

## THE NAMIB CAPER CAPPARIS HEREROENSIS

by Ernst van Jaarsveld, Kirstenbosch

Capparis hereroensis is a rare, endemic shrub previously known from the summer rainfall parts of the Namib Desert and recently discovered in the Hondeklipbaai region of Namaqualand. It is closely related to the wellknown edible caper, Capparis spinosa from the Mediterranean region. The sweetly-scented flower of the Namib caper *Capparis hereroensis*, growing on the white sand dunes of the Namaqua coast near the Spoegriviermond. Photo: E van Jaarsveld.

uring the early part of 1986 Prof Christo Pienaar received a plant in the post from Mr Frikkie Ras of the farm Vredendal. He passed it on to me for identification. Mr Frikkie Ras is familiar with this species as it is one of the veldkos species with edible fruit known to him since his childhood on his family farm Somnaas near Hondeklipbaai on the Namaqualand coast. Upon investigation, the fruits with their characteristic androphore (andro = referring to the male parts, *phore* = carrier, referring to the long slender part between the petals and stigma protruding from the middle of the flower) immediately pointed me towards the Capparaceae. At the Compton Herbarium I then identified it as Capparis hereroensis, a Namib Desert endemic.

Both the generic and family names, *Capparis* and Capparaceae, are derived from the Greek word caper. This species has only been known to occur north of Swakopmund in the summer rainfall part of the Namib desert and its occurrence in the winter rainfall Namaqualand came as a surprise.

I immediately contacted Mr Frikkie Ras and a collecting trip was arranged for April 1986. Mr Ras guided us to the plants on the farm Somnaas where they were found between large white dunes in strandveld vegetation. The plants were indeed rare and only a few scattered specimens were found.

They are multi-stemmed, spreading shrubs up to 3 m wide and about 1 m high. The roots are tuberous, the branches bearing spiny stipules and green leaves with a velvety grey surface, an

adaptation presumably to shield the plant from the harsh sun reflected off the white sand. We collected old fruits containing seed and noticed the heavy predation by rodents, presumably local mice. A few dried flowers with their characteristic 4 sepals and 4 larger petals were also found, which confirmed my earlier identification. Associated strandveld species include Cephalophyllum spongiosum (olifantsvye), Didelta carnosa var. tomentosa, Euclea racemosa, Chrysanthemoides incana, Limonium perigrinum, Cladoraphis cyperoides and Aloe arenicola. Photographs were taken and a young plant and herbarium specimens were collected.

Back at Kirstenbosch I cultivated the young plant. It grew well but died when I tried to establish it on a dry site in the Mathews rockery at Kirstenbosch. The seeds did not germinate, probably because the thick impermeable seed coat needs scarification to break its dormancy.

At the end of December 1993 Kobus Kritzinger and Elbie Cloete from the Cape Department of Nature Conservation invited me to join them on a coastal Namagualand expedition between Groenrivier mouth and Kleinzee. This region falls within the winter rainfall Namib Desert with an annual rainfall range of between 50 - 100 mm. The Namaqua coast in this region is desolate and can only be reached with a 4-wheeldrive vehicle. Fresh water is rare and bees become troublesome when camping (competing for moisture), a reflection of summer aridity and a lack of surface water. It was on this expedition, on the farm Klipheuwel just south of the Spoegriviermond, that we crossed the characteristic white Namib dunes and I spotted another Capparis hereroensis population and was glad to see it in full flower for the first time! The flowers are large, yellow and sweetly scented. I took a number of pictures and made some herbarium collections as this population

represents the southernmost distribution record for this species. I also realized that, as with the Somnaas populations, the plants appear to occur between the white sand dunes and not on the orange dunes.

Capparis hereroensis seems to be closely related to the caper. C. spinosa of the Mediterranean region. This plant is also a multistemmed, low-growing shrub with large flowers and leaves with spiny stipules not unlike those of C. hereroensis. The pickled buds and fruits are popular in some dishes. It made me wonder if our indigenous Capparis could be used in a similar fashion and it would be worth testing its use as a food plant in arid coastal regions of South Africa.

Capparis hereroensis was described by Hans Schinz, a Swiss and named it. Hans Schinz later became professor of botany at Zurich University.

The Capparaceae has a cosmopolitan distribution with about 45 genera representing about 700 species, but it is mainly restricted to the tropical to subtropical parts of the world. It includes trees, shrubs, climbers, herbaceous and annual species that are often confined to arid and semi-arid regions. In South Africa and Namibia the family consists of 8 genera and 51 species. The largest genus in southern Africa is *Cleome* (herbs and annuals) with 19 species. Five Capparis species are known from southern Africa, the others being C. brassii, C. fascicularis, C. sepiaria and C. tomentosa all from the subtropical summer rainfall regions. 🖤



Andrew Jacobs from Kirstenbosch and young helper investigating the fleshy roots of *Capparis hereroensis*. Photo: E van Jaarsveld.

botanist from Zurich, who travelled widely in Namibia between 1884 and 1885. It was during one of these journeys that he discovered this species north of Swakopmund and later described

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