

OCCURRENCE OF THE RUST FUNGUS *UROMYCES RUMICIS*, A BIOLOGICAL CONTROL AGENT OF FIDDLE DOCK (*RUMEX PULCHER*) IN WESTERN AUSTRALIA

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The rust fungus *Uromyces rumicis* was first reported in Western Australia in 1986 from Perth. In its native habitat, Europe and Africa, the fungus is associated with *Rumex* and *Emex* species. The fungus is considered a potential biological control agent for these weeds in Australia. A survey of fungi on plants of Polygonaceae in 1990-1992 found *Uromyces rumicis* to be widespread in the wetter parts of south-west WA, but only *Rumex pulcher* (fiddle dock) was attacked. The fungus was absent on other *Rumex* species even when growing mixed with infested plants. Uredia and telia were only evident from the end of spring until plants senesced (November-January). At this time the dock plants have maturing seeds. It is likely that fungal development is too late to have a major impact on plant populations. The short period when spores are present explains why the fungus has been overlooked in the past. The observations in WA suggest that the climatic conditions suitable for other strains of the fungus would need to be considered if they are to be used as biological control agents against *Rumex* and *Emex* species.

A CANADIAN STRAIN OF *COLLETOTRICHUM GLOESPORIOIDES*, A POSSIBLE MYCOHERBICIDE FOR ST JOHN'S WORT, *HYPERICUM PERFORATUM*

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Two isolates of the fungus, *Colletotrichum gloeosporioides* (St John's Wort, Nova Scotia), were recently introduced from Canada into high security quarantine at the Keith Turnbull Research Institute.

The three strains of St John's Wort recognised in Australia, i.e. broad-leaved, narrow-leaved and intermediate-leaved forms were tested against the strains of *C. gloeosporioides*, as were plants collected from several infestations in Victoria and New South Wales. These tests indicated that Australian St John's Wort plants were susceptible to these strains of *C. gloeosporioides*. Preliminary host specificity tests were carried out on St Peter's Wort, *Hypericum tetrapterum*, and the Australian native *Hypericum gramineum*. It may be possible to develop *C. gloeosporioides* as a mycoherbicide as a later date, after further host-specificity testing.