminutive *Kniphofia fibrosa* is found only in mountain wetlands in the Easetern Cape and KwaZulu-Natal.