

The potent gifbol

Boophone disticha (Amaryllidaceae)
Gifbol, seeroogblom, ishwadi (Xhosa)

BOOPHONE DISTICHA IS A LARGE bulbous plant with attractive, distinctive leaves which spread into an erect fan when they develop after flowering. It is widespread throughout South Africa in a very wide range of habitats, from the winter rainfall region of the Western Cape through the dry Karoo to the moist summer rainfall grassland regions, where it occurs from sea level to fairly high altitudes in mountainous regions.

Tumbling seed dispersal

The large bulb is always partially exposed above ground. It flowers in spring in the summer rainfall region and midsummer in the winter rainfall region. The very attractive mass of flowers in various shades of pink form a dense umbel. When the seed capsules are ripe the umbel detaches from the bulb and rolls along the ground, distributing seed as it is propelled by the wind.

Like many other Amaryllids, *Boophone disticha* has fleshy recalcitrant seeds that germinate spontaneously but will only take root and grow if they happen to land in a favourable place in a good season. Because of the rolling and tumbling method of seed dispersal, seeds are sometimes caught against fences, creating a concentration of young plants. The leaves persist for about five months, after which the plant goes dormant until the next spring or summer

Wide variation in plants

Boophone disticha is fairly variable. The smallest plants with very wavy leaf margins occur in the south-western

Cape. There are also large stands near Cape Infanta, where they are valiantly resisting the invasion of alien Acacias. The largest forms I have seen are in thicket vegetation in the Kei valley and near East London; they have longer and straighter leaves and also flower much earlier than plants in the grassland and Karoo areas.

The only other member of the *Boophone* genus occurring in South Africa is the huge bulb *Boophone haemanthoides*, which occurs up the West Coast and adjacent interior. There is no record of medicinal use of this bulb but many have been lost as large parts of its habitat have been cultivated. It can be seen in the Postberg Wild Flower Reserve near Langebaan.

Massive trade for traditional medicine

Boophones can live for more than 100 years and are sometimes called “century plants”. They are extremely slow-growing, taking 12 to 15 years to reach flowering size.

The bulb is used extensively by traditional healers (see box: Medicinal properties). There is no question of sustainable harvesting, since bulbs are removed and destroyed when harvested. The bulbs are also sold at *muti* markets, ranking 23rd among the most frequently traded plants.

This remarkable plant is capable of slaughtering an ox and creating an intense hallucinogenic trip. Living for over a century, *boophone* also has healing properties and is in great demand by traditional healers.

Each trader is estimated to sell an average of 111kg per annum, at an average price of R17,20/kg. Given the increasing demand, a staggering number of these plants are being harvested despite the fact that they are protected by environmental legislation and may not be harvested without a permit.

Cultivation can counter falling numbers

The case for commercial cultivation is therefore very strong. Seed can be harvested and the plants are very attractive in gardens and rockeries. Although *boophone* is extremely hardy and drought-resistant, its slow growth rate tends to discourage commercial cultivators, but for far-sighted entrepreneurs there are good long-term possibilities. Young plants are available from registered wildflower nurseries. – Cameron McMaster (cameron@haznet.co.za).

A group of ancient *Boophone disticha* plants in full leaf photographed in November in the Quanti area of the Stutterheim district, Eastern Cape.



- The bulb is extremely poisonous, but cattle can graze the leaves.
- Plants are very slow-growing and its habitats are disappearing.
- Traditional healers use the bulb for its healing and hallucinogenic properties.

A particularly dark form of *Boophone disticha* photographed near Aberdeen in November 2006.

PHOTOS: CAMERON McMASTER



ABOVE LEFT: *Boophone disticha* in flower near Thomas River, ??, in November.

ABOVE RIGHT: The large form of *Boophone disticha* with straight leaves photographed in the hills above the Kei River near ??

A powerful poison

The name *Boophone disticha* comes from the Greek words *bous* (ox) and *phonos* (slaughter), as the poison in the bulb can kill an ox. The Xhosa name *ishwadi*, a respect word for *incwadi* (book or paper), refers to the bulb scales that are arranged like pages in a book.

When well-known botanical artist Dr Auriol Batten used a fresh specimen to copy from she developed a headache, drowsiness and sore eyes. San and Khoi hunter-gatherers used the bulb as an ingredient in their arrow and fish poison. Although I have often seen leaves cropped by livestock I have not heard reports of poisoning, and it seems the poison is concentrated in the bulb.

According to *People's Plants*, by Ben-Erik van Wyk and Nigel Gericke (Briza, 2000) the bulb is a powerful hallucinogen, sometimes used by diviners to induce visions that help communication with ancestral spirits. As an overdose can be fatal, the bulb must only be used with great care under the supervision of experienced traditional practitioners.

Medicinal properties

Traditional healers use *Boophone* for many ailments (described in *Medicinal Plants of South Africa* by Ben-Erik van Wyk, B van Oudtshoorn and Nigel Gericke (Briza 1997) and *Indigenous Healing Plants* by Margaret Roberts (Southern Book Publishers 1990).

In the Eastern Cape, the bulb scales are most often used in Xhosa initiation ceremonies to dress circumcision wounds and treat septic wounds and boils, and are very effective. Maybe the frequently-reported complications after circumcision are due partly to a shortage of this natural remedy.

In 1998 Johan Binneman discovered the mummified body of a San hunter in a cave in the Kouga mountains, Eastern Cape. The 2 000-year-old body was carefully wrapped in *Boophone disticha* bulb scales that had preserved it and protected it from insects and flesh-eating organisms (see the Archaeological Society of SA's journal *The Digging Stick*, Vol.16: 2, April 1999). The mummy is now in the Albany Museum in Grahamstown.