



Submission form: For Hazardous Substances and New Organisms applications

Submission details

What application are you submitting on?: APP 204535 Application to introduce four biocontrols to control the weed purple loosestrife

Organisation or submitter name: Apiculture New Zealand (ApiNZ)

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Privacy statement

The EPA is collecting your personal information for the purpose of administering this application under the Hazardous Substances and New Organisms Act and will use the information you provide in this form to contact you in relation to the application. We will store your personal information securely. Your submission and name will be made publicly available on our website, but your personal contact details will not be disclosed. You have the right to access the personal information we hold about you and to ask for it to be corrected if it is wrong. If you would like to access your personal information, or have it corrected, please contact us at info@epa.govt.nz.

Confidential details

The Official Information Act 1982 (OIA) applies to all information held by the EPA (subject to section 55 of the Hazardous Substances and New Organisms Act 1996), and information may be released under the OIA unless there are grounds to withhold it. If you consider any part of your submission is confidential, please clearly label it as such and include the reasons why you think the information is confidential (eg, you may consider some information to be commercially sensitive). Further information on the OIA is at www.ombudsman.parliament.nz

Your submission

What is your view on what is proposed in the application form?

- \boxtimes I support the application
- □ I oppose the application
- □ I neither support or oppose the application

The reasons for making my submission are¹: (further information can be supplied with your submission, see footnote).

Bees collect pollen and nectar from any plant within a reasonable flying distance (usually up to 3 kilometres but can be up to 12 kilometres) from their hive. Bees pollinate many valuable crops. They turn the nectar and pollen they collect from these plants into honey. Many beehives are kept close to waterbodies so will be affected by spraying activity in these areas. While Purple Loosestrife is considered a weed, it is also a useful source of pollen and nectar for bees.

Two research papers show that surfactants and other co-formulants are toxic to bees. Straw et al $(2021)^2$ evaluated two RoundupTM products, and another product with the same active ingredient, glyphosate. The researchers concluded that the active ingredient, glyphosate, is not the cause of the problem, that it is surfactants and other co-formulants. RoundupTM products caused considerable matting of bee hair, and this incapacitated the gas exchange system of bumble bees. In essence, the bumble bees were asphyxiated.

Goodwin and McBride (2000)³ evaluated the toxicity of surfactants applied topically and orally to honey bees (Apis mellifera L.) using laboratory bioassays. Eleven surfactants (Citowett®, Pulse®, Boost®, Codacide oil®, Contact®, Raingard®, Peptoil®, Sunspray®, Ethokem®, Multifilm® and Uptake®) were applied topically to anoxiated bees. Anoxiating bees and spraying them with water had no significant effect on their survival. Four surfactants (Citowett®, Pulse®, Boost®, Boost® and Ethokem®) were toxic when applied topically. Ethokem® and Boost® also showed oral toxicity.

If the need for spraying around waterbodies was able to be reduced, as has been the case in biocontrol programmes in the USA where infestations of purple loosestrife were reduced by up to 90 percent in the first ten years of their biocontrol programme, this would make the environment safer for honey bees.

¹ Further information can be supplied with your submission. If you are sending this submission electronically, please attach one or more files in any standard file format.

² Attachment 2

³ Attachment 1

I wish for the EPA to make the following decision:

ApiNZ supports EPA in approving the application from Horizons Regional Council to import or release four Coleoptera insects (*Neogalerucella calmariensis, Neogalerucella pusilla, Hylobius transversovittatus, Nanophyes marmoratus*) to control purple loosestrife (*Lythrum salicaria*), in New Zealand.

All submissions are taken into account by the decision makers. In addition, please indicate whether or not you also wish to speak at a hearing if one is held.

 \Box I wish to be heard in support of my submission (this means that you can present your submission to the DMC at the hearing but does not allow you to introduce new information at the hearing)

 \boxtimes I do not wish to be heard in support of my submission (this means that you cannot speak at the hearing)

If neither box is ticked, it will be assumed you do not want to appear at a hearing.

Send your completed form

You can send us the completed form by either post or email.

