

Can a Gall-Forming Rust Fungus Control an Invasive Tree?

Michael J. Morris

Plant Protection Research Institute, Private Bag X5017, Stellenbosch 7600, South Africa

The gall-forming rust fungus, *Uromycladium tepperianum*, was introduced into South Africa from Australia in 1987 for the biological control of the Port Jackson willow (*Acacia saligna*). This fungus is now established at over 100 localities throughout the southern and south-western Cape Province, where the plant is ranked as the most important invasive weed. The fungus develops through only 1 generation/yr and initial spread was expected to be slow. Following the first year of natural dissemination, development of the disease varied between sites with from 4- to 58-fold increases in the number of galls and a spread of from 4-400 m being recorded. After 2 yrs spread was up to 2 km and up to 50% mortality of saplings was recorded. Severe flower bud infection resulted in reduced seed production and in the death of a few older trees.
