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**Any known impact on human health?**

*It is described as being poisonous to livestock, and there is evidence in the medical literature for poisoning in cattle (MacLeod & Greig 1978). It is used as a herbal medicine against worms, but extracts from this plant are said to cause liver damage and blindness in overdose.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*Currently sold, this species is spreading and invading native forest. Native alternatives are readily available for ornamental but not necessarily alternative medicine uses.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*Currently sold so likely to be objections from sellers. Uncertain how significant a weed this is, and already well established - not sure how significant human spread is compared to natural spread.*

**Include in NPPA?**

*YES - low priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Eccremocarpus scaber***

**Common names**

*Chilean glory creeper, Chilean glory vine, glory vine, Chilean glory flower*

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*yes*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*yes. North and South islands, local and scattered. Flora IV. Especially common in south Canterbury.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Yes, especially in lowland/coastal sites. Mainly recorded from near cultivation and therefore often established among other naturalised and cultivated plants.*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*reject 20*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*should be rejected as seems to becoming more common.*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.  
*Sold in NZ. I have seen it in nurseries.*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

1

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant  
*Attractive cultivated plant.*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)  
Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?  
*Lowland and coastal NZ.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

—

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*Nil*

**Any known impact on human health?**

*No known harm*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*First recorded as naturalised in 1940; could become more common and abundant in the future.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*Forming numerous large populations in some areas, not particularly common in native ecosystems.*

**Include in NPPA?**

*YES - medium priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

## Notes from TAG meeting

Nil

# *Egeria densa*

## Common names

*Egeria*, *Oxygen weed*, *Brazilian elodea*

## Synonyms

*Anacharis densa*, *Elodea densa*, *Philotria densa*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, widespread throughout North Island, abundant in Waikato and Manawatu catchments. South Island sites in vicinity of Blenheim and scattered ponds in Canterbury.*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Yes, submerged species invasive throughout New Zealand range*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals).

*Extremely invasive, disrupts hydro-electric power generation, drainage, irrigation and recreational activities. Displaces other vegetation from much of submerged range (to ~6 m).*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*18 (23 P&C) (Reject)                      AWRAM (64)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Was sold in New Zealand until 1982 (Noxious Plant Act 1978). Possibly still spread by hobbyists.*

## Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level

—

## NZ Nursery register 2004/05 genus level only

—

## NZ Nursery Register 1997/98 genus level only

—

## NZ Nursery register 1991/92 genus level only

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Commonly referred to in international aquarium literature as an oxygenator plant for ponds/aquaria.*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)  
Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?  
*Widespread in many North Island areas, absent from most of South Island. Could be problematic in most nutrient-rich water bodies in New Zealand.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)  
*Difficult to control, both through lack of effective methods and its aquatic habitat.*

**National eradication i.e. DOC, MAF**

–

**RPMS YES/NO refer to master document**  
Yes

**NPPA YES/NO**  
Yes

**Notifiable organism**  
No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**  
*CCC/Ecan weed-led - Avon R.*

**Any known impact on human health?**  
*No known harm*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)  
*Only spread by human activities, either deliberate or accidental (e.g. contaminated nets, boats and drainage machinery). NPPA inclusion reduces long-distance spread.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.  
*None, less invasive submerged plants available*

**Include in NPPA?**  
*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**  
*Nil*

**Notes from TAG meeting**  
*Nil*

## ***Ehrharta villosa***

**Common names**  
*Pyp grass*

**Synonyms**  
*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)  
*Yes, p43, Vol V*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Fully naturalised. N.: Wanganui (Turakina Beach); Hawke's Bay (Taikura near Blackhead Point).*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Originally planted at Turakina Beach in the early 1960s as a sand dune binder. A note on AK 216398 A. E. Esler Turakina Beach, 1969, indicated that it was showing a tendency to increase. Harrington (1993, nzpps) reports it is smothering dune communities at Turakina beach. Environmental: Replaces mosy native species e.g pingao and spinifex in sand dune habitats. Economic: Not known. Social: Unkown. Cultural: Unknown. Health; Unknown.*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*Reject (9)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*No suppliers in RHS Plant Finder*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Grading?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Limited current distribution. Two map refs plotted. Sand dunes and sandy places. Potential unknown.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*haloxyfop (gallant) provides good control (Harrington 1998). Glyphosate also OK.*

**National eradication i.e. DOC, MAF**

*yes*

**RPMS YES/NO refer to master document**

*Yes*

**NPPA YES/NO**

*Yes*

**Notifiable organism**

No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*DoC weed-led*

**Any known impact on human health?**

*No known harm*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*WRA = 9 (Reject). Whilst it has no ornamental value and so very unlikely to be propagated and distributed for this purpose, its historical use for dune stabilisation indicates a potential future use. It has apparently not spread since 1969. Inclusion will support DOC's weed-led approach to controlling (if not eradicating) this species.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*Easily controlled with herbicides.*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Eichhornia crassipes***

**Common names**

*Water hyacinth*

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, formerly widespread in northern North Island, with scattered sites south to Wellington, also Tasman District in South Island*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Yes, invasive free-floating species throughout New Zealand range*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Extremely invasive. In New Zealand this plant has completely displaced other vegetation, impacting on water quality, drainage and recreational activities.*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*17 (16 DC) (Reject)*

*AWRAM (67)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.  
*Despite being banned from sale and distribution since 1979 this plant is still apparently distributed by hobbyists (usually for ornamental fish breeding) with several new sites reported annually.*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Commonly referred to in international aquarium/pond plant literature as a showy ornamental pond plant and ideal spawning plant (masses of fine roots provide shelter from predators)*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradients?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Most sites now eradicated. Could be problematic in most nutrient-rich water bodies in northern North Island and warmer parts of the South Island.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*Relatively easy to kill plants, but seeds long-lived (up to 15 years) and some methods not always acceptable in aquatic situations.*

**National eradication i.e. DOC, MAF**

*yes*

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*Yes*

**Notifiable organism**

*notifiable*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*Nil*

**Any known impact on human health?**

*No known harm*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*Mostly if not exclusively spread by deliberate human introduction. Long running national eradication programme.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

None

**Include in NPPA?**

YES - high priority

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

Nil

**Notes from TAG meeting**

Nil

## ***Eomecon chionantha***

**Common names**

Snow poppy, poppy of the dawn, Chinese bloodrot

**Synonyms**

*Eomecon chionanthum*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

yes

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

yes (Heenan *et al* 2002). Spread by rhizomes, especially from garden waste dumping and possibly by seed.

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

n/a

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

Described in proposal as "extremely invasive groundcover" although I haven't seen the species in the wild and am uncertain how it compares to other invasive groundcovers such as *tradescantia*. Current sites are spreading into native bush (Heenan *et al* 2002). Impacts very uncertain as is typical of newly naturalised species. Following website promoting it as a garden plant in Britain notes invasive tendencies, <http://www.worldplants.com/eomecon.htm> but not reported as a weed anywhere else in the world (Randall 2002)

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

reject (8)

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

not a lot of information on this species

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report. Listed in Gaddum and the proposal quotes it as present in NZ Nursery Register 2003 (monospecific genus).

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

6

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

## NZ Nursery register 1991/92 genus level only

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant  
*Listed in NZ published and distributed books such as Redgrove 1995*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)  
Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?  
*Wild distribution is currently very restricted, but cultivated throughout NZ and seems likely to naturalise more widely.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)  
*Reported in proposal as so far proving difficult to control.*

## National eradication i.e. DOC, MAF

—

**RPMS YES/NO refer to master document**  
Yes

**NPPA YES/NO**  
No

**Notifiable organism**  
No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**  
*Listed as a "regional surveillnace pest" on Bay of Plenty (proposer of this species and the area where this has naturalised)*

**Any known impact on human health?**  
*No known harm*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)  
*Newly naturalised (1st collection in 1997) species showing indications that it is likely to become a problem in future. Although probably quite well distributed in cultivation (a number of nurseries sell it) not yet widely established in the wild. Human spread (either deliberate sale and propoagation or garden waste dumping) main way that this species is likely to reach new areas.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.  
*Uncertainty over impacts and how invasive this species is (typical of newly naturalised species). Likely to be some objections from industry as this species is sold.*

**Include in NPPA?**  
*YES - medium priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**  
*I'm somewhat uncertain about this and if anyone has more information on this species this would be very useful.*

**Notes from TAG meeting**  
*Sufficient information available to include on Accord, but it would be useful to gather further information for the future*

# *Equisetum arvense*

## Common names

*Field horsetail*

## Synonyms

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*yes*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Yes, especially in south NI and Buller*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Yes, forms sometimes dense colonies on river banks, obliterating other vegetation. Toxic to livestock, esp horsrs.*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*DOC weed score 21, P & C wra score 19 'reject', PAW wra score 8 'reject', my score 24 'reject'.*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*OK*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Have seen it in herb gardens in Rotorua. Saw it discussed in an early Maggie's Garden Show in a Taihape garden, growing in shingle that came from the Rangitikei river.*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Could become more widely distributed on river and stream banks and in wet paddocks and natural areas*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*Hard as hell, selective herbicides, asphalt and concrete don't stop it.*

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

Yes

**NPPA YES/NO**

Yes

**Notifiable organism**

No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

Nil

**Any known impact on human health?**

*Equisetum spp. are rich in thiaminase, an enzyme that destroys thiamine, an essential amino acid. Only monogastric animals like horses are poisoned, and the animals become increasingly unthrifty and have difficulty breathing. These plants also contain nicotin (an alkaloid), so the entire plant is toxic (the roots and stem base are most toxic), also to humans if consumed in large quantities.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*Limited distribution, hard or impossible to kill, valuable to and distributed by herbalists. Considered weedy in BC, noxious in all Australian states, minor weed of crops in many NH countries.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*Grown and used by herbalists as a remedy and a pot scourer, can be used as an indicator of gold in the soil, not yet a problem in NZ, may never become one.*

**Include in NPPA?**

YES - medium priority

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

Nil

**Notes from TAG meeting**

Nil

## ***Equisetum hyemale***

**Common names**

*Rough horsetail*

**Synonyms**

Nil

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

yes

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Localized in Canterbury at least. Data from other regions lacking.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)  
*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.  
*Potential to form tall dense masses in wetland and damp open places*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.  
*reject (22)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)  
*Reflects its weediness in aquatic habitats*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.  
*Herbarium specimens in CHR relate to gardens, and sold in at least one nursery*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**  
*1*

**NZ Nursery register 2004/05 genus level only**  
—

**NZ Nursery Register 1997/98 genus level only**  
—

**NZ Nursery register 1991/92 genus level only**  
—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant  
*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)  
Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?  
*Very localised, but given the abundance of its congener, it would probably have widespread potential in wetlands*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)  
*All Equisetum spp. are difficult to control with chemicals and almost impossible to remove manually*

**National eradication i.e. DOC, MAF**  
—

**RPMS YES/NO refer to master document**  
—

**NPPA YES/NO**  
*Yes*

**Notifiable organism**  
*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**  
*Nil*

**Any known impact on human health?**

*Equisetum spp.* are rich in thiaminase, an enzyme that destroys thiamine, an essential amino acid. Only monogastric animals like horses are poisoned, and the animals become increasingly unthrifty and have difficulty breathing. These plants also contain nicotine (an alkaloid), so the entire plant is toxic (the roots and stem base are most toxic), also to humans if consumed in large quantities.

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*Probably spread almost entirely by humans and considering its potential impact there are very strong reasons for including it.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*None other than its potential popularity*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Equisetum spp. (all)***

**Common names**

*Horsetail*

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, one species*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Yes, one sp., other spp. have potential to grow here, as other spp cosmopolitan in NH.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Yes, several of the 25 species are described overseas as 'invasive' in certain habitats.*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*Hard to do for all species, but let's assume it's similar to *E. arvense*.*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*OK*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gratings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Three of more of the species have the potential to establish and thrive in NZ.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*As for E. arvense*

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*Nil*

**Any known impact on human health?**

*Equisetum spp. are rich in thiaminase, an enzyme that destroys thiamine, an essential amino acid. Only monogastric animals like horses are poisoned, and the animals become increasingly unthrifty and have difficulty breathing. These plants also contain nicotin (an alkaloid), so the entire plant is toxic (the roots and stem base are most toxic), also to humans if consumed in large quantities.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*As for E. arvense. Other species equally hard to control and have potential to be equally invasive.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*Only one species here so far. Not terribly serious as a weed. Attractive to grow as a curiosity and useful in some garden environments and in floral arrangements.*

**Include in NPPA?**

*YES - medium priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

Three species reported in NZ, 2 currently NPPA and UO, 3rd reported as eradicated. Universities have held live plants in the past (I remember being shown them when I was a student) so there may be species in cultivation here that have not been reported.

#### Notes from TAG meeting

Limited species so include the 3 species in NZ

## ***Eragrostis curvula***

#### Common names

*African love grass*

#### Synonyms

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, p528, Vol V*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Fully naturalised. N.: scattered and local; S.: Canterbury (Christchurch), North Otago (Kurow), Central Otago (Ophir, Wanaka-Cromwell Rd, Earnsclough); Three Kings Is.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Some NZ records are of escapes from experimental plots. This plant can invade degraded pastures and disturbed native grasslands. It is naturalised in a large number of locations on the Australian mainland and is found in all States and Territories except for the Northern Territory and the Australian Capital Territory.*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*Reject (18)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant  
*35 suppliers of curvula plus 17 suppliers of curvula "Totnes Burgundy" in RHS Plant Finder (although 151 suppliers of other B species. J. A DUKE (1983) at Purdue Unit, considered it a warm-season bunchgrass with good growth in spring and autumn, used fresh and as hay, and recommended for leys with alfalfa in drier farming areas. In South Africa and adjacent territories, it is valued for ease of establishment, reasonable yields, and palatability. However, in countries where it has been adopted, it is often regarded as inferior to the best grazing grasses and has not spread much beyond experimental areas. It is considered excellent for protecting terraces and for grassing water channels; and is valuable for erosion control. In Lesotho, it is used to make baskets, brooms, hats, ropes, and candles, used in funeral ritual, as a charm, and eaten as a grain (Duke and Wain, 1981).*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)  
Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?  
*Widely distributed. 2 map refs in both SI and NI plotted. Roadsides, in sandy soil, or on banks, depleted tussock grassland, stony flats and waste land. Potential unknown.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)  
*Tetrapion (2.25 and 3.00 kg/ha a.i.) was the most effective herbicide in killing E. curvula and promoting P. clandestinum in experiments 1 and 2, but, in experiment 3, glyphosate and 2,2-DPA were equally effective in killing E. curvula at 3 (glyphosate) and 2 (2,2-DPA) of the 4 application times.*

**National eradication i.e. DOC, MAF**

–

**RPMS YES/NO refer to master document**  
Yes

**NPPA YES/NO**  
Yes

**Notifiable organism**  
No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**  
*Nil*

**Any known impact on human health?**  
*It is said to be non-toxic, but the sap of Eragrostis spp. can be irritant to human skin, and may cause contact dermatitis.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)  
*WRA=18 (Reject). High ornamental value judging from presence in the European nursery trade. While there is no proposal for its inclusion, this species has high potential as a future ornamental grass for sale and distribution in NZ which could greatly expand its presently limited distribution.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.  
*none*

**Include in NPPA?**  
*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**  
*Nil*

**Notes from TAG meeting**  
*Nil*

# *Erica lusitanica*

## Common names

*Spanish heath*

## Synonyms

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, p612, Vol V*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Fully naturalised. N.; S.: abundant and widespread in many parts from the Wangaroa area (N. Auckland) to Bluff (Southland), especially in areas with moderate to fairly high rainfall.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Economic: Pastoral production loss, particularly on poorer acid soils. Environmental: Alters succession back to natives. Social: Not known. Health: Not known. Cultural: Not known.*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*Reject (18)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

## Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level

—

## NZ Nursery register 2004/05 genus level only

*80*

## NZ Nursery Register 1997/98 genus level only

*77*

## NZ Nursery register 1991/92 genus level only

*65*

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*30 suppliers in total in RHS PF; 6 of E. lusitanica, 9 of E.I 'George Hunt', 5 of E.I 'Sheffield Park', 12 of E.I x E. veitchii 'Exeter' and 4 of E.I x E. veitchii 'Pink Joy'.*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradients?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Widely spread from Southland to N. Auckland. Hillside pastures, scrub and grassland, also in open disturbed habitats such as old landslips, railway banks and roadsides, from near sea level to c. 1000 m. Potential unknown.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

—

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

Yes

**NPPA YES/NO**

No

**Notifiable organism**

No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*DoC weed-led*

**Any known impact on human health?**

*No known harm.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*WRA=18 (Reject). Inclusion may support DOC's weed-led programme of control and ARC's "ban-from-sale".*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*Already a very wide spread and abundant spp in NZ, dispersing naturally by a variety of mechanisms.*

*Preventing sale and distribution now is possibly unlikely to have any useful effect in stemming the future spread and impacts of this species.*

**Include in NPPA?**

*YES - low priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Erigeron karvinskianus***

**Common names**

*Mexican daisy*

**Synonyms**

*Erigeron mucronatus, Erigeron "Profusion"*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*yes*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Yes. North and South islands. Throughout, common, abundant, aggressive.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)  
*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Yes. Substantial colonisation of open and/or rocky habitats. A serious conservation and amenity horticultural weed.*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*reject 23*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*definite rejection, surprised that this wasn't a higher score!!*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.  
*Sold in nurseries in the past.*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

*57*

**NZ Nursery register 1991/92 genus level only**

*41*

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Attractive plant. Probably still distributed by passing amongst gardeners.*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradients?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*potentially widespread in lowland up montane habitats throughout NZ*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*difficult since it produces abundant seed and can be wind dispersed. Can be sprayed and hand weeded.*

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

*Yes*

**NPPA YES/NO**

*Yes*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*Nil*

**Any known impact on human health?**

*It is suggested to be non-toxic, but it seems that most species in the genus (if not all) contain irritant compounds that may cause dermatitis.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*Aggressive colonising weed of open and disturbed habitats. Smothers other low growing vegetation.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*None.*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Euonymus japonicus***

**Common names**

*Japanese spindle tree*

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*YES*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*YES - Flora IV: Nth Is - well est in Auckland City, also collected from Levin, Pukerua Bay (waste places, scrubland). 22 voucher specimens of naturalised material in Auckland Herbarium - oldest 1970 (AK 250341).*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

.

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*YES - CONSERVATION VALUES: invades forest margins, disturbed and secondary forest and shrubland, coastal scrub and forest, cliffs and sand dunes on the mainland and on offshore islands*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*Reject (21) NB: Unsure re allelopathic effects or self-compatibility.*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Quite a lot of information on impacts and invasiveness available about this *E. japonicus* in NZ. Reasonably confident about WRA score - apart from those things mentioned.*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Sold in the garden industry - desirable for its brightly coloured fruit and variegated foliage (cvs). Unsure of level of market now. Inclusion as a National Surveillance Plant Pest and in some RPMS may have limited its propagation and sale since the mid-1990s.*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

49

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradients?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Currently naturalised distribution confined to the NI - primarily in coastal and lowland areas. Potential to spread further than current extent.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*Physical Control (Hand pull seedlings, cut and stump treat larger trees); Chemical Control (Larger shrubs and trees - cut down and apply herbicide to cut stumps, e.g. glyphosate, metsulfuron-methyl, triclopyr - or spray whole tree/infestation). Biological Control: None available.*

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

Yes

**NPPA YES/NO**

No

**Notifiable organism**

No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*Overseas: naturalised and invasive in a number of north-western US states. Was included on the National Surveillance Plant Pest list and still included in some RPMS.*

**Any known impact on human health?**

*All *Euonymus* spp. are believed to be highly toxic due to the presence of glycosides. Ingestions of these plants, especially in large amounts, are expected to cause serious effects to major body organs such as the liver, heart or kidneys. All parts of these plants are poisonous and ingestion will lead to vomiting, diarrhea, weakness, chills, coma, and convulsions.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*WRA score high Reject (21). One member of a very weedy genus. Was included on the National Surveillance Plant Pest list. Toxic to humans and animals (Connor, 1977).*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*none*

**Include in NPPA?**

*YES - medium priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Ficus rubiginosa***

**Common names**

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

**YES**

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*YES - Flora IV: Nth Is - recently naturalised in Auckland City. GISD - Northland, Auckland, BoP, Hawke's Bay - established and spreading. NB - pollinating wasp present in NZ only for the last 20 yrs - so naturalisation only since that time. Distribution now increasing. 16 voucher specimens of naturalised material in Auckland Herbarium - oldest records 1983 (e.g. AK 165261).*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*YES - CONSERVATION VALUES: Strangler fig that grows into a long-lived and large tree (to c.15m). Can damage or kill its supporting plant. Can invade forests in any successional phase and regardless of disturbance (GISD). Persists in later succession vegetation. As a hemi-epiphyte - capable of invading forest or other native communities at any succession stage. Very drought tolerant. Major threat to native lava communities, e.g. Rangitoto Is [http://issg.appfa.auckland.ac.nz/database/species/reference\\_files/TURTID/Wotherspoon.pdf](http://issg.appfa.auckland.ac.nz/database/species/reference_files/TURTID/Wotherspoon.pdf) ECONOMIC IMPACTS: potentially a hugh lithophyte, so could inflict serious damage on urban infrastructure. (GISD)*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*Reject (17.5)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Large number of species in genus recognised as weedy/ invasive overseas including *Ficus benjamina*, *F. elastica*, *F. macrophylla*, *F. microcarpa* etc. (PIER database).*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Flora IV - cultivated as an ornamental/amenity and specimen tree. GISD - commonly cultivated in northern NZ.*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—  
**NZ Nursery register 2004/05 genus level only**

—  
**NZ Nursery Register 1997/98 genus level only**

—  
**NZ Nursery register 1991/92 genus level only**

—  
**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant  
*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)  
Gratings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?  
*Initially limited to cultivated individuals - but now pollinator is present beginning to naturalise and spread more widely. Potentially a major weed in warmer parts of NZ - including NI and northern SI regions (e.g. Northland, Auckland, Waikato, BoP, Hawke's Bay, Taranaki, Wairarapa, Wellington, Nelson/Marlborough, NW Nelson, West Coast).*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)  
*DIFFICULT TO CONTROL - as untreated or insufficiently treated trees able to resprout - also difficult to identify trees establishing as epiphytes in forest habitats. Physical Control (pull out seedlings & cut down larger trees); Chemical Control (fell trees and drill and inject herbicide into the trunk or paint the stump with herbicide). Biological Control: None available.*

**National eradication i.e. DOC, MAF**

—  
**RPMS YES/NO refer to master document**  
*Yes*

**NPPA YES/NO**  
*Yes*

**Notifiable organism**  
*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**  
*NZ: DoC weed-led. ARC site-led control on regional park land. Was a National Surveillance Plant Pest and still included in some RPMS as a Surveillance Pest Plant.*

**Any known impact on human health?**  
*The sap of Ficus spp. can cause photodermatitis and eczema. Consequent skin pigmentation may last for many years.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)  
*WRA score Reject (17.5). One member of a very weedy genus. Prior to the arrival of F. rubiginosa's pollinating wasp Pleistodontes imperialis, about 20 years ago - no seed set in NZ. Seed can now be produced with planted trees acting as sources for invasion. Therefore important to prevent further sale and deliberate human-mediated spread of this species. Was included on the 'National Surveillance Plant Pest List' and therefore in a number of RPMS as a Surveillance Pest Plant - meaning sale of this plant has been either non-existent or at very low levels for over 10 years.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.  
*none*

**Include in NPPA?**

YES - medium priority

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

Likely to be little impact on the nursery industry of including this species. This species is most highly valuable in NZ as an ornamental/specimen tree particularly in parks and gardens, and in association with old settlements/buildings.

**Notes from TAG meeting**

Nil

## ***Fuchsia boliviana***

**Common names****Synonyms**

Nil

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

YES

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

YES - Flora IV - Nth Is - Bay of Islands, Auckland City, prob. Tauranga, Sth Is - Nelson (scrub & much modified forest around settlements). C. 12 voucher specimens of naturalised material in Auckland Herbarium - oldest record 1972 (AK 215868).

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

n/a

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

YES - CONSERVATION VALUES: Establishes along track and stream sides, forest margins, in disturbed and intact forest. Very shade tolerant. Able to disperse large distance from cultivated and naturalised individual via bird dispersal. Forms dense, tall thickets of up to c.2m tall.

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

Reject (10) NB Unsure of self-compatibility & amount of seed produced

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

Not able to find much information about this species becoming an environmental weed in other countries and limited information from NZ. No personal experience of this plant other than in cultivated situations.

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

Sold in the garden industry mainly as *F. b. var. luxurians*. Flora IV - commonly cultivated in warmer parts of NZ, esp. north of Volcanic Plateau.

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

1

**NZ Nursery register 2004/05 genus level only**

4

**NZ Nursery Register 1997/98 genus level only**

4

**NZ Nursery register 1991/92 genus level only**

1

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*NZ: Garden dumping has resulted in some spread (AK herbarium records).*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Known to have naturalised in warm northern NI regions. Likely able to spread far more widely, with hard frosts probably the main limiting factor.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*NB control methods for F. magellanica from Australia which I am assuming will be applicable: Physical Control (hand pull small plants and seedlings); Chemical Control (Either foliar spray or cut and paint stumps cut close to the ground with a Glyphosate-based herbicide) <http://www.bushcare.tas.gov.au/care/wdspecies.htm#fuchsia>*

**National eradication i.e. DOC, MAF**

–

**RPMS YES/NO refer to master document**

–

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*NZ: DoC weed-led*

**Any known impact on human health?**

*No known harm*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*WRA score Reject (10). Risk assessment score not that high and information found on extent of impact here limited. Naturalisation relatively recent - but high seed production and bird dispersal of seed, ability to grow in low light, and alter understorey composition etc - all suggest species should be included on the NPPA.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*none*

**Include in NPPA?**

*YES - medium priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Does not appear to be that widely sold - so not significant impact on nursery industry. Also many other Fuchsia species available as alternatives.*

**Notes from TAG meeting**

*Nil*

# *Galeobdolon luteum*

## Common names

*aluminium plant, artillery plant*

## Synonyms

*Lamium galeobdolon, Galeobdolon argentatum*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

yes

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

yes (*FI NZ vol IV*). *Spreads vegetatively, conflicting reports on spread by seed.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Groundcover species forming thick mats preventing regeneration (ARC proposal)*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*reject (9)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*No listings for this species in catalogues, but has been known by other names so may have been listed under other names. Available on internet under synonym at <http://homepages.ihug.co.nz/~waitoka/plants/cold.html>*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Listed in NZ published and distributed gardening books such as Bryant 1994 and Bryant 1999 (under 2 different names).*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Widespread and relatively common species in the North and South Islands. Certainly not yet everywhere it could be (only reported naturalised in 1980s)*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*Fragments grow easily so physical control generally ineffective. Reported to be controlled with glyphosate although some different reports.*

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*Controlled in some DOC reserves on a site-led basis.*

**Any known impact on human health?**

*No known harm, although there is some anecdotal evidence that it may cause allergy on some people.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*Currently sold, invasive and spreading. Recent naturalisation (1980s) so at a relatively early stage of invasion. Limited ability to spread without human assistance so deliberate sale probably a significant pathway for spread.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*Not as invasive as some other smothering groundcover species (neither as vigorous or as shade tolerant in my experience), may be some objections from sellers.*

**Include in NPPA?**

*YES - medium priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Genista monspessulana***

**Common names**

*Montpellier broom, French broom*

**Synonyms**

*Teline monspessulana*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*yes*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

yes. North and South Islands. Flora IV. Note that there are a lot of plants that appear to intermediate between *G. monspessulana* and *G. stenopetala*. These may be hybrids or part of the range of natural variation of *G. monspessulana* - this issue needs to be investigated. (Possibly both species and hybrids should be on NPPA).

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)  
*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.  
*Yes. colonises disturbed areas, forest margins, scrub associations, and waterways.*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.  
*reject 22 and 14.5*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)  
*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.  
*Genus sold in nurseries. I have seen this species for sale in garden centres.*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

*48*

**NZ Nursery register 1991/92 genus level only**

*35*

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant  
*Attractive plant, with yellow flowers.*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)  
Gradients?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?  
*Has the potential to considerably expand its range and abundance.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)  
*spraying and handweeding.*

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*ARC Surveillance plant.*

**Any known impact on human health?**

*No known harm*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*Already well established but this species has the potential to become much more widespread and common. Therefore, its cultivation potential should be reduced by it being included on the NPPA.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*Perhaps too well established?*

**Include in NPPA?**

*YES - medium priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Includes a broad range of morphological variations that may represent hybrids with *genista stenopetallia*. Requires further work*

## ***Gunnera manicata***

**Common names**

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*yes*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Probably not, but too difficult to distinguish from *G.tinctoria**

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*Probably similar to *G.tinctoria*, i.e., widespread on moist colluviums*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Has potential to smother native species in the same way as *G.tinctoria**

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*insufficient information*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Widely sold by nurseries, even if under incorrect names.*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

7

**NZ Nursery register 2004/05 genus level only**

63

**NZ Nursery Register 1997/98 genus level only**

54

**NZ Nursery register 1991/92 genus level only**

19

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*It may not have yet naturalised but there is difficulty distinguishing it. Potential distribution may be widespread if it is like *G.tinctoria**

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*No specific data, but if it is like *G.tinctoria* it will be relatively easy to control with appropriate sprays. Its location on inaccessible habitats makes this problematical however.*

**National eradication i.e. DOC, MAF**

*No*

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*Nil*

**Any known impact on human health?**

*The leaf stalks are covered in stout prickles that can cause mechanical injury. Handling plant may also cause skin irritation or allergic reaction*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*The difficulty of distinguishing this species from *G.tinctoria* is reason alone to ban it, to avoid confusion and mislabeling*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*Only that this species and *G.tinctoria* are popular*

**Include in NPPA?**

*No*

If answering D or E, please note the reason for the uncertainty here. Any other comments here.

*Nil*

**Notes from TAG meeting**

*Difficulties with ID. Can be ID'd by a 'specialist'. Incorrect labelling. Refer to Steering Group. TAG comment - not naturalised, not recorded as weed, very difficult to ID at size sold, implementation problem, steering group decision but note TAG c*

## ***Gunnera tinctoria***

**Common names**

*Chilean rhubarb*

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*yes*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Yes, widespread in western Taranaki and Wanganui, scattered elsewhere in N.Is., and scattered in South Island, particularly on the West Coast*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Smothers native communities, including threatened species. Completely transforms the landscape. Ranges from sea level to the montane zone*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*reject (10)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Relatively low score reflects absence of noxious features and fact of being only an environmental weed*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Very widely sold*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

*24*

**NZ Nursery register 2004/05 genus level only**

*63*

**NZ Nursery Register 1997/98 genus level only**

*54*

**NZ Nursery register 1991/92 genus level only**

*19*

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant  
*Often seed at scholl fairs and the like.*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)  
Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?  
*Has a very wide range from Stewart Island to Northland. Limited mainly by suitable habitat of moist colluviums*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)  
*Adult plants and seedlings are relatively easy to control with appropriate sprays. Its location on inaccessible habitats makes this problematical however.*

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**  
Yes

**NPPA YES/NO**  
Yes

**Notifiable organism**  
No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**  
*DoC weed-led*

**Any known impact on human health?**  
*Leaves and stems are covered in rubbery prickles that can cause mechanical injury.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)  
*Natural dispersal appears to be rather slow except where suitable habitat is continuous, such as taranaki cliffs. Therefore human dispersal to find new loci are critical*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.  
*Popular garden plant.*

**Include in NPPA?**  
*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**  
*Nil*

**Notes from TAG meeting**  
*Nil*

## ***Gymnocoronis spilanthoides***

**Common names**  
*Senegal tea, temple plant, costata*

**Synonyms**  
*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, scattered garden sites in North and northern South Island.*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Yes, naturalised on Papakura Stream and Wairoa River (Auckland Region)*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Invasive in fertile wetlands, flowing and still waters, impacting biodiversity and promoting flooding.*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*15 (8 - P&C) (Reject) AWRAM 57*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Widely sold as an aquarium plant (as costata) and an ornamental pond plant, prior to gazettal as a noxious plant (1991).*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Few known occurrences. Could be problematic in most nutrient-rich water bodies in lowland New Zealand.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*Difficult to control, both through lack of effective methods and its aquatic habitat.*

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

*Yes*

**NPPA YES/NO**

*Yes*

**Notifiable organism**

No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

Nil

**Any known impact on human health?**

No known harm.

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*This plant would be desirable if available for sale and distribution. An attractive fast growing ornamental pond plant with scented white flowers attractive to butterflies, also suitable for aquarium culture as a submerged plant. Highly invasive promoting flooding.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*None, less invasive marginal plants available*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

Nil

**Notes from TAG meeting**

Nil

## ***Hedera helix subsp. helix and cultivars***

**Common names**

*English ivy*

**Synonyms**

*Hedera helix f. arborescens, H. helix f. minima, H. helix var. conglomerata, H. helix var. crenata, H. helix var. minima, H. helix var. taurica, H. petarum var. taurica, H. taurica. Possibly H. hibernica*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

yes

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*yes (Fl.NZ vol IV). Spread by seed (bird dispersed) and vegetative (either dumping of garden waste or deliberate planting)*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

n/a

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Grows as a ground cover and self-clinging vine on trees etc. As groundcover inhibits seedling recruitment and competes with native groundcover species, as a vine on trees can damage trees eg by making them more vulnerable to being blown over or losing branches due to extra weight*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*reject (19)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.  
*Numerous listings at species and genus level (uncertain how much is subsp helix and how much canariensis because they are very difficult to tell apart, but no other species is widely cultivated).*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

15

**NZ Nursery register 2004/05 genus level only**

61

**NZ Nursery Register 1997/98 genus level only**

49

**NZ Nursery register 1991/92 genus level only**

46

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Listed in NZ published and distributed gardening books such as Nicholls (1995) Bryant 1994. Ivy cultivars (uncertain which subspecies) are common in urban amenity plantings eg traffic islands.*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Widespread and common species. Likley to be present in all regions as widely cultivated and sold and has been naturalised since 1873. Hasn't reached every park or reserve that could be affected though*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*Can be controlled with herbicides although generally quite hard to kill and frequent repeat treatments required. Manual control is difficult because fragments resprout and also many people get skin rashes from contact with the sap so care has to be taken with control and disposal.*

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

Yes

**NPPA YES/NO**

No

**Notifiable organism**

No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*In 4 RPMSs (mainly surveillance etc aiming at prevent distribution rather than eradication). Controlled in some DOC reserves on a site-led basis (eg Carluke Reserve, Marlborough Sounds).*

**Any known impact on human health?**

*Clipping or just handling the plant may result in a skin rash and even blistering and inflammation. Sap is toxic and contact dermatitis is often reported, which are frequently serious. The medical literature even describes cases of death*

by suffocation due to contact with this plant. Ingestion may cause rash, vomiting or diarrhea, which can be serious in children.

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*Widely sold. Relatively serious invasive weed which can spread by bird-dispersed seed, but human dispersal probably more important, especially for longer distance dispersal.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*Dumping of garden waste may more significant than sale (although deliberate planting is often the source of dumped material). Well established weed already, so less to gain from banning than a less widely distributed species. Likely to be objections from industry as this is a popular species.*

#### **Include in NPPA?**

*No - needs more information. Will be considered for next review round of Accord*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Only one subspecies is proposed. The two subspecies (subsp.helix and canariensis) are very difficult to reliably distinguish and this is likely to create significant problems with enforcement. This needs discussion but I would recommend either including the whole species, or not including ivy at all.*

#### **Notes from TAG meeting**

*require more information around subspecies/sterile cultivars. RA group to investigate*

## ***Hedychium flavescens***

#### **Common names**

*Yellow ginger*

#### **Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*yes*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Widespread in warmer areas of New Zealand, especially Northland, Auckland, Coromandel, and Taranaki Localized in Nelson-Marlborough coastal areas of South Island*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Smothers native vegetation and prevents regeneration, especially in forested areas*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*reject (14)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Lower score than H.gardnerianum because does not disperse by seed.*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.  
*Previously widely grown as an ornamental*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

8

**NZ Nursery Register 1997/98 genus level only**

3

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant  
*Strong appeal as an ornamental*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)  
Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Potential to greatly expand within its present northern range and also to new areas further south*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*Can be readily controlled with injected herbicide but labor intensive*

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

Yes

**NPPA YES/NO**

Yes

**Notifiable organism**

No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*Nil*

**Any known impact on human health?**

*No known harm.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*Because does not spread by seed, human dispersal is critical for establishment of new loci.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*Popular garden plant, although public awareness of the issue is growing*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

## Notes from TAG meeting

Nil

# *Hedychium gardnerianum*

## Common names

*Kahili ginger*

## Synonyms

Nil

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

yes

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Widespread in warmer areas of New Zealand, especially Northland, Auckland, Coromandel. Localized in northern coastal areas of South Island, especially on the West Coast as far down as Haast.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Smother native vegetation and prevents regeneration, especially in forested areas*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*reject (15)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Previously widely grown as an ornamental*

## Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level

—

## NZ Nursery register 2004/05 genus level only

8

## NZ Nursery Register 1997/98 genus level only

3

## NZ Nursery register 1991/92 genus level only

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Strong appeal as an ornamental*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Grading?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Potential to greatly expand within its present northern range and also to new areas further south, i.e. most recently become a problem in Bay of Plenty*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*Can be readily controlled with injected herbicide but labor intensive*

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

*Yes*

**NPPA YES/NO**

*Yes*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*DoC weed-led*

**Any known impact on human health?**

*No known harm.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*Human dispersal an important part of its range expansion, e.g., on the West coast, has spread from garden plantings into forest behind in just the last decade. Listing important part of preventing further new loci.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*Popular garden plant, although public awareness of the issue is growing*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Heracleum mantegazzianum***

**Common names**

*Giant hogweed, Cartwheel flower, Wild parsnip, Wild rhubarb*

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes. Vol 4 says waste places, gardens and especially palustral situations, Dannevirke, Napier, Wellington, Marlborough, Canterbury. Otago, Southland.*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Yes, already established in some places. Common weed in UK.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Very serious, especially along river and stream banks. Sitter for fenced-off riparian conservation sites. 'It forms a dense canopy outcompeting native riparian species and results in an increase in soil erosion along the stream banks where it occurs. The plant exudes a clear watery sap which sensitizes the skin to ultraviolet radiation. This can result in severe burns to the affected areas resulting in severe blistering and painful dermatitis.- US website.*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*AIP wra score 15*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Underestimates threat, which is to riparian areas. In UK and elsewhere it has formed huge dense stands along river banks. It's also a serious threat to human health.*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Use encouraged in a gardening column in the Listener 3 or 4 years ago.*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Very limited distribution now, but could probably become widely distributed along river and stream banks, especially as more of these are likely to be fenced off from grazing stock in the future.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*Above ground parts easy to knock down, but persistent rootstocks can be hard to kill. Glyphosate does the job apparently.*

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

No

**Notifiable organism**

No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

Nil

**Any known impact on human health?**

*Heracleum mantegazzianum* exudes a clear watery sap from all parts of the plant, particularly from the stem, which contains glucoside phototoxins that react with ultraviolet light (from sunlight) (Gunby 1980; USDA 2003). This reaction can result in serious skin burns and lead to severe blistering and painful dermatitis. According to Northall (2003) "phytotoxicity is characterised by the development of erythema, oedema and burn-like lesions within 24 hours and possibly large, fluid filled blisters within 48" (Fig. 1). These blisters can develop into purplish or blackened scars, and the affected areas may remain hypersensitive to UV light for many years (Gunby 1980).

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*Serious weed overseas, replacing native veg along river and stream banks. Very limited distribution in NZ. Sometimes promoted as a foliage plant and curiosity here. Serious human health potential.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*Not yet serious here and may never be.*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

Nil

**Notes from TAG meeting**

Nil

## ***Hieracium argillaceum* group**

**Common names**

**Synonyms**

Nil

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, p327, Vol IV*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Fully naturalised. S.: Canterbury (Mt Torlesse and Lake Pukaki), C. Otago.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*More info needed (14)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Widely spread in SI from Canty to C. Otago. 7 map references. Not known from NI. Roadsides, rocky places, waste land, in scrub, grassland and forest.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

—

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*NZB - prohibited plant species*

**Any known impact on human health?**

*No known harm.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*ditto*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*none*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Hieracium aurantiacum***

**Common names**

*orange hawkweed*

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, p328, Vol IV*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Fully naturalised. N.: Manawatu (Feilding); S.: Nelson, Canterbury, Westland (Otira), Otago, Southland; St.: Halfmoon Bay.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*More info needed (19)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

## NZ Nursery register 1991/92 genus level only

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Widely spread in SI and is known from Manawatu in NI. 19 map refs in SI, one in NI. Waste land, grassland, scrub, tussock grassland, roadsides, lawns, gardens, pastures.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

—

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*NZB - prohibited plant species*

**Any known impact on human health?**

*No known harm.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*ditto*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*none*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## *Hieracium caespitosum*

**Common names**

*field hawkweed*

**Synonyms**

Nil

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

Yes, p328, Vol IV

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

Fully naturalised. S.: Marlborough, Canterbury, Otago (Old Man Range).

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

n/a

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

Reject (21)

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

Nil

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

Nil

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

Nil

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

Widely spread in SI. 21 map references plotted in SI. Grassland, scrub, tracksides, riverbanks, forest margins, roadsides, pasture.

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

—

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

No

**Notifiable organism**

No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*NZB - prohibited plant species*

**Any known impact on human health?**

*No known harm.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*ditto*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*none*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Hieracium lepidulum***

**Common names**

*tussock hawkweed*

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, p329, Vol IV*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Fully naturalised. N.: Taranaki (Mt Egmont); S.: Nelson, Marlborough, Canterbury, Otago.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*Reject (20)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradients?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Widely spread in SI. >35 map refs plotted in SI and 1 (Taranaki) in the NI. Grassland, roadsides, riverbanks, riverbeds and gold tailings, beech forest, scrub, pine forests.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

—

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*NZB - prohibited plant species*

**Any known impact on human health?**

*No known harm.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*ditto*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*none*

**Include in NPPA?**

*YES - high priority*

If answering D or E, please note the reason for the uncertainty here. Any other comments here.

*Nil*

Notes from TAG meeting

*Nil*

## ***Hieracium murorum***

**Common names**

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, p329, Vol IV*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Fully naturalised. N.: southern Ruahine Range (Mt Takapari); S.: Canterbury (Hanmer Forest Park), Otago (Dunedin).*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*Reject (15)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Exotic forest, streamside cliffs, roadsides. One map ref plotted (Dunedin).*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

—

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*NZB - prohibited plant species*

**Any known impact on human health?**

*No known harm.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*ditto*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*none*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Hieracium pilosella***

**Common names**

*mouse-ear hawkweed*

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, p330, Vol IV*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Fully naturalised. N.: Rotorua, Volcanic Plateau, Lake Waikaremoana, Kaimanawa and Ruahine Ranges, Hawke's Bay; S.: Marlborough, Canterbury, Westland (Douglas R.), Otago, Southland.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)  
*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.  
*Reject (24)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)  
*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.  
*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant  
*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)  
Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?  
*Widely spread throughout eastern SI and central NI - many map refs plotted. Tussock grasslands, lawns, waste land, river terraces, roadsides, rock outcrops, pasture.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

—

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*NZB - prohibited plant species*

**Any known impact on human health?**

*No known harm.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)  
*ditto*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.  
*none*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Hieracium pollichiae***

**Common names**

*spotted hawkweed*

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, p331, Vol IV*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*?*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*Reject (19)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*n/a*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

—

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*NZB - prohibited plant species*

**Any known impact on human health?**

*No known harm.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*ditto*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*none*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Hieracium praealtum***

**Common names**

*king devil*

## Synonyms

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, p331, Vol IV*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Fully naturalised. N.: Volcanic Plateau (between Tokoroa and Taupo); S.: Nelson (Glenhope), Marlborough (Mt Richmond), Canterbury, Westland, Otago.*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*Reject (22)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Widely spread throughout SI and central NI - many map refs plotted. Grassland, scrub, stony sites, waste land, roadsides, pasture, occasionally in wet sites.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

—

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*NZB - prohibited plant species*

**Any known impact on human health?**

*No known harm.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*ditto*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*none*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Hieracium sabaudum***

**Common names**

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

*Yes, p332, Vol IV*

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*Fully naturalised. S.: Otago (known from only 2 localities - Wanaka and Queenstown).*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

*Reject (17)*

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

*Nil*

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Restricted current distribution in SI only. Garden weed, waste land.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

—

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

*No*

**Notifiable organism**

*No*

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*NZB - prohibited plant species*

**Any known impact on human health?**

*No known harm.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*ditto*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*none*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Nil*

## ***Hieracium spp. (all)***

**Common names**

*hawkweed*

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

*?*

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

*n/a*

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

*Economic: Pastoral production loss, particularly in higher altitude grazing lands in SI foothills and high country.*

*Environmental: Replace native herbs and grasses within tussock grasslands. Social: Not known. Health: Not known.*

*Cultural: Not known.*

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

*Nil*

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

*Nil*

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

*1*

**NZ Nursery register 2004/05 genus level only**

*2*

**NZ Nursery Register 1997/98 genus level only**

*3*

**NZ Nursery register 1991/92 genus level only**

*2*

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

42 suppliers of various *Hieracium* species in RHS PF, but only *H. murorum* occurs and was last listed in 2000.

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Grading?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

*Potential unknown.*

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

*While susceptible to herbicides, *Hieracium* spp are not economic to control with herbicides in pastoral agricultural systems.*

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

Yes

**NPPA YES/NO**

No

**Notifiable organism**

No

**Other supporting information, for example DOC weed-led, control in parks and reserves etc, can be included if available.**

*Nil*

**Any known impact on human health?**

*No known harm.*

**Reasons for inclusion in NPPA.** A summary of how inclusion in the NPPA supports management objectives for the species (see section 3.2 of the evaluation criteria report)

*WRA = 14-24 (Reject in all cases except *H. aurantiacum*). Many of the species may not have reached their potential distributions in NZ and some are potentially ornamental and offered for sale (e.g. *H. aurantiacum*). All species are currently prohibited species in NZ. There are no known economically viable control methods for pastoral populations of these species.*

**Reasons against inclusion in NPPA.** Reasons why this species might be excluded from the NPPA. If there are regulatory impacts the TAG members are aware of then these can be noted here, but TAG members are not required to include these in their decision as these will be addressed by the steering group.

*none*

**Include in NPPA?**

*YES - high priority*

**If answering D or E, please note the reason for the uncertainty here. Any other comments here.**

*Nil*

**Notes from TAG meeting**

*Whole genus has weed characteristics.*

## ***Hieracium Xstoloniflorum (aurantiacum x pilosella hybrid)***

**Common names**

**Synonyms**

*Nil*

**Is the plant species present in NZ?** (if no, species will not be included in NPPA, however it can be recommended for UO status if technically justified)

Yes, p332, Vol IV

**Has the plant species formed self-sustaining populations in New Zealand?** (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).

Fully naturalised. N.: Taranaki (Mt Egmont), Wellington City; S.: Marlborough (Pelorous Sound), Canterbury, Westland (Otira), Otago (Oamaru, Queenstown).

**If no to previous question, what potential does the species have to establish self sustaining populations in NZ?** (i.e. overseas range, eg species is currently established in similar climates to NZ eg SE Australia, Hawaii uplands)

n/a

**Does the plant have the potential to cause adverse impacts?** (Discussed in section 2.2 of the evaluation criteria report. Brief comments on the types of impacts, noting what is affected (eg conservation values, human health). Brief comment on degree of impact. Summarise information provided with species proposals.

**WRA result and score, for example "reject (18)".** NOTE - "reject" means that the model result is a recommendation to not allow the importation of this species if it was not present in NZ. "Accept" means that the model result is a recommendation to allow the importation of this species if it was not present in NZ.

Reject (24)

**Comments on WRA score** (Discussed in section 3.1 of the evaluation criteria report. Note that there is no system developed specifically for the purpose of evaluating NPPA species. A high ranking as a weed in the WRA system used is indicative only)

Nil

**Objective evidence it has been or is deliberately distributed in NZ.** Discussed in section 3.2.1 of the evaluation criteria report.

Nil

**Gaddum "The Plant Finder" (trade version 2001) - listing to species and cultivar level**

—

**NZ Nursery register 2004/05 genus level only**

—

**NZ Nursery Register 1997/98 genus level only**

—

**NZ Nursery register 1991/92 genus level only**

—

**Other supporting information on its deliberate distribution or potential for deliberate distribution in NZ** (i.e. garage sale, overseas, personal observations). Include comments on appeal as a cultivated plant

Nil

**Known vs potential distribution in NZ (abundance in New Zealand)** (Discussed in section 3.2.2 of the evaluation criteria report.)

Gradings?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?

Widely distributed. No dist. map. Gardens, waste land, roadsides, grassland, forest and scrub.

**Ease of control of the plant as a species** (Discussed in section 3.2.3 of the evaluation criteria report. What physical/ chemical/ biological methods are available for killing the plant? How susceptible is it to control methods? How practical are the control methods in the environments the plant occurs or could occur in?)

—

**National eradication i.e. DOC, MAF**

—

**RPMS YES/NO refer to master document**

—

**NPPA YES/NO**

No