

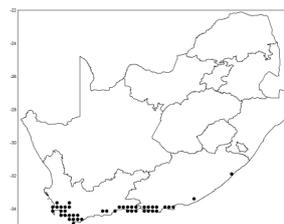
ARC-PPRI FACT SHEETS ON INVASIVE ALIEN PLANTS  
AND THEIR CONTROL IN SOUTH AFRICA

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## Australian myrtle

### *Leptospermum laevigatum*



**AUSTRALIAN MYRTLE** (*Leptospermum laevigatum*) is a large and compact, many-branched shrub or small tree (i) that reaches as high as 6 metres. It was introduced into South Africa from eastern Australia in 1850 to stabilise drift sand on the Cape Flats. Mature stems are twisted and furrowed, and have a ribbony, thin brown bark. The leaves are leathery, alternate and narrowly egg-shaped, about 15-30 mm long and 5-8 mm wide. Single, white flowers, up to 2 cm across, are produced in the leaf-axils between late August and November (ii). The fruits mature the following year and comprise semi-fleshy, cup-shaped capsules about 7mm long and 8mm wide with 8-10 valves (iii). The fruits are serotinous (remaining on the plant for two to three years) and each fruit contains 80-130 small seeds, which are adapted for wind dispersal.



#### THE PROBLEM

Since its introduction, Australian myrtle has become invasive in sandy coastal areas and lowland fynbos in South Africa. The plant is particularly invasive in the unique and endangered fynbos regions where it forms dense and impenetrable stands that outcompete and replace indigenous species (iv). Currently, infestations are restricted and discontinuous along the south-western and southern coastal regions of the Western Cape, but also occur in coastal regions of the Eastern Cape. Australian myrtle is becoming more dominant as an invasive plant on sandy soils in fynbos vegetation because it is replacing Port Jackson (*Acacia saligna*), an alien invasive plant that is under substantial biological control. Australian myrtle develops strong lateral roots with mats of fine rootlets in the top 5 cm of soil. The water uptake by these rootlets is so effective that few other species are able to survive in the immediate vicinity.



#### THE SOLUTION

Chemical control is expensive and may be undesirable in the ecologically sensitive fynbos areas that are normally invaded. The multi-stemmed nature of the plants makes them less tractable to sawing and chopping, which hampers mechanical control. Biological control offers the best long-term solution for the control of Australian myrtle infestations, and two insect-species are currently being utilised for this purpose in South Africa: a leaf-mining moth *Aristaea thalassias*, and a bud-galling midge *Dasineura strobila*. A gall-inducing scale-insect *Callococcus leptospermi*, which is known to cause spectacular die-back of Australian myrtle, is also being considered as a potential biological control agent against infestations of the plant in South Africa.



**environmental affairs**

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