

## **Cape tulips -- pretty but pests in pastures**

August 17 2009



Cape tulips, imported as attractive garden plants, are now pasture pests in Western Australia, South Australia, Victoria and New South Wales. Credit: Paul Yeoh, CSIRO

CSIRO and the Department of Agriculture and Food Western Australia (DAFWA) are collaborating to try to outwit one of southern Australia's worst agricultural weeds.

"We are initiating a one-year study to see if it would be feasible to control one and two-leaf Cape tulips (Moraea flaccida and M. miniata) using the rust fungus Puccinia moraeae as a biological control agent," CSIRO Entomology's Dr John Scott said.

"Dr Louise Morin, our experienced plant pathologist, will be testing various rust isolates to see how pathogenic they are on Cape tulips occurring in Australia as well as testing them on a few key closely-related, non-target plant species.



"The tests will be conducted in the AQIS-accredited CSIRO Black Mountain Containment Facility in Canberra."

Dr Scott said Cape tulips appear to be suitable targets for biological control because there are only a few close relatives among Australian native species and no related crops.

The logical place to look for possible biological control agents for Cape tulips was their home range, South Africa. Earlier CSIRO surveys there identified three potential biological control agents, of which the rust appears the most promising.

This initial study, funded by DAFWA, will yield information on the aggressiveness of the rust on Cape tulips and assist in determining its biological control potential.

"It will also provide preliminary information on the susceptibility of key non-target plant species to the rust. This is an important first step in deciding if the rust should undergo future comprehensive hostspecificity testing," Dr Scott said.

Cape tulips were introduced to Australia from South Africa in the mid-19th Century as garden plants. Since then, they have become major pasture weeds in Western Australia, South Australia, Victoria and New South Wales. They are unpalatable and poisonous to livestock.

Cape tulips are also invading natural ecosystems and have the potential to be serious environmental weeds.

Source: CSIRO Australia

Citation: Cape tulips -- pretty but pests in pastures (2009, August 17) retrieved 10 April 2024



from <a href="https://phys.org/news/2009-08-cape-tulips-pretty-pests.html">https://phys.org/news/2009-08-cape-tulips-pretty-pests.html</a>

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