Report to the Government of Niue on Invasive Plant Species
of Environmental Concern
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The Government of Niue requested assistance from the US Department of Agriculture, Forest Service, Institute of Pacific Islands Forestry, to conduct a survey of invasive plant species of environmental concern, similar to surveys previously conducted in Micronesia and American Samoa. The survey was carried out from 15-19 May 2000. The objectives, as with previous surveys, were to: (1) identify plant species that are presently causing problems to natural and semi-natural ecosystems; (2) identify species that, even though they are not presently a major problem, could spread more widely or are known to be problem species elsewhere; (3) confirm the absence of species that are a problem elsewhere and, if introduced to Niue, could be a threat there; and (4) make appropriate recommendations.

During our visit local experts<sup>2</sup> showed us sites of known infestations. We also had available copies of botanical surveys conducted in the past (see Appendix 1, References). A visit of such short duration does not permit an exhaustive survey of the weed flora of the island. However, the intent was only to conduct an overall survey. Additional surveys of individual species or sensitive areas can and should be conducted as needed. This report summarizes our findings and makes some suggestions for further action.

Invasive species occurring in or of threat to Niue have been grouped into four categories:

- 1. Species that are invasive elsewhere in similar ecosystems but were not seen on our visit and are not reported in the literature as being present on Niue (199 species).
- 2. Species that are invasive elsewhere and are also invasive or potentially invasive on Niue (22 species).
- 3. Species that are invasive or weedy elsewhere and are common, weedy or cultivated on Niue (97 species).
- 4. Native species that exhibit aggressive behavior (1 species).

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These species are listed in Appendix 2. Additional information about each species is located on a World Wide Web site, http://www.hear.org/pier, and on the PIER-CD, copies of which have been made available to the Departments of Community Affairs and Agriculture, Forestry and Fisheries.

There are a number of other species that are mostly invasive weeds in gardens, fields, and pastures and along roadsides but don't seem to pose any particular threat to wildland ecosystems. While we did not specifically survey for them, a list of these species, compiled from the literature, is included in Appendix 3.

#### 1. Dangerous species not known to be on Niue

Perhaps because of its location "off the beaten path", many invasive species have yet to reach Niue. These are listed in Appendix 2, Table 1. The following list summarizes the worst of these.

Acacia farnesiana was reported by Waterhouse (1997) to be present but it was not seen and the local experts do not know of it. This species is invasive in Hawai'i, Fiji, French Polynesia and Vanuatu and is reported to be present in the Cook Islands as well. If it should be found, it should be a high-priority candidate for prompt eradication. Other Acacias should be introduced only after due consideration of their possible invasiveness. The Acacia spirorbis planted as a yard tree on Niue appears to be only weakly invasive—only a few isolated examples away from houses were seen, and even those may have been on long-abandoned homesteads.

Cecropia obtusifolia and C. peltata are invasive tree species that are a problem in Hawai'i and French Polynesia, respectively. Cecropia obtusifolia is also reported to be invasive on Rarotonga (Cook Islands).

*Chromolaena odorata* (Siam weed) is a highly invasive pan-tropical weed. It will likely show up in Niue at some point in time and should be promptly eradicated if found. It has tiny seeds that can travel on boots, clothing or used cars or equipment. Biological controls are available but are most effective in open areas, less so in shaded stands.

Clerodendrum quadriloculare is suspicious because it appears to have the ability to invade intact or relatively intact native forests. This species is notorious for being a prolific producer of root suckers and, in fact, the plant is easily propagated by means of root cuttings. A dense, monospecific understory of this species was seen growing in full shade beneath the forest canopy on Pohnpei. The species is an attractive yard plant and is commonly planted for that purpose. Cultivated specimens were observed in American Samoa and French Polynesia. In Hawai'i it is becoming a problem ornamental, producing numerous root suckers that appear some distance from the parent plant.

*Cinnamomum verum* (cinnamon) was found to be very invasive in our survey of American Samoa. It is also present in Samoa, Fiji, French Polynesia and the Cook Islands (Rarotonga).

Clidemia hirta (Koster's curse) is a serious problem species in Hawai'i and other locations. It is reported by Waterhouse (1997) to be present in Niue. This is doubtful, as we did not see it. This is a very serious weed of the forest understory on many tropical islands and should be

immediately eradicated if found. It is present in Samoa and American Samoa, Tonga and Vanuatu.

Coccinia grandis (ivy or scarlet gourd) is a smothering vine that is showing potential for serious damage to the forests of Saipan. The vines climb over trees and form such dense cover that the forest underneath is completely shaded out and destroyed. It is also invasive in Guam and Hawai'i and is reportedly present in Fiji, Tonga and Vanuatu. It is a vegetable commonly used in southeastern Asian cooking and the plant is often introduced for that reason.

Cordia alliodora (Ecuador laurel, salmwood) was introduced to Vanuatu as a forestry tree and has become a pest there (Tolfts, 1997).

Cryptostegia grandiflora (rubber vine, India rubber vine) is a climbing vine that has become a serious problem in northeastern Queensland, Australia. Other vines that could be serious problems if introduced into Niue include *Thunbergia* species, *Passiflora* species not already present and non-native *Ipomoea* species.

Dieffenbachia maculata (spotted dieffenbachia or dumb cane), a common house and yard plant, is apparently absent although *D. picta* was reported by Sykes (1970) to be under cultivation in Alofi. This species is a problem in American Samoa and is reportedly present in the Cook Islands, Fiji, and Tonga. If found in the wild, either of these species should be promptly eradicated, as they reproduce vegetatively and can thrive in the dense shade of an intact native forest canopy.

Two rubber trees, *Funtumia elastica* (African rubber tree) and *Castilla elastica* (Panama rubber tree), are species that have proven very invasive in Samoa. *Castilla elastica* is present in French Polynesia as well.

Miconia calvescens (the purple plague) has been a disaster to the forest ecosystem of Tahiti in French Polynesia (and has subsequently spread to other islands in French Polynesia). It has also escaped in Hawaii and is the subject of an intensive and costly eradication effort there. It recently was discovered in Queensland, Australia, were an eradication project is also under way. This species is an attractive garden plant and might be introduced this way or as tiny seeds on shoes or used equipment.

A number of grass species are potentially invasive, including:

- *Pennisetum setaceum* (fountain grass), a grass that is a major problem in Hawai'i. It is present in Fiji and French Polynesia. This species is often sold as an ornamental through seed catalogues and so could easily be imported into Niue via the mail system.
- *Imperata cylindrica* (cogon grass), known as a very invasive species. It is present in Samoa, Tonga and Vanuatu.
- A number of other grass species of various degrees of invasiveness, including Andropogon gayanus, Andropogon glomeratus, Andropogon virginicus, Cenchrus brownii, Chloris

radiata, Digitaria insularis, Echinochloa polystachya, Hymenachne amplexicaulis, Hyparrhenia rufa, Ischaemum polystachyum, Ischaemum rugosum, Ischaemum timorense, Miscanthus floridus, Panicum repens, Paspalum paniculatum, Paspalum urvillei, Pennisetum clandestinum, Pennisetum polystachyon, Rhynchelytrum repens, Saccharum spontaneum, Schizachyrium condensatum, Setaria pallide-fusca, Setaria palmifolia and Tripsacum latifolium. Grasses are easily introduced as contaminants in imported seed, imported sand and gravel or on used machinery, and by their nature tend to be invasive.

Passiflora mollissima (banana poka, banana passionfruit), a smothering vine that is a problem in Hawai'i and New Zealand, is also absent.

Pithecellobium dulce (Madras thorn) is a thorny tree present in Hawai'i, Fiji and French Polynesia.

*Psidium cattleianum* (strawberry guava) is a small tree that forms dense thickets. It is a major problem species in a number of island ecosystems including Hawai'i, Fiji, Tahiti and Rarotonga and Mangaia in the Cook Islands. Varieties with red and yellow fruits are known.

Tibouchina herbacea (glorybush or cane ti) is another species that is a major problem in Hawai'i.

The best indicator that a species might be invasive is the fact that it is invasive elsewhere. However, each island ecosystem is unique and invasiveness cannot be predicted with certainty. A good strategy is to be extremely cautious and exclude these and other species known to be invasive or weedy elsewhere (although the best strategy is to exclude all species not shown by risk assessment to be of acceptable risk). These and other known problem species that have the potential to cause problems in tropical island ecosystems and are not yet present in Niue are listed in Appendix 2, Table 1. These species should be excluded through plant quarantine and, if establishment is detected, promptly evaluated for eradication. In addition, species that are reported to be present in the Cook Islands, Fiji, Samoa and American Samoa and Tonga but are not present in Niue are listed in Appendix 4. These species would be of high risk of introduction from any air and ship traffic between these points and Niue.

## 2. Species that are invasive elsewhere and are likewise invasive or have the potential to become so on Niue

Some known invasive plants that are causing trouble in similar ecosystems have been introduced into Niue (Appendix 2, Table 2). Some of them are already causing problems while others are not. Some are cultivated plants that have not (yet) escaped and their potential for causing damage is so far unknown. However, one of the best predictors of invasiveness is the behavior of the species elsewhere, and these are known troublemakers.

Adenanthera pavonina (pomea, coral bean tree), invasive in secondary forests throughout the Pacific, is fairly widespread (and <u>not</u> native) on Niue. It is quite invasive on Tutuila, American Samoa. It may have not yet reached its full potential on Niue.

Aspargus setaceus was seen at the entrance to the Matavai Resort and at a few other locations. This species is a weed in Hawai'i. Its seeds are spread by birds, so it has the potential to spread widely.

Occasional infestations of *Clerodendrum chinense* (Honolulu rose) were seen. It is a problem species in Hawai'i, Samoa and American Samoa, so has the potential to spread more widely. It is reportedly controllable through repeated cutting or mowing (per Tom Misikea).

Hemigraphis alternata (metal leaf) was seen in several locations. This species is shade tolerant and will spread in the forest understory. It is found mostly along roadsides where cuttings have apparently been dumped. Two other species with similar behavior are *Tradescanthia spathacea* (talotalo, laupapaki) and *T. zebrina* (wandering jew).

Leucaena leucocephala (pepe) was quite prevalent, but not as aggressive as expected.

Lonicera japonica (Japanese honeysuckle) was seen cultivated in several locations. This species is a serious pest in a number of countries, is on the New Zealand noxious weed list and is banned from sale in that country. It can be spread both by birds and cuttings.

*Macfadyena unguis-cati* (cat's claw creeper) was seen beside the Public Works building. This aggressive vine climbs trees and also forms a dense mat on the ground. Control is difficult because it has tuberous roots and reproduces from pieces and cuttings. It is a problem species in Hawai'i.

*Melinis minutiflora* (molasses grass) is a species that is both invasive and can cause a serious fire hazard. It has fostered the establishment of fire regimes on many islands where it has been introduced. It is not widespread on the island.

*Merremia tuberosa* (wood rose), a climbing, smothering vine, is notable for its aggressive behavior on Niue. It is present in a limited number of locations—good examples can be seen at the dump and behind the library/archives building.

Mikania micrantha (mile-a-minute weed) is pervasive throughout the island.

Mimosa invisa is a particularly nasty plant as it is covered with thorns and forms dense tangles that are difficult to walk through. It is limited in distribution on Niue (in the Talafa area) and has been treated for eradication (sprayed with Roundup®). Given the limited extent of the infestation and the problems this species can cause, completion of the eradication effort should be given high priority. Mimosa pudica, a smaller plant with only small prickles, can form dense mats. It doesn't seem to be widespread yet, but it may become more prevalent with time.

Occasional trees of *Paraserianthes falcataria* (Moluccca albizia) were seen. This species has the potential, over time, of spreading more widely (as can be seen on Hawai'i, Pohnpei and Tahiti). Further planting should be discouraged. If this is not a desired species, emphasis could be given to cutting the existing trees.

Passiflora foetida (love-in-a-mist) was fairly widespread. It is quite prevalent on most Pacific islands.

*Pennisetum purpureum* (elephant grass) forms dense stands and is the most troublesome grass on Niue.

*Scindapsus aureus*, a climbing vine with large green and yellow leaves, is present at quite a number of locations. It forms a dense mat on the forest floor as well. Spread by cuttings, it is difficult to eradicate as any roots or pieces left behind will sprout.

*Solanum torvum* (prickly solanum, devil's fig) is a spiny species of disturbed areas that forms dense, impenetrable thickets. It was reported to be present on Niue, but was not seen. If previously present, it may have already been eliminated, but if not it certainly must be of limited extent and would be a candidate for eradication. It would be a serious problem for agriculture.

Sorghum sudanense (Sudan grass) was found along the road at the west end of the airport runway, along with a similar, as yet unidentified species. It was also seen elsewhere, such as along the Alofi-Hakapu road. Sudan grass has a reputation of being quite invasive, and may be another invasive species yet to reach full potential on Niue. It is reported to be present in Tonga.

Spathodea campanulata (African tulip tree) is occasionally planted as an ornamental. This tree has become a major problem in Fiji, the Hawaiian Islands and some other places. Large trees do not stand up well to wind. At least at the Vaipapahi Experimental Station it has begun to spread locally by what appear to be root suckers. This species should be carefully monitored and any further planting should be discouraged.

Stachytarpheta urticifolia (blue rat's tail) is ubiquitous and Stachytarpheta jamaicensis is present as well. Both species are widespread in the Pacific.

Syngonium podophyllum, a climbing aroid, is probably another escape from cultivation. It has the ability to spread in the deep shade of intact forests, forming a dense mat on the forest floor as well as climbing trees (behavior similar to *Scindapsus aureus*). It is difficult to eradicate as it is able to reproduce from a single node and bits and pieces of the stems or roots are easily overlooked. It spreads from dumped cuttings.

*Tillandsia usneoides* (old man's beard, Spanish moss) is widely cultivated as a yard plant. It is a native of the southern United States, where it is widespread. Given the warm, moist climate of Niue, it has the potential to spread out of cultivation.

*Tithonia diversifolia* (tree marigold, Mexican sunflower) is widespread along roadsides but it's a light-loving species and probably won't penetrate far into the forest.

Wedelia trilobata (Singapore daisy) has the potential to become a widespread pest, as on many Pacific islands. Since distribution is presently limited, it might be considered seriously for control or eradication.

# 3. Species that are mentioned or listed as being weedy or invasive elsewhere and are common or weedy in Niue

A large number of other common or weedy introduced species were noted. Many of these species, which might best be termed aggressive weeds, are mostly prevalent along roadsides or on disturbed sites, although some species, particularly alien trees, can gradually spread into forested ecosystems. In the case of vines and plants that form dense ground cover, the regeneration of native species can be inhibited.

Some of these species could become a problem in the future, since there is often a long lag time between introduction and when a species begins to cause serious impacts. These species (listed in Appendix 2, Table 3) should be monitored for spread and possible control measures, if necessary.

Not many exotic tree species have been introduced to Niue. Some that are present and might spread beyond cultivation include *Bauhinia monandra* (orchid tree), *Ceiba pentandra* (kapok), *Delonix regia* (flame tree), *Moringa oleifera* (horseradish tree), *Samanea saman* (monkeypod), *Tecoma stans* (yellow bells) and *Thevetia peruviana* (yellow oleander), but these should be easily controlled if they appear in unwanted places.

A number of introduced grasses have become established, including Axonopus fissifolius (narrow-leaved carpetgrass), Brachiaria mutica (para grass), Brachiaria subquadripara (green summer grass), Cenchrus ciliaris (bufflegrass), Cenchrus echinatus (bur grass); Chloris radiata (plush-grass, radiate fingergrass), Chrysopogon aciculatus (Mackie's pest, lovegrass), Cynodon dactylon (Bermuda grass), Digitaria ciliaris (fingergrass, smooth crabgrass), Digitaria violascens (smooth crabgrass), Eleusine indica (goosegrass), Miscanthus floridulus (swordgrass), Panicum maximum (Guinea grass), Paspalum conjugatum (Hilo grass), Paspalum dilatatum (dallis grass) and Sorghum halepense (Johnson grass).

Other widespread or weedy species include *Abelmoschus moschatus* (fou ingo), *Allamanda cathartica* (yellow trumpet vine), *Asystasia gangetica* (Chinese or Philippine violet), *Bidens pilosa* (beggar's tick), *Centrosema pubescens* (centro), *Crotalaria anagyroides* (pine kotalelia), *Cuscuta campestris* (golden dodder), *Derris malaccensis* (akau Niukini, New Guinea creeper) and *Furcraea foetida* (Mauritius hemp).

Antigonon leptopus (chain of hearts), a climbing vine often planted as an ornamental, is a widespread pest on Guam. Only a few examples, mostly in cultivation, were seen on Niue.

A climbing vine, tentatively identified as *Ipomoea macrantha*, was seen next to Gabe's Food Bar and at other locations. *Ipomoea macrantha* is indigenous, but a specimen was taken and a positive identification is pending.

Lantana camara (lantana) is present but is apparently fairly well controlled by introduced biological agents. If lantana becomes a problem an evaluation should be conducted to make sure these agents are still present.

*Momordica charantia* (bitter-melon, balsam pear), a member of the cucumber family, is a climbing vine and its fruit can be the host for fruit flies. It is reported to be present but was not seen.

#### 4. Native species exhibiting aggressive behavior

*Merremia peltata* (fue, fue vao), a native or early introduction, is quite invasive along forest edges where there has been disturbance, but its extent seems to be limited on Niue, unlike many Pacific islands.

#### Strategies for dealing with invasive species

The first line of defense against invasive species is to keep them out. Control at ports of entry is essential, and those concerned with the protection of natural ecosystems should work closely with plant protection and quarantine officials to combat known and potential invasive plant species. Plant quarantine officers should be familiar with both agricultural pests and those that threaten wildland ecosystems. A list of known noxious species to be excluded should be developed and exclusion of these species should be backed by the force of law and regulation. Better yet is to utilize the "precautionary principle" (now used by Australia and New Zealand and under serious consideration by a number of other counties) to exclude all alien species not shown to be of acceptable risk. Risk assessment and management techniques can be used to assess the likelihood and effects of possible introductions and to develop exclusion and eradication strategies.

Niue is to be commended for the recently formed Invasive Species Committee. Close coordination and cooperation between the various government Departments and Divisions is essential. The committee can be effective both for long-term strategic actions, such as review and strengthening of relevant laws and regulations, as well as short-term tactical and operational problems, such as the introduction of a new species.

The Invasive Species Committee should consider drawing up a prioritized plan of action. This would include critical areas to be protected and species that might lend themselves to control or eradication. Time, money and people are always in limited supply and they must be directed to the places where they will do the most good. There are many areas on the island that are relatively free of weed species. It should be possible to eliminate the invasive species of major concern in at least some of these areas and protect them into the future. Some recommendations are made below as to possible management actions against some individual plant species, but the Committee should test these against available resources and priorities.

Education of the public about the danger of introductions and encouraging the use of native species can be helpful. People need to understand why they should follow the quarantine regulations, why they shouldn't dump garden cuttings in the woods, and why they should report suspicious plants. What may just be a pretty flower to be planted in a yard or garden can turn out to be an invasive species. Public service announcements on television or radio can be used and "wanted" posters can be prepared for critical species. Education of schoolchildren is especially important, as this is the most impressionable age. Children can also have a notable effect on the

actions of their parents. Prompt follow-up to public reports and inquiries is essential to maintain the credibility of a public education program.

The public also needs to understand that the immediate eradication of a small area of a problem species, even if it involves the use of herbicides, may be better than living with a problem species forever. There are many instances where you hear people say, "I wish we'd taken action when this pest was first noticed". It may even be worthwhile to take people to a place where they can be shown the full extent of a problem if the infestation is allowed to spread so that they will understand, accept and support eradication. For example, anyone visiting Tahiti would very likely come away convinced that *Miconia calvescens* is an ecological disaster and that it should be prevented from becoming established on other Pacific islands. The public should be informed and involved in any proposed control or eradication actions.

Any local nurseries, botanical gardens or plant importers can be sources of new introductions. A positive approach is to work together to develop a "white list" of both native and non-native species that the public can be encouraged to plant.

Foresters, conservation officers, extension agents and others that spend time in the field should be alert to new species that exhibit invasive behavior. Often, these species first show up in urban or farm areas because they are usually introduced by people and tend to first become established in flower gardens and disturbed areas. Suspicious plant species should be promptly reported. Periodically scheduled surveys can also be conducted for new or expanding infestations. An evaluation should be conducted for any new species that appears to be invasive or is known to be invasive elsewhere. Assistance by an expert who is familiar with the species and methods for its eradication or control should be requested if needed. Prompt action is essential, since once a species becomes widespread, control or eradication can be extremely costly or impossible. Assistance is also available on-line from experts through the Pacific Pestnet and Aliens list-servers.

Niue appears to have adequate laws and regulations in place to deal with quarantine and new introductions, but it would be appropriate for the Invasive Species Committee to review them to see if they might need to be strengthened. In the case of Niue, where most land is privately owned, the ability of government to require the control of noxious species on private lands or to take action on private lands if the landowner cannot be located or does not take prompt action is essential. Provision for emergency funds to deal with immediate problems should also be in place. New Zealand and some of its town councils have strong laws and regulations that can be used as models.

#### Recommendations

In addition to the above general strategies, we offer the following specific recommendations:

• Make every effort to keep out all the species listed in Appendix 2, Table 1. All of these are known invasive species elsewhere, and there is no sense in running the risk that they will act the same in Niue. As we are able to gather more information on other species that might threaten tropical island ecosystems we will add them to the database. For those with Internet access, additional information and new listings can be found at http://www.hear.org/pier.

The information is also available on the PIER-CD for local use. Assistance from experts in identifying and managing invasive species can also be obtained by subscribing to and posting inquiries on the Aliens and Pacific Pestnet list servers.

- Take special measures to keep Castilla elastica, Cecropia obtusifolia/peltata, Cinnamomum verum, Chromolaena odorata, Clerodendrum quadriloculare, Clidemia hirta, Coccinia grandis, Dieffenbachia maculata, Funtumia elastica, Imperata cylindrica, Passiflora foetida, Passiflora mollissima, Pennisetum setaceum, Psidium cattleianum and Tibouchina herbacea out, to monitor for their occurrence, and to eradicate them immediately if found. These are all well-documented problem species that have had a major impact on natural ecosystems elsewhere. The potential impact of these species, if they are introduced and become established, is very high.
- Extraordinary measures need to be employed against *Miconia calvescens* because its effect on Niue's ecosystems would be so devastating if introduced. At a minimum, quarantine officers should be alert to people who might have been in the woods or rural areas in French Polynesia (particularly the islands of Tahiti, Moorea, Raiatea and Tahaa) or Hawai'i (especially the island of Hawai'i), and inspect their shoes or boots for seeds. Any trucks or equipment coming from French Polynesia or Hawai'i, particularly those that have been used in rural areas, must be power washed or steam cleaned. Any infestations picked up from public reporting or scouting should be promptly eradicated before the plants set seed.
- Several shade-loving species, particularly *Hemigraphis alternata, Scindapsus aureus*, and *Syngonium podophyllum, Tradescanthia spathacea*, and *Tradescanthia zebrina* have become established in forested areas and their dense stands crowd out other species. At present, the infestations are mostly along roadsides, apparently as a result of dumping of cuttings. Serious consideration should be given to controlling these infestations before they spread further into the forest. The public should be encouraged, through education, not to dump cuttings in the future.
- Wood rose (*Merremia tuberosa*) is quite aggressive on Niue. It is presently in a limited number of locations, primarily spreads by cuttings, and might lend itself to control measures.
- An excellent start has been made on the eradication of *Mimosa invisa*. Eradication efforts should be completed and a scouting and public reporting program set up to detect new infestations. A "wanted" poster and other public education efforts would be appropriate.
- Discourage any planting of *Paraserianthes falcateria*. While it spreads only slowly, it has managed to become widespread on several Pacific islands.
- Lonicera japonica (Japanese honeysuckle) is a dangerous species that was seen only in cultivation. If the owners of these plants could be persuaded to give them up, it would eliminate the danger from this plant.
- Sudan grass (*Sorghum sudanense*) has a bad reputation as an invasive species. It is presently limited in extent and may be a candidate for control measures. Be very cautious in

introducing new grasses, as many of them are aggressive invaders. Grass seed is also invariably contaminated with other grasses or weeds.

- Wedelia trilobata is just getting a foothold on Niue. If unchecked, it will spread rapidly
  throughout the island, becoming a problem along roadsides, in gardens and fields, or any
  other open, disturbed areas. Serious consideration should be given to an eradication
  campaign against this species.
- Many forested areas are relatively free of invasive species. They could probably kept free of serious weed pests at relatively low cost. Conservation and other sensitive areas should be given high priority in this regard. Specific tracts of intact forest (Huvalu, for example) or areas with a greater diversity of species (Lefuka) should be targeted as high priority areas to be protected, not only from invasive weed species but from conversion into crop lands. As these areas of native forest are lost, there will be a corresponding loss of other organisms, most notably the native fruit bats and pigeons. Not only are these species utilized as a food source by Niueans but they serve as pollinators of the native tree species and then provide a means of dispersal for seed of the native trees. Conservation of these areas could be coupled with environmental education programs in the schools. Pristine areas might also be developed as national parks that could serve not only conservation but could promote tourism.
- Species listed in Appendix 2, Table 3 are pests and, although they may not be presently causing serious damage to wildland ecosystems, they are certainly not desirable species. They should not be more widely distributed.
- A number of species used and ornamental plantings are, at least to some degree, invasive.
   While many of these species have desirable ornamental or physical characteristics, planting
   exotics as opposed to native species is a policy question that needs to be carefully considered.
   Most species that naturalize to any extent will gradually spread throughout available and
   suitable habitat, given enough time. New introductions should be carefully assessed to
   minimize risk.
- Require steam cleaning or power washing of all used equipment coming into Niue. This is
  desirable not only from the standpoint of excluding invasive plants, but also insects and
  diseases. Especially suspect are roadbuilding machinery, military equipment and off-road
  vehicles.
- Change the customs arrival form to have people indicate if they have been in forests as well as farms. This would then alert quarantine officers to inspect boots and other clothing for soil and seeds. New Zealand uses this language on its entry forms. This is particularly important to prevent the entry of *Chromolaena odorata*, *Miconia calvescens* and other small-seeded species.
- Intact native forests are the most resistant to invasion. Any measures that limit the amount of disturbance will help keep invasive species out.

- A risk-rating scheme would be useful in evaluating the various known and potential invasive species for their risk of introduction, spread and potential damage. The Institute of Pacific Islands Forestry is looking at the possibility of adapting the Australian risk assessment system to the needs of the Pacific. If so, all the species listed will be rated and this information provided to Pacific island countries.
- It might be useful to conduct a joint training session/workshop for foresters, land managers, extension agents, quarantine officers and other interested individuals and organizations in the recognition, exclusion, eradication, and control of invasive species. The goal of the training and workshop would be to increase the knowledge of invasive species of environmental concern and foster cooperation and joint action against invasive species. We are looking into cooperating with such organizations as the Secretariat of the Pacific Community and/or SPREP to provide such training.
- The purpose of this survey was to give an overall assessment of the situation. Individual species of concern should be more fully evaluated as needed as to extent, invasiveness, and the possibility for control or eradication. Technical assistance should be requested, if needed, to evaluate individual species.

#### Appendix 1.

#### Background material and references:

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Table 1. Species that are invasive elsewhere in similar ecosystems but are not known to be present in Niue

Scientific Name	Common Names	Family	Habit
Acacia auriculiformis	Papuan wattle, auri, earleaf acacia; tuhkehn pwelmwahu	Fabaceae	tree
Acacia confusa	Formosan koa, Formosa acacia, sosigi, shoshigi, sosugi, boiffuring, serepa, soschghi, pilampwoia, ianángi, yanangi	Fabaceae	tree
Acacia farnesiana	Ellington curse, aroma, klu, popinac, kandaroma, cassie, vaivai vaka-vatona, vaivai vakavotona, ban baburi, oki, te kaibakoa, debena, kolu	Fabaceae	shrub
Acacia mangium	mangium, tuhkehn pwelmwahu	Fabaceae	tree
Acacia mearnsii	black wattle	Fabaceae	tree
Acacia melanoxylon	Australian blackwood, blackwood acacia	Fabaceae	tree
Acacia nilotica	prickly acacia, algaroba, tiare, babul	Fabaceae	tree
Acacia spp.	acacia	Fabaceae	shrub/tree
Adenanthera abrosperma	giddy giddy	Fabaceae	tree
Ailanthus altissima	tree of heaven	Simaroubaceae	tree
Albizia chinensis		Fabaceae	tree
Albizia lebbeck	siris-tree, rain tree, East Indian walnut, bois noir, kokko, trongkon-mames, tronkon mames, mamis, kalaskas, trongkon-kalaskas, schepil kalaskas, ukall ra ngebard, gumorningabchey; ngumorrningobchey, 'ohai, vaivai, vaivai ni vavalangi, vaivai ni vavalagi	Fabaceae	tree
Alternanthera philoxeroides	alligator weed	Amaranthaceae	herb
Andropogon gayanus	gamba grass	Poaceae	grass
Andropogon glomeratus	bush beardgrass	Poaceae	grass
Andropogon virginicus	broomsedge, yellow bluestem, whisky grass	Poaceae	grass
Annona glabra	pond apple, alligator apple, bullock's heart, cherimoyer, uto ni mbulumakau, uto ni bulumakau, kaitambo, kaitambu	Annonaceae	tree
Ardisia crenata	hen's eyes, Hilo holly, coral berry, Australian holly, arbre à noël	Myrsinaceae	shrub
Ardisia elliptica	shoebutton ardisia, ati popa'a	Myrsinaceae	shrub
Argyreia nervosa	elephant creeper, Hawaiian baby woodrose, silver morning glory, woolly morning glory, coup d'air, liane a minguet, liane d' argent	Convolvulaceae	vine
Aristolochia littoralis	Dutchman's pipe	Aristolochiaceae	vine
Austroeupatorium inulaefolium		Asteraceae	herb
Azadirachta indica	neem	Meliaceae	tree
Barleria lupulina		Acanthaceae	shrub
Bauhinia purpurea	orchid tree, purple butterfly tree, pink butterfly tree	Fabaceae	tree
Bauhinia variegata	orchid tree, butterfly tree	Fabaceae	tree
Blechum brownei	blackweed, yerbas babui, vao uliuli	Acanthaceae	herb
Bocconia frutescens	bocconia	Papaveraceae	shrub
Brillantaisia lamium		Acanthaceae	shrub
Buddleia asiatica	dog tail	Loganiaceae	shrub
Buddleia madagascariensis	butterfly bush, smoke bush	Buddleiaceae	shrub

Scientific Name	Common Names	Family	Habit
Caesalpinia bonduc	gray nickers, wait-a-bit, nickaeoo, pacap, pakao, tochedulik, sers mekemad, togodulik, talamoa, talatalamoa, talmoa foto, kakalaioa, tataramoa, talatala'amoa, 'anoso, 'anaoso, soni, jeimota	Fabaceae	vine
Caesalpinia decapetala	cats claw, Mysore thorn, Mauritius thorn, wait-a-bit, cats claw, puakelekino	Fabaceae	shrub
Calliandra calothyrsus	powderpuff	Fabaceae	shrub
Calliandra	red powder puff	Fabaceae	shrub
haematocephala Cardiospermum grandiflorum	balloon vine; heart seed	Sapindaceae	vine
Cassia obtusifolia	habucha	Fabaceae	herb
Cassia siamea	cassod tree	Fabaceae	tree
Castilla elastica	Panama rubber tree, Mexican rubber tree, pulu mamoe	Moraceae	tree
Casuarina glauca	swamp oak, saltmarsh ironwood, longleaf ironwood	Casuarinaceae	tree
Cecropia obtusifolia	trumpet tree, guarumo, parasolier, faux-ricin, pisse-roux	Cecropiaceae	tree
Cedrela odorata	cigar box cedar, Mexican cedar, West Indian cedar, Spanish cedar, Mexican cedar, sita hina	Meliaceae	tree
Cenchrus brownii	burgrass, sand-bur	Poaceae	grass
Cestrum diurnum	inkberry, day jessamine, day cestrum, China berry, tinta 'n-China, tentanchinu, tintan china, thauthau	Solanaceae	shrub
Chloris radiata	plush-grass, radiate fingergrass	Poaceae	grass
Chromolaena odorata	Siam weed, triffid weed, bitter bush, herbe du Laos, otuot, kesengesil, masigsig, hagonoy, agonoi, huluhagonoi, mahsrihsrihk	Asteraceae	herb
Chrysobalanus icaco	coco plum, icaco, apolo, icaque	Chrysobalanaceae	shrub
Chrysophyllum oliviforme	satin leaf, caimitillo	Sapotaceae	tree
Cinchona pubescens	quinine tree	Rubiaceae	tree
Cinnamomum burmannii	padang cassia	Lauraceae	tree
Cinnamomum camphora	camphor tree, camphor laurel	Lauraceae	tree
Cinnamomum verum	cinnamon tree, ochod ra ngebard, tinamoni	Lauraceae	tree
Citharexylum caudatum	juniper berry	Verbenaceae	tree
Citharexylum spinosum	fiddlewood, masese	Verbenaceae	tree
Clausena excavata	clausena	Rutaceae	tree
Clerodendrum japonicum	glorybower	Verbenaceae	shrub
Clerodendrum paniculatum	pagoda plant, pagoda flower, butcherechár, butecherechar, butcherechár tukehn sousou	Verbenaceae	shrub
Clerodendrum quadriloculare	bronze-leaved clerodendrum, tuhkehn palau	Verbenaceae	shrub
Clidemia hirta	Koster's curse, soap bush, kui, kúi, kaurasiga, kauresinga, kaurasinga, roinisinga, ndraunisinga, mara na bulumakau, mbona na mbulamakau, vuti	Melastomataceae	shrub
Clitoria ternatea	butterfly pea, buikike, bukike, paokeke, bukike paokeke, capa de la reina, kapa de la raina, putitainubia, pepe, latoela, nawa	Fabaceae	vine
Clusea rosea	signature tree, autograph tree, copey, Scotch attorney	Guttiferae	tree
Coccinia grandis	ivy gourd, scarlet-fruited gourd, aipikohr, kundru	Cucurbitaceae	vine
Cordia alliodora	laurel, Ecuador laurel, salmwood, kotia	Boraginaceae	tree
Cordia curassavica	black sage	Boraginaceae	shrub
Cordia glabra	broad-leaved cordia	Boraginaceae	tree
Cortaderia jubata	Andean pampas grass, purple pampas grass	Poaceae	grass
Cortaderia selloana	pampas grass, silver pampas grass	Poaceae	grass
Corynocarpus laevigatus	New Zealand laurel, karakara nut	Corynocarpaceae	tree

Scientific Name	Common Names	Family	Habit
Cryptostegia grandiflora	rubber vine, India rubber vine, liane de gatope	Asclepiadaceae	vine
Cupaniopsis anacardioides	carrotwood	Sapindaceae	tree
Dalbergia sissoo	Indian dalbergia, shisham	Fabaceae	tree
Derris elliptica	derris, tuba, bagin, oop, op, dub, up, peinuhp, uhp, upanai, upanyap, upkesetik, yuub, nduva, duva ni vavalagi, nduva ni vavalangi	Fabaceae	vine
Desmanthus virgatus		Fabaceae	herb
Desmodium nicaraguense		Fabaceae	tree
Desmodium tortuosum	Florida beggar weed, Spanish clover	Fabaceae	herb
Dichrostachys cinerea	marabú, Sen Domeng, Saint Domingue, acacia Saint Domingue	Fabaceae	shrub
Dieffenbachia maculata	spotted dieffenbachia, dumb cane, yalu ni vavalagi	Araceae	herb
Digitaria insularis	cottongrass, sourgrass, feather-top grass	Poaceae	grass
Dissotis rotundifolia	dissotis	Melastomataceae	herb
Duranta repens	golden dewdrop	Verbenaceae	shrub
Echinochloa polystachya	aleman grass, carib grass	Poaceae	grass
Erigeron karvinskianus	Mexican daisy, seaside daisy, daisy fleabane	Asteraceae	herb
Eriobotrya japonica	loquat, Japanese plum	Rosaceae	tree
Eupatorium catarium	praxelis	Asteraceae	herb
Ficus benghalensis	banyan, Indian banyan, vada tree	Moraceae	tree
Ficus benjamina	weeping fig, baka, ovava' fisi	Moraceae	tree
Flacourtia rukam	Indian plum, Indian prune, governor's plum, filimoto	Flacourtiacae	tree
Flemingia macrophylla		Fabaceae	tree
Flemingia strobilifera	besungelaiei	Fabaceae	shrub
Flindersia brayleyana	Queensland maple, silkwood	Rutaceae	tree
Fuchsia boliviana	fuchsia	Onagraceae	tree
Fuchsia magellanica	fuchsia	Onagraceae	shrub
Funtumia elastica	African rubber tree, pulu vao	Apocynaceae	tree
Grevillea banksii	kahili flower, Banks grevillea, haiku	Proteaceae	tree
Grewia asiatica	, 5	Tiliaceae	tree
Gymnocoronis spilanthoides	Senegal tea, temple plant	Asteraceae	herb
Haematoxylum campechianum	logwood, bloodwood tree, bloodwood tree, campeachy wood	Fabaceae	tree
Harungana madagascariensis	harungana	Clusiaceae	tree
Hedychium coronarium	white ginger, butterfly lily, sinter pwetepwet, thevunga, ndrove, tolon, cevuga vula, dalasika	Zingiberaceae	herb
Hedychium gardnerianum	kahili ginger, cevuga dromodromo, sinter weitahta	Zingiberaceae	herb
Heterocentron subtriplinervium	pearl flower	Melastomataceae	herb
Heterospathe elata	palma brava, palma braba, asbo, demailei, demailéi, domaile, domailei, ebouch, buag bbuag	Arecaceae	tree
Hippobroma longiflora	star of Bethlehem	Campanulaceae	herb
Hiptage benghalensis	hiptage, liane de cerf	Malpighiaceae	shrub
Hymenachne amplexicaulis	hymenachne	Poaceae	grass
Hyparrhenia rufa	jaragua grass	Poaceae	grass
Hypochoeris radicata	hairy cat's ear, gosmore	Asteraceae	herb
Hyptis capitata	botones, batunes, t'aiegarabao, knobweed	Lamiaceae	herb

Scientific Name	Common Names	Family	Habit
Hyptis suaveolens	wild spikenard, mumutun	Lamiaceae	herb
Imperata cylindrica	blady grass, cogon grass, satintail, alang-alang, lalang, carrizo, kunai, gi, ngi, paille de dys, paillotte, impérata cylindrique	Poaceae	grass
lpomoea spp.	morning glory (non-native)	Convolvulaceae	herb
Ischaemum polystachyum	paddle grass, reh padil, mah	Poaceae	grass
Ischaemum rugosum	muraina grass, tho muraina, co muraina, wrinkle duck-beak, saramattagrass	Poaceae	grass
Ischaemum timorense	centipede grass, waidoi grass	Poaceae	grass
Justicia carnea	pink plume-flower, pink jacobinia	Acanthaceae	shrub
Jasminum fluminense		Oleaceae	vine
Jatropha gossypifolia	bellyache bush, cotton-leaved physic nut	Euphorbiaceae	shrub
Khaya senegalensis	African mahogany, Senegal mahogany	Meliaceae	tree
Leptospermum ericoides	tree manuka, tree manuba, kanuka	Myrtaceae	tree
Leptospermum scoparium	New Zealand tea, manuka	Myrtaceae	tree
Licuala grandis	ruffled fan palm, palmier-cuillère	Arecaceae	tree
Ligustrum spp.	privet	Oleaceae	shrubs, small trees
Lophostemon confertus	brush box, Brisbane box, vinegar tree	Myrtaceae	tree
Ludwigia peruviana	Iudwigia, Peruvian primrose, water primrose	Onagraceae	shrub
Melaleuca quinquenervia	paperbark, cajeput, punk tree, niaouli	Myrtaceae	tree
Melastoma candidum		Melastomataceae	tree
Melochia umbellata	melochia	Sterculiaceae	tree
Memecylon floribundum		Melastomataceae	shrub?
Miconia calvescens	miconia, purple plague, velvet leaf, bush current	Melastomataceae	tree
Mikania scandens	climbing hempweed	Asteraceae	vine
Mimosa pigra	catclaw mimosa, thorny sensitiveplant, giant mimosa, giant sensitive plant, zaraz, dormilona, bashful plant, amourette violet, amourette riviére	Fabaceae	shrub
Montanoa hibiscifolia	montanoa, tree daisy, Anzac flower	Asteraceae	shrub
Muntingia calabura	jam tree, Jamaican cherry, Singapore cherry, Panama cherry, Panama berry, ornamental cherry, calabura, sirsen, budo, manzanilla, mansanita, manzanita, capulin	Tiliaceae	tree
Ochroma pyramidale	balsa, corkwood	Bombacaceae	tree
Odontonema tubaeforme	fire spike, cardinal flower	Acanthaceae	shrub
Operculina ventricosa	paper rose, alalag, palulu, fue hina	Convolvulaceae	vine
Paederia scandens	stink vine	Rubiaceae	vine
Panicum repens	torpedo grass, panic rampant, wainaku grass, couch panicum, creeping panic	Poaceae	grass
Parkinsonia aculeata	parkinsonia, Jerusalem thorn, horse-bean, retama	Fabaceae	tree
Paspalum urvillei	vasey grass	Poaceae	grass
Passiflora ligularis	sweet granadilla, yellow passionfruit	Passifloraceae	vine
Passiflora mollissima	banana poka, banana passionfruit, bananadilla	Passifloraceae	vine
Passiflora rubra	red passionfruit	Passifloraceae	vine
Passiflora suberosa	wild passionfruit, devil's pumpkin, indigo berry, corky passionflower, passiflore, grenadille, huehue haole	Passifloraceae	vine
Pennisetum clandestinum	kikuyugrass, kikuyo	Poaceae	grass
Pennisetum polystachyon	mission grass, feathery pennisetum, queue de chat, mechen katu, pwokso, o tamata	Poaceae	grass
Pennisetum setaceum	fountain grass	Poaceae	grass

Scientific Name	Common Names	Family	Habit
Piper aduncum	spiked pepper, yaqona ni Onolulu, yanggona ni Onolulu	Piperaceae	tree
Piper auritum	eared pepper, anise piper, hoja santa, anisillo, hinojo, sabalero, hoja de la estrella, Hawaiian sakau, false sakau, false kava	Piperaceae	shrub
Pistia stratiotes	water lettuce, tropical duckweed, laitue d'eau, pistie, lechuguita de agua, repollo de agua, apon-apon, apoe-apoe, beo-cai, chawk	Araceae	aquatic herb
Pithecellobium dulce	Madras thorn, Manila tamarind, camachili, kamachile, kamachiles, kamachili, kamatire, kamatsiri, kamatsíri 'opiuma, kataiya	Fabaceae	tree
Pittosporum undulatum	Victorian box, Victorian laurel, Australian cheesewood, mock orange, sweet pittosporum	Pittosporaceae	tree
Pluchea indica	Indian fleabane, Indian pluchea	Asteraceae	shrub
Pluchea symphytifolia	sour bush	Asteraceae	shrub
Prosopis spp.	mesquite, algaroba	Fabaceae	tree
Psidium cattleianum	strawberry guava, cherry guava, cattley guava, Chinese guava, kuahpa, waiawi, ngguava, goyavier de Chine, tuava tinito	Myrtaceae	tree
Rhodomyrtus tomentosa	rose myrtle, downy myrtle, Isenberg bush	Myrtaceae	shrub
Rhynchelytrum repens	Natal redtop, Natal grass, red Natal grass, Holme's grass, blanketgrass, salapona, herbe du Natal, herbe rose, herbe pappanque, tricholène	Poaceae	grass
Rubus alceifolius	giant bramble	Rosaceae	shrub
Rubus moluccanus	broad leafed bramble, Molucca bramble, Molucca raspberry, piquant lou-lou, kohkihl, soni, wa sori, wa ngandrongandro, wa votovotoa	Rosaceae	shrub
Rubus rosifolius	roseleaf raspberry, thimbleberry, ola'a, framboisier	Rosaceae	shrub
Rubus spp.	raspberries, blackberries, brambles	Rosaceae	shrub
Saccharum spontaneum	wild cane, ahlek, ahlec, banga ruchel, ac	Poaceae	grass
Salvinia molesta	salvinia, water fern, kariba weed, African payal	Salviniaceae	fern
Sanchezia nobilis	sanchezia	Acanthaceae	shrub
Sanchezia parvibracteata	sanchezia	Acanthaceae	shrub
Schinus terebinthifolius	Christmas-berry, Brazilian pepper, Brazilian holly, Florida holly, faux poivrier, poivre rose, warui	Anacardiaceae	tree
Schizachyrium condensatum	little bluestem, bush beardgrass	Poaceae	grass
Senecio madagascarensis	fireweed	Asteraceae	herb
Senecio mikanioides	German ivy, Italian ivy, cape ivy	Asteraceae	vine
Sesbania grandiflora	hummingbird tree, sesban, katurai, agati, agathi	Fabaceae	small tree
Setaria pallide-fusca	foxtail, Queensland pigeon grass, cat's tail grass	Poaceae	grass
Setaria palmifolia	palmgrass, short pitpit, hailans pitpit, broadleaved bristlegrass	Poaceae	grass
Solandra maxima	cup of gold, golden cup	Solanaceae	liana
Solanum mauritianum	bugweed, wild tobacco, tree tobacco, pula	Solanaceae	shrub
Solanum seaforthianum	potato creeper, Brazilian nightshade	Solanaceae	vine
Solanum tampicense	wetland nightshade, aquatic soda apple	Solanaceae	aquatic herb
Solanum torvum	prickly solanum, devil's fig, turkeyberry, terongan, fausse aubergine, aubergine sauvage épineuse, piko, tisaipale, kausoni, soni, kauvoto-votua, kaisurisuri, katai, bhankatiya, soni ni vavalagi	Solanaceae	shrub
Solanum viarum	tropical soda apple	Solanaceae	herb?
Sphaeropteris cooperi	Australian tree fern	Cyatheaceae	fern
Stizolobium pruriens	cow itch, velvet bean, Bengal bean, Mauritius bean, akangkang dangkulo	Fabaceae	vine
Syncarpia glomulifera	turpentine tree, lustre wood	Myrtaceae	tree

Scientific Name	Common Names	Family	Habit
Syzygium floribundum	weeping myrtle	Myrtaceae	tree
Tabebuia heterophylla	pink tecoma, pink trumpet tree, white cedar, calice du pape	Bignoniaceae	tree
Thunbergia alata	black-eyed susan vine	Acanthaceae	vine
Thunbergia grandiflora	Bengal trumpet, blue trumpet vine, clock vine	Acanthaceae	vine
Thunbergia laurifolia	purple allamanda, laurel-leaved thunbergia, laurel clock vine	Acanthaceae	vine
Tibouchina herbacea	glorybush, cane ti, tibouchina	Melastomataceae	herb
Tibouchina urvileana	glorybush, lasiandra, princess flower	Melastomataceae	herb
Timonius timon	liberal, sakosia	Rubiaceae	tree
Tribulus cistoides	puncture vine, caltrop, te maukinikini	Zygophyllaceae	herb
Triphasia trifolia	limeberry, limon-China, limoncito, lemon China, lemon de China	Rutaceae	shrub
Triplaris weigeltiana		Polygonaceae	tree
Tripsacum latifolium		Poaceae	grass
Triumfetta semitriloba	Sacramento bur, dadangsi, masiksik lahe	Tiliaceae	shrub
Turbina corymbosa	turbina	Convolvulaceae	vine
Turnera ulmifolia		Turneraceae	herb
Vitex parviflora		Verbenaceae	shrub/tree
Ziziphus mauritiana	Indian jujube, manzanas, manzanita, jujube, baer, bahir, baher	Rhamnaceae	tree

NOTE: The common names in this and the following tables are from the PIER data base and web site and include names in use at various locations throughout the Pacific. Additional information, including the locations where the various names are used, can be found in the individual species summaries at the PIER web site, http://www.hear.org/pier, or on the PIER CD.

Table 2. Introduced species that are invasive elsewhere and are also invasive or potentially invasive in Niue.

Scientific Name	Common Names	Family	Habit
Adenanthera pavonina	coral bean tree, red sandalwood tree, red bead tree, lopa, pomea, bead tree, false wiliwili, kaikes, colales, culalis, kolales, kulales, kulalis, metekam, metkam, metkem, telengtúngd, telentundalel, mwetkwem, lera, lere ndamu, vaivai, vaivai ni vavalangi	Fabaceae	tree
Asparagus setaceus	ornamental asparagus, asparagus fern	Liliaceae	vine
Clerodendrum chinense	Honolulu rose, losa Honolulu, pikake hohono, pikake wauke, pitate mama	Verbenaceae	shrub
Hemigraphis alternata	metal leaf; cemetery plant	Acanthaceae	herb
Lonicera japonica	Japanese honeysuckle, honekakala	Caprifoliaceae	vine
Macfadyena unguis-cati	cat's claw creeper	Bignoniaceae	vine
Melinis minutiflora	melinis, molasses grass, herbe molasses, puakatau	Poaceae	grass
Merremia tuberosa	wood rose	Convolvulaceae	vine
Mikania micrantha	mile-a-minute weed, Chinese creeper, American Rope, liane américaine, kwalo koburu, fue saina, wa mbosuthu, wa mbosuvu, wa mbutako, wa ndamele, ovaova, wa bosucu, usuvanua	Asteraceae	vine
Mimosa invisa	giant sensitive plant, grande sensitive, sensitive gèante, singbiguin sasa, mechiuaiu, vao fefe palagi, la'au fefe tele, la'au fefe palagi, wa ngandrongandro levu, wa ngandrongandro ni wa ngalelevu, limemeihr laud, co gadrogadro	Fabaceae	shrub
Paraserianthes falcataria	Moluccca albizia, tuhke kerosene, tuhkehn karisihn, ukall ra ngebard, tamaligi palagi	Fabaceae	tree
Passiflora foetida	love-in-a-mist, wild passion fruit, passionflower, dulce, stinking passionflower, passiflore, tomates, kudamono, pasio vao, vine vao, vaine 'ae kuma, pohapoha, tea biku, sou, loliloli ni kalavo, bombom, pompom, pwomwpwomw, qaranidila	Passifloraceae	vine
Pennisetum purpureum	elephant grass, napier grass, merker grass, bokso, puk-soh, acfucsracsracsr, herbe éléphant, fausse canne à sucre	Poaceae	grass
Scindapsus aureus	pothos, money plant, yalu, wa yalu, wa lu, alu, halu, waloa, matha, nanggalanggala, nanggalinggali, tonga, tanga	Araceae	climber
Sorghum sudanense	Sudan grass, kola	Poaceae	grass
Spathodea campanulata	African tulip tree, fireball, fountain tree, tulipier du Gabon, pissepisse, apar, rarningobchey, tuhke dulip, tiulipe, taga mimi	Bignoniaceae	tree
Stachytarpheta urticifolia	blue rat's tail, dark-blue snakeweed, false verbena; herbe bleue, sakura, ouchung, louch beluu, mautofutala, mautofu tala, mautofu Samoa, motofu Samoa, hiku`i kuma, hiku'kuma, 'iku 'i kuma, mautofu vao, matofu fualanumanoa, te uti, turulakaka, tumbutumbu, serakawa, lavenia, se karakarawa	Verbenaceae	herb
Syngonium podophyllum	arrowhead plant, goosefoot plant	Araceae	climber
Tithonia diversifolia	tree marigold, Mexican sunflower, Japanese sunflower, matala	Asteraceae	shrub
Tradescanthia spathacea	oyster plant, boat plant, moses in a boat, talotalo, laupapaki	Commelinaceae	herb
Tradescanthia zebrina	wandering zebrina, wandering jew	Commelinaceae	herb
Wedelia trilobata	wedelia, Singapore daisy, dihpw ongohng, ngesil ra ngebard, rosrangrang, atiat, ate	Asteraceae	herb

Table 3. Species that are reported as invasive or weedy elsewhere and are common, weedy or cultivated in Niue.

Scientific Name	Common Names	Family	Habit
Abelmoschus moschatus	kamang, ka'mang, karereon, karereon nikapwerik nik, kareron, likonokon, gongul, metei, mety, methey, hathongethong, kamwayang, nikapwerik, setmwechin, sotumo, fou ingo, fau ingo, wakiwaki, wakewake, wakeke, vakeke, aukiki, okeoke, o'e'e	Malvaceae	herb
Aleurites moluccana	candlenut, bancoulier, lama, lumbang, raguar, sakan, shakan, kukui, lauthe, lauthi, nggerenggere, toto, sikethi, tuitui, waiwai, sikeli, 'ama	Euphorbiaceae	tree
Allamanda cathartica	yellow trumpet vine, allamanda, golden allamanda, golden cup, lani-ali'i, puataunofo	Apocynaceae	shrub
Anacardium occidentale*	cashew, cashew nut, 'apu initia, kesiu	Anacardiaceae	tree
Annona muricata*	soursop, prickly custard apple, laguana, laguaná, laguanaha, laguanaba, labuanaha, sei, sae, truka shai, jojaab,sasaf, sausab, sausau, sosap, syasyap, talapo fotofoto	Annonaceae	tree
Annona squamosa*	sugar apple, sweetsop, custard apple, sugar apple, atis, ates, ngel ra ngebard	Annonaceae	tree
Anredera cordifolia	Madeira vine, lamb's tails, mignonette vine	Basellaceae	vine
Antigonon leptopus	Mexican creeper, mountain rose, Confederate vine, chain of love, hearts on chain, kadena de amor, love vine, coral vine, rohsapoak	Polygonaceae	vine
Asystasia gangetica	Chinese violet, Philippine violet, coromandel	Acanthaceae	herb
Axonopus fissifolius	narrow-leaved carpetgrass	Poaceae	grass
Bambusa spp.	bamboos, bambou, pehri en sapahn, bambuu, bambu, pi'ao, pi'ao palaoan, bwai, kaho palangi	Poaceae	tree
Barleria prionitis	barleria	Acanthaceae	shrub
Bauhinia monandra*	orchid-tree, St. Thomas-tree, flamboyant, flores mariposa, mariposa, pine fua loloa, pink butterfly tree	Fabaceae	tree
Bidens pilosa	beggar's tick, Spanish needle, Cobbler's pegs, piquants noirs, fisi'uli, kofe tonga, kofetoga, piripiri, tae puaka, batimadramadra, mbatimandramandra, mbatikalawau, matakaro, matua kamate	Asteraceae	herb
Brachiaria mutica	California grass, para grass, buffalo grass, Mauritius grass, puakatau	Poaceae	grass
Brachiaria subquadripara	brachiaria, green summer grass	Poaceae	grass
		Fabaceae	vine
Calotropis gigantea*	calotrope, crown flower, pua-kalaunu	Ascelepiadaceae	shrub
Cananga odorata*	ilang-ilang, alang-ilang, ylang-ylang, lengileng, chiráng, irang, ilahnglahng, ilanlang, pwanang, pur-n-wai, pwurenwai, sair-n-wai, seirin wai, seir en wai, makasoi, moso'oi, moto'oi' mata'oi, makosoi, mokosoi, mokohoi, motoi, ilanilan	Annonaceae	tree
Canna indica*	canna, canna lily, Indian shot, mongos halum-tano, lu iu en wai, fagamanu, fanamanu, gasau ni ga, te riti, misimisi, ali'ipoe, li'ipoe, poloka, apeellap, oruuru, fagafaga	Cannaceae	herb
Cardiospermum halicacabum	balloon vine, heart pea, wa niu, vo niu	Sapindaceae	vine
Casuarina equisetifolia*	casuarina, ironwood, Australian pine, she-oak, horsetail tree, gagu, gago, weighu, nokonoko, te katurina, toa	Casuarinaceae	tree
Ceiba pentandra	kapok, kapok tree, algodon de Manila, atgodon di Manila, algidon, atgidon de Manila, koatoa, atagodon, arughuschel, batte ni gan' ken, bulik, kuhtin, kotin, cottin, koatoa, koatun, cutin, kalngebard, kalngebárd, kerrekar ngebard, vavau ni lokoloko, vavae, vauvau ni vavalangi, semar	Bombacaceae	tree
Cenchrus ciliaris	buffelgrass, African foxtail grass, anjan grass	Poaceae	grass

Scientific Name	Common Names	Family	Habit
Cenchrus echinatus	burgrass, sand-bur, Mossman River grass, herbe a cateaux, loklok, lellik, karmwijmwij, tuitui, vao tuitui, te anti, te kateketeke, motie vihilago, se mbulabula, piri-piri, cauit-cauitan, konpeitogusa, 'ume'alu, hefa, mosie vihilango, cram-cram	Poaceae	grass
Centrosema pubescens	centro, pi ni ndola	Fabaceae	herb
Cestrum nocturnum*	night-flowering cestrum, night-flowering jasmine, queen (or lady) of the night, dama-de-noche, iki he po, thauthau, thauthau ni mbongi, kara, teine o le po, ali'i o le po	Solanaceae	shrub
Chamaecrista nictitans	partridge pea, Japanese tea senna	Fabaceae	small shrub
Chloris barbata	swollen fingergrass, airport grass, mau'u lei, purpletop chloris	Poaceae	grass
Chrysopogon aciculatus	Mackie's pest, lovegrass, seed grass, golden beardgrass, seedy grass, herbe plate, herbe à piquant, inifuk, palaii, iul, manienie 'ula, mutia tai, matapekepeke, matapekapeka, mosie fisi	Poaceae	grass
Coffea arabica*	coffee, kove, kofe	Rubiaceae	tree
Commelina diffusa	commelina, dayflower, wandering Jew, semprebiban-damalong, honohono, mau'utoga, mau'u Tonga, mohuku vai, ai rorongi, ai rongorongo, airogorogo, cobulabula, rongomatailevu, thombulambula, matembulambula, drano, duludauwere, ndrano, ndulandauwere, luna, tho nggalonggalo	Commelinaceae	herb
Costus speciosus	crepe ginger, crape ginger, wild ginger, Malay ginger, isebsab	Costaceae	herb
Crassocephalum crepidoides	thickhead, fireweed, pualele, fisi puna, fua lele, maraburubo, se vuka	Asteraceae	herb
Crotalaria anagyroides	crotalaria, pine kotalelia, pile	Fabaceae	shrub
Cuscuta campestris	golden dodder, field dodder, navereverelangi, wa vereverelangi, wa lawala, wa mbosuthu, wa ndanga, wa tikaivu, ndithangi	Convolvulaceae	vine
Cynodon dactylon	Bermuda grass, giant Bermuda grass, bahama grass, devil's grass, couch grass, Indian doab, grama, devilgrass, couchgrass, manini, kambuta, pasto bermuda, zacate bermuda, grama dulce, gramón, hierba fina, grama-seda, chiendent, petit chiendent, chiendent pied-de-poule, motie molulu, manienie, balama grass, kabuta, mosie molulu, herbe de couverture	Poaceae	grass
Cyperus alternifolius	umbrella plant, umbrella sedge	Cyperaceae	sedge
Cyperus rotundus	nut grass, nutsedge, purple nutsedge, cocograss, souchet rond, souchet à tubercules, herbe à oignon, chaguan humatag, kili'o'opu, soro na kambani, sora na kambani, soro ni kabani, ivako, malanga, vuthesa, tuteoneon, mot ha, mumuta, pakopako, te mumute, vucesa, motha, vucesa, oni ani	Cyperaceae	sedge
Delonix regia*	flame tree, flamboyant, poinciana; arbol del fuego, atbot, atbut, atbot det fuegu, fayarbaw, nangiosákura, nangyo, pilampwoia weitahta, sakuranirow, sekoula, ohai', pine	Fabaceae	tree
Derris malaccensis	New Guinea creeper, 'ava niukini, nduva, tuva, nduva ni niukini, kava fisi, akau niukini	Fabaceae	vine
Digitaria ciliaris	Henry's crabgrass, fingergrass, smooth crabgrass, tropical crabgrass, violet crabgrass, large crab grass, summer grass, kukaepua'a, saulangi	Poaceae	grass
Digitaria violascens	smooth crabgrass, violet crabgrass, sau	Poaceae	grass
Elaeis guineensis*	African oil palm, apwiraiasi	Arecaceae	tree
Elephantopus mollis	elephantopus, elephant's foot, tobacco weed, papago vaca, papago halomtano, papago' halom tano, lata hina, tavako ni veikau, jangli tambaku, tapua erepani, faux tabac, lau veveli	Asteraceae	herb
Eleusine indica	goosegrass, wiregrass, goose foot, crow's foot, bullgrass, umog, reh takai, manienie ali'i, fahitalo, te uteute, deskim, keteketarmalk, kavoronaisivi, vorovoroisivi, mahkwekwe, ta'ata'a, takataka, ghoraya, lau ta'ata'a, chiendent patte de poule, katejukjuk, mohuku siamane, mosie fahitalo, takataka 'a leala	Poaceae	grass
Eugenia uniflora	Surinam cherry, red Brazil cherry, kafika, kafika palangi, pitanga	Myrtaceae	shrub, tree
Ficus elastica*	India rubber tree, rubber plant; komunoki, komunokí, rapah, gak'iynigoma	Moraceae	tree
Furcraea foetida	Mauritius hemp, sisal, toua, faumalila, fau malila	Agavaceae	succulent

Scientific Name	Common Names	Family	Habit
Gliricidia sepium	mother of cacao, madre de cacao	Fabaceae	tree
Grevillea robusta*	silk oak, silky oak, she-oak, silver oak, oke'	Proteaceae	tree
Hedychium flavescens	yellow ginger, awaphuhi melemele, awapuhi melemele	Zingiberaceae	herb
Hylocereus undatus	night-blooming cereus, strawberry pear, red pitaya, dragon fruit, pitahaya, pitaya	Cactaceae	climber
Hyptis pectinata	comb hyptis, mint weed, purple top, mumutun lahe, mumutun palaoan, mumutan ademelon, fausse menthe, tamole ni veikau, tamoli ni vavalangi, timothi ni vavalangi, wavuwavu, ndamoli, ben tulsia	Lamiaceae	herb
Indigofera suffruticosa	indigo, aniles, 'akauveli	Fabaceae	shrub
Kalanchoe pinnata	life plant, air plant, resurrection plant, Canterbury bells, Mexican love plant, bulatawamudu, tupu he lau, tupu noa, teang	Crassulaceae	herb
Kyllinga nemoralis	white kyllinga, kili'o'opu, mo'u upo'o, tuise, pakopako, pakopako 'ae kuma	Cyperaceae	sedge
Kyllinga polyphylla	Navua sedge, tuise tele, tuise fiti, pakopako	Cyperaceae	sedge
Lantana camara	lantana, landana, lanitana, rantana, rahndana, tukasuweth, te kaibuaka, talatala, kauboica, latora moa, tatara moa, ros fonacni, latana, lakana, talatala, talatala talmoa, te kaibuaja, taramoa, migiroa, kaumboitha, mbonambulumakau, mbona ra mbulumakau, tokalau, waiwai, taratara hamoa	Verbenaceae	shrub
Leucaena leucocephala	leucaena, wild tamarind, lead tree, faux-acacia, faux mimosa, koa haole, tangantangan tangan-tangan, talntangan, ganitnityuwan tangantan, telentund, namas, vaivai, vaivai dina, vaivai ni vavalangi, tuhngantuhngan, rohbohtin, lopa samoa, pepe, siale mohemohe, fua pepe, nito, cassis, te kaitetua, balori	Fabaceae	tree
Macroptilium atropurpureum	siratro	Fabaceae	herb
Melia azedarach	Chinaberry, pride-of-India, white cedar, indian lilac, Persian lilac, lilas des Indes, paraiso, para'isu, lelah, prais, sili, tili, dake, bakain, sita	Meliaceae	tree
Mimosa pudica	sensitive plant, sleeping grass, sensitive, betguen sosa, tuitui, cogadrogadro, lajwania, memege, mechiuaiu, vao fefe, mateloi, pohe ha'avare, ra kau pikikaa, tho ngandrongandro, tho kandrodandro, limemeihr	Fabaceae	herb
Miscanthus floridulus	miscanthus, swordgrass, sawgrass, reed grass, Japanese silvergrass, Chinese silvergrass, Chinese fairygrass, eulalia, nete, neti, tupon nette, tupun-neti, nette, mah, sapala, sapeleng, sapalang, aset, banga ruchel, medecherecher bokso, pagaluel, ngasau, 'u, kaho, kaho tonga	Poaceae	grass
Momordica charantia	balsam-apple, cerasee, bitter-melon, bitter gourd, balsam pear, peria, squirting cucumber, atmagoso, almagosa, atmagosu, markoso, kerala, meleni 'ae kuma; vaine 'initia	Cucurbitaceae	vine
Moringa oleifera*	horseradish tree, drumstick tree, malungkai, marronggai, marungai, marunggai, malungay, katdes, sajina	Moringaceae	tree
Neonotonia wightii	glycine	Fabaceae	vine
Opuntia spp.	prickly pear, lengua de vaca	Cactaceae	succulent shrub
Orthosiphon aristatus	cat's whiskers, emadecharebub, kumi ni pusi, kava 'i pusi	Lamiaceae	herb
Panicum maximum	Guinea grass, green panic, buffalograss, saafa, herbe de Guinéa, panic élevé, capime guiné, fataque	Poaceae	grass
Paspalum conjugatum	Hilo grass, T grass, ti grass, sour grass, sour palpalum, herbe créole, herbe de tauère, rehn wei, moise vailima, motie vailima, udel ra ngebei, muhsrasre, vao lima, vailima matafao, vailima	Poaceae	grass
Paspalum dilatatum	dallis grass, paspalum, water grass, hiku nua, paspalum dilaté, herbe sirop, herbe de miel	Poaceae	grass
Paspalum fimbriatum	fimbriate or Panama paspalum, Columbia grass	Poaceae	grass
Paspalum paniculatum	Russell river grass, galmarra grass	Poaceae	grass
Passiflora edulis*	passion fruit, purple granadilla, yellow passion fruit, purple passion fruit, liliko'i, qarandila, vaine tonga, pasio	Passifloraceae	vine
Passiflora laurifolia*	yellow granadilla, belle apple, pasio, vaine tinetina	Passifloraceae	vine

Scientific Name	Common Names	Family	Habit
Passiflora maliformis	vaine kai, pasio	Passifloraceae	vine
Passiflora quadrangularis*	granadilla, giant granadilla, parapotina maata, palasini, palatini, vine fua lalahi, vine palasini, tinitini, pasione, pasio, kudamono	Passifloraceae	vine
Pinus caribaea*	Caribbean pine, Bahamas pine	Pinaceae	tree
Psidium guajava	guava, abas, apas, guabang, kuabang, guahva, quwawa, kuahpa, kuava, amrut, kautoga, ku'ava, kuhfahfah, kautonga, kautonga tane, kuawa, goyavier, ku'avu, tu'avu, te kuawa, kuwawa, nguava, ngguava ni India	Myrtaceae	tree
Pueraria lobata	kudzu, acha, nepalem, aka, a'a, yaka, wa yaka, nggariaka, Japanese arrowroot	Fabaceae	vine
Pueraria phaseoloides*	tropical kudzu, puero	Fabaceae	vine
Ricinus communis	castor bean, castor-oil plant, agaliya, gelug, maskerekur, uluchula skoki, mbele ni vavalagi, toto ni vavalagi, utouto, lama papalagi, tuitui, tuitui fua ikiiki, koli, lepo, ricin, koli, lepohina	Euphorbiaceae	shrub
Samanea saman	monkeypod, rain tree, 'ohai saman, tronkon mames, gumor ni spanis, vaivai ni vavalangi, vaivai ni vavalagi, kasia	Fabaceae	tree
Sambucus mexicana	elderberry, Mexican elder	Caprifoliaceae	small tree
Sanseviera trifasciata*	bowstring hemp, mother-in-law's tongue, tigre, kitelel	Agavaceae	herb
Schefflera actinophylla	octopus tree, umbrella tree, ivy palm	Araliaceae	tree
Senna alata*	candle bush, candalabra bush, Roman candle tree, ringworm bush, Acapulco, arakak, akapuku, andadose, candalaria, takebiha, kerula besokel, yult, rakau honuki, truke-n-kili-n-wai, tuhkehn kilin wai, tirakahonuki, flay-n-sabouw, mulamula, akapuku, bakau plant, mbai ni thangi, te'elango	Fabaceae	shrub
Sorghum halepense	Johnson grass, Aleppo grass, Aleppo milletgrass, sorgo de Alepo, zacate Johnson, grama China, cañuela, Don Carlos, gumai, kola, sorgho d' Alep, herbe de Cuba	Poaceae	grass
Stylosanthes guianensis	stylo, Brazilian lucerne, tropical lucerne	Fabaceae	herb
Syzygium cumini*	Java plum, jambolan plum, duhat, mesegerak, mesekerrak, mesekerrák, mesigerak, jamelonguier, kavika ni India, jammun, faux-pistachier, jamelon-guier	Myrtaceae	tree
Syzygium jambos*	malabar plum,rose apple, iouen wai, youenwai, apel en wai, kavika, kavika ni vavalangi, kavika ni India, ahi'a popa'a	Myrtaceae	tree
Tecoma stans*	yellow bells, yellow-elder, tagamimi, piti, peeal	Bignoniaceae	small tree
Thevetia peruviana*	yellow oleander, be-still tree, koneta, irelepsech	Apocynaceae	small tree
Tillandsia usneoides*	Spanish moss, old man's beard	Bromeliaceae	bromeliad
Triumfetta rhomboidea	Chinese burr, paroquet burr, burr bush, dadangsi, masiksik lahe, mo'osipo, mosipo, mautofu, qatima	Tiliaceae	shrub
Urena lobata	hibiscus burr, aramina, caesarweed, pink Chinese burr, urena burr, dadangsi, dadangsi apaka, dadangsi machingat, dádangse, chosuched e kui, karap, korop, nognuk, ocher, osuched a rechui, motipo, mosipo, mautofu, mo'osipo, manutofu, qatima, gataya, jute africain, nggatima	Malvaceae	shrub

<sup>\*</sup>Cultivated

Table 4. Native species that exhibit aggressive behavior

Scientific Name	ne Common Names		Habit
Merremia neltata	merrimia, lohl, yol, kebeas, fitau, lagon, lagun, pala, fue, fue vao, fue kula, iol, pul, puhlah, fue lautetele, fue mea, abui, grobihi, arosumou, wa mbula, wa bula, wa damu, wa ndamu, viliyawa, wiliviwa, veliyana, wiliao	Convolvulaceae	vine

#### Other invasive plant species, mostly of agricultural concern, reported to be present in Niue

Abutilon grandiflorum Acalypha alopecuroides

Acalypha indica Acalypha lanceolata Achyranthes aspera Adenostemma lavenia Ageratum conyzoides

Alysicarpus vaginalis Amaranthus interruptus Amaranthus lividus Amaranthus viridis Apium leptophyllum Argemone mexicana Axonopus affinis

Boerhavia repens Bothriochloa bladhii Brachiaria eruciformis

Axonopus compressus

Brachiaria paspaloides Brassica juncea Cardamine sarmentosa Celosia argentea

Cinchrus calvcalatus Centella asiatica Centotheca lappacea Chloris gayana

Cleome viscosa

Clerodendrum speciosissimum

Cleome viscosa Coix lachryma-jobi Conyza canadensis Coronopus didymus Crotalaria pallida Crotalaria verrucosa Cuyphea carthagenensis Cymbopogon nardus Cyperus compressus

Cyperus rotundus Cyrtococcum oxyphyllum Dactyloctenium aegyptium Desmodium heterocarpon

Desmodium incanum Desmodium triflorum Desmodium uncinatum Dichanthium annulatum Digitaria eriantha Digitaria setigera

Dioscorea bulbifera Echinochloa colona

Echinochloa crus-gali Eclipta prostrata Eleocharis geniculata Eleutheranthera ruderalis

Emilia sonchifolia Eragrostis tenella

Euphorbia cyathophora Euphorbia geniculata Euphorbia glomerifera Euphorbia heterophylla Euphorbia hirta Euphorbia prostrata

Fimbristylis dichotoma Fimbristylis ovata Fleurya interrupta

Foeniculum vulgare Gomphrena globosa Guettarda speciosa Hibiscus diversifolius Indigofera hirsuta Indigover spicata Ipomoea cairica Ipomoea indica

Ipomoea littoralis Ipomoea pes-caprae ssp.

brasiliensis

Ipomoea quamoclit Ischaemum indicum Kyllinga brevifolia Kyllinga monophylla Lablab purpureus Leontodon saxatilis Leontodon taraxacoides Leonurus sibiricus Lepidium virginicum Leucas decemdentata Ludwigia octovalvis

Luffa cylindrica Lycopersicon lycopersicum Macroptilium lathyroides Malvastrum coromandelianum

Mariscus javanicus Mariscus sumatrensis Nephrolepis biserrata Nephropelis hirsutula

Nicandra physalodes Operculina

turpethum

Oplismenus compositus Oplismenus hirtellus Oxalis corniculata Paspalum distichum

Paspalum orbiculare Phyllanthus

amarus

Phyllanthus virgatus Physalis angulata Physalis peruviana Pilea microphylla Plantago lanceolata Plantago major Polygala paniculata Portulaca oleracea

Pseudelephantopus spicatus

Pycreus polystachyos Rorippa sarmentosa Rhynchosia minima Ruellia prostrata Salvia coccinea Salvia occidentalis Scaveola sericea Senna occidentalis

Senna tora

Sesuvium portulacastrum

Sida acuta Sida parvifolia Sida rhombifolia Solanum nigrum Sonchus oleraceus Spermacoce assurgens Sporobolus africanus Sporobolus fertilis

Stachytarpheta jamaicensis

Synedrella nodiflora Taraxacum officinale Thunbergia fragrans Teucrium inflatum Uraria lagopodioides Verbena bonariensis Verbena officinalis Vernonia cineria Vigna marina Waltheria americana Wedelia biflora

Youngia japonica

Sources: Swarbrick (1997), Waterhouse (1997), Whistler (1988)

# Invasive species present in American Samoa, the Cook Islands, Fiji, French Polynesia, Samoa or Tonga but not present in Niue

	Present in:					
Scientific Name	American Samoa	Cook Islands	Fiji	French Polynesia	Samoa	Tonga
Acacia auriculiformis						
Acacia farnesiana						
Acacia mangium						
Albizia chinensis						
Albizia lebbeck						
Annona glabra	İ					
Ardisia crenata						
Ardisia elliptica						
Argyreia nervosa						
Axonopus compressus						
Azadirachta indica						
Bauhinia purpurea						
Bauhinia variegata						
Blechum brownei						
Buddleia madagascariensis						
Caesalpinia bonduc	Native					
Caesalpinia decapetala						
Calliandra calothyrsus						
Cassia siamea						
Castilla elastica						
Casuarina glauca						
Cecropia obtusifolia						
Cecropia peltata						
Cedrela odorata						
Cestrum diurnum						
Chloris radiata						
Chrysobalanus icaco						
Chrysophyllum oliviforme						
Cinchona pubescens						
Cinnamomum camphora						
Cinnamomum verum						
Citharexylum spinosum						
Clerodendrum japonicum						
Clerodendrum paniculatum						
Clerodendrum quadriloculare						
Clidemia hirta						
Clitoria ternatea						
Coccinia grandis						
Cordia alliodora						
Cryptostegia grandiflora						
Derris elliptica						
Desmanthus virgatus						
Desmodium nicaraguense						
Desmodium tortuosum						

	Present in:					
Scientific Name	American Samoa	Cook Islands	Fiji	French Polynesia	Samoa	Tonga
Dichrostachys cinerea						
Dieffenbachia maculata						
Digitaria insularis						
Dissotis rotundifolia						
Duranta repens						
Eriobotrya japonica						
Ficus benghalensis				Cult.		
Ficus benjamina				Cult.		
Flacourtia rukam	Native					
Flemingia macrophylla						
Flemingia strobilifera						
Funtumia elastica						
Grevillea banksii						
Haematoxylum campechianum						
Hedychium coronarium						
Hedychium gardnerianum						
Heterocentron subtriplinervium						
Hippobroma longiflora						
Hyparrhenia rufa						
Hypochoeris radicata						
Hyptis capitata						
Hyptis suaveolens						
Imperata cylindrica						
Ipomoea spp.						
Ischaemum rugosum						
Ischaemum timorense						
Justicia carnea						
Jasminum fluminense						
Jatropha gossypifolia						
Licuala grandis						
Ligustrum spp.						
Ludwigia peruviana						
Melaleuca quinquenervia						
Miconia calvescens						
Mikania scandens						
Montanoa hibiscifolia						
Muntingia calabura						
Ochroma pyramidale						
Odontonema tubaeforme						
Operculina ventricosa						
Paspalum urvillei						
Passiflora ligularis						
Passiflora rubra						
Passiflora suberosa						
Pennisetum clandestinum						
Pennisetum polystachyon						
Pennisetum setaceum						
Piper aduncum						
Pistia stratiotes						
Pithecellobium dulce						
Pluchea indica						
Pluchea symphytifolia						
Psidium cattleianum		_	_			
Rhodomyrtus tomentosa						

	Present in:					
Scientific Name	American Samoa	Cook Islands	Fiji	French Polynesia	Samoa	Tonga
Rhynchelytrum repens						
Rubus moluccanus						
Rubus rosifolius						
Saccharum spontaneum						
Salvinia molesta						
Sanchezia nobilis						
Sanchezia parvibracteata						
Schinus terebinthifolius						
Sesbania grandiflora						
Setaria pallide-fusca						
Setaria palmifolia						
Solanum mauritianum						
Solanum torvum						
Sphaeropteris cooperi						
Stizolobium pruriens						
Syncarpia glomulifera						
Tabebuia heterophylla				Cult.		
Thunbergia alata						Cult.
Thunbergia grandiflora						
Thunbergia laurifolia						
Tribulus cistoides						
Triphasia trifolia						
Triplaris weigeltiana						
Triumfetta semitriloba						
Turnera ulmifolia						
Waterhousia floribunda						
Ziziphus mauritiana						

Presence in American Samoa determined by survey, other locations as reported in the literature.

#### **Scientific name synonyms**

This table lists commonly used scientific name synonyms of the listed invasive species. Names sometimes change because better information is available on the taxonomy of a species or precedence is given to an earlier author.

Synonym	Listed as	Family
Adenoropium gossypifolium	Jatropha gossypifolia	Euphorbiaceae
Albizia falcataria	Paraserianthes falcataria	Fabaceae
Albizia saman	Samanea saman	Fabaceae
Aleurites triloba	Aleurites moluccana	Euphorbiaceae
Allamanda hendersonii	Allamanda cathartica	Apocynaceae
Andropogon condensatus	Schizachyrium condensatum	Poaceae
Andropogon halepensis	Sorghum halepense	Poaceae
Andropogon marcrourus	Andropogon glomeratus	Poaceae
Andropogon rufus	Hyparrhenia rufa	Poaceae
Antelaea azadirachta	Azadirachta indica	Meliaceae
Ardisia humilis	Ardisia elliptica	Myrsinaceae
Ardisia solanacea	Ardisia elliptica	Myrsinaceae
Ardisia squamulosa	Ardisia elliptica	Myrsinaceae
Argyreia speciosa	Argyreia nervosa	Convolvulaceae
Aristolochia elegans	Aristolochia littoralis	Aristolochiaceae
Arum seguine	Dieffenbachia maculata	Araceae
Axonopus affinis	Axonopus fissifolius	Poaceae
Bidens alba	Bidens pilosa	Asteraceae
Blechum pyramidatum	Blechum brownei	Acanthaceae
Brachiaria purpurascens	Brachiaria mutica	Poaceae
Brassaia actinophylla	Schefflera actinophylla	Araliaceae
Bryonia grandis	Coccinea grandis	Cucurbitaceae
Bryophyllum pinnatum	Kalanchoë pinnata	Crassulaceae
Buddleja madagascarienses	Buddleia madagascarienses	Buddleiaceae
Caesalpinia crista	Caesalpinia bonduc	Fabaceae
Caesalpinia sepiaria	Caesalpinia decapetala	Fabaceae
Cascabela thevetia	Thevetia peruviana	Apocynaceae
Cassia aeschynomene	Chamaecrista nictitans	Fabaceae
Cassia alata	Senna alata	Fabaceae
Cassia lechenaultiana	Chamaecrista nictitans	Fabaceae
Cassia leschenaultiana	Chamaecrista nictitans	Fabaceae
Castilloa elastica	Castilla elastica	Moraceae
Casuarina litorea	Casuarina equisetifolia	Casuarinaceae
Cenchrus brevisetus	Cenchrus echinatus	Poaceae
Cenchrus pungens	Cenchrus echinatus	Poaceae
Cenchrus quinquevalvis	Cenchrus echinatus	Poaceae
Cenchrus setosus	Pennisetum polystachyon	Poaceae
Cenchrus viridis	Cenchrus echinatus	Poaceae

Synonym	Listed as	Family	
Chloris inflata	Chloris barbata	Poaceae	
Chloris paraguayensis	Chloris barbata	Poaceae	
Chlorocyperus rotundus	Cyperus rotundus	Cyperaceae	
Cinchona succirubra	Cinchona pubescens	Rubiaceae	
Cinnamomum zeylanicum	Cinnamomum verum	Lauraceae	
Citharexylum quadrangulare	Citharexylum spinosum	Verbenaceae	
Clerodendrum fragrans	Clerodendrum chinense	Verbenaceae	
Clerodendrum philippinum	Clerodendrum chinense	Verbenaceae	
Coccinea cordifolia	Coccinea grandis	Cucurbitaceae	
Cordia collococca	Cordia glabra	Boraginaceae	
Cordia macrostachya	Cordia curassavica	Boraginaceae	
Croton moluccanus	Aleurites moluccana	Euphorbiaceae	
Cyathea cooperi	Sphaeropteris cooperi	Cyatheaceae	
Cyperus aromaticus	Kyllinga polyphylla	Cyperaceae	
Cyperus flabelliformis	Cyperus alternifolius	Cyperaceae	
Cyperus kyllingia	Kyllinga nemoralis	Cyperaceae	
Cyperus purpuro-variegatus	Cyperus rotundus	Poaceae	
Cyperus stoloniferum pallidus	Cyperus rotundus	Poaceae	
Cyperus tetrastachyos	Cyperus rotundus	Poaceae	
Cyperus tuberosus	Cyperus rotundus	Poaceae	
Delairea odorata	Senecio mikanioides	Asteraceae	
Desmodium rensonii	Desmodium nicaraguense	Fabaceae	
Dieffenbachia picta	Dieffenbachia maculata	Araceae	
Dieffenbachia seguine	Dieffenbachia maculata	Araceae	
Dolichos pruriens	Stizolobium pruriens	Fabaceae	
Doxantha unguis-cati	Macfadyena unguis-cati	Bignoniaceae	
Elephantopus scaber	Elephantopus mollis	Asteraceae	
Epipremnum aureum	Scindapsus aureus	Araceae	
Epipremnum pinnatum	Scindapsus aureus	Araceae	
Eugenia cumini	Syzygium cumini	Myrtaceae	
Eugenia jambos	Syzygium jambos	Myrtaceae	
Eupatorium inulaefolium	Austroeupatorium inulaefolium	Asteraceae	
Eupatorium odoratum	Chromolaena odorata	Asteraceae	
Gliricidia maculata	Gliricidia sepium	Fabaceae	
Glycine javanica	Neonotonia wightii	Fabaceae	
Glycine wightii	Neonotonia wightii	Fabaceae	
Guilandina bonduc	Caesalpinia bonduc	Fabaceae	
Gynura crepidioides	Crassocephalum crepidioides	Asteraceae	
Hemigraphis colorata	Hemigraphis alternata	Acanthaceae	
Hibiscus abelmoschus	Abelmoschus moschatus	Malvaceae	
Hiptage madablota	Hiptage benghalensis	Malpighiaceae	
Imperata arundinacea	Imperata cylindrica	Poaceae	
Imperata conferta	Imperata cylindrica	Poaceae	
Ipomoea peltata	Merremia peltata	Convolvulaceae	
Ipomoea tuberosa	Merremia tuberosa	Convolvulaceae	
Ischaemum digitatum var.			
polystachyum	Ischaemum polystachyum	Poaceae	

Synonym	Listed as	Family
Isotoma longiflora	Hippobroma longiflora	Campanulaceae
Jussiaea grandiflora	Ludwigia peruviana	Onagraceae
Jussiaea peruviana	Ludwigia peruviana	Onagraceae
Jacobinia carnea	Justicia carnea	Acantaceae
Kunzea ericoides	Leptospermum ericoides	Myrtaceae
Kunzea scoparium	Leptospermum scoparium	Myrtaceae
Kyllinga cephalotes	Kyllinga nemoralis	Cyperaceae
Kyllinga monocephala	Kyllinga nemoralis	Cyperaceae
Kyllinga monophylla	Kyllinga polyphylla	Cyperaceae
Laurentia longiflora	Hippobroma longiflora	Campanulaceae
Leucaena glauca	Leucaena leucocephala	Fabaceae
Meibomia nicaraguense	Desmodium nicaraguense	Fabaceae
Meibomia rensonii	Desmodium nicaraguense	Fabaceae
Melia azadirachta	Azadirachta indica	Meliaceae
Melinis repens	Rhynchelytrum repens	Poaceae
Melochia compacta	Melochia umbellata	Sterculiaceae
Melochia indica	Melochia umbellata	Sterculiaceae
Merremia nymphaeifolia	Merremia peltata	Convolvulaceae
Miconia magnifica	Miconia calvescens	Melostomataceae
Mimosa diplotricha	Mimosa invisa	Fabaceae
Mimosa dulcis	Pithecellobium dulce	Fabaceae
Mimosa lebbeck	Albizia lebbeck	Fabaceae
Miscanthus japonicus	Miscanthus floridulus	Poaceae
Moghania strobilifera	Flemingia strobilifera	Fabaceae
Mucuna pruriens	Stizolobium pruriens	Fabaceae
Notonia wightii	Neonotonia wightii	Fabaceae
Ochroma lagopus	Ochroma pyramidale	Bombacaceae
Odontonema callistachyum	Odontonema tubaeforme	Acanthaceae
Odontonema strictum	Odontonema tubaeforme	Acanthaceae
Operculina peltata	Merremia peltata	Convolvulaceae
Oplismenus polystachyus	Echinochloa polystachya	Poaceae
Orthosiphon stamineus	Orthosiphon aristatus	Lamiaceae
Paederia foetida	Paederia scandens	Rubiaceae
Panicum barbinode	Brachiaria mutica	Poaceae
Panicum guadeloupense	Brachiaria mutica	Poaceae
Panicum melinis	Melinis minutiflora	Poaceae
Panicum minutiflora	Melinis minutiflora	Poaceae
Panicum muticum	Brachiaria mutica	Poaceae
Panicum palmaefolium	Setaria palmifolia	Poaceae
Panicum purpurascens	Brachiaria mutica	Poaceae
Panicum subquadriparum	Brachiaria subquadripara	Poaceae
Passiflora mixta	Passiflora mollissima	Passafloriaceae
Passiflora tripartita	Passiflora mollissima	Passifloriaceae
Pennisetum cenchroides	Cenchrus ciliaris	Poaceae
Pennisetum ciliare	Cenchrus ciliaris	Poaceae
Pennisetum polystachion	Pennisetum polystachyon	Poaceae
Pennisetum ruppelii	Pennisetum setaceum	Poaceae

Synonym	Listed as	Family
Pennisetum setosum	Pennisetum polystachyon	Poaceae
Phaseolus atropurpureus	Macroptilium atropurpureum	Fabaceae
Pithecellobium saman	Samanea saman	Fabaceae
Pluchea odorata	Pluchea symphytifolia	Asteraceae
Poinciana regia	Delonix regia	Fabaceae
Pothos aureus	Scindapsus aureus	Araceae
Pothos pinnata	Scindapsus aureus	Araceae
Praxelis clematidea	Eupatorium catarium	Asteraceae
Pseudechinolaena polystachya	Echinochloa polystachya	Poaceae
Psidium littorale	Psidium cattleianum	Myrtaceae
Pueraria harmsii	Pueraria lobata	Fabaceae
Pueraria novo-guiniensis	Pueraria lobata	Fabaceae
Pueraria thunbergiana	Pueraria lobata	Fabaceae
Pueraria trilolba	Pueraria lobata	Fabaceae
Raphidophora aurea	Scindapsus aureus	Araceae
Rhaphidophora aurea	Scindapsus aureus	Araceae
Rhaphidophora pinnata	Scindapsus aureus	Araceae
Rhoeo discolo	Tradescanthia spathacea	Commelinaceae
Rhoeo spathacea	Tradescanthia spathacea	Commelinaceae
Ruellia alternata	Hemigraphis alternata	Acanthaceae
Saccharum floridulum	Miscanthus floridulus	Poaceae
Salvinia auriculata	Salvinia molesta	Salviniaceae
Sanchezia speciosa	Sanchezia nobilis	Acanthaceae
Senna obtusifolia	Cassia obtusifolia	Fabaceae
Solandra hartwigii	Solandra maxima	Solanaceae
Solandra nitida	Solandra maxima	Solanaceae
Solanum auriculatum	Solanum mauritianum	Solanaceae
Solanum houstonii	Solanum tampicense	Solanaceae
Solanum verbascifolium	Solanum mauritianum	Solanaceae
Stachytarpheta cayennensis	Stachytarpheta urticifolia	Verbenaceae
Stachytarpheta urticaefolia	Stachytarpheta urticifolia	Verbenaceae
Stizolobium aterrimum	Stizolobium pruriens	Fabaceae
Stizolobium deeringianum	Stizolobium pruriens	Fabaceae
Stizolobium niveum	Stizolobium pruriens	Fabaceae
Syngonium angustatum	Syngonium podophyllum	Araceae
Tabebuia pallida	Tabebuia heterophylla	Bignoniaceae
Tabebuia pentaphylla	Tabebuia heterophylla	Bignoniaceae
Thelechitonia trilobata	Wedelia trilobata	Asteraceae
Thevetia nerifolia	Thevetia peruviana	Apocynaceae
Thunbergia harrisii	Thunbergia laurifolia	Acanthaceae
Trachypogon rufus	Hyparrhenia rufa	Poaceae
Tradescanthia discolor	Tradescanthia spathacea	Commelinaceae
Trema cannabina	Trema orientalis	Ulmaceae
Trichachne insularis	Digitaria insularis	Poaceae
Tricholaena repens	Rhynchelytrum repens	Poaceae
Tricholaena rosea	Rhynchelytrum repens	Poaceae
Triopteris jamaicensis	Hiptage benghalensis	Malpighiaceae

Synonym	Listed as	Family
Triplaris surinamensis	Triplaris weigeltiana	Polygonaceae
Triumfetta bartramia	Triumfetta rhomboidea	Tiliaceae
Urena sinuata	Urena lobata	Malvaceae
Urochloa mutica	Brachiaria mutica	Poaceae
Zebrina pendula	Tradescantia zebrina	Commelinaceae