The robust pineapple flower

The ease with which they can be cultivated and the longevity of the flowers make these plants popular.

MUCH OF WHAT I RELATE IN this series is based on personal experience gained over years of exploring and observing wildflowers in many parts of the country. It's fascinating to see how some species are confined to specific habitats, occupying different niches in the complex system of a plant community in a particular area. It's fun to observe how even plants of the same species sometimes vary considerably in size and appearance in different habitats, and to speculate on why they evolved that way.

The distribution of plants and the reasons why some are widespread and others extremely localised, are questions that interest me. To come across the unexpected and find a species not previously recorded in a particular area, thus extending the known range of that species, is rewarding. It provides the extra thrill that motivates me to continue exploring the veld. I have often used the analogy that the adrenalin rush experienced when one makes such a find is probably just as intense as that experienced by a golfer who hits a hole-in-one.

Progressing through the alphabet in this series, I must confess to a certain amount of bias towards particular genera and species that are favourites of mine. As we embark on discussing plants under the letter E, the genus *Eucomis* is definitely one them. They are commonly called pineapple flowers because of their close resemblance to pineapples. They are deciduous bulbous plants with a rosette of leaves and a many-flowered inflorescence (flower head) topped with a bunch of leafy bracts (the coma), like a pineapple.

The name of the genus is descriptive of this feature. The Latin word *Eucomis* means beautiful hair or topknot.

It is a small genus of only 10 species, most of which are native to the summer rainfall areas. One species, *Eucomis regia,* is confined to the winter rainfall region of the Western and Northern Cape and has a growth pattern and flowering time exactly the opposite of the others in the genus. How did this anomaly come about?

Some members of the summer rainfall species vary so considerably within their distribution range that it is difficult to understand why they are classified as belonging to the same species.

The genus *Eucomis*

Eucomis are included in the large family Hyacinthaceae and it's clear that their structure and flowers resemble those of hyacinths. With the exception of *Eucomis regia*, *Eucomis* are encountered in moist montane and subalpine grassland in the summer rainfall region from the Eastern Cape to the highlands of Zimbabwe.

The different species vary considerably in size and colour. The summer rainfall species flower from mid-summer to autumn and *Eucomis regia* flowers in late winter and early

FROM TOP TO BOTTOM:

- *Eucomis regia*, the only species occurring in the winter rainfall region of the Western Cape. In contrast to the other species, all of which flower in mid-summer and autumn and are dormant in winter, this species has a winter growth and early-spring flowering cycle, and is dormant in summer.
- A dwarf form of *Eucomis humilis* from Tiffindell Ski Resort in the Southern Drakensberg.
- There are two forms of *Eucomis autumnalis* in the Eastern Cape. This smaller form is from Middledrift Farm, Cathcart. This species is heavily exploited by traditional healers for medicinal purposes.
- *Eucomis comosa*, a tall species with cream flowers with mauve centres.

spring. While most species have flowers that range from white through cream to apple green, two of the smallest species, *Eucomis vandermerwei* and *Eucomis schijffii* have purple to dark-maroon flowers. The former species is a true dwarf reaching up to 15cm high, but with dark green, purple-spotted leaves making it one of the most attractive dwarf summer-growing bulbs for containers.

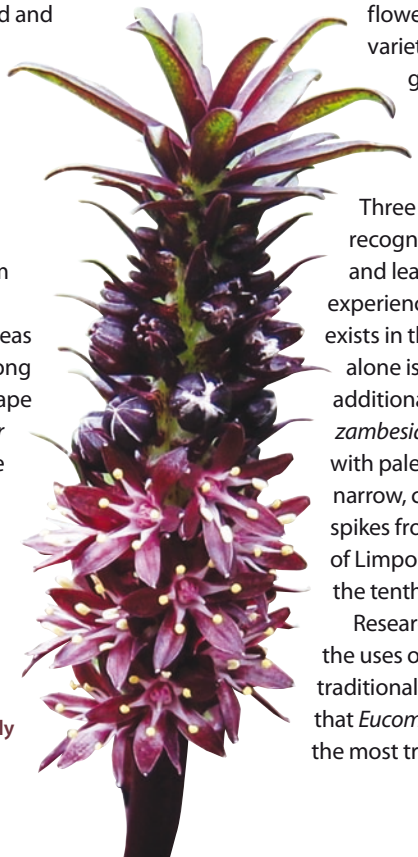
- The taller species are used as cut flowers and have a long vase life.
- *Eucomis* bulbs are used by traditional healers to treat a variety of ailments.
- They are popular in the UK where a number of nurseries are developing hybrids.

It occurs naturally in rocky outcrops in montane grassland in Mpumalanga.

The seldom seen *Eucomis schijffii* is another dwarf species with a rosette of bluish-grey leaves. It's confined to wet rock faces in basalt gravel on the highest mountain ranges above a 3 000m altitude in the Eastern Cape, Lesotho and KwaZulu-Natal.

The largest pineapple flower is *Eucomis pallidiflora*, a tall and stately plant with a spike of green flowers reaching up to 2m in height. It's found in moist areas of KwaZulu-Natal, Swaziland and Mpumalanga. The species previously known as *Eucomis pole-evansii* has now been included as a subspecies of *Eucomis pallidiflora*.

Eucomis comosa is not as tall, but has attractive cream flowers with pale mauve centres. It grows in moist areas on mountain slopes and along streams from the Eastern Cape to Limpopo. *Eucomis bicolor* is one of the most attractive members of the genus,



Eucomis vandermerwei is a very attractive dwarf species from the Mpumalanga highveld. Its unique purple colouring and spotted leaves make it a highly desirable horticultural subject especially suitable as a pot plant.

occurring on grassy mountain slopes from the Eastern Cape to Mpumalanga.

Much confusion exists between *Eucomis montana* and *Eucomis humilis*. The former is a very variable species from the northeastern Free State, Mpumalanga and Swaziland. However, a robust and popular garden subject with spectacular ivory-coloured flowers with dark maroon centres has, according to bulb specialist Graham Duncan, curator of the bulb collection at Kirstenbosch, been wrongly attributed to this species and belongs in fact to the species *Eucomis humilis*

This large form of *Eucomis humilis* occurs naturally in the Sentinel Peak region of the Drakensberg. A popular garden subject, it has been distributed by nurseries, erroneously, as *Eucomis montana*. A close-up of the beautiful ivory and maroon flowers.

'Further research and fieldwork is required to clarify the confusion between the various forms of these two species.'

(June 2007, *Plantsman UK*, published by the Royal Horticultural Society).

Eucomis humilis, as the name suggests, is a smaller species found on rocky overhangs at high altitude in the Drakensberg. It's characterised by purple spotting on the undersides of the leaves and on the short stems.

Both these species have foul-smelling flowers that attract flies. Further research and field work is required to clarify the confusion between the various forms of these two species. *Eucomis autumnalis* is another variable species with green flowers that occurs in a variety of habitats from grassland to forest verges, from as far west as Graaff Reinet and northwards.

Three subspecies are recognised based on size and leaf shape, but in my experience the variation that exists in the Eastern Cape alone is justification for an additional subspecies. *Eucomis zambesiaca*, a small species with pale green leaves and narrow, creamy-white flower spikes from the northern parts of Limpopo and Zimbabwe, is the tenth member of genus.

Research literature on the uses of *Eucomis* bulbs in traditional medicine indicates that *Eucomis autumnalis* is one of the most traded bulbs in Gauteng (L Williams, 1997, *Vision,* a publication of the Endangered Wildlife Trust) and *Eucomis comosa,* in KwaZulu-Natal (Dold and Cocks, 2002, *The South African Journal of Sciences*). These bulbs are used by traditional healers to treat a great variety of ailments. Some wild populations are thus under threat of over-exploitation and extinction.

Long lasting and popular

All the *Eucomis* species, with the possible exception of *Eucomis regia*, make excellent horticultural subjects, are easy to propagate and grow and have virtually no pests or diseases. They are popular in the UK and Europe where a number of specialist nurseries develop attractive hybrids.

The taller species are used extensively as cut flowers and have an exceptionally long vase life. Because the tough flowers don't wilt rapidly, individual florets are used to make bridal bouquets and buttonholes. *Eucomis* is easily grown from seed or from the offsets produced by the bulbs of certain species. Bulblets can also develop from leaf cuttings planted in soil – a convenient method of propagating highly desirable cultivars.

While there is very little literature available on *Eucomis*, some of the wild flower field-guides have excellent illustrations. Elsa Pooley's two books, *A Field Guide to the Wild Flowers of KwaZulu-Natal and the Eastern Region* and *Mountain Flowers,* are recommended for the summer rainfall species. – *Cameron McMaster (cameron@haznet.co.za)* **|fw**