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Committee Environment Committee
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Velvetleaf Update to the Environment Committee

1. Purpose

To update the Environment Committee on the status of the pest plant velvetleaf (*Abutilon theophrasti*) in the Wellington Region.

2. Summary

The highly invasive velvetleaf species has been discovered in fodder beet crops on a number of properties throughout New Zealand. This national outbreak is linked to contaminated imported fodder beet seed.

The response is being led by the Ministry for Primary Industries (MPI). All known crops are being searched and any velvetleaf plants removed and destroyed. There are currently more than 200 known properties with infested fodder beet crops across New Zealand. There are two known affected properties in the Wellington Region.

3. Background

Velvetleaf is regarded as the world's worst cropping weed, damaging arable crops and lowering crop yield by competing for nutrients, space and water. Velvetleaf seedlings are vigorous and the plant grows rapidly in the first few months after germination. Seeds remain viable for up to 60 years. The seed survives in silage and in the gut of cattle, so it has the potential to spread rapidly through farms.

Fodder beet is a winter forage crop that is break-fed and used as cut silage. The current incursions of velvetleaf seed are likely to have come from contaminated imported fodder beet seed that has been sold in New Zealand. MPI is investigating how this occurred.

Velvetleaf is known to have been in New Zealand since 1948, but only in sporadic infestations. It was more recently found during 2011 in maize crops in

the Waikato. The origin of this incursion is unknown. The current management regime is landowner responsibility with input from Waikato Regional Council.

The seed has a very long life in the soil and has potential to spread through the transportation of winter feed, contaminated machinery and in the gut of livestock.



Velvetleaf seed head in fodder beet crop, South Wairarapa. Photo K. Stevens 2016

4. Current situation

There are 207 properties known to have fodder beet crops infested with velvetleaf as of April 22. These sites are found across New Zealand, largely in the South Island. The main infestation is in the lower South Island, with 183 sites in Southland, Canterbury and Otago. Of our immediate neighbours, Horizons, has 12 affected crops and Marlborough has one. There are two known sites in the Wellington Region.

Regional Council officers, MPI staff, contractors and volunteers continue to search crops for velvetleaf.

5. Ministry for Primary Industries' response

MPI has activated the National Biosecurity Capability Network in response to the incursion. AsureQuality has coordinated the management of the event. This involves locating the potentially affected properties, searching any crops and managing the removal and disposal of plants. Factsheets for landowners have been developed and further information on the ongoing management of affected land is being developed.

Due to the number of infested properties it is likely that MPI will move to a long term management of velvetleaf. MPI has formed a governance group

comprising representatives from the affected primary industries and regional councils to consider future management options.

6. Response in the Wellington region

There are two properties in the Wellington Region that are known to have fodder beet crops with velvetleaf present. GWRC Biosecurity Officers have inspected both properties and removed three plants as per the MPI protocol.

Both properties are in the South Wairarapa: Pirinoa with 6.8 ha of fodder beet and Hinakura with 6.2 ha. Two flowering and seeding plants were found at Pirinoa and one at Hinakura. The plants were bagged to prevent any further seed fall, removed from the site and sent to the landfill for safe disposal. Photos and samples were sent to MPI and Landcare Research to confirm the identity of the plant.

The three sites have been marked with GPS and Biosecurity staff are working with the landowners to manage the future risk at these sites. Because of the likelihood that viable seeds have fallen, these sites will require ongoing monitoring and management.

Velvetleaf may be considered for inclusion in the review and development of the GWRC Regional Pest Management Plan (RPMP), subject to the national decision regarding long term management options. Responsibility for management should remain at the national level but regional councils may use their RPMPs to include rules that minimise further contamination at the regional scale. Discussions regarding funding of long term management will need to be negotiated.

Farm, crop and machinery hygiene are important strategies for the prevention and control of this pest.



GWRC Biosecurity Officer bagging and removing velvet leaf from fodder beet crop. Photo K. Stevens 2016

7. Recommendations

That the Committee:

1. *Receives the update.*
2. *Notes the content of the paper.*
3. *Agrees to monitor the national and regional velvetleaf situation as it develops.*

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