



DECISION

Date	3 October 2012
Application code	APP201363
Application type	To release any new organism under section 34 of the Hazardous Substances and New Organisms Act 1996
Applicant	Environment Southland
Date application received	19 June 2012
Consideration date	11 September 2012
Considered by	A decision-making committee of the Environmental Protection Authority (the Committee) ¹ Shaun Ogilvie (Chair) Helen Atkins Louise Malone
Purpose of the application	To release two weevils; <i>Anthonomus kuscheli</i> and <i>Berberidicola exaratus</i> , as biological control agents for the weed Darwin's barberry (<i>Berberis darwinii</i>)
The new organism approved for release	<i>Anthonomus kuscheli</i> <i>Berberidicola exaratus</i>

1. Summary of decision

- 1.1 The application to release *Anthonomus kuscheli* and *Berberidicola exaratus* was lodged under section 34 of the Hazardous Substances and New Organisms Act 1996 (the Act).
- 1.2 The application was considered in accordance with the relevant provisions of the Act and of the HSNO (Methodology) Order 1998 (the Methodology).
- 1.3 The Committee has **approved** the application without controls in accordance with section 38(1)(a) of the Act.

¹ The Committee referred to in this decision is the subcommittee that has made the decision on this application under delegated authority in accordance with section 18A of the Act.

2. Application process

Application Receipt

2.1 The application was formally received for processing on 19 June 2012.

Public notification

2.2 Section 53(1)(c) of the Act provides that an application under section 34 of the Act must be publicly notified by the Environmental Protection Authority (EPA).

2.3 The application was notified by placing a notice on the EPA website on 22 June 2012.

2.4 In accordance with section 53(4) of the Act, letters or emails notifying the Minister for the Environment, the Ministry for Primary Industries (MPI), the Department of Conservation (DOC), and other government departments, crown entities, and local authorities who have expressed an interest in being notified about applications for non-genetically modified new organisms were sent. Māori organisations, non-government organisations and stakeholders who have expressed an interest in being notified about applications for non-genetically modified new organisms were directly notified. All those parties had an opportunity to comment on the application as per section 58(1)(c) of the Act and clause 5 of the Hazardous Substances and New Organisms (Methodology) Order 1998 (Methodology).

2.5 Section 59(1)(c) of the Act requires an application to be open for the receipt of submissions for 30 working days from the date of public notification. The application was open for submissions from 22 June 2012 until 3 August 2012.

2.6 Ten submissions were received. Wellington Botanical Society, Otago Regional Council, Federated Farmers, Wellington Regional Council, Bay of Plenty Regional Council, West Coast Regional Council, Marlborough District Council, and Te Rūnanga o Ngāi Tahu all made submissions in support of the application. John Little from the Nursery and Garden Industry Association (NGIA), and Cliff Mason made submissions in opposition to the application, and both requested to speak at the hearing. John Little subsequently wrote to the EPA commenting that *“in light of the EPA staff report and...[Landcare’s]... response to submissions, NGIA has determined that we do not wish to speak to our submission at the public hearing. We are satisfied with Landcare’s reassurances regarding the issues we were concerned about”*.



Comments from MPI and DOC

- 2.7 The Ministry of Primary Industries (MPI) chose not to comment on the application.
- 2.8 The Department of Conservation (DOC) considers Darwin's barberry to be an invasive weed in many parts of New Zealand. They wrote a submission in support of this application (see Appendix 2 of the EPA staff report).

Reports sought

- 2.9 The EPA staff report was provided under section 58(1)(a) of the Act.
- 2.10 Ngā Kaihautū Tikanga Taiao (NKTT), were given the opportunity to prepare a report and chose not to comment on the application.
- 2.11 On 28 August 2012, the EPA staff report was published on the EPA website and the applicant and submitters were informed of its availability.

Hearing and Consideration

- 2.12 Section 59(1)(d) of the Act requires a date for the commencement of the hearing of this application that is not more than 30 working days after the closing date for submissions.
- 2.13 The hearing took place in Wellington on 11 September 2012.
- 2.14 Randall Milne, from Environment Southland, presented the application and introduced a panel of expert witnesses:
- Dr Richard Hill, Application Author, (Richard Hill & Associates subcontracted to Landcare Research)
 - Ms Lynley Hayes, Landcare Research Team Leader
 - Dr Quentin Paynter, Landcare Research
 - Mr Lindsay Smith, Landcare Research
- 2.15 One submitter, Cliff Mason, presented his submission in opposition to the application. Bev Abbott, from the Wellington Botanical Society, Anne Thompson from Federated Farmers, and Richard Grimmett from the Greater Wellington Regional Council (GWRC), all presented their submissions in support of the application. The Committee would like to thank all people who submitted the information used in making this decision. Public submissions provide a focus for the Committee on points that need clarification, and the Committee found the submissions and the applicants' responses very helpful in its consideration of the application.



Information available for the consideration

2.16 The information available for the consideration comprised:

- The application;
- Internal EPA staff report;
- Comments received from DOC;
- Public submissions; and
- Information obtained during the hearing.

Legislative criteria for application

2.17 The application was determined in accordance with section 38 of the Act, taking into account the matters specified in sections 36 and 37, relevant matters in Part 2 of the Act, and the Methodology.

3. Minimum Standards

3.1 The Committee noted the biology of *Anthonomus kuscheli* and *Berberidicola exaratus* described in the application and the EPA staff report.

3.2 The Committee considered whether *Anthonomus kuscheli* and *Berberidicola exaratus* meet the five minimum standards as specified in section 36(a-e) of the Act:

(a) cause any significant displacement of any native species within its natural habitat; or

(b) cause any significant deterioration of natural habitats; or

(c) cause any significant adverse effects on human health and safety; or

(d) cause any significant adverse effects to New Zealand's inherent genetic diversity; or

(e) cause disease, be parasitic, or become a vector for human, animal, or plant disease, unless the purpose to import or release an organism to cause disease, be a parasite, or a vector for disease.

Consideration of section 36(a) of the Act

3.3 The Committee considered whether *Anthonomus kuscheli* and *Berberidicola exaratus* are likely to cause any significant displacement of any native species within its natural habitat.



- 3.4 Cliff Mason questioned the statement in section 3.23 of the EPA staff report that says; “*native invertebrates are not commonly found in habitats infested with Darwin’s barberry.*” He asked “*what evidence the EPA has in making that statement because I’d be very surprised to hear that there’s not a lot of native invertebrates on Stewart Island?*”.
- 3.5 The Committee is satisfied with the reference to Smith *et al* (2004) provided in the EPA staff report that discussed the invertebrates associated with barberry in New Zealand. The applicant added that “*in our survey of Darwin’s barberry, we found very few, if any native invertebrates on barberry itself. Most of the invertebrates we found were exotic.*”.
- 3.6 The Committee is satisfied that native weevils do not typically share this niche with exotic weevils and that native weevils do not rely on Darwin’s barberry flowers and seeds as food sources or oviposition sites in the same way that *Anthonomus kuscheli* and *Berberidicola exaratus* do. The Committee is satisfied that there will be no direct competition between native and exotic weevils and that *Anthonomus kuscheli* and *Berberidicola exaratus* will not have a significant effect on native weevil populations in this regard.
- 3.7 Cliff Mason highlighted the “*value of our native weevil species and the possibility that introducing a couple of alien species might interfere with their biology.*” He said “*we really don’t know enough about the biology of our native weevil species. We do know that we’ve got an existing biological control agent, Microctonus aethiopoides, which is attacking our native weevils. Its populations might be boosted by the presence of the new weevils in large concentrations in Darwin’s barberry. Our weevil fauna is so precious that we should not be running the risk of any further possible negative effects on their continued existence.*”.
- 3.8 The Committee noted a publication by Barratt *et al* (1997), in which only 30% of all weevil species collected in the field were parasitized by *Microctonus aethiopoides*, and levels were generally low, indicating poor suitability. Almost 12,000 weevils were collected during the study, which were identified as 36 different species. Eight weevil species were found to be parasitised, including *Sitona discoideus*, the target host. Parasitism of non-target species was approximately 2%. Substantial non-target parasitism was only found at one location, with up to 24% parasitism of a native weevil, *Nicaeana fraudator*.
- 3.9 Barratt *et al* (1997) found that *Microctonus aethiopoides* oviposited in weevils that were 3-12 mm long. *Anthonomus kuscheli* (3 mm) is therefore at the lower limit of “size acceptability” and *Berberidicola exaratus* (< 3 mm) is likely to be too small for *M. aethiopoides*.
- 3.10 The Committee made the important distinction between the Irish and Moroccan strains of *M. aethiopoides*: the Moroccan strain was introduced to New Zealand prior to regulation under the



HSNO Act and is the strain discussed by Barratt *et al* (1997); the Irish strain was approved for release by ERMA in 2005, and differs from the Moroccan strain in its target effects and because it reproduces asexually with unfertilised females producing female progeny. The paper by Barratt *et al* (1997) assured the Committee that while there are some non-target effects associated with the pre-regulated release of the Moroccan strain of *M. aethiopoides*, these effects on native weevil populations are not significant. In addition, there are no recorded non-target effects reported from the release of the Irish strain of *M. aethiopoides*.

- 3.11 The Committee considered whether introducing new prey for *M. aethiopoides* would have any discernable effect on ecosystem function, but concluded that any effects would not be significant. The Committee considers that *Anthonomus kuscheli* and *Berberidicola exaratus* are likely to be too small to be parasitized by *M. aethiopoides* and, even if parasitism did take place, these new hosts would not add significantly to the already broad host range of the Moroccan strain of this parasitoid. The Committee considers that *M. aethiopoides* populations will not be boosted by the introduction of *A. kuscheli* and *B. exaratus*. The effect, if it existed, would be spatially limited to stands of Darwin's barberry and would therefore not be significant across New Zealand.
- 3.12 After assessing all the information, the Committee is satisfied that *Anthonomus kuscheli* and *Berberidicola exaratus* will not cause any significant displacement of any native species within its natural habitat.

Consideration of section 36(b) of the Act

- 3.13 The Committee considered whether *Anthonomus kuscheli* and *Berberidicola exaratus* are likely to cause any significant deterioration of natural habitats.
- 3.14 The Committee reviewed the results of laboratory testing intended to determine whether there is any risk to non-target species. The Committee is satisfied with the validity of the host range testing presented by Quentin Paynter and has respect for the authority of his expert opinion. The Committee is satisfied that no native flora will be damaged by the introduction of *Anthonomus kuscheli* and *Berberidicola exaratus*.



- 3.15 Outdoor field trials of viable host plants were conducted in Chile. Test plants were selected using a standard centrifugal phylogenetic method (Briese 2005), where only phylogenetically closely related plants are tested.
- 3.16 Testing showed that *A. kuscheli* feeds on the leaves and buds of *B. darwinii* and other species in the genus *Berberis* (see Table 1 of the application). No plants outside the genus were attacked. New generations of *A. kuscheli* developed on *B. darwinii* and *B. thunbergii*, but it could not complete its life cycle on any other species in the genus *Berberis*.
- 3.17 Testing showed that *B. exaratus* was able to complete its development in seven of the eight species of *Berberis* tested (see Table 2 of the application). No plants outside the genus showed larval development, indicating that *B. exaratus* cannot complete its development on plants outside the *Berberis* genus.
- 3.18 Tests were conducted in containment in New Zealand to obtain additional information on the effects of each weevil on New Zealand native plant species and to support the Chilean results.
- 3.19 These additional tests showed that *A. kuscheli* will not attack any New Zealand native plants. However, it may damage the foliage and buds of ornamental species of *Berberis*; although *B. thunbergii* was again the only species that *A. kuscheli* could complete its development on.
- 3.20 Testing showed that *B. exaratus* will not attack any New Zealand native plants. However, the foliage and buds of ornamental species of *Berberis* may be damaged.
- 3.21 After assessing all the information, the Committee is satisfied that *Anthonomus kuscheli* and *Berberidicola exaratus* will not cause any significant deterioration of natural habitats.

Consideration of section 36(c) of the Act

- 3.22 The Committee considered whether *Anthonomus kuscheli* and *Berberidicola exaratus* are likely to cause any significant adverse effects on human health and safety.
- 3.23 The applicant, submitters and the EPA staff report did not identify any effects on human health and safety. After assessing all the information, the Committee did not identify any mechanisms by which this could happen, and is satisfied that *Anthonomus kuscheli* and *Berberidicola exaratus* will not cause any significant adverse effects on human health and safety.

Consideration of section 36(d) of the Act

- 3.24 The Committee considered whether *Anthonomus kuscheli* and *Berberidicola exaratus* are likely to cause any significant adverse effect to New Zealand's inherent genetic diversity.



- 3.25 The Committee is satisfied with the information on the taxonomy of *Anthonomus kuscheli* and *Berberidicola exaratus* provided in the EPA staff report. The Committee considers that there are no closely related native weevils in New Zealand and that neither *Anthonomus kuscheli* nor *Berberidicola exaratus* will be able to interbreed with any native weevils.
- 3.26 After assessing all the information, the Committee is satisfied that *Anthonomus kuscheli* and *Berberidicola exaratus* will not cause any significant adverse effects on New Zealand's inherent genetic diversity.

Consideration of section 36(e) of the Act

- 3.27 The Committee considered whether *Anthonomus kuscheli* and *Berberidicola exaratus* are likely to cause disease, be parasitic, or become a vector for human, animal, or plant disease.
- 3.28 The applicant, submitters and the EPA staff report did not identify any potential for *Anthonomus kuscheli* or *Berberidicola exaratus* to cause disease, be parasitic, or become a vector for human, animal, or plant disease. After assessing all the information, the Committee is satisfied that *Anthonomus kuscheli* and *Berberidicola exaratus* will not cause disease, or become a vector for human, animal, or plant disease.

Conclusion on the Minimum Standards

- 3.29 The Committee is satisfied that *A. kuscheli* and *B. exaratus* are unlikely to cause significant displacement of other organisms, cause significant deterioration of natural habitats, have any significant adverse effects on human health and safety, have a significant adverse effects on New Zealand's inherent genetic diversity and are unlikely to cause disease, be parasitic, or become a vector for human, animal, or plant disease.
- 3.30 After assessing all the information, the Committee considers that both *Anthonomus kuscheli* and *Berberidicola exaratus* meet the minimum standards, as specified in section 38(a)(i) of the Act.

4. The ability to establish an undesirable self-sustaining population and the ease of eradication

- 4.1 Section 37 of the Act requires the Committee 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.
- 4.2 The Committee considers that *Anthonomus kuscheli* and *Berberidicola exaratus* would establish self-sustaining populations and that such populations would not be undesirable as that it is the intention of



the release.

- 4.3 The Committee noted that the eradication of such a population would be very difficult, but that this is unlikely to be an objective. It is expected that populations of *Anthonomus kuscheli* and *Berberidicola exaratus* will be restricted to environments where Darwin's barberry (or other members of the genus *Berberis*) is present.

5. Effects of any inseparable organism

- 5.1 No inseparable organisms associated with *Anthonomus kuscheli* and *Berberidicola exaratus* were identified.

6. Assessment of adverse effects

- 6.1 The Committee considered the potential adverse effects of the organism, including any risks and costs associated with the release of the organism, on human health and safety, the environment, society and communities, Māori culture and traditions, the principles of the Treaty of Waitangi (Te Tiriti o Waitangi), and the market economy.
- 6.2 After assessing all the information, the Committee did not identify any significant adverse effects on human health and safety, or on the market economy from the release of *Anthonomus kuscheli* and *Berberidicola exaratus*.
- 6.3 The Committee considered any environmental effects in addition to those covered under the minimum standards. NGIA did raise a concern regarding the effect of *Anthonomus kuscheli* and *Berberidicola exaratus* on ornamental members of the *Berberis* genus, but their concerns were addressed by the applicant prior to the hearing, such that they withdrew their opposition to the application and did not attend the hearing.
- 6.4 After assessing all the information, the Committee did not identify any adverse effects on the environment from the release of *Anthonomus kuscheli* and *Berberidicola exaratus*.
- 6.5 The Committee identified a potential impact on *Berberis* sp. valued by home gardeners and plant lovers. However, the Committee considers that people can use pesticides where weevils are a problem and that the weevils will not kill or harm the actual plants themselves, as their only significant



negative effect is on flowers and seed production.

- 6.6 After assessing all the information, the Committee did not identify any adverse effects on society and communities from the release of *Anthonomus kuscheli* and *Berberidicola exaratus*.

Effects on Māori and their culture and traditions and the principles of the Treaty of Waitangi (Te Tiriti o Waitangi)

- 6.7 The Committee took into account the possible effects on the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, valued flora and fauna, and other taonga, and the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).
- 6.8 After assessing all the information, the Committee did not identify any adverse effects on the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, valued flora and fauna, and other taonga, as there will be no impacts on native flora or fauna.
- 6.9 The Committee notes that Landcare Research provides this information in their quarterly report “*Biological Control of Weeds*”, which is available through the Landcare website.
- 6.10 Given the absence of identified effects to the outcomes of significance to iwi/Māori (as outlined in the Protocol ‘*Incorporating Māori perspectives in HSNO Act decision making*’) the Committee considers the application to be broadly consistent with the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

Conclusion

- 6.11 After considering the information, the Committee did not identify any adverse effects, risks or costs from the release of *Anthonomus kuscheli* and *Berberidicola exaratus*. The Committee therefore considers the risks to be negligible. Since the Committee did not identify any adverse effects, the Committee was not required to take into account the probability of occurrence or magnitude of any adverse effects.
- 6.12 In addition, the Committee noted that New Zealand has no international obligations relevant to the application.

7. Assessment of positive effects

- 7.1 The Committee considered the potential positive effects (including benefits) of the organism on human health and safety, the environment, society and community, relevant aspects of Māori culture and



traditions, and the market economy.

- 7.2 The Committee noted the benefits outlined in the EPA staff report and considered that there may be additional benefits, as outlined below.
- 7.3 Cliff Mason suggested that there is “*very little evidence that the proposed introduction will result in anything valuable*”. He contended in his oral submission that “*there is very little theoretical evidence that biological control agents are able to stop that kind of spread and production of outliers colonising new areas, and the references provided by the applicant report exactly that contention... There isn’t much evidence about whether biological control agents that reduce the number of seeds produced by the target weed can actually reduce the spread if there’s a major vector like birds carting the seeds around... We don’t really know whether reduction of these seeds will actually reduce those outliers*”.
- 7.4 Quentin Paynter responded that in his opinion “*we expect reducing the seed set to have an effect on the dispersal rate of the weed purely because the number of propagules is crucial in terms of weed dispersal into an area where it doesn’t already occur*”.
- 7.5 Cliff Mason questioned whether the agents would be “*synergistic*” or whether they might “*interfere with each other because one attacks the flowers, which presumably reduces the number of fruits available to the other*”.
- 7.6 In response, the Committee noted that using both weevils is expected to have an additive effect. Lynley Hayes observed that “*we don’t expect that to be the case. These agents co-evolved together*” and Quentin Paynter clarified the example of *Trichapion lativentre* and *Rhyssomatus marginatus* on *Sesbania punicea* in South Africa, where “*the effect of the two agents is complimentary*”. Richard Hill added the New Zealand-specific example of the introduction of gorse seed weevil and gorse pod moth, and claimed that introducing two agents has “*significantly reduced seed set in gorse*”.
- 7.7 Ann Thompson commented that “*the release of these weevils will potentially provide economic and environmental benefits by allowing greater pasture productivity*”. She added that “*this application aligns with our policy on research, science and technology, in that we encourage the Government to provide greater support for science as a means of building resilience within our economy*”.
- 7.8 Bev Abbott reported that members of the Wellington Botanical Society, a collective of about 280 community and professional botanists, were sufficiently concerned, and at times “*despairing about the state of Darwin’s barberry*” to engage with this application. She spoke in detail about the volunteer commitment to removing barberry from native reserves in the Wellington region. “*It’s very difficult for*



any organisation to go in there and try and control it. Anything that's actually going to reduce the challenge that's going to be faced by current and future generations in dealing with weeds like Darwin's barberry has to be considered". She mentioned her personal experience with Darwin's barberry: "I looked at a plant of Darwin's barberry in its full splendour growing on a cliff face in Otari Wiltons bush, and [I was] thinking about the logistics of somebody trying to get in there to manage that outlier and to remove it so that it doesn't continue to plop seedling through Otari Wiltons bush, which is one of our national treasures as a collection of indigenous plants". In conclusion, she commented that "it wasn't easy for the society to come out and say yes we think this is time for biocontrol. We have members who would share some of Cliff's [Cliff Mason's] concerns about introducing more foreign species into New Zealand, but we think that the Darwin's barberry is a case where it is now time to start looking at new tools to deal with this pest".

- 7.9 The Committee considered the information from GWRC about "just what it does cost rate payers and tax payers to deal with this pest at the moment". Bev Abbott commented that "if you start looking at what those costs could become [in the future], if we can get a new tool that works successfully, then that would be wonderful news".
- 7.10 The Committee considered the evidence provided in support by Richard Grimmett that intensive animal control needs to be associated with weed management. Barberry creates a habitat for rabbits and goats, so replanting of native flora is often hampered unless it is accompanied with animal control. He said that the GRWC invests \$120-140K p/a in biocontrol and that "30% of the budget is just on animal control". Barberry "regrowth rate is prolific, often with mats of seedlings coming up very quickly, so lines have to be re-cut or re-treated". These add to ongoing maintenance costs, and maintenance and eradication of Darwin's barberry is "energy sapping and dangerous". "If these agents are working on barberry.... in terms of our maintenance program...if the amount of seed that is dropped... on those cut lines and tracks in the park is greatly reduced, the amount of time spent in there goes into extending our pest control in other areas".
- 7.11 He added that control of barberry using agrichemicals is costly and damages native plants adjacent to Darwin's barberry stands. To avoid that, removal involves cutting the stems and painting on an herbicide. It takes many years to achieve any degree of control and is very labour intensive. "Once we've cleared sites, it [Darwin's barberry] rapidly regrows from seed in the soil". However, Darwin's barberry does not have a big seed bank, and seeds only remain viable for a year or so after they are dropped.
- 7.12 Mr Grimmett commented that "in terms of the individual plant, [it] only has a finite life. If we've got



indigenous species that have got 500 thousand years worth of restoration processes to take on, then I think it'll win out in the end. The approach we [at the council] take is a 500 year vision. It's taken hundreds of years to get here and it's going to take beyond our lifetime to retract". The Committee was impressed by the foresight of this vision, and considered that the benefits associated with the release of *Anthonomus kuscheli* and *Berberidicola exaratus* should be assumed to be achievable in the long-term foreseeable future.

7.13 Mr Grimmatt also informed the Committee on the impact on biodiversity from Darwin's barberry and said that for the GWRC "*Biocontrol for Darwin's barberry...is a very good option for this species to reduce the rate of spread and contain it within its current distribution range. Because of the steep terrain and normally unproductive nature of some of that steep terrain, biocontrol is the only realistic control option we've got on a lot of that steep country. We've only got finite resources so we deem it to be a very good investment to invest in long term options such as biocontrol, and have a long multidecades view on it for it to come to fruition*".

7.14 The Committee considered the information provided by Lynley Hayes that this is the early stage of range expansion for Darwin's barberry, and that this application this is a pre-emptive strike. Lynley Hayes commented that "*Darwin's barberry could be another gorse in 100 years*". The Committee is satisfied that by striking early, range expansion of Darwin's barberry may be slowed, or even halted.

Conclusion

7.15 After considering the information, the Committee considered that there are benefits to be gained from the release *Anthonomus kuscheli* and *Berberidicola exaratus*. The Committee is satisfied that these benefits will be achieved in the foreseeable future and will be non-negligible.

8. Achieving the purpose of the Act

8.1 The purpose of the Act is to protect the environment, and the health and safety of people and communities, by preventing or managing the adverse effects of hazardous substances and new organisms (section 4 of the Act).

8.2 The Committee took into account the following matters when considering the application in order to achieve the purpose of the Act:

- The sustainability of all native and valued introduced flora and fauna;
- The intrinsic value of ecosystems;
- Public health;



- The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, valued flora and fauna, and other taonga;
- The economic and related benefits and costs of using a particular hazardous substance or new organism;
- New Zealand's international obligations;
- The need for caution in managing adverse effects where there is scientific and technical uncertainty about those effects; and
- The principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

8.3 The Committee is satisfied that this decision is consistent with the purpose of the Act and the above principles and matters. Any substantive issues arising from the legislative criteria and issues raised by submitters have been discussed in the preceding sections of this decision.

9. Evaluation and weighing of positive and adverse effects

9.1 The Committee took into account all the effects of *Anthonomus kuscheli* and *Berberidicola exaratus*, and concluded that they pose negligible risks, and that the benefits are non-negligible. It is therefore evident that the positive effects of releasing *Anthonomus kuscheli* and *Berberidicola exaratus* outweigh the adverse effects.

10. Decision

10.1 After reviewing all of the information contained in the application, the Committee was satisfied that the application met the requirements of section 34 of the Act. In any event, in accordance with section 59(3)(a)(ii), the Committee waives any information requirement that has not been met as requested by the applicant in its application.

10.2 The Committee considered that the threshold for approval under section 38 of the Act had been met. The Committee has concluded that the organisms meet the minimum standards set out in section 36 of the Act and that the positive effects of the organisms outweigh the adverse effects of the organisms, taking into account all of the following:

- all the effects of the organisms;
- the matters in section 37 of the Act;
- the relevant matters in Part 2 of the Act; and
- the Methodology.



- 10.3 The Committee decided to exercise its discretion and **approve** the release of *Anthonomus kuscheli* and *Berberidicola exaratus* under section 38(1)(a) of the Act. The Committee noted that in accordance with section 38(2) of the Act, the approval has been granted without controls.
- 10.4 **The Committee noted that under section 38(3) of the Act, if *Anthonomus kuscheli* and *Berberidicola exaratus* have not been released within five years of the date of this decision, this approval for release 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.**
- 10.5 The Committee has waived the requirement under section 38(4) of the Act, to notify the Committee of the release of *Anthonomus kuscheli* and *Berberidicola exaratus*.
- 10.6 **The Committee recommended that all people releasing the organisms notify Ngāi Tahu. We strongly support ongoing communication between regional councils, industry bodies and other community groups associated with biocontrol programmes.**
- 10.7 The Committee would like to thank all people who provided information that has been used in making this decision.

Signed

3 October 2012

Dr Shaun Ogilvie
Chair, Decision Making Committee
Environmental Protection Authority

Date

Approval code: NOR100068, NOR100069



Approval numbers for the organisms in application APP201151

Organism	Approval code
<i>Anthonomus kuscheli</i>	NOR100069
<i>Berberidicola exaratus</i>	NOR100068

