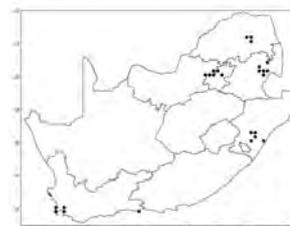


ARC-PPRI FACT SHEETS ON INVASIVE ALIEN PLANTS AND THEIR CONTROL IN SOUTH AFRICA

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CROFTON WEED, indigenous to Central America, is a multi-stemmed, perennial shrub that grows to 3 m tall. The predominantly upright, sparsely branched stems are typically reddish and densely glandular-hairy when young. The serrated diamond-shaped, dark green leaves are 3-6 cm wide and oppositely arranged on the stems. Dense terminal flower-heads, each about 5 mm in size and comprising clusters of white florets (i), are borne August to November. It flowers profusely, each plant producing tens of thousands of seeds annually. Seeds are dispersed by wind and water. Plants produce new stems at the base, and stems that touch the soil root readily, creating dense stands. Crofton weed grows especially in moist areas, such as water catchments, along slow flowing streams and amongst rocks in areas with water seepage. It is a major invasive plant in a number of countries and, in South Africa is a category 1 declared weed where, by law, it must be controlled and eradicated.



THE PROBLEM

Crofton weed has become invasive in mountainous and wet areas in the Western Cape, North West, KwaZulu-Natal, Gauteng, Mpumalanga and Limpopo provinces, and is spreading. The plant is an aggressive competitor near water and a strong grower, even in partial shade. It is allelopathic and alters the microbial communities in soil, aiding its competitiveness. Crofton weed stands suppress biodiversity in pristine and sensitive wetland areas. It is a major water user and dense stands clog streams (ii), cause erosion, and reduce water flow. Furthermore, the plant is poisonous to certain animals, and dense stands may reduce the carrying capacity of land.



THE SOLUTION

Biological control is the best long-term, sustainable solution to the problem since the sensitive water catchment areas, which are particularly prone to damage, are often in mountainous terrain that is hard to access. Two biocontrol agents were established for the control of this plant in South Africa: a stem-galling fly, *Procecidochares utilis* (iii) and a leaf spot fungus, *Passalora ageratinae* (iv). Research towards the introduction of additional, effective and safe biocontrol agents is continuing. The agents already established contribute to the control of the plant, but additional control is required. Where accessible, manual removal is recommended, with chemical control (spot-spraying) in large infestations. In areas where sparse and dense infestations occur, control efforts should be concentrated on the sparse plants first, as these could rapidly develop into more dense stands. Ensure both biological control agents are established in dense stands, to reduce the plant density and spread until such time as these are treated. To reduce spread, flower and seed heads can be cut during winter, placed in plastic bags and decomposed, buried deeply or burned. Chemicals suitable for the control of the weed include formulations of glyphosate, triclopyr and metsulfuron methyl, which must be applied strictly according to label instructions. This will require repeated treatments to deal with new seedlings and regrowth.



environmental affairs

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REPUBLIC OF SOUTH AFRICA



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