



## DECISION

<b>Date</b>	19 December 2011
<b>Application Code</b>	APP201039
<b>Application Type</b>	Release from Containment any New Organism under section 34(1) of the Hazardous Substances and New Organisms Act 1996.
<b>Applicant</b>	Waikato Regional Council
<b>Date Application Received</b>	19 September 2011
<b>Public notification period</b>	21 September – 3 November 2011
<b>Consideration Date</b>	12 December 2011
<b>Organism approved</b>	<i>Colaspis argentinensis</i>

### 1. Summary of Decision

- 1.1. The application to import and release *Colaspis argentinensis*, under section 34(1) of the Hazardous Substances and New Organisms Act 1996 (the HSNO Act), is **approved without controls**.
- 1.2. The Waikato Regional Council intends to import and release *C. argentinensis* for use as a biological control for the weed 'moth plant' (*Araujia hortorum*).
- 1.3. In making this decision the Environmental Protection Authority (EPA) has determined that the minimum standards in section 36 of the HSNO Act have been met and that, taking into account all of:
  - the effects of the organism;
  - the effects of any inseparable organism; and
  - the matters in section 37 of the HSNO Act,the positive effects of *C. argentinensis* outweigh the adverse effects.

## 2. The Application

- 2.1. The application proposed the importation and release of the beetle *C. argentinensis* to act as a biological control agent against the weed moth plant (*Araujia hortorum*).
- 2.2. No inseparable organisms were identified.
- 2.3. The application was made by Waikato Regional Council on behalf of a council collective and DOC. The application is part of a long term management strategy for the weed moth plant.
- 2.4. Moth plant is an evergreen vine that can grow up to 5-10m tall, with smelly milky sap, dark green leaves, and clusters of bell shaped white flowers from December to May, followed by distinctive thick choko-like pods (10 x 7cm) which split to release hundreds of parachute-like black seeds. The seeds are dispersed long distances by wind as well as on clothing and animals.
- 2.5. Moth plant is long-lived, fast growing, and tolerant of shade, drought, damp, wind, salt and a range of soil types. While moth plant is frost tender, it is able to invade a wide range of habitats including intact or disturbed forests and margins, hedges, cliffs, coastal areas, mangroves, and wastelands. Once established, moth plant smothers and kills plants in the canopy, strangles supporting plants, and prevents the establishment of native seedlings.

## 3. Application Process

### Relevant legislation

- 3.1. The application was considered in accordance with the relevant provisions of the HSNO Act and the Hazardous Substances and New Organisms (Methodology) Order 1998 (the Methodology). Unless otherwise specified, references to sections in this decision refer to sections of the HSNO Act.

### Application receipt

- 3.2. Application APP201039 was formally received for processing on 19 September 2011.

### Public notification and notification of government departments

- 3.3. The application was publicly notified as required by section 53(1)(b). The 30 working day notification period began on 22 September 2011, and closed on 3 November 2011.
- 3.4. In accordance with sections 53(4) and 58(1)(c), the Department of Conservation (DOC) and the Ministry of Agriculture and Forestry (MAF) were notified and provided with an opportunity to comment on the application.

### Submissions and hearing

- 3.5. Seventeen submissions were received in response to the application; thirteen submissions in support of the application, and one opposed.

- 3.6. The EPA did not consider that a hearing was necessary, and although three submitters initially requested a hearing (two in support of the application and one opposed), they later withdrew their request and therefore in accordance with section 60, a hearing was not convened.

### Consideration and Determination

- 3.7. The EPA considered the application on 12 December 2011.
- 3.8. The EPA took into account all relevant information, including the information provided through the public submission process, and information from the applicant and government agencies that were notified pursuant to section 53(4).
- 3.9. The application was determined in accordance with section 38, taking into account the matters specified in sections 36 and 37, relevant matters in Part 2 of the HSNO Act, and the Methodology.

## 4. The organism

- 4.1. The organism considered for importation and release is:
- Order: Coleoptera
  - Family: Chrysomelidae
  - Sub-family: Eumolpinae
  - Genus: *Colaspis*
  - Species: *argentinensis*
- 4.2. Adult beetles are approximately 8mm long and feed sparingly on the host plant, then lay eggs on or in the soil at the base of the stem. Adults live for 2-4 months, and observations in containment in New Zealand suggest that females may lay several hundred eggs over their life.
- 4.3. Larvae grow to approximately 8 mm long and on hatching burrow to feed in the root zone. Plant deaths observed in Argentina have been attributed to root damage. Development from egg to adult takes 30-40 days in the laboratory, and it is expected that the beetle will complete two generations annually in New Zealand.

## 5. The minimum standards

- 5.1. The EPA considered that *C. argentinensis* meets the minimum standards for approval as specified in section 36.

### Significant displacement of any native species within its natural habitat

- 5.2. Based on its host specificity, *C. argentinensis* does not have the ability to cause significant displacement of any native species within its native habitat.

### Significant deterioration of natural habitats

- 5.3. Based on its host specificity testing, *C. argentinensis* does not feed on native or valued plant species and will not cause significant deterioration of natural habitats.

### Significant adverse effects on human health and safety

- 5.4. Based on the information in this application, there is nothing to indicate that *C. argentinensis* will cause significant adverse effects on human health and safety.

### Significant adverse effect to New Zealand's inherent genetic diversity

- 5.5. Based on the information provided in this application, *C. argentinensis* could not interbreed with any native species; therefore it could not cause significant adverse effects on New Zealand's inherent genetic diversity.

### Cause disease, be parasitic, or become a vector for human, animal, or plant disease

- 5.6. Based on the information in this application, there is nothing to indicate that *C. argentinensis* will cause disease, be parasitic or become a vector for human, animal or plant disease.

### Conclusion on minimum standards

- 5.7. The EPA considers that *C. argentinensis* meets the minimum standards as stated in section 36 of the HSNO Act.

## 6. Assessment of positive and adverse effects

### Ability of the organism to establish an undesirable self-sustaining population

- 6.1. Section 37 requires the decision-maker to have regard to the ability of the organism to establish an undesirable self-sustaining population and the ease with which the organism could be eradicated if it established such a population.
- 6.2. The EPA noted that the purpose of releasing *C. argentinensis* is to establish a self-sustaining population. The EPA considers that a self-sustaining population is desirable.
- 6.3. The EPA recognises that once a self-sustaining population has been established, eradication of *C. argentinensis* would be impossible.

### Uncertainty

- 6.4. The EPA is required by section 7 to take into account the need for caution in managing adverse effects where there is scientific and technical uncertainty about those effects.
- 6.5. The EPA had regard to these requirements when considering the positive and adverse effects of the application.

### Context and assumptions

- 6.6. Biological control agents can take many years to establish, disperse widely, and have an impact on the target species. There is uncertainty about whether *C. argentinensis* will establish, disperse successfully, and how long this will take.
- 6.7. If *C. argentinensis* does not establish, it can be assumed that there will be no significant effects (either adverse or beneficial), from the release of this beetle.

- 6.8. The EPA has considered the positive and adverse effects of the release of *C. argentinensis* on the basis that the *C. argentinensis* has established widely around New Zealand.

### **Potential benefits of releasing *C. argentinensis***

- 6.9. The proposed benefits of releasing *C. argentinensis* relate to successful biological control of the weed moth plant. This is likely to be of major long term benefit to localised ecosystems. The EPA therefore considers the benefits of this release to be medium (non-negligible).

- 6.10. The EPA noted that many of the submissions received in support of the application referred to the extent of the problems caused by moth plant and the difficulties in managing this weed.

### **Potential risks of releasing *C. argentinensis***

#### **Risk to non-target species**

- 6.11. Centrifugal-phylogenetic host range testing cited by the applicant provides sufficient evidence to conclude that feeding on native flora by *C. argentinensis* will not occur. The EPA noted that the New Zealand native, *Parsonsia heterophylla* is in the same family as moth plant but in a different subfamily i.e. not phylogenetically close. Under centrifugal host-range testing, closely related plants are tested first and if positive results are obtained then the next chosen test species would be phylogenetically more distant. In this case, the EPA noted that testing indicated that there was no reason, other than in the interests of New Zealand, to test *Parsonsia*. When the *Parsonsia heterophylla* test was negative, no further species needed to be tested.
- 6.12. Host range testing identifies some feeding on “tweedia” (*Oxypetalum caeruleum*), an exotic ornamental. The applicant has suggested that this feeding could be easily prevented by the use of commonly available pesticides. In the highly improbable event that *C. argentinensis* feeds on native flora, there is likely to be minimal localised damage.
- 6.13. The EPA therefore considers that the risks associated with this release are negligible.

#### **Potential impacts on Māori and their culture and traditions**

- 6.14. The EPA took into account the potential effects on Māori and their culture and traditions and the principles of the Treaty of Waitangi (Te Tiriti o Waitangi) in accordance sections 6(d) and 8.
- 6.15. The EPA noted that the applicant undertook Category One national consultation (as described in the EPA's document *Working with Māori under the HSNO Act 1996*, April 2005) with Māori Groups.
- 6.16. The EPA considered reports provided by Kura Kaupapa Taiao (KKT) and Ngā Kaihautū Tikanga Taiao (NKTT) with regard to the potential for the release of *C. argentinensis* to impact on taonga (valued resources) and kaitiakitanga responsibilities. The EPA concluded that the risks of adverse impacts on taonga and kaitiakitanga responsibilities are negligible. However, the EPA noted the following areas of concern:
- the influence of submissions on decisions;

- additional biocontrol agents and generalisations about chemicals versus biocontrol;
- uncertainty regarding post release monitoring; and
- highlighting the benefits to Māori land.

6.17. The EPA noted that under section 8 they are required to take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi). The EPA considered that this application was consistent with the principles of the Treaty of Waitangi.

## 7. Recommendations

7.1. The EPA notes the intention of Landcare to monitor post release sites and requests that the reports be forwarded to the EPA and made public.

## 8. Decision

- 8.1. After reviewing all of the information contained in the application, the EPA was satisfied that the application met the requirements of section 34. In any event, in accordance with section 59(3)(a)(ii), the EPA waives any information requirement that has not been met.
- 8.2. The EPA considered that the threshold for approval under section 38 had been met, as it concluded that the organism met the minimum standards set out in section 36 and that, taking into account all of:
- the effects of the organism;
  - the matters in section 37;.
  - the relevant matters in Part 2 of the HSNO Act; and
  - the Methodology
- the positive effects outweighed the adverse effects.
- 8.3. The EPA decided to exercise its discretion and **approve** the import and release of *C. argentinensis* under section 38(1)(a). The EPA noted that in accordance with section 38(2), the approval has been granted **without controls**.
- 8.4. The EPA noted that under section 38(3), if *C. argentinensis* has not been released within five years of the date of this decision, the approval will lapse. However, any person may apply before the expiry of the time limit for an extension of that time limit for a further period of up to five years.
- 8.5. The EPA noted that section 38(4) requires that every person that releases the organism, within five years of the date of this decision, notify the EPA within one month after the date of release.
- 8.6. The EPA would like to thank all people who submitted information that has been used by the committee in making this decision.

19 December 2011

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**Manuka Henare**  
**Chair, Decision Making Committee**  
**Environmental Protection Authority**

**Date**

**Approval Code: NOR100017**