QUEEN OF THE NIGHT

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Queen of the night, *Cereus peruvianus* (L.) Mill. family Cactaceae, is a popular plant in many South African gardens, but it presents a serious threat to our natural vegetation. It often spreads to the surrounding veld where it forms spiny thickets. Dense stands are as yet not very common, which is why the plant must be eradicated now before the problem assumes more serious proportions in the large areas that offer favourable conditions for this hardy plant.

The generic name - which means "torch" - refers to the candelabra-like appearance of the plant. Queen of the night is also known as "Peruvian apple cactus", while in Afrikaans it is known as "nagblom" or "bobbejaanpaal".

MORPHOLOGY

Queen of the night is a perennial succulent tree, usually 6 to 7 m tall, which normally consists of a short main stem from which numerous thick, vertical branches grow. It does, however, sometimes also occur as a multi-stemmed shrub. The branches are succulent, green and thorny, and they are covered with a bluish, waxy layer. The branches have 4 to 9 (usuallly 6) conspicuous lateral ridges on which spines occur in groups of 6 to 8. The spines are 1 to 2 cm long, sharp, straight or recurved and brown to black in colour. Each group of thorns occurs on a brown to grey protuberance, the areole, arranged 10 to 25 mm apart on the ridges.

The stems are indented at irregular distances to create the impression of segments. The young growth tips have succulent leaves on the ridges, but these soon drop so that the plants can be regarded as being leafless.

The lateral branches arise from the dormant axillary buds between the spines in an areole. The plants have a shallow but extensive root system.

In spring the plant produces large, funnel-shaped flowers consisting of a long tube that widens towards the top. The flowers are about 15 cm long and 7 to 10 cm in diameter. The scale-like-leaves that cover the tube are thick and green to pink while the thinner, inner petals are white.

As the name indicates, the flowers open at night and usually close again the next morning,

FIG. 1 – Queen of the night is a perennial succulent tree, 6-7 m tall

FIG. 2 – Large, white, funnel-shaped flowers are produced in spring

although they might remain open on cool, cloudy days. The flowers are visited by many bees which, together with night-flying insects, are responsible for pollination of the plant. When the flower wilts the petals and stamens drop while the ovary enlarges to form a fleshy, virtually spherical fruit with a diameter of some 4 cm. The skin of the fruit is smooth and spineless, red to pink in colour but gradually changes to amber. The edible flesh is white, sweet and aromatic and contains a large number of small, black seeds about the size of a pin-head. When ripe, the fruit splits along one side. Birds and baboons are very partial to the fruit.

Another smaller cactus commonly found on rockeries and in hedges, the organ pipe cactus, (*Cereus* sp.) has similar flowers, but they are strikingly yellowish-green, have many more spines and only grow to a height of 2 m. This cactus could also sometimes occur as dense infestations. It does not, however, spread as rapidly since it bears no fruit. New plants only develop where old plants have fallen over.

Queen of the night is also sometimes confused with the indigenous naboom (*Euphorbia* spp.) which also have succulent stems with lateral ridges, but the Euphorbias have a more distinct main stem. The stems are also more deeply indented, the spines occur in pairs, the flowers are small and inconspicuous and the plant exudes a typical white milky substance from wounds in the stems.

DISTRIBUTION

This weed is indigenous in South America and was probably brought to South Africa by succulent collectors. With the exception of Hawaii where it is sometimes a pest in pastures, it has not assumed weed proportions anywhere else in the world. It was only proclaimed a weed in South Africa as recently as 1982.

As far as is known queen of the night infestations in South Africa are limited mainly to the warmer parts of the Transvaal where they mostly especially occur in the bushveld to the north of the Magalies(berg) Mountains. One of the worst infestations is at Kameelpoort, north-east of Pretoria, where queen of the night has infested some 3 000 ha of land. Smaller infestations occur in the vicinity of Soutpan, Warmbaths, Pienaars River, Hammanskraal, Pretoria North, Rust de Winter, Groblersdal, Thabazimbi, Rustenburg and Brits. It is, however, found as a cultivated ornamental in many South African gardens where especially in the warmer areas, it could be a potential source of infestation. It is sometimes planted in hedges.

Queen of the night usually proliferates under trees and it has been found that the seedlings require finely textured soil and enough shade to develop. Infestations are, however, sometimes also found in sandy soil and in the open veld.

PROPAGATION

The main propagation method of queen of the night is by means of seed. This is facilitated by birds and monkeys that eat the fruit and spread the seeds to the veld. Most infestations therefore usually occur under trees where birds roost. Any specimen of queen of the night in a garden is therefore a potential source of infestation.

Although to a lesser degree, queen of the night also propagates vegetatively since parts of the stems that touch the ground readily root. The succulent stems remain viable for a long time after the plant has been chopped down or uprooted.

DANGERS

The biggest danger of this plant lies in its ability to oust the natural vegetation and invade pastures. The dense, spiny infestations under trees prevent animals from finding shelter in the shade. It is also difficult to eradicate the plant since it does not die easily. Because the plant has no natural enemies in South Africa, it can undisturbedly invade large areas.

LEGISLATION

Queen of the night has been proclaimed a weed under the Conservation of Natural Resources Act of 1983 (Act 43 of 1983). The plant may therefore not be distributed or be allowed to spread. Furthermore it may occur in no urban area anywhere in the Republic and it must be effectively controlled on all farm units in the Republic. Owners and occupants are therefore legally responsible for eradicating this plant in their gardens.

CONTROL

It is essential to eradicate this weed now, while serious infestations are still relatively few.

In the case of small infestations or single plants in gardens, the plant must be chopped down and the stem base must be dug up. Smaller seedlings can be pulled up by hand. The plant must then either be burnt or buried very deep. Care must be taken that no part of the plant is left lying where it can root. Under no circumstances must pieces of the plant simply be carted away to be discarded, since this is one of the commonest ways in which cactus infestations originate.

Larger infestations can be controlled chemically by the application of MSMA (Masmar L2032, Act 36/1947).

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