

## INDIGENOUS FUNGAL PATHOGENS AS POTENTIAL BIOLOGICAL CONTROL AGENTS FOR *CHRYSANTHEMOIDES MONILIFERA* (BITOU BUSH)

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**Abstract** Bitou bush is an introduced invasive weed of the coastline of eastern Australia. It is naturally affected by a leaf necrosis and a dieback disease, a terminal necrosis of the stem which commonly affects only the small branchlets, the lesion terminating at the junction of the branchlet with the larger stem. Disease progression down into the bush is erratic and not observed at all sites where symptoms have been present. Several fungi are associated with these lesions. To date, no single isolate has proved pathogenic and dieback may be the result of infection by a complex of fungi.

In contrast, a different, less frequent, but more invasive disease has been observed at some sites. The

primary incitant of this disease was *Sclerotinia sclerotiorum*. At these sites, the disease has progressed rapidly into the bush and lesions have been observed in older stems up to 35 mm in diameter. Sclerotia are produced in numbers much fewer than are formed by this pathogen in annual hosts such as lupins. No symptoms have ever been observed in any other native shrubs or exotic weeds growing in the vicinity of diseased bushes. Although it is a pathogen with a wide host range, *S. sclerotiorum* has considerable potential for further study as a biological control agent, given the environment in which it would be applied.