Prospects for Biological Control of *Berberis darwinii* (Berberidaceae) in New Zealand: What are its Seed Predators in its Native Chilean Range?

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**Abstract**

A native of South America, Darwin's barberry, *Berberis darwinii* Hook, (Berberidaceae) has become an invasive species in New Zealand. It has invaded many habitat types from grazed pastures to intact forests, due in part to its large reproductive capacity. Consequently, as an early step in a biocontrol solution surveys were conducted in its native range for damaging invertebrates utilizing flower buds and seeds. Sampling for potential agents was conducted at 35 sites in southern Chile between Concepción (36°57’ S.) and Chiloé (42° 52’ S.). At suitable sites flowering or fruiting plants of *B. darwinii* were beaten 5 times onto a beating tray and all weevil species observed were collected. The insect surveys yielded four weevil species on Darwin's barberry. *Berberidicola exaratus* (Blanchard) was the most common and widely distributed seed predator. It was detected at 29 of the 35 sites. *Anthonomus kuscheli* Clark was the most common flower bud feeder and was detected at 13 of the 35 sites. Damage to the seeds and flower buds by these weevils is obvious. Host-testing studies of these two weevil species is continuing in Chile.