

How to assess the risk posed to the New Zealand native flora by an invasive defoliator

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We assessed the risk posed to the New Zealand native flora by the Australian invasive defoliator, *Uraba lugens*, the Gum Leaf Skeletoniser. We tested native flora within the Myrtaceae, using host testing methods of larval feeding assays, adult laboratory and field cage oviposition assays, and a field survey. Two distinct mechanisms that could result in gum leaf skeletoniser impacting on native New Zealand plants was discovered: development of self-sustaining populations on native species, and/or temporary spill-over of solitary larvae. *Metrosideros umbellata* (southern rata) was the native plant ranked the highest risk yet still an unlikely host, all other plants were highly improbable to develop self-sustaining populations. Temporary spill-over feeding by larvae according to distance from infested host tree is highly likely on a number of native plant species but this will be more likely in urban areas, and mixed tree plantings. We continue to investigate rapid and novel methods of assessing risk from invasive insects as a part of Better Border Biosecurity research.

