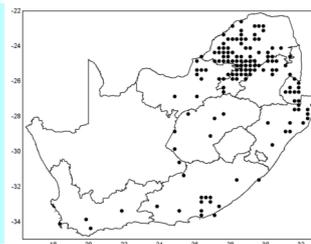
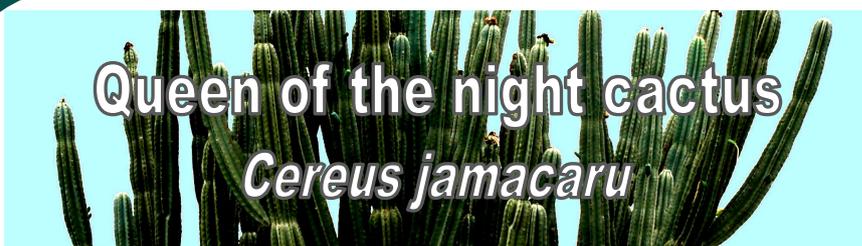
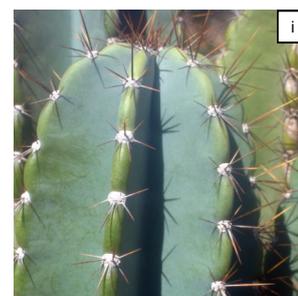


ARC-PPRI FACT SHEETS ON INVASIVE ALIEN PLANTS AND THEIR CONTROL IN SOUTH AFRICA

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QUEEN OF THE NIGHT is a columnar cactus with a succulent, woody stem. The lateral branches are green or blue-green, ribbed, and grow in segments. Areoles, each of which contains 5-10 long, sharp spines, occur on the ribs (i). Large, white, funnel-shaped flowers are borne in summer and open at night (ii). These are followed by edible, red, succulent fruit (iii). Superficially, the plant resembles the indigenous *Euphorbia ingens*, but the latter releases a milky latex when damaged while the cactus does not. Although queen of the night is a common garden plant in many parts of South Africa, it is a category 1 declared weed and must be controlled, or eradicated where possible.



THE PROBLEM

Indigenous to South America, the plant was imported into South Africa as an ornamental, probably by cactus enthusiasts. From gardens, it has been spread mainly by birds and mammals which feed on the fruit. However, it is also capable of propagating vegetatively and stems which touch the soil will root. When infestations are eradicated manually, all parts of the plant should be burned or buried deeply, since disposing of them elsewhere will merely result in a new infestation.



Queen of the night is a problem owing to its ability to outcompete indigenous vegetation and invade pastures. Birds and monkeys deposit seeds at their roosts, causing cactus thickets to develop under trees which prevents stock and game from finding shade. This is especially serious in hot areas, and results in loss of condition. In addition, the spines of the cactus often become lodged in animals' skin and cause irritation. In rural areas, plants are often not noticed until they become taller than the surrounding grass, by which time they have already fruited. Again, birds will disperse the seed, resulting in a denser and more widespread infestation.



THE SOLUTION

Mechanical control is effective for small infestations provided all parts of the plant are destroyed after felling. Larger infestations can be controlled chemically with MSMA (Masmar L2032, Act 36/1947). However, depending on the severity of the infestation, these methods may be labour intensive and costly, and also require regular follow-up.



Biological control is the preferred, and only sustainable solution to controlling queen of the night. After rigorous testing, the mealybug, *Hypogeococcus pungens*, was released at all infestations. This agent kills cactus seedlings before they have even been noticed by the landowner, and is effectively controlling the spread of this plant throughout the country. A stem-boring beetle, *Alcidion cereicola*, has also been released and, although it is equally damaging, it has not become established in all areas. Nevertheless, results obtained from the mealybug have exceeded expectation at all sites, and the plant is considered to be under complete control in areas where the insect is present.



environmental affairs

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