

Sustainable Options

Pest Plant Control

18

Minimising the Spread of Wild Kiwifruit



Wild kiwifruit infestation

Introduction

Wild kiwifruit plants have been establishing in the native bush gullies and small exotic forestry blocks of Te Puke district since the 1970s.

They are also established elsewhere in the Bay of Plenty region, especially around Katikati, Opotiki and parts of the Rotorua district.

Wild kiwifruit is mostly growing from seed dispersal via birds (e.g. silver eyes or wax eyes, sparrows and blackbirds) and aggravated by people distributing large quantities of fruit as stock feed.

This factsheet advises best practice methods to minimise the establishment and further spread of wild kiwifruit.

Pest Plant Status

In the Bay of Plenty region wild kiwifruit is classified as a **Total Control Pest Plant** in Environment Bay of Plenty's Regional Pest Management Strategy.

Unless control is being undertaken by an Industry Management Group, land occupiers are required to control wild kiwifruit.

Origin

A native of China and Northeast Asia, kiwifruit seed (*Actinidia deliciosa*) was first brought to the Wanganui district of New Zealand in 1904.

During the 1920s an Auckland nurseryman, Hayward Wright bred the "Hayward" cultivar from selections of *Actinidia deliciosa*. This is the most abundantly grown commercial plant. There are two other commercially cultivated species in New Zealand. These are *Actinidia chinensis* which are yellow-fruited kiwifruit sold as Zespri™ Gold, and *Actinidia arguta*, a species producing grape-sized hairless fruit.

Other *Actinidia* species and crosses between species are currently being trialed by HortResearch.

Concern

Wild kiwifruit can form a "mound" of tangled stems to three metres high or grow to the tops of native or exotic trees, sometimes forming a heavy canopy.

If uncontrolled, wild kiwifruit may strangle host trees, e.g. *Pinus radiata*, or cause host trees to topple or break.

Hayward (*Actinidia deliciosa*) kiwifruit contain approximately 1,100 seeds per fruit. Wild kiwifruit contain approximately 300 seeds per fruit.

In a recent trial conducted by Landcare Research, approximately 50% of Hayward kiwifruit seeds were viable.

Reject Fruit

At least 10,000 tonnes of fruit is used as stock feed annually.

Occasionally, reject fruit is left, unpicked, on kiwifruit vines.

Pest Plant Control

18

Reject fruit used as stock feed is distributed on farms in a range of rural locations, often remote or adjacent to areas of native bush or exotic forest.

It is suspected that kiwifruit is spreading via birds such as wax eyes or possibly other vectors such as rats and possums. Further research is planned to establish the affects of these vectors.

Ideally, all reject fruit would be used for processing.

Best Practice Methods To Minimise The Spread Of Wild Kiwifruit

Cover stockpiles of reject fruit and feed out stock consumption amounts at daily or regular intervals.

Piles of reject kiwifruit are easily covered by 3.66 metre wide lengths of windbreak e.g. Sarlon® and secured at the edges. Two 12 metre long widths, sewn together, will conveniently cover a 10 to 15 tonne truck load. This material "breathes" and will not hasten fruit ripening. Feed out from the stockpile at one or two day intervals. This will avoid large quantities of fruit being available for mass feeding by birds. Leachate from kiwifruit stockpiles must not enter any waterways.

Remove reject fruit from vines and mulch as soon as possible.

This practice would at least avoid fruit ripening and being available to birds over an extended period. Once fruit is dropped between rows and mulched by a mower it quickly breaks down into compost material.

Control

Wild kiwifruit is currently being controlled in the Bay of Plenty by a jointly-funded control programme.

Control methods vary depending on age, growth habit of vines, and situation. Isolated vines may be cut as close to ground level as possible and Vigilant[™] Gel applied to the top of the cut stump. Large isolated vines can be controlled by a frilling or stem-injection method i.e. downward cuts are made with a machete or tomahawk around the full circumference of the stem as close to ground level as possible. Vigilant[™] Gel can then be applied into the downward cuts. N.B. Winter dormancy or sap flow in spring may inhibit absorption of the herbicide.

"Mounds" of wild kiwifruit may be controlled by overall herbicide application in spring, summer and early to mid autumn. Tordon® Brushkiller or Grazon® herbicides at 60 mls per 10 litres water plus penetrant are effective. Herbicide must be applied at low pressure and care taken to avoid off-target damage, e.g. by over-spray. The application should only be made by a Growsafe® certified operator.

CAUTION: When using any herbicide READ THE LABEL thoroughly to ensure that all instructions and safety requirements are followed.





Windbreak material covering reject kiwifruit to exclude birds.

For further information and advice, contact your local pest plant officer at Environment Bay of Plenty:

Telephone: 0800 ENV BOP (368 267) Facsimile: 0800 ENV FAX (368 329) Pollution Hotline: 0800 73 83 93 Email: info@envbop.govt.nz Website: www.envbop.govt.nz Address: 5 Quay Street, P 0 Box 364, Whakatane, New Zealand

This fact sheet was prepared by Environment Bay of Plenty's pest plant section.

his fact sheet was last updated May 2005.