

## Observations on invasive plant species in American Samoa

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This is a continuation of the survey of islands in Micronesia and American Samoa for invasive plant species requested by the Pacific Islands Committee, Council of Western State Foresters. A survey of selected Micronesian islands was conducted in 1998 and was discussed in a previous report<sup>2</sup>. This report is based on perceptions gained from a trip to American Samoa from 16 to 23 July 1999, including the islands of Tutuila, Ofu, Olosega and Ta'u. The objectives were three-fold: (1) To identify plant species on the islands that are presently causing problems to natural and semi-natural ecosystems; (2) to identify species that, even though they are not presently a major problem, could spread more widely or spread to other islands where they are not present, potentially causing problems; and (3) to confirm the absence of species that are a problem elsewhere and, if introduced to American Samoa, could be a threat there.

During our visit local experts showed us sites of known infestations<sup>3</sup>. We also had available copies of various botanical and weed surveys conducted in the past (see Appendix 1, References). A weeklong trip does not permit an exhaustive survey of the weed biota of the islands. However, the intent was to conduct an overall survey. Surveys of individual species or sensitive areas (such as the

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2 Space, James C. and Marjorie Falanruw (1999). Observations on invasive plant species in Micronesia. Report prepared for the meeting of the Pacific Islands Committee, Council of Western State Foresters, Majuro, Republic of the Marshall Islands, February 22-26, 1999.

3 We would like to thank Colin Steele, Forestry Program Manager, and Manu Tuiono'ula, Forest Health Coordinator, American Samoa Community College Land Grant, for their generous assistance in the conduct of the survey. We would also like to thank Pa'u Young for his assistance in our survey of Ta'u.

National Park of American Samoa) can and should be conducted as needed. This report summarizes our findings and makes some suggestions for further action.

For convenience and to be consistent with the Micronesia report, invasive species occurring in or of threat to the American Samoan islands have been grouped into five 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 in American Samoa (174 species).
2. Species that are invasive elsewhere and are also invasive or potentially invasive in American Samoa (20 species).
3. Species that are not known to be particularly invasive elsewhere but have the potential to be invasive in American Samoa (5 species).
4. Species that are invasive or weedy elsewhere and are common or weedy in American Samoa (80 species).
5. Native species that exhibit aggressive behavior (7 species).

These species are listed in Appendix 2. In addition, species are listed by location within American Samoa in Appendix 3. Additional information about each species is located on a World Wide Web site, <http://www.hear.org/pier>. Copies of this web site are also available for installation on individual computers for rapid access.

There are numerous species that are invasive weeds in gardens, fields, and pastures and along roadsides but don't seem to pose a particular threat to wildland ecosystems. These species are not included.

### **1. Dangerous species not known to be in American Samoa**

While there are some serious or potentially serious weed species in American Samoa, some other major pests have not yet arrived. The worst of these include the following:

*Cecropia obtusifolia* and *C. peltata*, invasive tree species that are a problem in Hawai'i and French Polynesia, respectively.

*Chromolaena odorata* (Siam weed), a highly invasive pan-tropical weed. It is present in a number of islands in the Marianas and Micronesia, as well as Papua New Guinea, the Philippines and Australia.

*Coccinia grandis* (ivy or scarlet gourd), 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 recorded in the literature as being present in Fiji, Tonga and Vanuatu. Whistler reports that it is present in Samoa, and this close proximity makes this species a special threat to American Samoa.

A rubber tree, *Funtumia elastica* (African rubber tree, pulu vao), has been reported by Whistler (1988) as being present and invasive in Samoa. As far as is known, this species is not yet in American Samoa, although another rubber tree (*Castilla elastica*, Panama rubber tree or pulu

mamoe) is present (see below). *F. elastica* should be a priority species for exclusion or, if found, eradication.

*Miconia calvescens* (the purple plague), which has caused serious damage to the ecosystem of Tahiti in French Polynesia. It has also escaped in Hawaii and is the subject of an intensive and costly eradication effort there. Recently it was discovered in Queensland, Australia, and has spread to other islands in French Polynesia.

*Melinis minutiflora* (molasses grass), a species that is both invasive and causes a serious fire hazard. It has fostered the establishment of fire regimes on many islands where it has been introduced. It is cited in the literature as being present but not weedy in Samoa, and is present on a number of other Polynesian islands. It is not recorded from American Samoa, but even though it may not be causing problems in Samoa, it is a species that it would be desirable to exclude, given its reputation.

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

*Pennisetum setaceum* (fountain grass), another grass that is a major problem in Hawai'i. It is recorded as being present in Fiji.

*Psidium cattleianum* (strawberry guava), a small tree that forms dense thickets and is a major problem species in Hawai'i, Tahiti and elsewhere.

*Rubus* species (blackberries and raspberries), many of which are pests.

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

And the above are just the worst of the lot. In addition, all grasses, all members of the Melastomataceae family, and all *Ligustrum*, *Passiflora* or *Rubus* species not already present should be highly suspect and should be proven benign before they are allowed to be introduced.

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 those species known to be invasive or weedy elsewhere (although an even better strategy, now being adopted by countries such as Australia and New Zealand, is to exclude all species not shown by risk analysis to be of negligible risk). Known problem species that have the potential to cause problems in tropical island ecosystems 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, there are a number of species that are present on Tutuila that are not present on Ofu, Olosega, or Ta'u (see Appendix 3). Measures that limit the spread of invasive species to these islands, or prompt eradication, may keep these islands free from some pests already on Tutuila.

## 2. Species that are invasive elsewhere and are likewise invasive or have the potential to become so in American Samoa

Some known invasive plants that are causing trouble in similar ecosystems have been introduced into American Samoa (see 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* (the coral bean tree, lopa) is invasive in secondary forests, but also has the ability to become much more widely established, both on Tutuila and the Manu'as. On Ofu it was invading relatively intact forest margins, producing what seemed to be an overwhelming number of seedlings. It has probably spread too widely for anything but local control in sensitive areas but this should certainly be explored. Unfortunately, many people roast and eat the seeds, referring to them as "Samoan peanuts", and don't view the tree's presence as a problem.

*Antigonon leptopus* (chain of hearts) is reported to be present on Tutuila. This climbing vine has become a widespread pest on Guam. It has not yet escaped cultivation in American Samoa. It should be observed for invasive behavior on Tutuila and excluded from the outer islands.

The Panama rubber tree (*Castilla elastica*, pulu mamoe), previously reported to be highly invasive in Samoa, has become established on Tutuila near Maloata. It is also reported to be found near 'Ili'ili. This species has the ability to become established in intact forests, posing a threat to the native forests. It presently doesn't seem to be too widespread and might be a good candidate for eradication or control.

*Cinnamomum verum* (cinnamon, tinamoni) is actively naturalizing in secondary forests in several locations on Tutuila. It shows great potential for becoming a major invasive species. It should be evaluated for control measures and should be excluded from the Manu'a islands.

*Clerodendrum chinense* (Honolulu rose, losa Honolulu) is prevalent on both Tutuila and the Manu'a Islands. This shade-tolerant species reproduces from root suckers.

*Clidemia hirta* (Koster's curse) is present on Tutuila and the Manu'a Islands (particularly on Ofu and Ta'u). It is scattered and localized on Olosega. This species is a serious problem species in Hawai'i. The thrips *Liothrips urichi* was introduced as a biological control agent on Tutuila about 25 years ago and seems to be giving a reasonable level of control. It was recently introduced to Ta'u. The agent could also be introduced to Ofu/Olosega. Work is under way on additional bio-control agents in Hawai'i.

*Costus speciosus* (crepe or wild ginger) was seen naturalizing on Tutuila. This is a potentially troublesome species that reproduces vegetatively and can grow in either full sun or shaded forest understories. At least in the A'oloau area of Tutuila it seemed to thrive in areas of disturbance (in this case an abandoned orchard that was being turned into pasture). It is a weedy species in French Polynesia.

*Dieffenbachia maculata* (spotted Dieffenbachia or dumb cane), which probably escaped from cultivation as an ornamental, was seen in a number of locations on Tutuila, including the National Park of American Samoa. This is potentially a very bothersome species, as it reproduces vegetatively and can thrive in the dense shade of an intact native forest canopy.

An isolated infestation of a *Hedychium* sp. (ginger) was seen on Ta'u that should be promptly eradicated.

*Imperata cylindrica* (cogon grass) has been reported to be present in American Samoa. We did not see it, and it may not be a problem in American Samoan ecosystems, but this is a very invasive species elsewhere and, if found to be present, should be closely monitored for spread.

*Kalanchoë pinnata* (life plant), probably also an escape from cultivation, was seen on both Tutuila and Olosega. It reproduces vegetatively and may be invasive on the forest floor.

*Lantana camara* (lantana, latana) was observed being grown as an ornamental on Tutuila and Ta'u. Although a serious pest elsewhere in the Pacific (and throughout the tropics), it does not seem to be a problem here, at least yet.

*Leucaena leucocephala* (fua pepe), as is the case throughout most of the Pacific, is prevalent on all the islands.

A *Ligustrum* (*L. sinense*?) was noted in cultivation on Tutuila. Privets are notorious invaders and it would be desirable to eradicate any examples and exclude them in the future.

*Lonicera japonica* (Japanese honeysuckle) was also seen in cultivation on Tutuila and Ta'u. This is another well-known invader. If possible, it should be eradicated or at least further plantings discouraged and the present ones monitored for spread.

*Merremia peltata* (fue lautetele) is quite invasive on Tutuila and is also found on Ta'u. According to local sources, it was introduced about 1970, although this may just have been the time it became a noticeable problem. It is apparently a native or an early introduction throughout much of Melanesia, Polynesia and Micronesia, but its aggressive behavior has been noted elsewhere. Not seen on Ofu and Olosega.

*Mikania micrantha* (mile-a-minute weed, fue saina) has become well established as a major pest of disturbed areas on all the major American Samoan Islands.

*Mimosa invisa* (giant sensitive plant, vao fefe palagi) is established on Tutuila and Ofu, although not widespread. Given its limited extent on Ofu, it is a prime candidate for eradication there. It should be excluded from Olosega and Ta'u and promptly eradicated if found. A biological control agent is available that might also be employed if *M. invisa* becomes more widespread. However, this agent (*Heteropsylla spinulosa*) will not eradicate the plant and is most effective in open areas, such as pastures.

*Paraserianthes falcataria* (tamaligi palagi) is widespread on Tutuila. However, it may be a candidate for exclusion or control on the Manu'a Islands.

*Spathodea campanulata* (African tulip tree) is present in cultivation on Tutuila. This tree has become a major problem in Fiji, the Hawaiian Islands and some other places. It is a problem species in Samoa and thus should be closely monitored for spread from its present locations in American Samoa. It was not observed on the Manu'a Islands and it would be good to exclude it from there.

*Syngonium podophyllum*, a climbing aroid, was seen spreading in the National Park of American Samoa along the Mount 'Alava trail. It was also noted in many areas bordering habitation sites (e.g. the Government housing area). This is an especially aggressive plant that has the ability to tolerate low light conditions such as those found in relatively intact forest settings. Along one area of the Mount 'Alava trail it completely dominated the groundcover layer, seemingly to the exclusion of all other species. It also has a tendency to climb and in fact was covering the trunks of most of the mature trees in the area. This species would probably require hand or mechanical removal, followed by periodic checks, for eradication. *Syngonium* is able to reproduce from a single node and almost certainly bits and pieces of the stems would be overlooked.

### **3. Species that are not known to be invasive elsewhere but have the potential to spread in American Samoa**

A few species that have not been particularly invasive elsewhere have the potential to become problems in American Samoa (Appendix 2, Table 3).

*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, making it a likely candidate to invade intact or only slightly disturbed native forest stands. Specimens observed on Tutuila and Ta'u were cultivated ones in yards, but this species should be monitored for possible naturalization. If so, naturalized populations should be promptly eradicated.

*Desmodium nicaraguense* (synonym *D. rensonii*) has been distributed as a forestry tree but shows signs of naturalizing. It should be closely monitored and, if necessary, naturalizing populations controlled.

*Flemingia macrophylla* has likewise been distributed as a forestry tree and may naturalize. Again, close monitoring and, if necessary, control is in order. Another *Flemingia* species, *F. strobilifera*, is invasive on Tahaa and Raiatea (Society Islands) and naturalizes along roadsides on Nuku Hiva (Marquesas), French Polynesia, as well as in the Hawaiian Islands.

*Sambucus mexicana* (Mexican elder) is fairly common on Tutuila, both as an ornamental and naturalized in open areas. It is also present on Ta'u.

The white-flowered form of *Sesbania grandiflora* (hummingbird tree) has naturalized in localities where it has been planted on Tutuila. It was originally introduced as a possible fuelwood tree, but it is not resistant to hurricanes. If not too widespread, it may be a candidate for control or eradication.

#### **4. Species that are mentioned or listed as weedy or invasive elsewhere and are common or weedy in American Samoa**

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 4) should be seriously evaluated for inter-island quarantine to confine them to the islands where they are presently located or to eradicate them if they become established elsewhere.

Potentially invasive tree species include *Acacia auriculiformis* (earleaf acacia), *A. mangium*, *Ceiba pentandra* (kapok, vavae), *Schefflera actinophylla* (octopus tree), *Syzygium jambos* (malabar plum), *Samanea saman* (monkeypod), *Tabebuia heterophylla* (pink trumpet tree) and *Tecoma stans* (yellow bells).

*Passiflora maliformis* (pasio) is reported to be in American Samoa (not seen). This species is on the French Polynesia noxious weed list.

An isolated infestation of *Solanum torvum* (prickly solanum) is located on Tutuila and should be eradicated.

Likewise, an infestation of *Ipomoea alba* on Tutuila should be eradicated.

A wide variety of introduced grasses have become established, the most aggressive of which include *Cenchrus echinatus* (bur grass, vao tuitui); *Cynodon dactylon* (Bermuda grass); *Paspalum* spp., including *P. conjugatum* (Hilo grass, vao lima), *P. dilatatum* (Dallis grass), *P. fimbriatum*, and *P. urvillei* (Vasey grass); *Pennisetum pupureum* (elephant or napier grass) and *Sorghum halepense* (Johnson grass) (although there is some question as to the identify of this last species – Whistler (1988) classifies it as *S. sudanense*, a less aggressive species).

Other widespread weedy species include *Indigofera suffruticosa* (indigo), *Mimosa pudica* (sensitive plant, vao fefe), *Passiflora foetida* (love-in-a-mist, pasio vao), *Psidium guajava* (guava, ku'ava), *Stachytarpheta urticifolia* (blue rat's tail, mautofu tala) and *Wedelia trilobata* (Singapore daisy, ateate). *Derris malaccensis* (New Guinea creeper, 'ava niukini) is present and invading lowland coastal forests on Tutuila, Aunu'u, Ofu and Olosega.

A number of other species present to some degree in American Samoa have bad reputations elsewhere. These should be monitored for invasive behavior and evaluated for quarantine. They include bamboos (*Bambusa* and other bamboo species), *Cestrum diurnum* (day cestrum) and *C. nocturnum* (night-flowering cestrum, queen of the night, teine o le po, ali'i o le po), *Duranta repens* (golden dewdrop), *Hedychium* spp. (gingers), *Hemigraphis alternata*, *Hyptis pectinata* (comb hyptis or mint weed), *Ricinus communis* (castor bean) and *Schinus terebinthifolius* (Christmasberry).

## 5. Native and naturalized species exhibiting aggressive behavior

Some native species (or early introductions) exhibit characteristics that could make them problem species if they are introduced to islands where they are not present. These species are listed in Appendix 2, Table 5.

### 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 land management officials should work closely with plant protection and quarantine officials to make them aware of known and potential invasive plant species. Plant quarantine officers are familiar with most agricultural pests, but they may not be aware of some of the pests that threaten wildland ecosystems. In cooperation with the plant quarantine organization, a list of 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 go to the approach recently adopted by Australia and under serious consideration by a number of other countries. That is to exclude all alien species not shown to be of negligible 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.

Other exclusion measures that would be desirable to put in place include:

- Requiring steam-cleaning or power washing of all used equipment coming into American Samoa and moving between the island of Tutuila and the Manu'a Islands. 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. Equipment that has been in Hawai'i or French Polynesia is of especially high risk because of the danger of introducing *Miconia calvescens* and some other especially noxious species prevalent there.
- Changing the customs arrival form to have people indicate if they have been in forests as well as on 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.
- Conducting a joint training/workshop for foresters, land managers, quarantine officers and others to understand the problem of environmental weeds and develop ways to work together to deal with the situation.

Education of the public about the danger of introductions and encouraging the use of native species

can be helpful. What may just be a pretty flower to be planted in a yard or garden can turn out to be an invasive species. It is particularly important to work with local nurseries and botanical gardens, as these are often 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.

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 the problem if the infestation is allowed to spread so that they will 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 also be encouraged to report suspicious plants. Public service announcements on television or radio or newspaper articles can encourage this. Funding can be requested to prepare PSA's or "wanted" posters. Prompt follow-up to public reports is essential to maintain the credibility of such a program.

Land managers and extension agents 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 become established in disturbed areas. Suspicious plant species should be promptly reported. A scouting program should be established where scheduled surveys are made for new or expanding infestations. A formal evaluation should be requested for any new species that appears to be invasive or is known to be invasive elsewhere. This evaluation should be by an expert who is familiar with the species and methods for its eradication or control and can recommend further action. Prompt action is essential, since once a species becomes widespread, control or eradication can be extremely costly or impossible.

It is also very helpful to have laws and regulations in place to aid in dealing with new introductions. This includes 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. Provision for emergency funds to deal with immediate problems should also be in place. Model laws and regulations can be obtained from states and countries that have implemented them.

The American Samoan government is encouraged to take advantage of the Federal assistance programs in dealing with invasive plant species. American Samoa is already utilizing cost-share funding to provide locally available expertise in forest health protection. Experts are also on call from the Forest Service's Forest Health Protection staff, or they can arrange for expert consultation. Finally, cost-share funding can be requested to deal with forest health problems, including plant pests, under the Cooperative Forestry and Hawaii Tropical Forestry Recovery acts. Funding is subject to recommendations resulting from a professional evaluation of the problem and the overall availability of funds. Funding also tends to be prioritized based on an economic evaluation of cost-effectiveness, so rapid eradication of a pest species while it is still confined to a small area would undoubtedly take precedence over the chronic problem of a species that has escaped control.

## Recommendations

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

### All islands:

- Make every effort to keep out all the species listed in Appendix 2, Table 1. These are known invasive species elsewhere, and there is no sense in running the risk that they will act the same in American Samoa. As we are able to gather more information on other species that might threaten tropical island ecosystems we will add them to the list. For those with Internet access, additional information and new listings can be found at <http://www.hear.org/pier>.
- Take special measures to keep *Coccinia grandis*, *Miconia calvescens* and *Psidium cattleianum* out, to monitor for their occurrence, and to eradicate them immediately if found. *Coccinia grandis* has proven highly invasive in Saipan, is present and invasive in Hawai'i, and is present in Samoa. Given how *Miconia* has behaved in Tahiti and Hawai'i, it could be an ecological disaster if it is introduced. *Psidium cattleianum* is a serious problem in Hawai'i and a number of other tropical islands.

Since there is so much traffic to Samoa from Hawai'i, where these species are present, it would be highly desirable to institute some special measures to prevent their introduction from that source (similar measures would be desirable for French Polynesia, although there is apparently little traffic from there). At a minimum, quarantine officers should be alert to people who might have been in the woods or rural areas in Hawai'i, especially on the Big Island, and inspect their shoes or boots for seeds. Any trucks or equipment coming from Hawai'i that have been used in rural areas must be power washed or steam cleaned. Warning posters should be produced to alert the public and encourage reporting of any introductions (fortunately, these plants are quite distinctive and easily identified). Any infestations picked up from public reporting or scouting should be promptly eradicated before the plants set seed.

Perhaps a procedure could be established that begins the quarantine/plant inspection process in Hawai'i similar to that for people travelling to the mainland U.S. In this case all baggage heading for or through American Samoa would be subject to inspection for target noxious species before it left Hawai'i.

- In addition, there are other notorious weeds that are not yet in American Samoa, including *Chromolaena odorata*, *Cecropia obtusifolia* and *C. peltata*, *Melinis minutiflora*, *Passiflora mollissima*, *Pennisetum setaceum*, *Rubus* spp., *Tibouchina herbacea*, *Ligustrum* spp. and *Passiflora* spp. Quarantine measures should be instituted to keep them out and they should be eradicated immediately if found.
- For species listed in Appendix 2, Tables 2 and 3, take all reasonable precautions to prevent movement to islands where they are not present, be vigilant to detect introductions on these islands, and take prompt action if they are found.

- Species listed in Appendix 2, Table 4 are pests and, although they may not be presently causing serious damage to wildland ecosystems, they are certainly not desirable species. Some of them may turn out to be serious problems and there is always a chance that they could be introduced to an island ecosystem where they could do serious harm. It would be best to keep them off islands where they do not occur.
- Species listed in Appendix 2, Table 5, even though native to American Samoa, exhibit characteristics of invasive behavior and should not be introduced where they are not present.
- A number of species used in forestry 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.
- 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 should be developed and the various known and potential invasive species evaluated for their risk of introduction, spread and potential damage. This should be done on a Pacific-wide basis.
- A joint training session/workshop should be conducted 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 should be to foster cooperation and joint action against invasive species.
- The purpose of this survey was to give an overall assessment of the situation. Individual species of concern should be more fully evaluated as to extent, invasiveness, and the possibility for control or eradication. Technical assistance should be requested, if needed, to evaluate individual species.

### **Tutuila:**

- A cultivated *Ligustrum* sp. was noted. Privets are notorious weed species on tropical islands. If at all possible, this species should be eradicated and *Ligustrum* spp. banned from further importation.
- *Adenanthera pavonina* (the coral bean tree) appears to be quite invasive in American Samoa. It is a prolific producer of seeds, which are probably spread by birds. This species has the potential to be a major problem in the future. Likewise, *Cinnamomum verum* is quite invasive and it looks as if it will become a major problem. Both of these species are well past the point where eradication is feasible. However, if it is desirable to limit their spread, they could be evaluated for control measures.

- The Panama rubber tree (*Castilla elastica*), while spreading, is presently limited in extent. It is a problem species in Hawai'i and French Polynesia and is capable of invading intact forests. Given that it is in the initial stages of invasion in American Samoa, it would be desirable to evaluate this species for possible control or eradication.
- *Funtumia elastica* (African rubber tree, pulu vao) is a particularly invasive species in Samoa. Because of its proximity to American Samoa and the high volume of traffic between the islands, this species is of special concern. Strategies for exclusion should be developed and implemented, the species monitored for establishment and promptly evaluated for exclusion if found.
- *Syngonium polyphyllum* and *Dieffenbachia maculata* were noted at several places around the island. *S. polyphyllum* is a climber that spreads vegetatively. The nodes root, and any cuttings are a potential new source of infestation. *Dieffenbachia* reproduces vegetatively by rhizomes. Both species grow in the shade and appear to readily invade intact forest ecosystems. Both are present in limited areas in the National Park of American Samoa and it would be desirable to evaluate them for eradication from the Park and other sensitive areas.
- *Kalanchoë pinnata* was noted on the road to Masefau. If this species is limited in extent, it may also be a candidate for control or eradication.
- There is a localized infestation of *Solanum torvum* across from the high school in Leone. This species is spread by birds and is a pest in French Polynesia and elsewhere. It should be eradicated as soon as practical.
- A infestation of *Ipomoea alba* is spreading along the road near the golf course. This species is a weed in Hawai'i. Given the local nature of the infestation, this would be a good candidate for eradication.
- *Desmodium nicaraguense* (*D. rensonii*) and *Flemingia macrophylla* have been planted in species trials around the Community College and have been distributed to landowners in the past. Some naturalization has been reported. Distribution to landowners has been stopped, but the species should be monitored for naturalization and the need for possible control.

### **Manu'a Islands**

Probably because of their isolation, these islands have fewer weed species than Tutuila. For example, *Mimosa invisa* is apparently not present on Ta'u. While inter-island quarantine inspection is probably not realistic, some measures could be instituted to reduce the risk of introduction or establishment of weed species not already present. These include cleaning road construction equipment before it is moved between Tutuila (or other locations) and these islands, public education and reporting of problem species, scouting expeditions to discover incipient infestations, and prompt eradication of new infestations.

Recommendations for the individual islands follow.

### **Ofu:**

- *Mimosa invisa* is present in limited areas above Ofu village. It would seem to be practical to eradicate it. We were told that eradication had previously been considered but rejected because it would involve the use of herbicides. Given the nasty nature of this species, it would be well to make another try at convincing the village that eradication is far better than living with this problem, which will only get worse in the future.

### **Olosega:**

- *Clidemia hirta* is not yet widespread on this island. Given the limited access to much of the island, it may be desirable and feasible to institute control measures. A more detailed survey would be needed to establish feasibility, but given the limited extent of the infestations we saw it may be practical. Cleaning for control of other invasives may be practical as well, as the forest is mostly intact and free of major invasive species.
- *Kalanchoë pinnata* was seen on the road to Sili village. Again, this plant seems to be limited in extent and may be a candidate for control or eradication.

### **Ta'u:**

- *Mimosa invisa* infestations should be eradicated if they are found. The island is apparently free of this undesirable species, but it is certain to show up someday.
- The island also appears to be free of *Mimosa pudica* infestations. It has been reported as present, but was not seen by us or by Whistler (1992) in his botanical inventory for the National Park of American Samoa. If it is not present, it may be desirable to develop a strategy to prevent its introduction and to eradicate it if (more likely, when) it is found.
- Some cultivated species include *Clerodendrum quadriloculare*, *C. chinense*, *Acacia auriculiformis*, *Tecoma stans*, *Lantana camara* and *Syngonium* spp. If it is not feasible to eliminate these species from cultivation, they should be closely monitored for naturalization and spread, as they are all known invasives.
- *Lonicera japonica* was seen in cultivation above the airport. This is a pest species in many locations and should be eliminated if possible.
- A species of *Hedychium* (ginger) was seen inland from Ta'u village. Several *Hedychium* species are bad forest invaders in Hawai'i. Since this is a small infestation in a rural area, it should be eradicated before it spreads further.

## Appendix 1.

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## Appendix 2

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

Scientific Name	Common Names	Family
<b>Acacia confusa</b>	Formosa koa, Formosa acacia, sosigi, shoshigi, pilampwoia, ianángi, yanangi	Fabaceae
<b>Acacia farnesiana</b>	Ellington curse, aroma, klu, popinac, kandaroma, cassie, vaivai vaka-vatona, vaivai vakavotona, ban baburi, oki, te kaibakoa, debena, kolu	Fabaceae
<b>Acacia mearnsii</b>	black wattle	Fabaceae
<b>Acacia melanoxylon</b>	Australian blackwood	Fabaceae
<b>Acacia nilotica</b>	prickly acacia, algaroba, tiare, babul	Fabaceae
<b>Acacia spp.</b>	acacia	Fabaceae
<b>Ailanthus altissima</b>	tree of heaven	Simaroubaceae
<b>Albizia chinensis</b>		Fabaceae
<b>Albizia lebeck</b>	siris-tree, rain tree, East Indian walnut, bois noir, kokko, trongkon-mames, tronkon mames, mamis, kalaskas, ukall ra ngebard, gumorningabchey; ngumorrningobchey, 'ohai, vaivai, vaivai ni vavalangi	Fabaceae
<b>Alternanthera philoxeroides</b>	alligator weed	Amaranthaceae
<b>Andropogon gayanus</b>	gamba grass	Poaceae
<b>Andropogon glomeratus</b>	bush beardgrass	Poaceae
<b>Andropogon virginicus</b>	broomsedge, yellow bluestem, whisky grass	Poaceae
<b>Annona glabra</b>	pond apple, bullock's heart, uto ni mbulumakau, kaitambo, kaitambu	Annonaceae
<b>Anredera cordifolia</b>	Madeira vine, lamb's tails, mignonette vine	Basellaceae
<b>Ardisia crenata</b>	hen's eyes, Hilo holly, coral berry, arbre à Noël	Myrsinaceae
<b>Ardisia elliptica</b>	shoebuttan ardisia, ati popa'a	Myrsinaceae
<b>Ardisia humilis</b>		Myrsinaceae
<b>Argyreia nervosa</b>	elephant creeper, Hawaiian baby woodrose, silver morning glory, woolly morning glory, coup d'air, liane a minguet, liane d' argent	Convolvulaceae
<b>Austroeupatorium inulaefolium</b>		Asteraceae
<b>Barleria lupulina</b>		Acanthaceae
<b>Barleria prionitis</b>	barleria	Acanthaceae
<b>Bauhinia variegata</b>	orchid tree, butterfly tree	Fabaceae

Scientific Name	Common Names	Family
<b>Bocconia frutescens</b>	bocconia	Papaveraceae
<b>Brillantaisia lamium</b>		Acanthaceae
<b>Buddleia asiatica</b>	dog tail	Loganiaceae
<b>Buddleia madagascariensis</b>	butterfly bush, smoke bush	Buddleiaceae
<b>Caesalpinia decapetala</b>	cats claw, Mysore thorn, Mauritius thorn, wait-a-bit, cats claw, puakelekino	Fabaceae
<b>Calliandra haematocephala</b>	red powder puff	Fabaceae
<b>Cardiospermum grandiflorum</b>	balloon vine; heart seed	Sapindaceae
<b>Cardiospermum halicacabum</b>	balloon vine, heart pea, wa niu, vo niu	Sapindaceae
<b>Cassia obtusifolia</b>	habucha	Fabaceae
<b>Cassia siamea</b>	cassod tree	Fabaceae
<b>Cecropia obtusifolia</b>	trumpet tree, guarumo, parasolier, faux-ricin, pisse-roux	Cecropiaceae
<b>Cenchrus brownii</b>	burgrass, sand-bur	Poaceae
<b>Cenchrus ciliaris</b>	buffelgrass, African foxtail grass, anjan grass	Poaceae
<b>Chloris radiata</b>	plush-grass, radiate fingergrass	Poaceae
<b>Chromolaena odorata</b>	Siam weed, trifid weed, bitter bush, herbe du Laos, kesengesil, masigsig, hagonoy, agonoi, huluhagonoi, mahsrihsrihk	Asteraceae
<b>Chrysobalanus icaco</b>	coco plum, icaco, icaque	Chrysobalanaceae
<b>Chrysophyllum oliviforme</b>	satin leaf, caimitillo	Sapotaceae
<b>Cinchona pubescens</b>	quinine tree	Rubiaceae
<b>Cinnamomum burmannii</b>	padang cassia	Lauraceae
<b>Cinnamomum camphora</b>	camphor tree, camphor laurel	Lauraceae
<b>Citharexylum caudatum</b>	juniper berry	Verbenaceae
<b>Citharexylum spinosum</b>	fiddlewood	Verbenaceae
<b>Clausena excavata</b>	clausena	Rutaceae
<b>Clitoria ternatea</b>	butterfly pea, buikike, bukike, paokeke, bukike paokeke, capa de la reina, kapa de la raina, putitainubia, pepe, latoela, nawa	Fabaceae
<b>Clusea rosea</b>	signature tree, copey, Scotch attorney	Guttiferae
<b>Coccinia grandis</b>	ivy gourd, scarlet-fruited gourd, ivy gourd aipikohr	Cucurbitaceae
<b>Coffea arabica</b>	coffee	Rubiaceae

Scientific Name	Common Names	Family
<b>Cordia alliodora</b>	laurel, kotia	Boraginaceae
<b>Cordia curassavica</b>	black sage	Boraginaceae
<b>Cordia glabra</b>	broad-leaved cordia	Boraginaceae
<b>Cortaderia jubata</b>	Andean pampas grass, purple pampas grass	Poaceae
<b>Cortaderia selloana</b>	pampas grass, silver pampas grass	Poaceae
<b>Corynocarpus laevigatus</b>	New Zealand laurel, karakara nut	Corynocarpaceae
<b>Crotalaria spp.</b>	kaskabeles, cascanetas, rattlepod, rattlebox	Fabaceae
<b>Cryptostegia grandiflora</b>	rubber vine, India rubber vine, liane de gatope	Asclepiadaceae
<b>Cupaniopsis anacardioides</b>	carrotwood	Sapindaceae
<b>Cuscuta campestris</b>	golden dodder, field dodder, navereverelangi, wa vereverelangi, wa lawala, wa mbosuthu, wa ndanga, wa tikaivu, ndithangi	Convolvulaceae
<b>Dalbergia sissoo</b>	Indian dalbergia, shisham	Fabaceae
<b>Digitaria insularis</b>	cottongrass, sourgrass, feather-top grass	Poaceae
<b>Echinochloa polystachya</b>	aleman grass, carib grass	Poaceae
<b>Elaeis guineensis</b>	African oil palm, apwiraiasi	Arecaceae
<b>Elephantopus mollis</b>	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
<b>Erigeron karvinskianus</b>	Mexican daisy, seaside daisy, daisy fleabane	Asteraceae
<b>Eriobotrya japonica</b>	loquat, Japanese plum	Rosaceae
<b>Flemingia strobilifera</b>	besungelaiei	Fabaceae
<b>Flindersia brayleyana</b>	Queensland maple, silkwood	Rutaceae
<b>Fuchsia boliviana</b>		Onagraceae
<b>Fuchsia hexapetalata</b>		Onagraceae
<b>Funtumia elastica</b>	African rubber tree, pulu vao	Apocynaceae
<b>Furcraea foetida</b>	Mauritius hemp, sisal, faumalila, fau malila	Agavaceae
<b>Grevillea banksii</b>	kahili flower, Banks grevillea, haiku	Proteaceae
<b>Grevillea robusta</b>	silk oak, silky oak, she-oak, silver oak, oke'	Proteaceae
<b>Grewia asiatica</b>		Tiliaceae
<b>Gymnocoronis spilanthoides</b>	Senegal tea, temple plant	Asteraceae
<b>Haematoxylum campechianum</b>	logwood, bloodwood tree, bloodwood tree, campeachy wood	Fabaceae
<b>Harungana madagascariensis</b>	harungana	Clusiaceae

Scientific Name	Common Names	Family
<b>Hedychium gardnerianum</b>	kahili ginger	Zingiberaceae
<b>Heterocentron subtriplinervium</b>	pearl flower	Melastomataceae
<b>Heterospatha elata</b>	palma brava, palma braba, asbo, demailei, demailéi, domaile, domailei, ebouch, buag bbuag	Arecaceae
<b>Hiptage benghalensis</b>	hiptage, liane de cerf	Malpighiaceae
<b>Hydrilla verticillata</b>	hydrilla, Florida elodea, water thyme	Hydrocharitaceae
<b>Hymenachne amplexicaulis</b>	hymenachne	Poaceae
<b>Hyparrhenia rufa</b>	jaragua grass	Poaceae
<b>Hypochoeris radicata</b>	hairy cat's ear, gosmore	Asteraceae
<b>Hyptis capitata</b>	botones, batunes, t'aiegarabao, knobweed	Lamiaceae
<b>Hyptis suaveolens</b>	wild spikenard, mumutun	Lamiaceae
<b>Ischaemum polystachyum</b>	paddle grass, reh padil, mah	Poaceae
<b>Ischaemum rugosum</b>	muraina grass, tho muraina, co muraina, wrinkle duck-beak, saramattagrass	Poaceae
<b>Ischaemum timorense</b>	centipede grass, waidoi grass	Poaceae
<b>Jacobinia carnea</b>	pink plume-flower, pink jacobinia	Acanthaceae
<b>Jasminum fluminense</b>		Oleaceae
<b>Jatropha gossypifolia</b>	bellyache bush, cotton-leaved physic nut	Euphorbiaceae
<b>Khaya senegalensis</b>	African mahogany, Senegal mahogany	Meliaceae
<b>Kyllinga polyphylla</b>	Navua sedge, tuise tele, tuise fiti, pakopako	Cyperaceae
<b>Leptospermum ericoides</b>	tree manuka, tree manuba, kanuka	Myrtaceae
<b>Leptospermum scoparium</b>	New Zealand tea, manuka	Myrtaceae
<b>Licuala grandis</b>	ruffled fan palm, palmier-cuillère	Arecaceae
<b>Lophostemon confertus</b>	brush box, Brisbane box, vinegar tree	Myrtaceae
<b>Ludwigia peruviana</b>	ludwigia, Peruvian primrose, water primrose	Onagraceae
<b>Melaleuca quinquenervia</b>	paperbark, cajeput, punk tree, niaouli	Myrtaceae
<b>Melastoma candidum</b>		Melastomataceae
<b>Melia azedarach</b>	Chinaberry, pride-of-India, white cedar, indian lilac, persian lilac, lilas des Indes, paraiso, para'isu, lelah, prais, tili, dake, bakain, sita	Meliaceae
<b>Melinis minutiflora</b>	molasses grass, herbe molasses, puakatau	Poaceae
<b>Memecylon floribundum</b>		Melastomataceae
<b>Merremia tuberosa</b>	wood rose	Convolvulaceae

Scientific Name	Common Names	Family
<b>Miconia calvescens</b>	miconia, purple plague, velvet leaf, bush current	Melastomataceae
<b>Mikania scandens</b>	climbing hempweed	Asteraceae
<b>Mimosa pigra</b>	catclaw mimosa, thorny sensitiveplant, giant mimosa, giant sensitive plant, zaraz, dormilona, bashful plant, amourette violet, amourette riviére	Fabaceae
<b>Montanoa hibiscifolia</b>	montanoa, tree daisy, Anzac flower	Asteraceae
<b>Myriophyllum aquaticum</b>	parrot's feather, water feather, Brazilian water milfoil	Haloragidaceae
<b>Neonotonia wightii</b>	glycine	Fabaceae
<b>Ochroma lagopus</b>	balsa, corkwood	Bombacaceae
<b>Operculina ventricosa</b>	paper rose, alalag, palulu, fue hina	Convolvulaceae
<b>Paederia scandens</b>	stink vine	Rubiaceae
<b>Panicum repens</b>	torpedo grass, panic rampant, wainaku grass, couch panicum, creeping panic	Poaceae
<b>Parkinsonia aculeata</b>	parkinsonia, Jerusalem thorn, horse-bean, retama	Fabaceae
<b>Passiflora edulis</b>	passion fruit, purple granadilla, yellow passion fruit, purple passion fruit, liliko'i, qarandila, vaine tonga, pasio	Passifloraceae
<b>Passiflora laurifolia</b>	yellow granadilla, belle apple, pasio, vaine tintina	Passifloraceae
<b>Passiflora ligularis</b>	sweet granadilla, yellow passionfruit	Passifloraceae
<b>Passiflora mollissima</b>	banana poka, banana passionfruit, bananadilla	Passifloraceae
<b>Passiflora quadrangularis</b>	granadilla, giant granadilla, parapotina maata, palatini, vine fua lalahi, tinitini, passione, pasio, kudamono	Passifloraceae
<b>Passiflora suberosa</b>	wild passionfruit, devil's pumpkin, indigo berry, corky passionflower, passiflore, grenadille, huehue haole	Passifloraceae
<b>Pennisetum clandestinum</b>	kikuyugrass, kikuyo	Poaceae
<b>Pennisetum polystachyon</b>	mission grass, feathery pennisetum, queue de chat, pwokso	Poaceae
<b>Pennisetum setaceum</b>	fountain grass	Poaceae
<b>Piper aduncum</b>	spiked pepper, yaqona ni Onolulu, yanggona ni Onolulu	Piperaceae
<b>Pistia stratiotes</b>	water lettuce, tropical duckweed, laitue d'eau, pistie, lechuguita de agua, repollo de agua, apon-apon, apoe-apoe, beo-cai, chawk	Araceae
<b>Pithecellobium dulce</b>	Madras thorn, Manila tamarind, camachili, kamachile, kamachiles, kamachili, kamatire, kamatsiri, kamatsíri 'opiuma, kataiya	Fabaceae
<b>Pittosporum undulatum</b>	Victorian box, Victorian laurel, Australian cheesewood, mock orange, sweet pittosporum	Pittosporaceae

Scientific Name	Common Names	Family
<b>Pluchea indica</b>	Indian fleabane, Indian pluchea	Asteraceae
<b>Pluchea symphytifolia</b>	sour bush	Asteraceae
<b>Praxelis clematidea</b>		Asteraceae
<b>Psidium cattleianum</b>	strawberry guava, cherry guava, cattley guava, Chinese guava, kuaHPa, waiawi, ngguava, goyavier de Chine, tuava tinito	Myrtaceae
<b>Pueraria phaseoloides</b>	tropical kudzu, puero	Fabaceae
<b>Rhodomyrtus tomentosa</b>	rose myrtle, downy myrtle, isenberg bush	Myrtaceae
<b>Rhynchelytrum repens</b>	Natal redtop, Natal grass, red Natal grass, Holme's grass, blanketgrass, salapona, herbe du Natal, herbe rose, herbe pappangue, tricholène	Poaceae
<b>Rubus alceaefolius</b>	giant bramble	Rosaceae
<b>Rubus moluccanus</b>	broad leafed bramble, Molucca bramble, Molucca raspberry, piquant lou-lou, kohkihl, soni, wa sori, wa ngandongandro, wa votovotoa	Rosaceae
<b>Rubus rosifolius</b>	roseleaf raspberry, thimbleberry, ola'a, framboisier	Rosaceae
<b>Rubus spp.</b>	raspberries, blackberries, brambles	Rosaceae
<b>Saccharum spontaneum</b>	wild cane, ahlek, ahlec, banga ruchel, ac	Poaceae
<b>Salvinia molesta</b>	salvinia, water fern, kariba weed, African payal	Salviniaceae
<b>Sanchezia speciosa</b>	sanchezia	Acanthaceae
<b>Schizachyrium condensatum</b>	little bluestem, bush beardgrass	Poaceae
<b>Senecio madagascarensis</b>	fireweed	Asteraceae
<b>Senecio mikanioides</b>	German ivy, Italian ivy, cape ivy	Asteraceae
<b>Setaria pallide-fusca</b>	foxtail, Queensland pigeon grass, cat's tail grass	Poaceae
<b>Setaria palmifolia</b>	palmgrass, short pitpit, hailans pitpit, broadleaved bristlegrass	Poaceae
<b>Solandra maxima</b>	cup of gold, golden cup	Solanaceae
<b>Solanum seafortianum</b>	potato creeper, Brazilian nightshade	Solanaceae
<b>Solanum tampicense</b>	wetland nightshade, aquatic soda apple	Solanaceae
<b>Solanum viarum</b>	tropical soda apple	Solanaceae
<b>Sphaeropteris cooperi</b>	Australian tree fern	Cyatheaceae
<b>Stylosanthes guianensis</b>	stylo, Brazilian lucerne, tropical lucerne	Fabaceae
<b>Syncarpia glomulifera</b>	turpentine tree	Myrtaceae
<b>Syzygium cumini</b>	Java plum, jambolan plum, duhat, mesegerak, mesekerrak, mesekerrák, mesigerak, jamelanguier, kavika ni India, jammun, faux-pistachier, jamelanguier	Myrtaceae
<b>Syzygium floribundum</b>		Myrtaceae

Scientific Name	Common Names	Family
<b>Thunbergia alata</b>	black-eyed susan vine	Acanthaceae
<b>Thunbergia grandiflora</b>		Acanthaceae
<b>Thunbergia laurifolia</b>	katurai, agati, agathi	Acanthaceae
<b>Tibouchina herbacea</b>	glorybush, cane ti, tibouchina	Melastomataceae
<b>Tibouchina urvileana</b>	glorybush, lasiandra, princess flower	Melastomataceae
<b>Tibouchina viminea</b>		Melastomataceae
<b>Timonius timon</b>	liberal, sakosia	Rubiaceae
<b>Tithonia diversifolia</b>	tree marigold, Mexican sunflower, Japanese sunflower, matala	Asteraceae
<b>Trema orientalis</b>	charcoal tree, gunpowder tree, agaunai, banahl, elodechoel, uanin, ndrou, ndroundrou, ndrikanaithembe, bulasisi	Ulmaceae
<b>Tribulus cistoides</b>	puncture vine, caltrop, te maukinikini	Zygophyllaceae
<b>Triphasia trifolia</b>	limeberry, limon-China, limoncito, lemon China, lemon de China	Rutaceae
<b>Triumfetta semitriloba</b>	Sacramento bur, dadangsi, masiksik lahe	Tiliaceae
<b>Turbina corymbosa</b>	turbina	Convolvulaceae
<b>Zebrina pendula</b>	wandering zebrina, wandering jew	Commelinaceae

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>.

**Table 2. Introduced species that are invasive elsewhere and are also invasive or potentially invasive in American Samoa.**

<b>Scientific Name</b>	<b>Common Names</b>	<b>Family</b>
<b>Adenantha pavonina</b>	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
<b>Antigonon leptopus</b>	Mexican creeper, mountain rose, Confederate vine, chain of love, hearts on chain, kadena de amor, love vine, coral vine, rohsapoak	Polygonaceae
<b>Castilla elastica</b>	Panama rubber tree, Mexican rubber tree, pulu mamoe	Moraceae
<b>Cinnamomum verum</b>	cinnamon tree, ochod ra ngebard, tinamoni	Lauraceae
<b>Clerodendrum chinense</b>	Honolulu rose, losa Honolulu, pikake hohono, pikake wauke, pitate mama	Verbenaceae
<b>Clidemia hirta</b>	Koster's curse, soap bush, kui, kúí, kaurasiga, kauresinga, kaurasinga, roinisinga, ndraunisinga, mbona na mbulamakau, vuti	Melastomataceae
<b>Costus speciosus</b>	crepe ginger, wild ginger, Malay ginger, isebsab	Zingiberaceae
<b>Dieffenbachia maculata</b>	spotted dieffenbachia, dumb cane	Araceae
<b>Imperata cylindrica*</b>	blady grass, cogon grass, satintail, alang-alang, lalang, carrizo, kunai, ngi, paille de dys, paillotte, impérata cylindrique	Poaceae
<b>Kalanchoe pinnata</b>	life plant, air plant, resurrection plant, Canterbury bells	Crassulaceae
<b>Lantana camara</b>	lantana, landana, rantana, rahndana, tukasuweth, te kaibuaka, talatala, kauboica, latora moa, tatara moa, ros fonacni, latana, lakana, talatala, talatala talmoa, te kaibuaja, taramoa, migiroa, kaumboitha, mbonambulmakau, mbona ra mbulumakau, tokalau, waiwai, taratara hamoa	Verbenaceae
<b>Leucaena leucocephala</b>	leucaena, faux-acacia, faux mimosa, koa haole, tangantangan tangan-tangan, talntangan, ganitnityuwan tangantan, telentund, namas, vaivai, vaivai ni vavalangi, tuhngantuhngan, rohbohtin, lopa samoa, pepe, siale mohemohe, fua pepe, nito, cassis, te kaitetua, balori	Fabaceae
<b>Ligustrum spp.</b>	privet	Oleaceae
<b>Lonicera japonica</b>	Japanese honeysuckle, honekakala	Caprifoliaceae

Scientific Name	Common Names	Family
<b>Merremia peltata</b>	merrimia, lohl, yol, kebeas, lagon, lagun, pala, fue, fue vao, fue kula, iol, puhlah, fue lautetele, fue mea, abui, grobihi, arosumou, wa mbula, wa ndamu, viliyawa, wiliviwa, veliyana, wiliao	Convolvulaceae
<b>Mikania micrantha</b>	mile-a-minute weed, Chinese creeper, American Rope, liane américaine, kwalo koburu, fue saina, fou laina, wa mbosuthu, wa mbosuvu, wa mbutako, wa ndamele, ovaova	Asteraceae
<b>Mimosa invisa</b>	giant sensitive plant, grande sensitive, sensitive gèante, singbiguin sasa, mechiuaiu, vao fefe palagi, la'au fefe tele, la'au fefe palagi, wa ngandongandro levu, wa ngandongandro ni wa ngalelevu, limemeihr laud	Fabaceae
<b>Paraserianthes falcataria</b>	Molucca albizia, tuhke kerosene, tuhkehn karisihn, ukall ra ngebard, tamaligi palagi	Fabaceae
<b>Spathodea campanulata</b>	African tulip tree, fireball, fountain tree, tulipier du Gabon, pisse-pisse, rarningobchey, tuhke dulip, tiulipe	Bignoniaceae
<b>Syngonium podophyllum</b>	arrowhead plant, goosefoot plant	Araceae

**Table 3. Species that are not known to be particularly invasive elsewhere, but that are potentially invasive in American Samoa.**

Scientific Name	Common Names	Family
<b>Clerodendrum quadriloculare</b>	bronze-leaved clerodendrum, tuhkehn palau	Verbenaceae
<b>Desmodium nicaraguense</b>		Fabaceae
<b>Flemingia macrophylla</b>		Fabaceae
<b>Sambucus mexicana</b>	elderberry, Mexican elder	Caprifoliaceae
<b>Sesbania grandiflora</b>	hummingbird tree, sesban, katurai, agati, agathi	Fabaceae

**Table 4. Species that are reported as invasive or weedy elsewhere and are common or weedy in American Samoa.**

<b>Scientific Name</b>	<b>Common Names</b>	<b>Family</b>
<b>Acacia auriculiformis*</b>	Papuan wattle, auri, earleaf acacia; tuhkehn pwelmwahu	Fabaceae
<b>Acacia mangium*</b>	mangium, tuhkehn pwelmwahu	Fabaceae
<b>Aleurites moluccana</b>	candlenut, bancoulier, lama, lumbang, raguar, sakan, shakan, kukui, lauthe, lauthi, nggerenggere, toto, sikethi, tuitui, waiwai, sikeli, 'ama	Euphorbiaceae
<b>Allamanda cathartica</b>	yellow trumpet vine, allamanda, golden allamanda, golden cup, lani-ali'i, puataunofu	Apocynaceae
<b>Anacardium occidentale*</b>	cashew, cashew nut, 'apu initia, kesiu	Anacardiaceae
<b>Asystasia gangetica</b>	Chinese violet, Philippine violet, coromandel	Acanthaceae
<b>Axonopus fissifolius</b>	narrow-leaved carpetgrass	Poaceae
<b>Azadirachta indica</b>	neem	Meliaceae
<b>Bambusa spp.</b>	bamboos, bambou, pehri en sapahn, bambuu, bambu, piao, piao palaoan	
<b>Bauhinia monandra</b>	orchid-tree, St. Thomas-tree, flamboyant, flores mariposa, mariposa, pine fua loloa, pink butterfly tree	Fabaceae
<b>Bauhinia purpurea</b>	orchid tree, purple butterfly tree, pink butterfly tree	Fabaceae
<b>Bidens pilosa</b>	beggar's tick, Spanish needle, Cobbler's pegs, piquants noirs, fisi'uli, kofe tonga, kofetoga, piripiri, tae puaka, mbatimandramandra, mbatikalawau, matakaro, matua kamate	Asteraceae
<b>Brachiaria mutica</b>	California grass, para grass, buffalo grass, Mauritius grass, puakatau	Poaceae
<b>Brachiaria subquadripara</b>	brachiaria, green summer grass	Poaceae
<b>Calliandra calothyrsus</b>	powderpuff	Fabaceae
<b>Calopogonium mucunoides</b>	calopo, akankan-guakag	Fabaceae
<b>Calotropis gigantea*</b>	calotrope	Asclepiadaceae
<b>Cananga odorata</b>	ilang-ilang, alang-ilang, ylang-ylang, chiráng, irang, ilahnglahng, ilanlang, pwanang, pur-n-wai, pwurenwai, sair-n-wai, seirin wai, seir en wai, makasoi, moso'oi, moto'oi' makosoi, mokosoi mokohoi, motoi, ilanilan	Annonaceae
<b>Casuarina equisetifolia</b>	casuarina, ironwood, Australian pine, she-oak, horsetail tree, gagu, gago, nokonoko, te katurina, toa	Casuarinaceae
<b>Casuarina glauca</b>	swamp oak, saltmarsh ironwood, longleaf ironwood	Casuarinaceae

Scientific Name	Common Names	Family
<b>Cedrela odorata*</b>	cigar box cedar, Mexican cedar, West Indian cedar, Spanish cedar, Mexican cedar, sita hina	Meliaceae
<b>Ceiba pentandra</b>	kapok, kapok tree, algodon de Manila, atgodon di Manila, koatoa, atagodon, batte ni gan' ken, bulik, kuhtin, kotin, cottin, koatoa, koatun, cutin, kalngebard, kalngebárd, kerrekar ngebard, vavau ni lokoloko, vavae, vauvau ni vavalangi, semar	Bombacaceae
<b>Cenchrus echinatus</b>	burgrass, sand-bur, Mossman River grass, herbe a cateaux, loklok, lellik, karmwijnwijn, tuitui, vao tuitui, te anti, te kateketeke, motie vihilago, se mbulabula, piri-piri, cauit-cauitan, konpeito-gusa, 'ume'alu, hefa, mosie vihilango, cram-cram	Poaceae
<b>Cestrum diurnum</b>	inkberry, day jessamine, day cestrum, tinta 'n-China, tentanchinu, tintan china, thauthau	Solanaceae
<b>Cestrum nocturnum</b>	night-flowering cestrum, 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
<b>Chloris barbata</b>	swollen fingergrass, airport grass, mau'u lei, purpletop chloris	Poaceae
<b>Clerodendrum japonicum</b>	glorybower	Verbenaceae
<b>Clerodendrum paniculatum</b>	pagoda plant, butcherechár, butecherechar, butcherechár tukehrn sousou	Verbenaceae
<b>Crassocephalum crepidoides</b>	thickhead, fireweed, pualele, fisi puna, fua lele, maraburubo	Asteraceae
<b>Cynodon dactylon</b>	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
<b>Cyperus rotundus</b>	nut grass, nutsedge, purple nutsedge, cocoglass, souchet rond, souchet à tubercules, herbe à oignon, chaguan humatag, kili'o'opu, soro na kambani, sora na kambani, malanga, vuthesa, tuteoneon, mot ha, mumuta, pakopako, te mumute, vucesa, motha, vucesa, oni ani	Cyperaceae
<b>Delonix regia</b>	flame tree, flamboyant, poinciana; arbol del fuego, atbot, atbot det fuegu, nangiosákura, nangyo, pilampwoia weitahta, sakuranirow, sekoula, ohai'	Fabaceae
<b>Derris malaccensis</b>	New Guinea creeper, 'ava niukini, nduva, tuva, nduva ni niukini, kava fisi	Fabaceae

Scientific Name	Common Names	Family
<b>Digitaria ciliaris</b>	Henry's crabgrass, fingergrass, smooth crabgrass, tropical crabgrass, violet crabgrass, large crab grass, summer grass, kukaepua'a, saulangi	Poaceae
<b>Digitaria violascens</b>	smooth crabgrass, violet crabgrass, sau	Poaceae
<b>Dissotis rotundifolia</b>		Melastomataceae
<b>Duranta repens</b>	golden dewdrop	Verbenaceae
<b>Eichhornia crassipes</b>	water hyacinth, jacinto de agua, lirio acuatico, jacinthe d'eau, bung el ralm, mbekambekairanga, ndambendambe ni nga, jal khumbe, bekabekairaga, dabedabe ne ga, jal khumbe, riri vai	Pontederiaceae
<b>Eleusine indica</b>	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
<b>Eugenia uniflora</b>	red Brazil cherry, Suriname cherry, kafika, kafika papalagi, pitanga	Myrtaceae
<b>Ficus benghalensis</b>	banyan, Indian banyan, vada tree	Moraceae
<b>Ficus benjamina</b>	weeping fig, baka, ovava' fisi	Moraceae
<b>Ficus elastica</b>	India rubber tree, rubber plant; komunoki, komunokí, rapah, gak'inyigoma	Moraceae
<b>Gliricidia sepium</b>	mother of cacao, madre de cacao	Fabaceae
<b>Hedychium coronarium</b>	white ginger, butterfly lily, sinter pwetepwet, thevunga, ndrove, tolon	Zingiberaceae
<b>Hedychium flavescens</b>	yellow ginger, awaphuhi melemele, awapuhi melemele	Zingiberaceae
<b>Hemigraphis alternata</b>		Acanthaceae
<b>Hyptis pectinata</b>	comb hyptis, mint weed, purple top, mumutun lahe, mumutun palaoan, mumutan ademelon, fausse menthe, tamoli ni vavalangi, timothi ni vavalangi, wawuwavu, ndamoli, ben tulsia	Lamiaceae
<b>Indigofera suffruticosa</b>	indigo, aniles, 'akauveli	Fabaceae
<b>Ipomoea spp.</b>	morning glory (non-native)	Convolvulaceae
<b>Mimosa pudica</b>	sensitive plant, sleeping grass, sensitive, betguen sosa, tuitui, cogadrogadro, lajwania, memege, mechiuaiu, vao fefe, mateloi, pohe ha'avare, ra kau pikikaa, tho ngandongandro, tho kandrodandro, limemeihr	Fabaceae

Scientific Name	Common Names	Family
<b>Momordica charantia</b>	balsam-apple, cerasee, bitter-melon, bitter gourd, balsam pear, peria, squirting cucumber, atmagoso, almagosa, atmagosu, markoso, kerala, meleni 'ae kuma; vaine 'initia	Cucurbitaceae
<b>Odontonema tubaeforme</b>	fire spike	Acanthaceae
<b>Operculina ventricosa</b>	paper rose, alalag, palulu, fue hina	Convolvulaceae
<b>Panicum maximum</b>	Guinea grass, green panic, buffalograss, saafa, herbe de Guinée, panic élevé, capime guiné, fataque	Poaceae
<b>Paspalum conjugatum</b>	Hilo grass, T grass, ti grass, sour grass, herbe créole, herbe de tauère, rehn wei, motie vailima, udel ra ngebei, muhsrasre, vao lima, vailima matafao, vailima	Poaceae
<b>Paspalum dilatatum</b>	dallis grass, paspalum, water grass, hiku nua, paspalum dilaté, herbe sirop, herbe de miel	Poaceae
<b>Paspalum fimbriatum*</b>	fimbriate or Panama paspalum, Colombia grass	Poaceae
<b>Paspalum paniculatum</b>	Russell river grass, galmarra grass	Poaceae
<b>Paspalum urvillei</b>	vasey grass	Poaceae
<b>Passiflora foetida</b>	love-in-a-mist, wild passion fruit, passionflower, dulce, stinking passionflower, passiflore, tomates, kudamono, pasio vao, vaine 'ae kuma, pohapoha, tea biku, sou, loliloli ni kalavo, pompom, pwomwpomw	Passifloraceae
<b>Passiflora maliformis</b>	vaine kai, pasio	Passifloraceae
<b>Pennisetum purpureum</b>	elephant grass, napier grass, merker grass, bokso, puk-soh, acfucsracsrsr, herbe éléphant, fausse canne à sucre	Poaceae
<b>Psidium guajava</b>	guava, abas, apas, guabang, kuabang, guahva, kuahpa, kuava, amrut, kautoga, ku'ava, kuhfahfah, kautonga, kuawa, goyavier, ku'avu, tu'avu, te kuawa, kuwawa, nguava, ngguava ni India	Myrtaceae
<b>Pueraria lobata</b>	kudzu, acha, nepalem, aka, a'a, yaka, wa yaka, nggariaka, Japanese arrowroot	Fabaceae
<b>Ricinus communis</b>	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, lephina	Euphorbiaceae
<b>Samanea saman</b>	monkeypod, rain tree, 'ohai saman, tronkon mames, gumor ni spanis, vaivai ni vavalangi, kasia	Fabaceae
<b>Sanchezia parvibracteata</b>	sanchezia	Acanthaceae
<b>Schefflera</b>	octopus tree, umbrella tree, ivy palm	Araliaceae

Scientific Name	Common Names	Family
<b>actinophylla*</b>		
<b>Schinus terebinthifolius*</b>	Christmas-berry, Brazilian pepper, Brazilian holly, Florida holly, faux poivrier, poivre rose, warui	Anacardiaceae
<b>Senna alata</b>	candle bush, candalabra bush, Roman candle tree, Acapulco, arakak, akapuku, andadose, candalaria, take-biha, 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
<b>Solanum torvum</b>	prickly solanum, devil's fig, turkeyberry, terongan, fausse aubergine, aubergine sauvage épineuse, piko, tisaipale, kausoni, soni, kauvoto-votua, kaisurisuri, katai, bhankatiya	Solanaceae
<b>Sorghum halepense</b>	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
<b>Stachytarpheta urticifolia</b>	blue rat's tail, dark-blue snakeweed, false verbena; herbe bleue, louch beluu, mautofutala, mautofu tala, mautofu Samoa, hiku `i kuma, hiku'kuma, 'iku 'i kuma, mautofu vao, matofu fualanumanoa, te uti, turulakaka, tumbutumbu, serakawa, lavenia	Verbenaceae
<b>Syzygium jambos</b>	malabar plum, rose apple, iouen wai, youenwai, apel en wai, kavika, kavika ni vavalangi, kavika ni India, ahi'a popa'a	Myrtaceae
<b>Tabebuia heterophylla</b>	pink tecoma, pink trumpet tree, white cedar, calice du pape	Bignoniaceae
<b>Tecoma stans</b>	yellow bells, yellow-elder, tagamimi, piti, peeal	Bignoniaceae
<b>Triumfetta rhomboidea</b>	Chinese burr, paroquet burr, burr bush, dadangsi, masiksik lahe, mo'osipo, mosipo, mautofu	Tiliaceae
<b>Urena lobata</b>	hibiscus burr, aramina, caesarweed, pink Chinese burr, urena burr, dadangsi, dadangsi apaka, dadangsi machingat, dádangse, chosuched e kui, karap, korop, nogruk, osuched a rechui, motipo, mosipo, mautofu, mo'osipo, manutofu, qatima, gataya, jute africain, nggatima	Malvaceae
<b>Wedelia trilobata</b>	wedelia, Singapore daisy, dihpw ongohng, ngesil ra ngebard, rosrangrang, atiat, ate	Asteraceae

\*Uncommon or rare in American Samoa

**Table 5. Native and naturalized species that exhibit aggressive behavior**

<b>Scientific Name</b>	<b>Common Names</b>	<b>Family</b>
<b>Bischofia javanica</b>	bischofia, bishopwood, toog, koka, tongotongo, koka ndamu, tongo, tongatonga, tea, 'o'a	Euphorbiaceae
<b>Caesalpinia bonduc</b>	gray nickers, wait-a-bit, pacap, pakao, tochedulik, sers mekemad, togodulik, talamoa, talatalamoa, talmoa foto, kakalaioa, tataramoa, talatala'amoia, 'anoso, 'anaoso, soni, jeimota	Fabaceae
<b>Caesalpinia major</b>	yellow nickers, 'anaoso, pakao, kakalaioa, hihikolo, kinikini	Fabaceae
<b>Canna indica</b>	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
<b>Chrysopogon aciculatus</b>	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
<b>Kyllinga nemoralis</b>	white kyllinga, kili'o'opu, mo'u upo'o, tuise, pakopako, pakopako 'ae kuma	Cyperaceae
<b>Miscanthus floridulus</b>	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 tonga	Poaceae

### Appendix 3

#### Invasive and potentially invasive species present on Tutuila

Scientific Name	Common Names	Family
<b>Acacia auriculiformis</b>	Papuan wattle, auri, earleaf acacia; tuhkehn pwelmwahu	Fabaceae
<b>Acacia mangium</b>	mangium, tuhkehn pwelmwahu	Fabaceae
<b>Adenanthera pavonina</b>	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
<b>Aleurites moluccana</b>	candlenut, bancoulier, lama, lumbang, raguar, sakan, shakan, kukui, lauthe, lauthi, nggerenggere, toto, sikethi, tuitui, waiwai, sikeli, 'ama	Euphorbiaceae
<b>Allamanda cathartica</b>	yellow trumpet vine, allamanda, golden allamanda, golden cup, lani-ali'i, puataunofu	Apocynaceae
<b>Anacardium occidentale</b>	cashew, cashew nut, 'apu initia, kesiu	Anacardiaceae
<b>Antigonon leptopus</b>	Mexican creeper, mountain rose, Confederate vine, chain of love, hearts on chain, kadena de amor, love vine, coral vine, rohsapoak	Polygonaceae
<b>Asystasia gangetica</b>	Chinese violet, Philippine violet, coromandel	Acanthaceae
<b>Axonopus fissifolius</b>	narrow-leaved carpetgrass	Poaceae
<b>Azadirachta indica</b>	neem	Meliaceae
<b>Bambusa spp.</b>	bamboos, bambou, pehri en sapahn, bambuu, bambu, piao, piao palaoan	
<b>Bauhinia monandra</b>	orchid-tree, St. Thomas-tree, flamboyant, flores mariposa, mariposa, pine fua loloa, pink butterfly tree	Fabaceae
<b>Bauhinia purpurea</b>	orchid tree, purple butterfly tree, pink butterfly tree	Fabaceae
<b>Bidens pilosa</b>	beggar's tick, Spanish needle, Cobbler's pegs, piquants noirs, fisi'uli, kofe tonga, kofetoga, piripiri, tae puaka, mbatimandramandra, mbatikalawau, matakaro, matua kamate	Asteraceae
<b>Bischofia javanica</b>	bischofia, bishopwood, toog, koka, tongotongo, koka ndamu, tongo, tongatonga, tea, 'o'a	Euphorbiaceae
<b>Brachiaria mutica</b>	California grass, para grass, buffalo grass, Mauritius grass, puakatau	Poaceae
<b>Brachiaria subquadripara</b>	brachiaria, green summer grass	Poaceae

Scientific Name	Common Names	Family
<b>Caesalpinia bonduc</b>	gray nickers, wait-a-bit, pacap, pakao, tochedulik, sers mekemad, togodulik, talamoa, talatalamoa, talmoa foto, kakalaioa, tataramoa, talatala'amo, 'anoso, 'anaoso, soni, jeimota	Fabaceae
<b>Caesalpinia major</b>	yellow nickers, 'anaoso, pakao, kakalaioa, hihikolo, kinikini	Fabaceae
<b>Calliandra calothyrsus</b>	powderpuff	Fabaceae
<b>Calopogonium mucunoides</b>	calopo, akankan-guakag	Fabaceae
<b>Calotropis gigantea</b>	calotrope	Asclepiadaceae
<b>Cananga odorata</b>	ilang-ilang, alang-ilang, ylang-ylang, chiráng, irang, ilahnglahng, ilanlang, pwanang, pur-n-wai, pwurenwai, sair-n-wai, seirin wai, seir en wai, makaso, moso'oi, moto'oi' makoso, mokoso, mokohoi, motoi, ilanilan	Annonaceae
<b>Canna indica</b>	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
<b>Castilla elastica</b>	Panama rubber tree, Mexican rubber tree, pulu mamoe	Moraceae
<b>Casuarina equisetifolia</b>	casuarina, ironwood, Australian pine, she-oak, horsetail tree, gagu, gago, nokonoko, te katurina, toa	Casuarinaceae
<b>Casuarina glauca</b>	swamp oak, saltmarsh ironwood, longleaf ironwood	Casuarinaceae
<b>Cedrela odorata</b>	cigar box cedar, Mexican cedar, West Indian cedar, Spanish cedar, Mexican cedar, sita hina	Meliaceae
<b>Ceiba pentandra</b>	kapok, kapok tree, algodon de Manila, atgodon di Manila, koatoa, atagodon, batte ni gan' ken, bulik, kuhtin, kotin, cottin, koatoa, koatun, cutin, kalngebard, kalngebárd, kerrekar ngebard, vavau ni lokoloko, vavae, vauvau ni vavalangi, semar	Bombacaceae
<b>Cenchrus echinatus</b>	burgrass, sand-bur, Mossman River grass, herbe a cateaux, loklok, lellik, karmwijnwijn, tuitui, vao tuitui, te anti, te kateketeke, motie vihilago, se mbulabula, piri-piri, cauit-cauitan, konpeito-gusa, 'ume'alu, hefa, mosie vihilango, cram-cram	Poaceae
<b>Cestrum diurnum</b>	inkberry, day jessamine, day cestrum, tinta 'n-China, tentanchinu, tintan china, thauthau	Solanaceae
<b>Cestrum nocturnum</b>	night-flowering cestrum, 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
<b>Chloris barbata</b>	swollen fingergrass, airport grass, mau 'u lei, purpletop chloris	Poaceae

Scientific Name	Common Names	Family
<b>Chrysopogon aciculatus</b>	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
<b>Cinnamomum verum</b>	cinnamon tree, ochod ra ngebard, tinamoni	Lauraceae
<b>Clerodendrum chinense</b>	Honolulu rose, losa Honolulu, pikake hohono, pikake wauke, pitate mama	Verbenaceae
<b>Clerodendrum japonicum</b>	glorybower	Verbenaceae
<b>Clerodendrum paniculatum</b>	pagoda plant, butcherechár, butecherechar, butcherechár tukehrn sousou	Verbenaceae
<b>Clerodendrum quadriloculare</b>	bronze-leaved clerodendrum, tuhkehrn palau	Verbenaceae
<b>Clidemia hirta</b>	Koster's curse, soap bush, kui, kúi, kaurasiga, kauresinga, kaurasiga, roinisinga, ndraunisinga, mbona na mbulamakau, vuti	Melastomataceae
<b>Costus speciosus</b>	crepe ginger, wild ginger, Malay ginger, isebsab	Zingiberaceae
<b>Crassocephalum crepidoides</b>	thickhead, fireweed, pualele, fisi puna, fua lele, maraburubo	Asteraceae
<b>Cynodon dactylon</b>	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
<b>Cyperus rotundus</b>	nut grass, nutsedge, purple nutsedge, cocoglass, souchet rond, souchet à tubercules, herbe à oignon, chaguan humatag, kili'o'opu, soro na kambani, sora na kambani, malanga, vuthesa, tuteoneon, mot ha, mumuta, pakopako, te mumute, vucesa, motha, vucesa, oni ani	Cyperaceae
<b>Delonix regia</b>	flame tree, flamboyant, poinciana; arbol del fuego, atbot, atbot det fuegu, nangiosákura, nangyo, pilampwoia weitahta, sakuranirow, sekoula, ohai'	Fabaceae
<b>Derris malaccensis</b>	New Guinea creeper, 'ava niukini, nduva, tuva, nduva ni niukini, kava fisi	Fabaceae
<b>Desmodium nicaraguense</b>		Fabaceae
<b>Dieffenbachia maculata</b>	spotted dieffenbachia, dumb cane	Araceae

Scientific Name	Common Names	Family
<b>Digitaria ciliaris</b>	Henry's crabgrass, fingergrass, smooth crabgrass, tropical crabgrass, violet crabgrass, large crab grass, summer grass, kukaepua'a, saulangi	Poaceae
<b>Digitaria violascens</b>	smooth crabgrass, violet crabgrass, sau	Poaceae
<b>Dissotis rotundifolia</b>		Melastomataceae
<b>Duranta repens</b>	golden dewdrop	Verbenaceae
<b>Eichhornia crassipes</b>	water hyacinth, jacinto de agua, lirio acuatico, jacinthe d'eau, bung el ralm, mbekambekairanga, ndambendambe ni nga, jal khumbe, bekabekairaga, dabedabe ne ga, jal khumbe, riri vai	Pontederiaceae
<b>Eleusine indica</b>	goosegrass, wiregrass, goose foot, crow's foot, bullgrass, umog, reh takai, manienie ali'i, fahitalo, te uteute, deskim, keteketarmalk, kavoronaisivi, vorovoraisivi, mahkwekwe, ta'ata'a, takataka, ghoraya, lau ta'ata'a, chiendent patte de poule, katejukjuk, mohuku siamane, mosie fahitalo, takataka 'a leala	Poaceae
<b>Eugenia uniflora</b>	red Brazil cherry, Suriname cherry, kafika, kafika paplaga, pitanga	Myrtaceae
<b>Ficus benghalensis</b>	banyan, Indian banyan, vada tree	Moraceae
<b>Ficus benjamina</b>	weeping fig, baka, ovava' fisi	Moraceae
<b>Ficus elastica</b>	India rubber tree, rubber plant; komunoki, komunoki, rapah, gak'iynigoma	Moraceae
<b>Flemingia macrophylla</b>		Fabaceae
<b>Gliricidia sepium</b>	mother of cacao, madre de cacao	Fabaceae
<b>Hedychium coronarium</b>	white ginger, butterfly lily, sinter pwetepwet, thevunga, ndrove, tolon	Zingiberaceae
<b>Hedychium flavescens</b>	yellow ginger, awaphuhi melemele, awaphuhi melemele	Zingiberaceae
<b>Hemigraphis alternata</b>		Acanthaceae
<b>Hyptis pectinata</b>	comb hyptis, mint weed, purple top, mumutun lahe, mumutun palaoan, mumutan ademelon, fausse menthe, tamoli ni vavalangi, timothi ni vavalangi, wawuwavu, ndamoli, ben tulsia	Lamiaceae
<b>Imperata cylindrica</b>	blady grass, cogon grass, satintail, alang-alang, lalang, carrizo, kunai, ngi, paille de dys, paillotte, impérata cylindrique	Poaceae
<b>Indigofera suffruticosa</b>	indigo, aniles, 'akauveli	Fabaceae
<b>Ipomoea spp.</b>	morning glory (non-native)	Convolvulaceae

Scientific Name	Common Names	Family
<b>Kalanchoe pinnata</b>	life plant, air plant, resurrection plant, Canterbury bells	Crassulaceae
<b>Kyllinga nemoralis</b>	white kyllinga, kili'o'opu, mo'u upo'o, tuise, pakopako, pakopako 'ae kuma	Cyperaceae
<b>Lantana camara</b>	lantana, landana, rantana, rahndana, tukasuweth, te kaibuaka, talatala, kauboica, latora moa, tatara moa, ros fonacni, latana, lakana, talatala, talatala talmoa, te kaibuaja, taramoa, migiroa, kaumboitha, mbonambulmakau, mbona ra mbulumakau, tokalau, waiwai, taratara hamoa	Verbenaceae
<b>Leucaena leucocephala</b>	leucaena, faux-acacia, faux mimosa, koa haole, tangantangan tangan-tangan, talntangan, ganitnityuwan tangantan, telentund, namas, vaivai, vaivai ni vavalangi, tuhngantuhngan, rohbohtin, lopa samoa, pepe, siale mohemohe, fua pepe, nito, cassis, te kaitetua, balori	Fabaceae
<b>Ligustrum spp.</b>	privet	Oleaceae
<b>Lonicera japonica</b>	Japanese honeysuckle, honekakala	Caprifoliaceae
<b>Merremia peltata</b>	merrimia, lohl, yol, kebeas, lagon, lagun, pala, fue, fue vao, fue kula, iol, puhlah, fue lautetele, fue mea, abui, grobihi, arosoumou, wa mbula, wa ndamu, viliyawa, wiliviwa, veliyana, wiliio	Convolvulaceae
<b>Mikania micrantha</b>	mile-a-minute weed, Chinese creeper, American Rope, liane americaine, kwalo koburu, fue saina, fou laina, wa mbosuthu, wa mbosuvu, wa mbutako, wa ndamele, ovaova	Asteraceae
<b>Mimosa invisa</b>	giant sensitive plant, grande sensitive, sensitive gèante, singbiguin sasa, mechiuaiu, vao fefe palagi, la'au fefe tele, la'au fefe palagi, wa ngandongandro levu, wa ngandongandro ni wa ngalelevu, limemeihr laud	Fabaceae
<b>Mimosa pudica</b>	sensitive plant, sleeping grass, sensitive, betguen sosa, tuitui, cogadrogadro, lajwiania, memege, mechiuaiu, vao fefe, mateloi, pohe ha'avare, ra kau pikikaa, tho ngandongandro, tho kandrodandro, limemeihr	Fabaceae
<b>Miscanthus floridulus</b>	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 tonga	Poaceae
<b>Momordica charantia</b>	balsam-apple, cerasee, bitter-melon, bitter gourd, balsam pear, peria, squirting cucumber, atmagoso, almagosa, atmagosu, markoso, kerala, meleni 'ae kuma; vaine 'initia	Cucurbitaceae
<b>Odontonema tubaeforme</b>	fire spike	Acanthaceae
<b>Operculina</b>	paper rose, alalag, palulu, fue hina	Convolvulaceae

Scientific Name	Common Names	Family
<b>ventricosa</b>		
<b>Panicum maximum</b>	Guinea grass, green panic, buffalograss, saafa, herbe de Guinée, panic élevé, capime guiné, fataque	Poaceae
<b>Paraserianthes falcataria</b>	Molucca albizia, tuhke kerosene, tuhkehn karisihn, ukall ra ngebard, tamaligi palagi	Fabaceae
<b>Paspalum conjugatum</b>	Hilo grass, T grass, ti grass, sour grass, herbe créole, herbe de tauère, rehn wei, motie vailima, udel ra ngebei, muhsrasre, vao lima, vailima matafao, vailima	Poaceae
<b>Paspalum dilatatum</b>	dallis grass, paspalum, water grass, hiku nua, paspalum dilaté, herbe sirop, herbe de miel	Poaceae
<b>Paspalum paniculatum</b>	Russell river grass, galmarra grass	Poaceae
<b>Paspalum urvillei</b>	vasey grass	Poaceae
<b>Passiflora foetida</b>	love-in-a-mist, wild passion fruit, passionflower, dulce, stinking passionflower, passiflore, tomates, kudamono, pasio vao, vaine 'ae kuma, pohapoha, tea biku, sou, loliloli ni kalavo, pompom, pwomwpomw	Passifloraceae
<b>Passiflora maliformis</b>	vaine kai, pasio	Passifloraceae
<b>Pennisetum purpureum</b>	elephant grass, napier grass, merker grass, bokso, puk-soh, acfucsracsrsr, herbe éléphant, fausse canne à sucre	Poaceae
<b>Psidium guajava</b>	guava, abas, apas, guabang, kuabang, guahva, kuahpa, kuava, amrut, kautoga, ku'ava, kuhfahfah, kautonga, kuawa, goyavier, ku'avu, tu'avu, te kuawa, kuwawa, nguava, ngguava ni India	Myrtaceae
<b>Pueraria lobata</b>	kudzu, acha, nepalem, aka, a'a, yaka, wa yaka, nggariaka, Japanese arrowroot	Fabaceae
<b>Ricinus communis</b>	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
<b>Samanea saman</b>	monkeypod, rain tree, 'ohai saman, tronkon mames, gumor ni spanis, vaivai ni vavalangi, kasia	Fabaceae
<b>Sambucus mexicana</b>	elderberry, Mexican elder	Caprifoliaceae
<b>Sanchezia parvibracteata</b>	sanchezia	Acanthaceae
<b>Schefflera actinophylla</b>	octopus tree, umbrella tree, ivy palm	Araliaceae

Scientific Name	Common Names	Family
<b>Senna alata</b>	candle bush, candalabra bush, Roman candle tree, Acapulco, arakak, akapuku, andadose, candalaria, take-biha, 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
<b>Sesbania grandiflora</b>	hummingbird tree, sesban, katurai, agati, agathi	Fabaceae
<b>Solanum torvum</b>	prickly solanum, devil's fig, turkeyberry, terongan, fausse aubergine, aubergine sauvage épineuse, piko, tisaipale, kausoni, soni, kauvoto-votua, kaisurisuri, katai, bhankatiya	Solanaceae
<b>Sorghum halepense</b>	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
<b>Spathodea campanulata</b>	African tulip tree, fireball, fountain tree, tulipier du Gabon, pisse-pisse, rarningobchey, tuhke dulip, tiulipe	Bignoniaceae
<b>Stachytarpheta urticifolia</b>	blue rat's tail, dark-blue snakeweed, false verbena; herbe bleue, louch beluu, mautofutala, mautofu tala, mautofu Samoa, hiku `i kuma, hiku'kuma, 'iku 'i kuma, mautofu vao, matofu fualanumanoa, te uti, turulakaka, tumbutumbu, serakawa, lavenia	Verbenaceae
<b>Syngonium podophyllum</b>	arrowhead plant, goosefoot plant	Araceae
<b>Syzygium jambos</b>	malabar plum, rose apple, iouen wai, youenwai, apel en wai, kavika, kavika ni vavalangi, kavika ni India, ahi'a popa'a	Myrtaceae
<b>Tabebuia heterophylla</b>	pink tecoma, pink trumpet tree, white cedar, calice du pape	Bignoniaceae
<b>Tecoma stans</b>	yellow bells, yellow-elder, tagamimi, piti, peeal	Bignoniaceae
<b>Triumfetta rhomboidea</b>	Chinese burr, paroquet burr, burr bush, dadangsi, masiksik lahe, mo'osipo, mosipo, mautofu	Tiliaceae
<b>Urena lobata</b>	hibiscus burr, aramina, caesarweed, pink Chinese burr, urena burr, dadangsi, dadangsi apaka, dadangsi machingat, dádangse, chosuched e kui, karap, korop, nogruk, osuched a rechui, motipo, mosipo, mautofu, mo'osipo, manutofu, qatima, gataya, jute africain, nggatima	Malvaceae
<b>Wedelia trilobata</b>	wedelia, Singapore daisy, dihpw ongohng, ngesil ra ngebard, rosrangrang, atiat, ate	Asteraceae

## Appendix 4

### Invasive and potentially invasive species present on Ofu

Scientific Name	Common Names	Family
<b>Acacia mangium</b>	mangium, tuhkehn pwelmwahu	Fabaceae
<b>Adenanthera pavonina</b>	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
<b>Bischofia javanica</b>	bischofia, bishopwood, toog, koka, tongotongo, koka ndamu, tongo, tongatonga, tea, 'o'a	Euphorbiaceae
<b>Calopogonium mucunoides</b>	calopo, akankan-guakag	Fabaceae
<b>Canna indica</b>	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
<b>Cenchrus echinatus</b>	burgrass, sand-bur, Mossman River grass, herbe a cateaux, loklok, lellik, karmwijnwijn, tuitui, vao tuitui, te anti, te kateketeke, motie vihilago, se mbulabula, piri-piri, cauit-cauitan, konpeito-gusa, 'ume'alu, hefa, mosie vihilango, cram-cram	Poaceae
<b>Clerodendrum chinense</b>	Honolulu rose, losa Honolulu, pikake hohono, pikake wauke, pitate mama	Verbenaceae
<b>Clidemia hirta</b>	Koster's curse, soap bush, kui, kúi, kaurasiga, kauresinga, kaurasinga, roinisinga, ndraunisinga, mbona na mbulamakau, vuti	Melastomataceae
<b>Crassocephalum crepidoides</b>	thickhead, fireweed, pualele, fisi puna, fua lele, maraburubo	Asteraceae
<b>Delonix regia</b>	flame tree, flamboyant, poinciana; arbol del fuego, atbot, atbot det fuegu, nangiosákura, nangyo, pilampwoia weitahta, sakuranirow, sekoula, ohai'	Fabaceae
<b>Derris malaccensis</b>	New Guinea creeper, 'ava niukini, nduva, tuva, nduva ni niukini, kava fisi	Fabaceae
<b>Digitaria ciliaris</b>	Henry's crabgrass, fingergrass, smooth crabgrass, tropical crabgrass, violet crabgrass, large crab grass, summer grass, kukaepua'a, saulangi	Poaceae

Scientific Name	Common Names	Family
<b>Eleusine indica</b>	goosegrass, wiregrass, goose foot, crow's foot, bullgrass, umog, reh takai, manienie ali'i, fahitalo, te uteute, deskim, keteketarmalk, kavoronaisivi, vorovoraisivi, mahkwekwe, ta'ata'a, takataka, ghoraya, lau ta'ata'a, chiendent patte de poule, katejukjuk, mohuku siamane, mosie fahitalo, takataka 'a leala	Poaceae
<b>Leucaena leucocephala</b>	leucaena, faux-acacia, faux mimosa, koa haole, tangantangan tangan-tangan, talntangan, ganitnityuwan tangantan, telentund, namas, vaivai, vaivai ni vavalangi, tuhngantuhngan, rohbohtin, lopa samoa, pepe, siale mohemohe, fua pepe, nito, cassis, te kaitetua, balori	Fabaceae
<b>Mikania micrantha</b>	mile-a-minute weed, Chinese creeper, American Rope, liane américaine, kwalo koburu, fue saina, fou laina, wa mbosuthu, wa mbosuvu, wa mbutako, wa ndamele, ovaova	Asteraceae
<b>Mimosa invisa</b>	giant sensitive plant, grande sensitive, sensitive gèante, singbiguin sasa, mechiuaiu, vao fefe palagi, la'au fefe tele, la'au fefe palagi, wa ngandongandro levu, wa ngandongandro ni wa ngalelevu, limemeihr laud	Fabaceae
<b>Mimosa pudica</b>	sensitive plant, sleeping grass, sensitive, betguen sosa, tuitui, cogadrogadro, lajwiania, memege, mechiuaiu, vao fefe, mateloi, pohe ha'avare, ra kau pikikaa, tho ngandongandro, tho kandrodandro, limemeihr	Fabaceae
<b>Miscanthus floridulus</b>	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 tonga	Poaceae
<b>Paspalum conjugatum</b>	Hilo grass, T grass, ti grass, sour grass, herbe créole, herbe de tauère, rehn wei, motie vailima, udel ra ngebei, muhsrasre, vao lima, vailima matafao, vailima	Poaceae
<b>Passiflora foetida</b>	love-in-a-mist, wild passion fruit, passionflower, dulce, stinking passionflower, passiflore, tomates, kudamono, pasio vao, vaine 'ae kuma, pohapoha, tea biku, sou, loliloli ni kalavo, pompom, pwomwpomw	Passifloraceae
<b>Psidium guajava</b>	guava, abas, apas, guabang, kuabang, guahva, kuahpa, kuava, amrut, kautoga, ku'ava, kuhfahfah, kautonga, kuawa, goyavier, ku'avu, tu'avu, te kuawa, kuwawa, nguava, ngguava ni India	Myrtaceae
<b>Senna alata</b>	candle bush, candalabra bush, Roman candle tree, Acapulco, arakak, akapuku, andadose, candalaria, take-biha, kerula besokel, yult, rakau honuki, truke-n-kili-n-wai, tuhkehn kilin wai, tirakahonuki, flay-n-sabouw, mulamula, akapuku, bakau	Fabaceae

Scientific Name	Common Names	Family
	plant, mbai ni thangi, te'elango	
<b>Stachytarpheta urticifolia</b>	blue rat's tail, dark-blue snakeweed, false verbena; herbe bleue, louch beluu, mautofutala, mautofu tala, mautofu Samoa, hiku `i kuma, hiku'kuma, 'iku 'i kuma, mautofu vao, matofu fualanumanoa, te uti, turulakaka, tumbutumbu, serakawa, lavenia	Verbenaceae
<b>Triumfetta rhomboidea</b>	Chinese burr, paroquet burr, burr bush, dadangsi, masiksik lahe, mo'osipo, mosipo, mautofu	Tiliaceae
<b>Urena lobata</b>	hibiscus burr, aramina, caesarweed, pink Chinese burr, urena burr, dadangsi, dadangsi apaka, dadangsi machingat, dádangse, chosuched e kui, karap, korop, nogruk, osuched a rechui, motipo, mosipo, mautofu, mo'osipo, manutofu, qatima, gataya, jute africain, nggatima	Malvaceae

## Appendix 5

### Invasive and potentially invasive species present on Olosega

Scientific Name	Common Names	Family
<b>Allamanda cathartica</b>	yellow trumpet vine, allamanda, golden allamanda, golden cup, lani-ali'i, puataunofu	Apocynaceae
<b>Bischofia javanica</b>	bischofia, bishopwood, toog, koka, tongotongo, koka ndamu, tongo, tongatonga, tea, 'o'a	Euphorbiaceae
<b>Canna indica</b>	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
<b>Cenchrus echinatus</b>	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, konpeito-gusa, 'ume'alu, hefa, mosie vihilango, cram-cram	Poaceae
<b>Clerodendrum chinense</b>	Honolulu rose, losa Honolulu, pikake hohono, pikake wauke, pitate mama	Verbenaceae
<b>Clidemia hirta</b>	Koster's curse, soap bush, kui, kúi, kaurasiga, kauresinga, kaurasinga, roinisinga, ndraunisinga, mbona na mbulamakau, vuti	Melastomataceae
<b>Derris malaccensis</b>	New Guinea creeper, 'ava niukini, nduva, tuva, nduva ni niukini, kava fisi	Fabaceae
<b>Kalanchoe pinnata</b>	life plant, air plant, resurrection plant, Canterbury bells	Crassulaceae
<b>Leucaena leucocephala</b>	leucaena, faux-acacia, faux mimosa, koa haole, tangantangan tangan-tangan, talntangan, ganitnityuan tangantan, telentund, namas, vaivai, vaivai ni vavalangi, tuhngantuhngan, rohbohtin, lopa samoa, pepe, siale mohemohe, fua pepe, nito, cassis, te kaitetua, balori	Fabaceae
<b>Mikania micrantha</b>	mile-a-minute weed, Chinese creeper, American Rope, liane américaine, kwalo koburu, fue saina, fou laina, wa mbosuthu, wa mbosuvu, wa mbutako, wa ndamele, ovaova	Asteraceae
<b>Tecoma stans</b>	yellow bells, yellow-elder, tagamimi, piti, peeal	Bignoniaceae
<b>Triumfetta rhomboidea</b>	Chinese burr, paroquet burr, burr bush, dadangsi, masiksik lahe, mo'osipo, mosipo, mautofu	Tiliaceae
<b>Passiflora foetida</b>	love-in-a-mist, wild passion fruit, passionflower, dulce, stinking passionflower, passiflore, tomatoes, kudamono, pasio vao, vaine 'ae kuma, pohapoha, tea biku, sou, loliloli ni kalavo, pompom, pwomwpwomw	Passifloraceae

Scientific Name	Common Names	Family
<b>Psidium guajava</b>	guava, abas, apas, guabang, kuabang, guahva, kuaaha, kuava, amrut, kautoga, ku'ava, kuhfahfah, kautonga, kuawa, goyavier, ku'avu, tu'avu, te kuawa, kuwawa, nguava, ngguava ni India	Myrtaceae
<b>Pueraria lobata</b>	kudzu, acha, nepalem, aka, a'a, yaka, wa yaka, nggariaka, Japanese arrowroot	Fabaceae
<b>Stachytarpheta urticifolia</b>	blue rat's tail, dark-blue snakeweed, false verbena; herbe bleue, louch beluu, mautofutala, mautofu tala, mautofu Samoa, hiku `i kuma, hiku'kuma, 'iku 'i kuma, mautofu vao, matofu fualanumanoa, te uti, turulakaka, tumbutumbu, serakawa, lavenia	Verbenaceae

## Appendix 6

### Invasive and potentially invasive species present on Ta'u

Scientific Name	Common Names	Family
<b>Acacia auriculiformis</b>	Papuan wattle, auri, earleaf acacia; tuhkehn pwelmwahu	Fabaceae
<b>Adenanthera pavonina</b>	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
<b>Aleurites moluccana</b>	candlenut, bancoulier, lama, lumbang, raguar, sakan, shakan, kukui, lauthe, lauthi, nggerenggere, toto, sikethi, tuitui, waiwai, sikeli, 'ama	Euphorbiaceae
<b>Axonopus fissifolius</b>	narrow-leaved carpetgrass	Poaceae
<b>Bischofia javanica</b>	bischofia, bishopwood, toog, koka, tongotongo, koka ndamu, tongo, tongatonga, tea, 'o'a	Euphorbiaceae
<b>Brachiaria mutica</b>	California grass, para grass, buffalo grass, Mauritius grass, puakatau	Poaceae
<b>Brachiaria subquadripara</b>	brachiaria, green summer grass	Poaceae
<b>Cananga odorata</b>	ilang-ilang, alang-ilang, ylang-ylang, chiráng, irang, ilahnglahng, ilanlang, pwanang, pur-n-wai, pwurenwai, sair-n-wai, seirin wai, seir en wai, makasoi, moso'oi, moto'oi' makosoi, mokosoi mokohoi, motoi, ilanilan	Annonaceae
<b>Canna indica</b>	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
<b>Casuarina equisetifolia</b>	casuarina, ironwood, Australian pine, she-oak, horsetail tree, gagu, gago, nokonoko, te katurina, toa	Casuarinaceae
<b>Cenchrus echinatus</b>	burgrass, sand-bur, Mossman River grass, herbe a cateaux, loklok, lellik, karmwijnwijn, tuitui, vao tuitui, te anti, te kateketeke, motie vihilago, se mbulabula, piri-piri, cauit-cauitan, konpeito-gusa, 'ume'alu, hefa, mosie vihilango, cram-cram	Poaceae
<b>Chloris barbata</b>	swollen fingergrass, airport grass, mau' u lei, purpletop chloris	Poaceae
<b>Chrysopogon aciculatus</b>	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

Scientific Name	Common Names	Family
<b>Clerodendrum chinense</b>	Honolulu rose, losa Honolulu, pikake hohono, pikake wauke, pitate mama	Verbenaceae
<b>Clerodendrum quadriloculare</b>	bronze-leaved clerodendrum, tuhkehn palau	Verbenaceae
<b>Clidemia hirta</b>	Koster's curse, soap bush, kui, kúi, kaurasiga, kauresinga, kaurasinga, roinisinga, ndraunisinga, mbona na mbulamakau, vuti	Melastomataceae
<b>Cynodon dactylon</b>	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
<b>Cyperus rotundus</b>	nut grass, nutsedge, purple nutsedge, cocoglass, souchet rond, souchet à tubercules, herbe à oignon, chaguan humatag, kili'o'opu, soro na kambani, sora na kambani, malanga, vuthesa, tuteoneon, mot ha, mumuta, pakopako, te mumute, vucesa, motha, vucesa, oni ani	Cyperaceae
<b>Delonix regia</b>	flame tree, flamboyant, poinciana; arbol del fuego, atbot, atbot det fuegu, nangiosákura, nangyo, pilampwoia weitahta, sakuranirow, sekoula, ohai'	Fabaceae
<b>Digitaria ciliaris</b>	Henry's crabgrass, fingergrass, smooth crabgrass, tropical crabgrass, violet crabgrass, large crab grass, summer grass, kukaepua'a, saulangi	Poaceae
<b>Duranta repens</b>	golden dewdrop	Verbenaceae
<b>Eleusine indica</b>	goosegrass, wiregrass, goose foot, crow's foot, bullgrass, umog, reh takai, manienie ali'i, fahitalo, te uteute, deskim, keteketarmalk, kavoronaisivi, vorovoróisivi, mahkwekwe, ta'ata'a, takataka, ghoraya, lau ta'ata'a, chiendent patte de poule, katejukjuk, mohuku siamane, mosie fahitalo, takataka 'a leala	Poaceae
<b>Hemigraphis alternata</b>		Acanthaceae
<b>Hyptis pectinata</b>	comb hyptis, mint weed, purple top, mumutun lahe, mumutun palaoan, mumutan ademelon, fausse menthe, tamoli ni vavalangi, timothi ni vavalangi, wavuwavu, ndamoli, ben tulsia	Lamiaceae
<b>Imperata cylindrica</b>	blady grass, cogon grass, satintail, alang-alang, lalang, carrizo, kunai, ngi, paille de dys, paillotte, impérata cylindrique	Poaceae
<b>Indigofera</b>	indigo, aniles, 'akauveli	Fabaceae

Scientific Name	Common Names	Family
<b>suffruticosa</b>		
<b>Kyllinga nemoralis</b>	white kyllinga, kili'o'opu, mo'u upo'o, tuise, pakopako, pakopako 'ae kuma	Cyperaceae
<b>Lantana camara</b>	lantana, landana, rantana, rahndana, tukasuweth, te kaibuaka, talatala, kauboica, latora moa, tatara moa, ros fonacni, latana, lakana, talatala, talatala talmoa, te kaibuaja, taramoa, migiroa, kaumboitha, mbonambulmakau, mbona ra mbulumakau, tokalau, waiwai, taratara hamoa	Verbenaceae
<b>Leucaena leucocephala</b>	leucaena, faux-acacia, faux mimosa, koa haole, tangantangan tangan-tangan, talntangan, ganitnityuwan tangantan, telentund, namas, vaivai, vaivai ni vavalangi, tuhngantuhngan, rohbohtin, lopa samoa, pepe, siale mohemohe, fua pepe, nito, cassis, te kaitetua, balori	Fabaceae
<b>Lonicera japonica</b>	Japanese honeysuckle, honekakala	Caprifoliaceae
<b>Merremia peltata</b>	merrimia, lohl, yol, kebeas, lagon, lagun, pala, fue, fue vao, fue kula, iol, puhlah, fue lautetele, fue mea, abui, grobihi, arosoumou, wa mbula, wa ndamu, viliyawa, wiliwiwa, veliyana, wiliwo	Convolvulaceae
<b>Mikania micrantha</b>	mile-a-minute weed, Chinese creeper, American Rope, liane américaine, kwalo koburu, fue saina, fou laina, wa mbosuthu, wa mbosuvu, wa mbutako, wa ndamele, ovaova	Asteraceae
<b>Paspalum fimbriatum</b>	fimbriate or Panama paspalum, Colombia grass	Poaceae
<b>Schinus terebinthifolius</b>	Christmas-berry, Brazilian pepper, Brazilian holly, Florida holly, faux poivrier, poivre rose, warui	Anacardiaceae
<b>Syngonium podophyllum</b>	arrowhead plant, goosefoot plant	Araceae
<b>Tecoma stans</b>	yellow bells, yellow-elder, tagamimi, piti, peeal	Bignoniaceae
<b>Triumfetta rhomboidea</b>	Chinese burr, paroquet burr, burr bush, dadangsi, masiksik lahe, mo'osipo, mosipo, mautofu	Tiliaceae
<b>Crassocephalum crepidoides</b>	thickhead, fireweed, pualele, fisi puna, fua lele, maraburubo	Asteraceae
<b>Miscanthus floridulus</b>	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 tonga	Poaceae
<b>Paspalum conjugatum</b>	Hilo grass, T grass, ti grass, sour grass, herbe créole, herbe de tauère, rehn wei, motie vailima, udel ra ngebei, muhsrasre, vao lima, vailima matafao, vailima	Poaceae

Scientific Name	Common Names	Family
<b>Paspalum urvillei</b>	vasey grass	Poaceae
<b>Passiflora foetida</b>	love-in-a-mist, wild passion fruit, passionflower, dulce, stinking passionflower, passiflore, tomates, kudamono, pasio vao, vaine 'ae kuma, pohapoha, tea biku, sou, loliloli ni kalavo, pompom, pwomwpwomw	Passifloraceae
<b>Psidium guajava</b>	guava, abas, apas, guabang, kuabang, guahva, kuahpa, kuava, amrut, kautoga, ku'ava, kuhfahfah, kautonga, kuawa, goyavier, ku'avu, tu'avu, te kuawa, kuwawa, nguava, ngguava ni India	Myrtaceae
<b>Pueraria lobata</b>	kudzu, acha, nepalem, aka, a'a, yaka, wa yaka, nggariaka, Japanese arrowroot	Fabaceae
<b>Stachytarpheta urticifolia</b>	blue rat's tail, dark-blue snakeweed, false verbena; herbe bleue, louch beluu, mautofutala, mautofu tala, mautofu Samoa, hiku `i kuma, hiku'kuma, 'iku 'i kuma, mautofu vao, matofu fualanumanoa, te uti, turulakaka, tumbutumbu, serakawa, lavenia	Verbenaceae
<b>Urena lobata</b>	hibiscus burr, aramina, caesarweed, pink Chinese burr, urena burr, dadangsi, dadangsi apaka, dadangsi machingat, dádangse, chosuched e kui, karap, korop, nogruk, osuched a rechui, motipo, mosipo, mautofu, mo'osipo, manutofu, qatima, gataya, jute africain, nggatima	Malvaceae

## Appendix 7

### 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
<i>Adenoropium gossypifolium</i>	<i>Jatropha gossypifolia</i>	Euphorbiaceae
<i>Albizia falcataria</i>	<i>Paraserianthes falcataria</i>	Fabaceae
<i>Albizia saman</i>	<i>Samanea saman</i>	Fabaceae
<i>Aleurites triloba</i>	<i>Aleurites moluccana</i>	Euphorbiaceae
<i>Allamanda hendersonii</i>	<i>Allamanda cathartica</i>	Apocynaceae
<i>Andropogon condensatus</i>	<i>Schizachyrium condensatum</i>	Poaceae
<i>Andropogon halepensis</i>	<i>Sorghum halepense</i>	Poaceae
<i>Andropogon marcrourus</i>	<i>Andropogon glomeratus</i>	Poaceae
<i>Andropogon rufus</i>	<i>Hyparrhenia rufa</i>	Poaceae
<i>Angiopteris commutata</i>	<i>Angiopteris evecta</i>	Marattiaceae
<i>Antelaea azadirachta</i>	<i>Azadirachta indica</i>	Meliaceae
<i>Ardisia solanacea</i>	<i>Ardisia elliptica</i>	Myrsinaceae
<i>Ardisia squamulosa</i>	<i>Ardisia elliptica</i>	Myrsinaceae
<i>Argyreia speciosa</i>	<i>Argyreia nervosa</i>	Convolvulaceae
<i>Arum seguine</i>	<i>Dieffenbachia maculata</i>	Araceae
<i>Axonopus affinis</i>	<i>Axonopus fissifolius</i>	Poaceae
<i>Brachiaria purpurascens</i>	<i>Brachiaria mutica</i>	Poaceae
<i>Brassaia actinophylla</i>	<i>Schefflera actinophylla</i>	Araliaceae
<i>Bryonia grandis</i>	<i>Coccinea grandis</i>	Cucurbitaceae
<i>Buddleja madagascarienses</i>	<i>Buddleia madagascarienses</i>	Buddleiaceae
<i>Caesalpinia crista</i>	<i>Caesalpinia bonduc</i>	Fabaceae
<i>Caesalpinia sepiaria</i>	<i>Caesalpinia decapetala</i>	Fabaceae
<i>Cassia alata</i>	<i>Senna alata</i>	Fabaceae
<i>Castilloa elastica</i>	<i>Castilla elastica</i>	Moraceae
<i>Casuarina litorea</i>	<i>Casuarina equisetifolia</i>	Casuarinaceae
<i>Cenchrus brevisetus</i>	<i>Cenchrus echinatus</i>	Poaceae
<i>Cenchrus pungens</i>	<i>Cenchrus echinatus</i>	Poaceae
<i>Cenchrus quinquevalvis</i>	<i>Cenchrus echinatus</i>	Poaceae
<i>Cenchrus setosus</i>	<i>Pennisetum polystachyon</i>	Poaceae
<i>Cenchrus viridis</i>	<i>Cenchrus echinatus</i>	Poaceae
<i>Chloris inflata</i>	<i>Chloris barbata</i>	Poaceae
<i>Chloris paraguayensis</i>	<i>Chloris barbata</i>	Poaceae
<i>Chlorocyperus rotundus</i>	<i>Cyperus rotundus</i>	Cyperaceae

Synonym	Listed as	Family
<i>Cinchona succirubra</i>	<i>Cinchona pubescens</i>	Rubiaceae
<i>Cinnamomum zeylanicum</i>	<i>Cinnamomum verum</i>	Lauraceae
<i>Citharexylum quadrangulare</i>	<i>Citharexylum spinosum</i>	Verbenaceae
<i>Clerodendrum fragrans</i>	<i>Clerodendrum chinense</i>	Verbenaceae
<i>Clerodendrum philippinum</i>	<i>Clerodendrum chinense</i>	Verbenaceae
<i>Coccinea cordifolia</i>	<i>Coccinea grandis</i>	Cucurbitaceae
<i>Cordia collococca</i>	<i>Cordia glabra</i>	Boraginaceae
<i>Cordia macrostachya</i>	<i>Cordia curassavica</i>	Boraginaceae
<i>Croton moluccanus</i>	<i>Aleurites moluccana</i>	Euphorbiaceae
<i>Cyathea cooperi</i>	<i>Sphaeropteris cooperi</i>	Cyatheaceae
<i>Cyperus aromaticus</i>	<i>Kyllinga polyphylla</i>	Cyperaceae
<i>Cyperus kyllingia</i>	<i>Kyllinga nemoralis</i>	Cyperaceae
<i>Cyperus purpuro-variegatus</i>	<i>Cyperus rotundus</i>	Poaceae
<i>Cyperus stoloniferum pallidus</i>	<i>Cyperus rotundus</i>	Poaceae
<i>Cyperus tetrastachyos</i>	<i>Cyperus rotundus</i>	Poaceae
<i>Cyperus tuberosus</i>	<i>Cyperus rotundus</i>	Poaceae
<i>Delairea odorata</i>	<i>Senecio mikanioides</i>	Asteraceae
<i>Desmodium rensoni</i>	<i>Desmodium nicaraguense</i>	Fabaceae
<i>Dieffenbachia picta</i>	<i>Dieffenbachia maculata</i>	Araceae
<i>Dieffenbachia seguine</i>	<i>Dieffenbachia maculata</i>	Araceae
<i>Elephantopus scaber</i>	<i>Elephantopus mollis</i>	Asteraceae
<i>Eugenia cumini</i>	<i>Syzygium cumini</i>	Myrtaceae
<i>Eugenia jambos</i>	<i>Syzygium jambos</i>	Myrtaceae
<i>Eupatorium inulaefolium</i>	<i>Austroeupatorium inulaefolium</i>	Asteraceae
<i>Eupatorium odoratum</i>	<i>Chromolaena odorata</i>	Asteraceae
<i>Gliricidia maculata</i>	<i>Gliricidia sepium</i>	Fabaceae
<i>Glycine javanica</i>	<i>Neonotonia wightii</i>	Fabaceae
<i>Glycine wightii</i>	<i>Neonotonia wightii</i>	Fabaceae
<i>Guilandina bonduc</i>	<i>Caesalpinia bonduc</i>	Fabaceae
<i>Gynura crepidioides</i>	<i>Crassocephalum crepidioides</i>	Asteraceae
<i>Hemigraphis colorata</i>	<i>Hemigraphis alternata</i>	Acanthaceae
<i>Hiptage madablota</i>	<i>Hiptage benghalensis</i>	Malpighiaceae
<i>Imperata arundinacea</i>	<i>Imperata cylindrica</i>	Poaceae
<i>Imperata conferta</i>	<i>Imperata cylindrica</i>	Poaceae
<i>Ipomoea peltata</i>	<i>Merremia peltata</i>	Convolvulaceae
<i>Ipomoea tuberosa</i>	<i>Merremia tuberosa</i>	Convolvulaceae
<i>Ischaemum digitatum var. polystachyum</i>	<i>Ischaemum polystachyum</i>	Poaceae
<i>Jussiaea grandiflora</i>	<i>Ludwigia peruviana</i>	Onagraceae
<i>Jussiaea peruviana</i>	<i>Ludwigia peruviana</i>	Onagraceae
<i>Justica carnea</i>	<i>Jacobinia carnea</i>	Acantaceae
<i>Kunzea ericoides</i>	<i>Leptospermum ericoides</i>	Myrtaceae
<i>Kunzea scoparium</i>	<i>Leptospermum scoparium</i>	Myrtaceae

Synonym	Listed as	Family
<i>Kyllinga cephalotes</i>	<i>Kyllinga nemoralis</i>	Cyperaceae
<i>Kyllinga monocephala</i>	<i>Kyllinga nemoralis</i>	Cyperaceae
<i>Kyllinga monophylla?</i>	<i>Kyllinga polyphylla</i>	Cyperaceae
<i>Leucaena glauca</i>	<i>Leucaena leucocephala</i>	Fabaceae
<i>Meibomia nicaraguense</i>	<i>Desmodium nicaraguense</i>	Fabaceae
<i>Meibomia rensoni</i>	<i>Desmodium nicaraguense</i>	Fabaceae
<i>Melia azadirachta</i>	<i>Azadirachta indica</i>	Meliaceae
<i>Merremia nymphaeifolia</i>	<i>Merremia peltata</i>	Convolvulaceae
<i>Miconia magnifica</i>	<i>Miconia calvescens</i>	Melastomataceae
<i>Mimosa diplotricha</i>	<i>Mimosa invisa</i>	Fabaceae
<i>Mimosa dulcis</i>	<i>Pithecellobium dulce</i>	Fabaceae
<i>Mimosa lebeck</i>	<i>Albizia lebeck</i>	Fabaceae
<i>Miscanthus japonicus</i>	<i>Miscanthus floridulus</i>	Poaceae
<i>Moghania strobilifera</i>	<i>Flemingia strobilifera</i>	Fabaceae
<i>Notonia wightii</i>	<i>Neonotonia wightii</i>	Fabaceae
<i>Ochroma pyramidale</i>	<i>Ochroma lagopus</i>	Bombacaceae
<i>Odontonema callistachyum</i>	<i>Odontonema tubaeforme</i>	Acanthaceae
<i>Odontonema strictum</i>	<i>Odontonema tubaeforme</i>	Acanthaceae
<i>Operculina peltata</i>	<i>Merremia peltata</i>	Convolvulaceae
<i>Oplismenus polystachyus</i>	<i>Echinochloa polystachya</i>	Poaceae
<i>Paederia foetida</i>	<i>Paederia scandens</i>	Rubiaceae
<i>Panicum barbinode</i>	<i>Brachiaria mutica</i>	Poaceae
<i>Panicum guadeloupense</i>	<i>Brachiaria mutica</i>	Poaceae
<i>Panicum melinis</i>	<i>Melinis minutiflora</i>	Poaceae
<i>Panicum minutiflora</i>	<i>Melinis minutiflora</i>	Poaceae
<i>Panicum muticum</i>	<i>Brachiaria mutica</i>	Poaceae
<i>Panicum palmaefolium</i>	<i>Setaria palmifolia</i>	Poaceae
<i>Panicum purpurascens</i>	<i>Brachiaria mutica</i>	Poaceae
<i>Panicum subquadriparum</i>	<i>Brachiaria subquadripara</i>	Poaceae
<i>Passiflora mixta</i>	<i>Passiflora mollissima</i>	Passifloriaceae
<i>Passiflora tripartita</i>	<i>Passiflora mollissima</i>	Passifloriaceae
<i>Pennisetum cenchroides</i>	<i>Cenchrus ciliaris</i>	Poaceae
<i>Pennisetum ciliare</i>	<i>Cenchrus ciliaris</i>	Poaceae
<i>Pennisetum polystachion</i>	<i>Pennisetum polystachyon</i>	Poaceae
<i>Pennisetum ruppelii</i>	<i>Pennisetum setaceum</i>	Poaceae
<i>Pennisetum setosum</i>	<i>Pennisetum polystachyon</i>	Poaceae
<i>Pithecellobium saman</i>	<i>Samanea saman</i>	Fabaceae
<i>Pluchea odorata</i>	<i>Pluchea symphytifolia</i>	Asteraceae
<i>Poinciana regia</i>	<i>Delonix regia</i>	Fabaceae
<i>Pseudechinolaena polystachya</i>	<i>Echinochloa polystachya</i>	Poaceae
<i>Psidium littorale</i>	<i>Psidium cattleianum</i>	Myrtaceae
<i>Pueraria harmsii</i>	<i>Pueraria lobata</i>	Fabaceae

Synonym	Listed as	Family
<i>Pueraria novo-guiniensis</i>	<i>Pueraria lobata</i>	Fabaceae
<i>Pueraria thunbergiana</i>	<i>Pueraria lobata</i>	Fabaceae
<i>Pueraria trilolba sensu</i>	<i>Pueraria lobata</i>	Fabaceae
<i>Ruellia alternata</i>	<i>Hemigraphis alternata</i>	Acanthaceae
<i>Saccharum floridulum</i>	<i>Miscanthus floridulus</i>	Poaceae
<i>Sanchezia nobilis</i>	<i>Sanchezia speciosa</i>	Acanthaceae
<i>Senna obtusifolia</i>	<i>Cassia obtusifolia</i>	Fabaceae
<i>Solandra hartwigii</i>	<i>Solandra maxima</i>	Solanaceae
<i>Solandra nitida</i>	<i>Solandra maxima</i>	Solanaceae
<i>Solanum houstonii</i>	<i>Solanum tampicense</i>	Solanaceae
<i>Stachytarpheta urticaefolia</i>	<i>Stachytarpheta urticifolia</i>	Verbenaceae
<i>Syngonium angustatum</i>	<i>Syngonium podophyllum</i>	Araceae
<i>Tabebuia pallida</i>	<i>Tabebuia heterophylla</i>	Bignoniaceae
<i>Tabebuia pentaphylla</i>	<i>Tabebuia heterophylla</i>	Bignoniaceae
<i>Thelechitonia trilobata</i>	<i>Wedelia trilobata</i>	Asteraceae
<i>Thunbergia harrisii</i>	<i>Thunbergia laurifolia</i>	Acanthaceae
<i>Trachypogon rufus</i>	<i>Hyparrhenia rufa</i>	Poaceae
<i>Tradescantia zebrina</i>	<i>Zebrina pendula</i>	Commelinaceae
<i>Trema cannabina</i>	<i>Trema orientalis</i>	Ulmaceae
<i>Trichachne insularis</i>	<i>Digitaria insularis</i>	Poaceae
<i>Tricholaena repens</i>	<i>Rhynchelytrum repens</i>	Poaceae
<i>Tricholaena rosea</i>	<i>Rhynchelytrum repens</i>	Poaceae
<i>Triopteris jamaicensis</i>	<i>Hiptage benghalensis</i>	Malpighiaceae
<i>Triumfetta bartramia</i>	<i>Triumfetta rhomboidea</i>	Tiliaceae
<i>Urena sinuata</i>	<i>Urena lobata</i>	Malvaceae
<i>Urochloa mutica</i>	<i>Brachiaria mutica</i>	Poaceae