

Biocontrol of field horsetail (*Equisetum arvense*)

Horsetail is a major problem in riparian areas and farmland.



Biocontrol offers an opportunity to reduce both existing horsetail stands and spread of this weed. The Rangitikei Horsetail Control Group contracted Landcare Research to test 3 potential biocontrol agents:



weevil



sawfly



flea beetle

Testing has shown that the weevil is an extremely host specific and damaging agent. Adults feed on above ground plant parts and larvae mine down the stems into the roots.



potted horsetail – no weevils



potted horsetail – plus 15 adult weevils for 3 weeks

Although sawfly larvae are also extremely damaging, they only feed on above ground plant parts, not the roots. The adults do not feed at all. Sawfly larvae may also compete with the weevil and flea beetle by inadvertently consuming their eggs and young larvae while feeding on the horsetail stems.

An application to release the weevil will be lodged with the Environmental Protection Authority (EPA) in December 2015. See:

<http://www.landcareresearch.co.nz/science/plants-animals-fungi/plants/weeds/biocontrol/approvals/current-applications/field-horsetail>

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