

If answering D or E, please note the reason for the uncertainty here. Any other comments here.
Increasing rate of naturalisation noted around Auckland (e.g. Waitakere Ranges and foothills) - and included in the ARCs RPMS as a Research Organism.

Notes from TAG meeting

Nil

Homeria collina

Common names

Cape tulip

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, Wooley's Bay, Portland Island, French Pass

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 has.

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.

Poisonous to stock, could become more widespread, grows and survives in pasture.

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.

PAW wra score 6 'more information', aip wra score 18 'reject', DOC score 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)

Surprised paw score so low

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

Formerly widely planted in gardens but no more

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?
Could probably become more widely distributed

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?)
Easy to kill top growth, but hard to kill corms.

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.
Very occasionally still found in gardens

Any known impact on human health?
*All parts of *H. collina* plants are poisonous to livestock and humans even when they are dead and dry . Symptoms that include gastroenteritis, thirst, paralysis, blindness and heart and kidney failure.*

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)
Long time noxious plant, very limited distribution with room to spread, toxic to stock. Federal weed in US and declared weed in most of Australia.

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.
No effect on environment, little effect on agriculture, may not be as toxic as generally thought, unlikely to be a serious problem

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

Houttuynia cordata

Common names
Chameleon plant

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 localities in both islands.

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

Not reported as naturalised

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)

Native to east Asian islands, hardy to -15C, also sub-tropical climates, shade tolerant, typically in wet habitats.

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.

Could pose a serious threat to short-stature wetland (< 1m) vegetation and prevent regeneration.

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.

9 (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)

Nil

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

Imported under an incorrect name, subsequently distributed before all nursery stock could be destroyed.

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

A colourful plant suitable for damp shady areas in gardens, also has many herbal properties with traditional use in asian medicine.

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?

Not naturalised in New Zealand. Could naturalise in any wet areas, even in upland 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?)

Probably difficult to control due to rhizomatous growth habit

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. Potentially a problem weed of wet 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.

Potentially a useful herbal remedy (reported anti-HIV properties).

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

Hydrilla verticillata

Common names

Hydrilla

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, restricted to 4 Hawkes Bay lakes

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 at all sites

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 ~9 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.

21 (20 P&C) (Reject) AWRAM (74)

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. *Not known to be sold in New Zealand. Banned from sale in 1982 (Noxious Plant Act 1978).*

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.)
Gradients?: Widespread, common, Nth Island, Sth Island, Regions? Habitats?
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 (worse than all other submerged spp. in New Zealand), 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 to human health. However, human well-being may be indirectly affected as where this plant occurs, it causes substantial economic hardships, interferes with various water uses, and adversely impacts freshwater habitats.

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

Hydrocleys nymphoides

Common names

Water poppy

Synonyms

Hydrocleis nymphoides

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 northern North Island localities

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 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.

Invasive in shallow water bodies, including flowing water. Smothers other plants and disrupts irrigation/drainage.

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.

8 (Reject) AWRAM (45)

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 propagated and sold, most occurrences are in ornamental ponds.

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 offered for sale overseas.

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, herbicides used require RC consent.

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, but this plant may impact on human well-being by blocking access to water and degrading water quality.

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 deliberate human planting and subsequent movement by water. NPPA inclusion would prevent spread to new catchments.

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 waterlily-type plants available

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

Hypericum androsaemum

Common names

tutsan, sweet amber

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 Island and South Island. Flora IV. Often very abundant.

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, already has - rapid growth, colonising ability, tolerance of partial shade means it is well established in some conservation and natural ecosystem 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 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

1

NZ Nursery register 2004/05 genus level only

53

NZ Nursery Register 1997/98 genus level only

61

NZ Nursery register 1991/92 genus level only

58

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

Could be confused for otehr species of Hypericum.

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?

Already well established in higher rainfall areas. Could become more abundant in thesea reas and also could become more common in specific wetter habitats in drier easter South and Nothr Islands.

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?)

spray and hand weeding.

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?

*A few species in the genus are known to cause major toxicity. Ingestion of the plants by animals can lead to primary photosensitisation from absorption of the plant pigment hypericin, producing a condition known as hypericism (Kingsbury 1964, Morton 1971). At least four species have been implicated, but photosensitivity from ingestion of the plants has not been observed in humans, *H. androsaemum* is supposedly not as toxic as other *Hypericum* spp, but its berries are said to be poisonous and this species may also 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)

Well established and should not be deliberately spread elsewhere if possible.

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 - 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

Ipomoea indica

Common names

Blue morning glory

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 - lower parts from N Auckland to Wellington area. Sth Is, northern areas (Forest & scrub margins, around gardens and plantations). UO Declaration (DoC) - well established in Northland and Auckland and parts of the remainder of the NI and northern SI. NB Pre-1996 not known to set seed. 1996- plant found in BoP producing large amounts of seed and with seedlings nearby. Therefore - spread to more remote locations via seed dispersal more of a threat. 28 voucher specimens of naturalised material in Auckland Herbarium - oldest record 1964 (AK 101463).

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: Very broad environmental tolerances - but not tolerant of frost, the main limiting factor of establishment. Aggressive perennial vine that can form dense carpets across the ground and up supporting

vegetation - smothering, and weight of the vines can cause canopy collapse. Invades forest margins and then spreads into intact forest.

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) NB Unsure re palatability, toxicity, and potential for allelopathy. Also have assumed not self-compatible.

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)

*Very fast growing aggressive vine recognised as an invasive weed here and overseas (e.g. Australia, Hawaii). Now known to produce seed in NZ - which will allow greater spread into more remote areas. NB: Other species in the genus also recognised as an environmental weed, e.g. *I. cairica* and *I. hederifolia* in Australia, *I. aquatica* on Federal Noxious Weed List in America*

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 the garden industry. Popular garden plant in the past, with attractive blue flowers.

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

—

NZ Nursery register 2004/05 genus level only

11

NZ Nursery Register 1997/98 genus level only

7

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

UO Declaration (DoC) & ARC factsheet: garden dumping occurred because of its rampant nature in cultivation.

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 parts of the NI and northern parts of the SI. Seed set still thought to be a minor part of its spread.

Potential become much more widely naturalised.

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?)

CONTROL DIFFICULT - whole plant must be controlled or removed as regrows from even small stem fragments.

Physical Control (Small infestations can be cut and the roots dug up - ensuring all plant material is removed); Chemical Control (cut the vines, leaving vines to die, and apply glyphosate-based or 2,4-D plus dicamba herbicide to the cut stems; in open areas, where damage to underlying plants is not a concern, overall spray of the same herbicides can be applied). Biological Control: None available.

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. Was a National Surveillance Plant Pest and currently included on the NPPA list. Overseas: Pest plant in Hawaii and Australia.

Any known impact on human health?

It is said to be poisonous to humans, but no details are available. The seeds of some *Ipomoea* spp. have powerful hallucinogenic drugs.

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(18). Highly invasive vine with serious environmental impacts. NPPA status should be retained.

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.

Not currently sold so no nursery industry implications.

Notes from TAG meeting

Nil

Iris pseudacorus

Common names

Yellow flag, yellow flag iris

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 throughout, locally common (e.g. lower Waikato River, Avon River)

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 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.

Invasive in wetlands (including salt marsh) and water body margins, displacing other species. Invades wet pasture, toxic to livestock.

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.

21 (Reject)

AWRAM (52)

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 ornamental pond plant, with several varieties listed in Gaddum despite it's current NPPA status

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

11

NZ Nursery register 2004/05 genus level only

48

NZ Nursery Register 1997/98 genus level only

48

NZ Nursery register 1991/92 genus level only

51

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?

Scattered distribution, only abundant in lower Waikato and Avon River catchments. Could be problematic in many water bodies, wetlands and estuarine areas throughout 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?)

Relatively easy to control, but regrowth from seed and rhizomes.

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 - Northland, West Coast

Any known impact on human health?

This species can cause contact dermatitis and allergies in some people, via contact with sap or seeds in particular.

Many plants in this genus are poisonous if ingested, with roots and leaves toxic to animals, including humans. This species in particular has poisoned cattle and swine and may cause similar symptoms in humans if the rhizomes are ingested.

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)

A popular garden plant mostly spread by deliberate human planting and subsequent movement by water. NPPA inclusion would prevent spread to new catchments.

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 less invasive aquatic irises are 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

Jasminum humile

Common names

Italian jasmine, yellow jasmine, Italian yellow jasmine, yellow bush jasmine

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 (Fl.NZ vol IV). Spread by seed (bird dispersed). Limited if any vegetative spread.

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.

Forms dense thickets that exclude native species eg in forest gaps and open limestone areas eg on the cliff at Grove Scenic Reserve, Takaka

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 (12)

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.

Two listings for this species in Gaddum, genus widely distributed but most Nursery Register references not for this species. Listed as available on internet from NZ nurseries eg <http://www.bmn.co.nz>, <http://www.plantlife.co.nz>

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

2

NZ Nursery register 2004/05 genus level only

62

NZ Nursery Register 1997/98 genus level only

65

NZ Nursery register 1991/92 genus level only

71

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

I have never personally seen this species for sale or cultivated in a garden. Sometimes confused with J.mesnyi which is commonly cultivated.

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 has a very limited distribution (Hokitika, Takaka, Waikato and Shannon - FI NZ vol IV), but these cover a range on environments suggesting that this species is likely to naturalise elsewhere in NZ in 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?)

Not a lot of control undertaken as it is quite restricted in its distribution, reportedly killed by metsulfuron, but tends to grow in highly inaccessible areas like cliffs which makes control difficult.

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.

Limited control at some reserves. On a number of surveillance lists for DOC conservancies where it is believed to be absent.

Any known impact on human health?

Jasminum spp. may cause contact dermatitis in 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)

Invasive species that is relatively restricted in its distribution but could spread to many other areas, spread by birds but long distance spread is by people. Not spread much by dumping as it doesn't grow particularly well from fragments, so deliberate sale and planting is primary human pathway.

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 much active control of this species so lower priority than some other species. May be some industry objections (although not a particularly popular 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

Jasminum polyanthum

Common names

Jasmine, white jasmine

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 (Fl.NZ vol IV). Spread is primarily vegetative as fruit seldom produced.

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.

Forms extensive masses of layering vines, smothering native vegetation both as a groundcover and climbing up tall trees.

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 (6)

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)

low score considering invasiveness, mostly due to the fact that it doesn't have any means of dispersing without people

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

12 listings in Gaddum. Listed in catalogues on the internet <http://www.diacks.co.nz/Catalogue.pdf>

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

12

NZ Nursery register 2004/05 genus level only

62

NZ Nursery Register 1997/98 genus level only

65

NZ Nursery register 1991/92 genus level only

71

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

Popular ornamental and easy to propagate. Frequently sold.

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 very common in cultivation. Invasive as far south as Nelson at least. May not become a problem in cooler areas (Sl East Coast and inland) but grows well in Christchurch gardens. Although widespread not in many of the reserves that it could invade due to its limited dispersal.

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?)

Uncertain. More difficult than some other vines as it doesn't form a particularly thick trunk so stump treatment less use. Cut stems regrow easily making physical control largely ineffective.

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 in 5 RPMSs, mainly to prevent sale and distribution.

Any known impact on human health?

Jasminum spp. may cause contact dermatitis in 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)

Invasive species with little means of invading new areas without being spread by people.

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 ornamental so likely to be objections from industry. Already common, so less impact from banning this species than banning a more restricted species.

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

Kennedia rubicunda

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. Listed as a garden escape in Flora IV. Understood to be naturalised in Northland but no information supplied. Grows naturally in poor sand stone country but does well in high fertility soil. Tolerates dry conditions. Damaged by heavy frosts

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)

Unknown

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, but exact nature of these unknown since its distribution and habitats are 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 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)

low score reflects a general lack of information about this species

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

Genus probably, species possibly.

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

5

NZ Nursery register 1991/92 genus level only

10

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?

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

—

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)

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 known how serious a threat this is.

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.

Insufficient information available at the time of assessment.

Notes from TAG meeting

Need more info from proposer

Lagarosiphon major

Common names

Lagarosiphon, Oxygen weed

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, widespread in North Island and lowland 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, submerged species invasive at all sites

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 (60)

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, rare or absent in most of South Island. Could be problematic in most 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.
DoC weed-led - eradication attempt from Lake Waikaremoana, management in Lake Wanaka

Any known impact on human health?
*No direct harm to human health known. However, it indirectly affects human health, as for instance, *L.major* caused a power outage in 1968 when it blocked the intake screens at Aratiatia hydro station. This plant is also detrimental to recreation, such as Hamilton Lake and Lake Rotorua.*

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

Lantana camara

Common names

Lantana

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, Northland, Auckland, BOP

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, only in warmer districts

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.

Prickly, smelly, only slightly invasive. Much more damaging in warmer environments like Fiji.

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.

DC wra score 26, Mul wra score 33, P & C wra score 33, P & R wra score 32, DOC score 28.

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)

Pretty high. Probably Australian scores. Var in NZ non toxic, less invasive, less troublesome

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

Found on overseas websites

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?

Could probably expand its distribution and prevalence 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?)

Controlling individual plants not too hard, but Australians seem to have problems with large thickets.

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?

Highly toxic and can be LETHAL. Ingestions of L. camara, especially in large amounts, are expected to cause serious effects to major body organs. Wolfson & Solomons 1964 described acute poisoning of children who ingested the green fruit of L. camara. Unfortunately, it seems that it is common for children to be affected by eating its small blue-black berries. Leaves can also cause contact dermatitis, and stout recurved prickles cause mechanical injury. The literature records L. camara poisoning in numerous animals such as cattle, sheep, buffaloes, goats, rats, guinea pigs and kangaroos. Acute poisoning by ingestion in animals, takes the form of "pink-nose" with reddening of the muzzle and conjunctivitis, and severe gastroenteritis with death in as short a time as 3-5 days (Hurst 1942). In chronic poisoning, signs of photosensitisation appear if the animal is exposed to sunlight. Poisoning of cats and dogs are also recorded due to ingestion of immature berries. In NZ, Black & Carter 1985 recorded Lantana poisoning of cattle and sheep.

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)

Weed of national significance in Australia. Limited distribution, could spread. Prickly, some races toxic to stock, limited distribution, could spread. Precautionary principle says yes.

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.

NZ forms not toxic, not much of a problem, not very invasive.

Include in NPPA?

YES - high priority

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

NZ forms non toxic, not much of a problem, not very invasive.

Notes from TAG meeting

Include on NPPA at species level.

Lantana camara var aculeata

Common names

Lantana

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, Northland, Auckland, BOP

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, only in warmer districts

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.
prickly, smelly, only slightly invasive. Much more damaging in warmer environments like Fiji.

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.
DC 26, Mul 33, P & C 33, P & R 32, DOC score 28.

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)
pretty high. Probably overseas scores. Var in NZ non toxic, less invasive, less troublesome

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
Found on overseas websites

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?
Could probably expand its distribution and prevalence 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?)
Controlling individual plants not too hard, but Australians seem to have problems with large thickets. Lots of work overseas on biological control.

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?

Highly toxic and can be LETHAL. Ingestions of L. camara, especially in large amounts, are expected to cause serious effects to major body organs. Wolfson & Solomons 1964 described acute poisoning of children who ingested the green fruit of L. camara. Unfortunately, it seems that it is common for children to be affected by eating its small blue-black berries. Leaves can also cause contact dermatitis, and stout recurved prickles cause mechanical injury. The literature records L. camara poisoning in numerous animals such as cattle, sheep, buffaloes, goats, rats, guinea pigs and kangaroos. Acute poisoning by ingestion in animals, takes the form of "pink-nose" with reddening of the muzzle and conjunctivitis, and severe gastroenteritis with death in as short a time as 3-5 days (Hurst 1942). In chronic poisoning, signs of photosensitisation appear if the animal is exposed to sunlight. Poisoning of cats and dogs are also recorded due to ingestion of immature berries. In NZ, Black & Carter 1985 recorded Lantana poisoning of cattle and sheep.

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)

Australian references don't usually differentiate this form. Precautionary principle says yes.

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.

NZ forms not toxic, not much of a problem, not very invasive.

Include in NPPA?

YES - high priority

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

NZ forms non toxic, not much of a problem, not very invasive.

Notes from TAG meeting

Nil

Leycesteria formosa

Common names

Himalayan honeysuckle

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, very widespread in wetter regions of both islands, especially in regeneration forest sites. Less common in the east

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.

Forms dense stands which compete with early native colonists such as tutu. However it is replaced fairly rapidly in succession by taller native species. Also a weed of forestry, covering early plantings.

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)

Nil

Objective evidence it has been or is deliberately distributed in NZ. Discussed in section 3.2.1 of the evaluation criteria report.
Little evidence of current purposeful spread but historically was a horticultural species

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?

Very widespread and total range probably mostly occupied, leaving only "infilling" opportunities at a more local scale.

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?)

Readily controlled by sprays.

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?

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)

To control further 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.

The species is so widespread and with such good dispersal by birds (and rats) there is little likelihood of banning from sale having any influence on its further spread

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

Following discussions, decided there was little benefit to include on NPPA

Ligustrum lucidum

Common names

tree privet

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, common down to mid North Island but only scattered further south to Nelson-Marlborough

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.

Unlike many woody weeds, this species replaced native species in the forest sub canopy and canopy and therefore can have very long-term impacts on native biodiversity. Also reputed to be allergenic to humans

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)

High score reflects its invasiveness, persistence, and range of impacts.

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

Widely planted as a hedge, but less so now that is currently banned from sale.

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

—

NZ Nursery register 2004/05 genus level only

28

NZ Nursery Register 1997/98 genus level only

12

NZ Nursery register 1991/92 genus level only

31

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?
Current wide distribution indicate potential for spread into many other areas of northern North island, and possibly 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 killed by chemicals but labor intensive. Critically, it is very cryptic in native forest and difficult to detect before it seeds.

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?
*All *Ligustrum* spp. have poisonous black, blue-black or dark purplish berries, which might be eaten by children, leading to vomiting and diarrhoea. Note however, that all plant parts are toxic. Plants in this genus also cause respiratory irritation when in bloom, and contact dermatitis is also known to occur.*

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)
To control further spread into native vegetation including valuable off-shore islands. Note that as a "mast" seeding species it is attractive to starlings which fly long distances to roosting sites.

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.
No good reason not to control it as plenty of other options available.

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

Lilium formosanum

Common names
Formosa lily; Trumpet lily; St Joseph's lily, Taiwan lily

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 Auckland and Bay of Plenty - Flora IV. Now known to have spread extensively and to have colonised a wide range of coastal habitats in northern New Zealand (see accompanying proposal from ARC for inclusion in 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, very significant impacts already happening.

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)

Nil

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

Yes sold in nursery trade.

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

9

NZ Nursery register 2004/05 genus level only

25

NZ Nursery Register 1997/98 genus level only

30

NZ Nursery register 1991/92 genus level only

24

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

Lilely to be passed from gardener to gardener.

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?

spreading rapidly and has the potential to become very widespread and invasive.

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?)

spray 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 weed control programme.

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)

Spreading rapidly and posing a major impact on coastal and conservation land.

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

Lonicera japonica

Common names

Japanese honeysuckle

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, very widespread throughout the North Island, northern South Island, and 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.

Smother native vegetation, from very early secondary successions through to low forest. Particularly damaging in margins of wetlands.

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.

Still widely sold

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

7

NZ Nursery register 2004/05 genus level only

—

NZ Nursery Register 1997/98 genus level only

79

NZ Nursery register 1991/92 genus level only

38

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

Still widely cultivated as a trellis plant because of quick growth and sent.

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?

Very widespread and total range probably mostly occupied, leaving only "infilling" opportunities at a more local scale.

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 chemicals, but because of massive root system of established plants, follow up spraying is critical.

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?

It can cause contact dermatitis (Webster 1993). There is suggestion that its berries are toxic, but information on this plant is considered incomplete, However, ingestion of small amounts of its berries would not be expected to cause problems.

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)

Although it produces seed, seedlings are in fact not common. This suggest humans are important for its spread so that despite its widespread distribution, banning from sale may still contribute something to reduced rate of further 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.

A popular species still for gardeners. The widespread distribution does suggest banning from sale may not have a great effect.

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

Ludwigia peploides subsp. montevidensis

Common names

Primrose willow, floating primrose willow, water primrose

Synonyms

Jussiaea montevidensis, Ludwigia adscendens var. montevidensis, Jussiaea repens var. montevidensis

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, abundant in Waikato and West Auckland, sparse in Northland and Manawatu

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, can form floating mats 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.

Displaces other vegetation in shallow, nutrient-rich water bodies

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.

10 (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.

Possibly sold prior to NPPA status, but not commonly seen in cultivation.

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

—

NZ Nursery register 2004/05 genus level only

3

NZ Nursery Register 1997/98 genus level only

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
Rarely promoted as an ornamental pond 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?
Limited distribution only common in lower Waikato. Distribution limited by lack of dispersal ability, could become much more widespread especially in lowland 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?)
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

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 direct harm. Human well-being can be indirectly affected, as this plant may form very thick beds making boat traffic for instance, impossible. Irrigation and drainage can also be disrupted. Death of fish may also occur in large number due to oxygen depletion.

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. 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 marginal plants available

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

Ludwigia peruviana

Common names

Water primrose

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)

No

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

No

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)

Established in NSW (Sydney), listed as tropical/sub-tropical

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 and could be problematic in Northland/Auckland

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.

6 (10 P&C, 5 DC) (Reject) AWRAM (65)

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.

Not known from New Zealand, but was distributed as a pond plant overseas

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

—

NZ Nursery register 2004/05 genus level only

3

NZ Nursery Register 1997/98 genus level only

2

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

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?

Not known from New Zealand. Possible weed of nutrient rich wetlands and shallow water bodies in northern North 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?)

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

National eradication i.e. DOC, MAF

No

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?

No known direct harm. Human well-being can be indirectly affected, as this plant may form very thick beds making boat traffic for instance, impossible. Irrigation and drainage can also be disrupted. Death of fish may also occur in large number due to oxygen depletion.

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)

Not in New Zealand, retain UO status

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?

No

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

Nil

Notes from TAG meeting

Nil

Lythrum salicaria

Common names

Purple loosestrife

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, locally abundant in Horowhenua and Canterbury, scattered elsewhere, often in gardens.

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 in drains and fertile wetlands.

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.

Displaces other marginal and wetland vegetation, impedes access to water bodies and affects irrigation/drainage.

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.

19 (7 DC) (Reject) AWRAM (54)

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 distributed, several cultivars available. Hybrids with L. virgatum occur.

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

21

NZ Nursery register 2004/05 genus level only

8

NZ Nursery Register 1997/98 genus level only

22

NZ Nursery register 1991/92 genus level only

10

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

Common garden plant.

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?

Limited distribution only widespread in Horowhenua and Christchurch areas. Could be problematic on margins of most nutrient rich water bodies and wetlands (swamps) 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?)

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

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/CCC/ECan weed-led - Canterbury DoC/HRC weed-led - Horowhenua

Any known impact on human health?

No known direct harm. Human well-being can be indirectly affected, as this plant may form very thick beds making boat traffic for instance, impossible. Irrigation and drainage can also be disrupted. Death of fish may also occur in large number due to oxygen depletion.

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 spread by human activities with subsequent local spread, primarily by water movement. 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 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.

Some interesting genetics in this species. Flower forms are self-incompatible, gardeners tell me they have had it for years without it seeding - this is correct if only one flower form is present but if more than one is present - ie it suffers from alle effects which are likely to be overcome if this species was sold

Notes from TAG meeting

Nil

Macfadyena unguis-cati

Common names

Cat's claw creeper, cat's claw vine, cat's claw ivy, yellow trumpet vine

Synonyms

Doxanthus unguis-cati

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) but only reported wild site was Gisborne in 1945.

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 overseas, especially SE Queensland and NWS where it smothers native vegetation including tall trees, and has led to canopy collapse (Eg Wingham Bush in Australia)

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)

Nil

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

2 listings in Gaddum, available on internet <http://www.courierclimbers.co.nz/catalogue.php?page=4>

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

2

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

I've never personally seen this species for sale so it is probably quite uncommon

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?

Overseas this species weedy from the tropics (eg Niue) to warm temperate (New South Wales). Likely to be invasive in Northland, Auckland, Coromandel, less information on whether it may affect other NI and South Island lowland 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?)

Very difficult to control due to the production of numerous small tubers underground. Neither herbicide nor mechanical control particularly effective. Stump treatment can be used but extremely labour intensive - requires painting every individual stem with herbicide, on one tree in Wingham Bush, NSW, had 586 stems growing on it.

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.

not currently controlled anywhere as uncommon in cultivation and seldom 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)

Highly invasive species overseas and of limited distribution here, so an opportunity to control this species before it gets beyond control. Since it is only sparingly naturalised, human dispersal is currently the primary means of 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.

Isn't causing problems in NZ yet, and has been in NZ for some years. Uncertainty over how bad it would be here and how many areas would be affected. Sold so likely to be some objections from industry.

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

Melaleuca quinquenervia

Common names

melaleuca, swamp paperbark tree, cajeput, niaouli

Synonyms

Melaleuca cajuputi

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, not reported to be naturalised

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

No

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)

Widely naturalised in South Florida, northern limit corresponds with frost-free areas.

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.

Displaces all other vegetation, increases fire-risk, disrupts wetland ecological processes. Impedes access.

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.

10 (15 CD) (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)

Nil

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

In Gaddum, and available from several nurseries on web, also used in district planting schemes.

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

2

NZ Nursery register 2004/05 genus level only

27

NZ Nursery Register 1997/98 genus level only

30

NZ Nursery register 1991/92 genus level only

30

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?
Not known to be naturalised in New Zealand. Potentially could invade frost-free wetlands and heathlands, tolerant of very poor soils, salinity, drought and flooding.

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 without encouraging recolonisation.

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?

All parts of the plant can 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)

Potential threat to suitable habitats in coastal northern New Zealand.

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.

Promoted as a species tolerant of difficult soils (salinity, drought prone etc.). Plant produces essential oils.

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.

Possibly look for regeneration/escape from cultivated sites.

Notes from TAG meeting

Need more info - Don't know if naturalised. Not enough info. How long ago first planted? How much opportunity for spread? Climate profile.

Menyanthes trifoliata

Common names

Bogbean

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, eradicated from known field sites but maintained in cultivation (NIWA secure facilities).

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, escaped from garden pond in Darfield, 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.

Formed dense mat over the garden pond site. Could invade peatland waterbodies and displace native species.

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.

5 (Evaluate)

AWRAM (45)

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.

Presumably introduced as an ornamental pond plant.

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 recommended as an ornamental pond plant overseas.

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?

Not known from New Zealand. Potentially could invade shallow peaty waterbodies anywhere within 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?)

Unknown, New Zealand plants were physically removed. Viable seed have been produced in cultivation. These appear to have long viability.

National eradication i.e. DOC, MAF

eradicated

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)

Eradicated from New Zealand field sites, retain UO status

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.

If eliminated from all potential propagule sources then same status as sp. not recorded from New Zealand.

Notes from TAG meeting

Nil

Miscanthus nepalensis

Common names

Himalayan fairy 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

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 V). Northern NZ.

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.

Primarily colonises open areas such as cliffs and riverbeds and can dominate some sites for 20-30 years.

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)

Nil

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

no records of this species being sold, another species of Miscanthus (M.sinensis) is popular

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

—

NZ Nursery register 2004/05 genus level only

38

NZ Nursery Register 1997/98 genus level only

14

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

*Never seen this for sale although probably has some appeal as similar to *M.sinensis* only smaller. Possibly for sale under an incorrect label as there are sometimes difficulties with the labelling of grasses.*

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?

Mostly reported from northern NZ but often inland. I have seen it wild in the Marlborough Sounds. Probably has much greater potential distribution. Not yet really common anywhere.

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?)

Uncertain, most grasses can be controlled with herbicides such as haloxyfop but no specific info on this species

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.

DoC weed-led in Northland.

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)

Limited information but appears invasive in one region (Bay of Plenty) and spreading in northland and elsewhere.

CUrrently restricted in distribution. Being actively controlled in Northland. While this species is able to naturally disperse it is unlikely to reach new regions unless distributed by people.

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.

No evidence that it is in the nursery trade at present.

Include in NPPA?

YES - low priority

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

Priority low because of lack of evidence that it is in the nursery trade. However grasses are increasing in popularity and I'm uncertain why this one isn't available, so I would recommend caution on this.

Notes from TAG meeting

Nil

Myoporum insulare (plus hybrids)

Common names

Tasmanian ngaio

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 in coastal areas (Flora IV).

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. Is replacing *M. laetum* in some areas and is hybridising with *M. laetum*. Spreading and colonising on coastal/sanddunes 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.

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.

Yes, sold in the nursery trade.

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

—

NZ Nursery register 2004/05 genus level only

92

NZ Nursery Register 1997/98 genus level only

82

NZ Nursery register 1991/92 genus level only

60

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?
*Planted widely and extensively and therefore has the potential to become very widespread from these plantings.
Should be on NPPA so its spread through plantings is not allowed.*

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?)
spray 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.

Nil

Any known impact on human health?

M. insulare is considered to be very poisonous to humans, and to other animals, and Jerrett & Chinnock (1983) reported outbreaks of photosensitisation and deaths in cattle due to ingestion of this plant.

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)

Replacing the indigenous M. laetum and hybridising with that species. Need to limit spread from planting by banning the 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 - 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

Myrica faya

Common names

Fire tree, Candle-berry myrtle

Synonyms

Morella faya

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 (specimens in Allan herbarium)

Has the plant species formed self-sustaining populations in New Zealand? (Discussed in section 2.1 of the evaluation criteria report. State where/ evidence).
none reported

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)
Established and invasive in Hawaii, most islands, particularly upland areas. Native to Macaronesia (Madeira, Canary Islands, other Macaronesian species grow well throughout NZ eg Echium candicans).

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.

Highly invasive in Hawaii where it suppresses regeneration (eg on old lava flows), changes the nutrient regime (N-fixer) and facilitates the establishment of other weeds. Forms dense canopy excluding other species, possibly allelopathic. (info from UO declaration)

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 (12)

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 evidence for sale (currently banned from sale)

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

*Other species of Myrica in gardening books eg Bryant 1999. and on websites for medicinal properties
<http://www.caprine.co.nz/wa.asp?idWebPage=3278&idDetails=152> and
<http://www.claridges.co.nz/display/index.php?cat=000042>*

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 records of this species in NZ suggesting that it is very restricted at present. Limited information on potential distribution but likely to grow in areas where it doesn't currently occur.

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?)

uncertain, but because it changes nutrient regimes, damage can be difficult to reverse even if plants are killed.

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?

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)

Species currently not naturalised and very restricted in NZ, serious invasive weed overseas in an area with similar environments (NZ has many weeds in common with Hawaii). Preventative approach, more likely to be effective.

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.

Uncertain whether it would be sold if this was permitted. Not certain that this specie is still present in NZ as herbarium specimens were from 1950s and 60s.

Include in NPPA?

YES - high priority

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

If this species is considered to be present then it should be on the NPPA, uncertainty over whether it is still present is the main reason against including it

Notes from TAG meeting

Determine whether it is present in NZ. Still has UO status.

Myricaria germanica

Common names

false tamarisk

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, but confined to 3 braided rivers in the eastern 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 small native plants in braided riverbeds

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 (6)

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)
At the low end of reject because no history of weediness elsewhere and no noxious features

Objective evidence it has been or is deliberately distributed in NZ. Discussed in section 3.2.1 of the evaluation criteria report.
No evidence, and origin in N.Z. unknown

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?
Could grow in all the eastern South Island braided rivers and possibly in other regions

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?)
Unknown

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.

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)

The species currently has a limited distribution and spread to further catchments would be largely dependant on human activities, including being purposefully grown. So this possibility should be eliminated.

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 it is not known to be grown on purpose at this time

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

Myriophyllum aquaticum

Common names

Parrot's feather, thread of life, Brazilian watermilfoil

Synonyms

Enydria aquatica, Myriophyllum brasiliense, Myriophyllum proserpinacoides

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, locally abundant in North Island, scattered in 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, 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.

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.

17(17 P&C) (Reject) AWRAM (56)

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 inclusion on national surveillance plant pest list 1995?). Possibly still spread by hobbyist gardeners.

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

2

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?

Widespread in many North Island areas, absent from most of South Island. 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.

DoC weed-led - BOP, Westland

Any known impact on human health?

No known direct harm to human health, but may indirectly affect human well-being. Populations of this plant may be quite dense, sometimes as floating mats that have been uprooted, often choking waterways and impeding navigation and recreational activities.

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 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 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

Myriophyllum spicatum

Common names

Eurasian watermilfoil

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)

No

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

No

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)

Widely naturalised and invasive in temperate North America, native to Europe, Asia and North Africa. Could invade many New Zealand water bodies.

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, potential to disrupt hydro-electric power generation, drainage, irrigation and recreational activities and displace other vegetation from much of submerged range (to ~10 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.

20 (Reject)

AWRAM (69)

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.

Not known from New Zealand, but is commonly distributed as a pond plant overseas

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

2

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?

Not known from New Zealand. Could be problematic in most 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

No

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?

No known direct harm to human health, but may indirectly affect human well-being. M. spicatum impacts power generation and irrigation by clogging dam trash racks and intake pipes. Stagnant water created by M. spicatum mats provides good breeding grounds for mosquitoes, Mats of this plant also interfere with recreational activities such as swimming, boating, fishing and water skiing.

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)

Not in New Zealand, retain UO status

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?

No

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

Nil

Notes from TAG meeting

Nil

Najas guadalupensis

Common names

Southern naiad, southern waternymph

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)

No

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

No

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)

Native to all states of USA, South and Central America. Could invade many New Zealand water bodies.