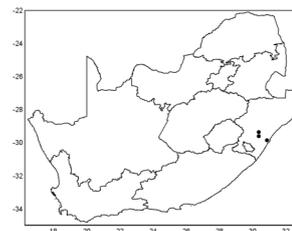


ARC-PPRI FACT SHEETS ON INVASIVE ALIEN PLANTS AND THEIR CONTROL IN SOUTH AFRICA

www.arc.agric.za



MISTFLOWER is a weak-stemmed, perennial, creeping herb (i) that grows up to 1 m in height, and is indigenous to Mexico. It was probably introduced into South Africa as an ornamental. The plant has opposite, lanceolate leaves (6 x 2 cm) with serrated margins (ii) and clusters of small, white flower heads (iii) which develop during September or October. It was first noted in 1955 in Chase Valley, Pietermaritzburg, and has since spread through areas of this city and the neighbouring Hilton that lie in the KwaZulu-Natal mistbelt. It has recently also been recorded in the Karkloof and Kloof (Ethekweni metropole) areas. The plant has become invasive in high rainfall areas of KwaZulu-Natal, South Africa, as well as Australia, India, New Zealand, Madagascar, Hawaii, and other countries. It grows in partially shaded, damp areas such as road embankments, stream banks and along the edge of forests. It can also invade cool hill sides in areas with very high rainfall (≥ 1500 mm/yr). Mistflower is a category 1 declared weed in South Africa and must be controlled, or eradicated where possible.



THE PROBLEM

Since this plant is a serious invader in other countries, it has the potential to become more prominent in suitable areas in South Africa. In other countries, it forms large, dense mats that smother all indigenous plants or pasture. The plants flower profusely, producing enormous numbers of small white inflorescences, and individual plants have been recorded as producing between 10 000 and 100 000 seeds. These are dispersed by wind or water. Mistflower produces numerous thin stems that spread out horizontally in the lower parts, and these root readily wherever they touch the soil. In this way, the plants can rapidly spread sideways to form large dense patches. Fortunately, this plant appears to have been introduced into very few places in South Africa, although large areas are climatically suited to it.

THE SOLUTION

Biological control agents from the natural range of mistflower in Mexico were established in both Hawaii and New Zealand, and were responsible for reducing dense stands to occasional small, scattered plants within a two year period. The most effective of these agents was the leaf smut fungus, *Entyloma ageratinae* R.W.Barreto & H.C.Evans (iv), which was introduced into South Africa in 1989 from Hawaii. Recent observations of this invasive plant in the Pietermaritzburg and Hilton areas indicate that it is under complete biological control here as well, and that the densities and size of plants are similar to those in New Zealand after successful biological control was implemented there. Infestations in recently recorded areas such as Kloof require monitoring, as well as searches for more infestations in areas where it has not yet been recorded.



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA



Compiled by: Lin Besaans (2012) © ARC
Plant Protection Research Institute
infoweeds@arc.agric.za