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# Tropical Vines for Hawai'i Landscapes

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Vines are highly versatile. They can shelter against the sun on arbors, screen out unwanted views or add privacy on fences, cover the ground as ground covers, or add color to landscapes as shrubs.

Some of the best flowering plants with outstanding color are vines. Examples are *Pentalinon luteum* (yellow mandevilla, Fig. 1), *Ipomoea horsfalliae* (Kuhio vine, Fig. 2), *Bauhinia corymbosa* (phanera, Fig. 3), *Bauhinia cumingiana* (Fig. 4), *Mucuna novoguineensis* (red jade vine), *Strongylodon macrobotrys* (jade vine), *Pyrostegia venusta* (huapala, Fig. 5), and *Mandevilla* x *amabilis* 'Alice Dupont' (mandevilla, Fig. 6).

**1. *Pentalinon luteum* (yellow mandevilla)**

Other vines are exceptional xeriscape plants, such as *Cryptostegia madagascariensis* (Madagascar rubber vine, Fig. 7), *Marsdenia floribunda* (stephanotis, Fig. 8), and *Petrea volubilis* (sandpaper vine, Fig. 9). Excellent wall creepers are *Macfadyena unguis-cati* (cat's claw creeper, Fig. 10), and *Ficus pumila* (creeping fig, Fig. 11). Vines that can add a tropical feel to a landscape are *Epipremnum pinnatum* 'Aureum' (golden pothos, Fig. 12), *Monstera deliciosa* (monstera), *Passiflora vitifolia* (red passion flower), and *Thunbergia mysorensis* (Mysore trumpet vine, Fig. 13).

Some good shade vines are *Artabotrys hexapetalus* (climbing ylang ylang, Fig. 14), *Begonia convolvulaceae* (Fig. 15), *Epipremnum pinnatum* 'Aureum', (golden pothos, Fig. 12), *Hedera helix* (English ivy, Fig. 16), and *Syngonium podophyllum* (nephthytis).

Many vines grow vigorously and can outgrow their root system unless the excessive top growth is pruned to stay in balance with their root system. Proper spacing can also help. Most original landscape plans space the plants too close together. I realize that "instant landscaping" is one of the reasons for close spacing, but excessive plants must be culled out at a later date, and often this is not done.

My favorite vines are *Pentalinon luteum* (yellow mandevilla, Fig. 1), *Ipomoea horsfalliae* (Kuhio vine, Fig. 2), *Pyrostegia venusta* (huapala, Fig. 5), *Thunbergia grandiflora* 'Alba' (white trumpet vine, Fig. 17), *Bougainvillea* 'Raspberry Ice' (Fig. 18), *Bauhinia corymbosa* (phanera, Fig. 3), *Bauhinia cumingiana* (Fig. 4), *Petrea volubilis* (sandpaper vine, Fig. 9), *Solanum seaforthianum* (star potato, Fig. 19),

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**2. *Ipomoea horsfalliae* (Kuhio)**

*Artabotrys hexapetallus* (climbing ylang ylang, Fig. 14), *Marsdenia floribunda* (stephanotis, Fig. 8), *Epipremnum pinnatum* 'Aureum' (golden pothos, Fig. 12), *Thunbergia mysorensis* (Mysore trumpet vine, Fig. 13), *Pseudogynoxys chenopodioides* (Mexican flame vine, Fig. 20), *Passiflora vitifolia* (red passion flower), *Saritaea magnifica* (purple bignonia, Fig. 21), *Strongylodon macrobotrys* (jade vine), *Macfadyenia unguis-cati* (cat's-claw creeper, Fig. 10), *Syngonium podophyllum* (nephthytis), and *Clerodendron splendens* (red clerodendron, Fig. 22). The reasons for choosing these vines were many. It was a difficult decision in many cases. You can make your own decision. Making such a list will help you narrow down the vines that you like. You can find pictures of them in the following pages of this publication.

The following vines can be seen growing on arbors at CTAHR's Pearl City Urban Garden Center on O'ahu: *Pandorea jasminoides* (pandorea, Fig. 23), *Poivera* spp. (orange eyelash vine), *Marsdenia floribunda* (stephanotis, Fig. 8), *Phaseolus caracalla* (snail vine), *Mandevilla* x *amabilis* 'Alice Dupont' (mandevilla, Fig. 6), *Ipomoea horsfalliae* (Kuhio vine, Fig. 2), *Tecomanthe dendrophila* (tecomanthe), *Pyrostegia venusta* (huapala, Fig. 5), *Argyreia nervosa* (baby woodrose, Fig. 24),

**2. *Ipomoea horsfalliae***

*Mansoa hymenaea* (garlic vine, Fig. 25), *Podranea ricasoliana* (pink trumpet vine, Fig. 26), *Antigonon leptopus* (Mexican creeper, Fig. 27), *Petrea volubilis* (sandpaper vine, Fig. 9), *Pentalinon luteum* (yellow mandevilla, Fig. 1), *Stigmaphyllon floribundum* (orchid vine, Fig. 28), *Tristellateia australasiae* (galphimia vine, Fig. 29), *Quisqualis indica* (Rangoon creeper, Fig. 30), *Thunbergia grandiflora* (blue trumpet vine, Fig. 31), and *Pseudogynoxys chenopodioides* (Mexican flame vine, Fig. 20).

Because many vines are exceptionally attractive and colorful or very vigorous and drought tolerant, the effort to learn about and use tropical vines can result in unusual and exotic landscapes.

## Invasive vines

Many vines are or can be invasive, including *Passiflora mollissima* (banana poka, Fig. 32), *Coccinea grandis*

3. ***Bauhinia corymbosa*** **(phanera)**

3. ***Bauhinia corymbosa***

(ivy gourd vine, Fig. 33), *Cryptostegia madagascariensis* (Madagascar rubber vine, Fig. 7), *Ipomoea alba* (moonflower vine, Fig. 34), and *Paederia foetida* (maile pilau, Fig. 35). Other vines that have been assessed for risk of invasiveness are listed in Table 1, but many others have not been evaluated yet.

***What is an invasive species?***

It is one that is non-native or exotic to the local or regional ecosystem. Its introduction causes or can potentially cause negative impacts to the environment, economy, or human health. Sometimes a weed is called simply a plant out of place; however, what makes a weed invasive is more complicated than that explanation. Invasive plants have a variety of characteristics that enable them to invade a natural, disturbed, or agricultural area and successfully establish an expanding population. These are some of those characteristics:

- Rapid growth (allows plants to take advantage of uninhabited gaps in the landscape)
- Early maturity (allows plants to produce seed at a young age)
- Abundant seed production (large numbers of offspring that can compete with other species)
- Shade tolerant (ability to spread into understory of native forests)
- Tolerant of many different soil types
- Persistent seed bank (i.e., seeds last for a long time in the soil and may germinate many years later, or they can accidentally be moved around with the soil)
- Effective seed-dispersal mechanisms (birds, animals, wind, humans)
- Vegetative reproduction (i.e., pieces of roots, stems, or leaves can break off and grow into new plants; this can happen when green waste or plant trimmings are discarded)
- Non-specific pollinators (pollinated by a variety of insects, birds, mammals, wind)
- Geophytes (have underground storage organs (i.e., bulbs, corms, or tubers)

**4. *Bauhinia cumingiana***

### *How do gardeners and landscapers help to spread invasive weeds?*

Hawai'i has one of the most serious invasive weed problems in the world. It is estimated that 91% of the invasive weeds in Hawai'i were purposefully introduced (Smith 1985). Of these invasive weeds, 39% were introduced for ornamental uses. Another 52% were introduced for crops/other uses. The Hawaii Pacific Weed Risk Assessment system (HPWRA) allows gardeners, landscapers, agriculturalists, and other plant enthusiasts to make informed decisions before introducing a plant species into the Hawaiian landscape.

### *The Hawaii Pacific Weed Risk Assessment System*

The HPWRA is a biosecurity screening tool that was developed by scientists who were concerned about the number of introduced plant species that were becoming invasive in natural and agricultural environments. The HPWRA system uses a series of 49 questions based on

**Table 1. Some vines to consider, with invasive species ratings**

| Species | HPWRA rating |
|---|---|
| *Antigonon leptopus* (Mexican creeper) | High risk |
| *Argyreia nervosa* (baby wood rose) | Low risk |
| *Artabotrys hexapetalus* (climbing ylang ylang) | Low risk |
| *Bauhinia corymbosa* (phanera) | Not assessed |
| *Bauhinia cumingiana* | Not assessed |
| *Begonia convolvulaceae* | Not assessed |
| *Chloranthus inconspicuous* (Chinese rice vine) | Not assessed |
| *Clerodendron* x *speciosum* (clerodendron vine) | Not assessed |
| *Clerodendron splendens* (red clerodendron) | Not assessed |
| *Clerodendron thomsonae* (bleeding heart clerodendron) | Not assessed |
| *Clitoria ternatea* (blue butterfly pea) | High risk |
| *Congea griffithiana* (congea) | Not assessed |
| *Epipremnum pinnatum* 'Aureum' (golden pothos) | High risk |
| *Ficus pumila* (creeping fig) | Low risk |
| *Hedera helix* (English ivy) | High risk |
| *Ipomoea aquatica* (ung-choi) | Not assessed |
| *Ipomoea batatas* (sweetpotato) | Not assessed |
| *Ipomoea horsfalliae* (Kuhio vine) | Low risk |
| *Ipomoea obscura* (small white morning glory) | High risk |
| *Ipomoea pes-caprae* (beach morning glory) | Not assessed |
| *Ipomoea triloba* ('Aiea morning glory) | Not assessed |
| *Jacquemontia ovalifolia* subsp. *Sandwicensis* (pa'u-o-hi'iaka) | Endemic |
| *Jasminum laurifolium* forma *nitidum* (angel wing jasmine) | Not assessed |
| *Jasminum multiflorum* (star jasmine) | Low risk |
| *Jasminum sambac* (pikake) | Not assessed |
| *Lonicera japonica* (Japanese honeysuckle) | High risk |
| *Macfadyena unguis-cati* (cat's claw creeper) | High risk |

**Table 1, cont'd. Some vines to consider, with invasive species ratings**

| Species | HPWRA rating |
|---|---|
| *Mandevilla* x *amabilis* 'Alice Dupont' (mandevilla) | Low risk |
| *Mansoa hymenaea* (garlic vine) | Low risk |
| *Marsdenia floribunda* (stephanotis) | Not assessed |
| *Monstera* spp. (monstera) | Not assessed |
| *Mucuna novoguineensis* (red jade) | Not assessed |
| *Myoporum parvifolium* (spreading myoporum) | Not assessed |
| *Norantea guianensis* (red hot poker) | Not assessed |
| *Pandorea jasminoides* 'Rosea' (bower of beauty) | Not assessed |
| *Passiflora edulis* (purple lilikoi) | Low risk |
| *Passiflora edulis* forma *flavicarpa* (yellow lilikoi) | Not assessed |
| *Passiflora edulis* forma *flavicarpa* x *Passiflora edulis* (hybrid lilikoi) | Not assessed |
| *Passiflora ligularis* (lemiwai) | Not assessed |
| *Passiflora quadrangularis* (giant granadilla) | High risk |
| *Passiflora vitifolia* (red passion flower) | High risk |
| *Pentalinon luteum* (yellow mandevilla) | High risk |
| *Petrea volubilis* (sandpaper) | Low risk |
| *Philodendron bipinnatifidum* (philodendron) | Not assessed |
| *Plectranthus australis* (swedish ivy) | Not assessed |
| *Podranea ricasoliana* (pink trumpet) | Evaluate |
| *Poranopsis paniculata* (snow creeper) | Low risk |
| *Pseudogynoxys chenopodioides* (Mexican flame) | High risk |
| *Pyrostegia venusta* (huapala) | High risk |
| *Quisqualis indica* (Rangoon creeper) | Not assessed |
| *Saritaea magnifica* (purple bignonia) | Evaluate |
| *Senecia macroglossus variegates* (variegated wax ivy) | Not assessed |
| *Solandra maxima* (cup of gold) | Evaluate |
| *Solanum seaforthianum* (star potato) | High risk |
| *Stigmaphyllon floribundum* (orchid) | Low risk |

**5. *Pyrostegia venusta* (huapala)**

traits that contribute to a species's ability to invade an environment and on invasion management. The questions consider a number of factors: biogeographical origin, biology, ecology, weediness elsewhere, undesirable traits, and history of use. Each question has a numerical score, and the results are summed to produce an overall score. Based on the score a species is rated "low risk," "evaluate" (needs more information), or "high risk." The rating is used to predict whether the species has the potential to be invasive in Hawai'i or other Pacific Islands. High-risk species may cause negative impacts to the economy, the environment, or human health.

While the HPWRA system was originally developed to screen a species before importation, it can also be used to inform us on low-risk species to use in sustainable agriculture, landscapes, and gardens. Low-risk species will not escape cultivation and negatively impact Hawai'i's biological uniqueness and quality of life. Some of the

**6. *Mandevilla* x *amabilis* 'Alice Dupont'**

**7. *Cryptostegia madagascariensis* (Madagascar rubber)**

species in this publication have been screened by the HPWRA system. If you are interested in a species that has not been screened, you can request an assessment or the list of already assessed species from the Weed Risk Assessment Specialists at hpwra@yahoo.com. Over 1,000 species have been assessed, and the ratings can accessed at www.plantpono.org. While the HPWRA system is not legally binding, it allows us to make informed planting decisions that promote a sustainable Hawai'i. More information about the HPWRA system is available at www.botany.hawaii.edu/faculty/daehler/wra/.

## Some of the worst invasive vines

*Coccinia grandis* (ivy gourd)
*Cryptostegia madagascariensis* (Madagascar rubber)
*Ipomoea alba* (moonflower)
*Paederia foetida* (maile pilau)
*Passiflora mollissima* (banana poka)

## Resources

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Neal, Maria C. 1965. In gardens of Hawaii. Bishop Museum Press, Special Publication 50.

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**Table 1, cont'd. Some vines to consider, with invasive species ratings**

| Species | HPWRA rating |
|---|---|
| *Strongylodon macrobotrys* (jade) | Low risk |
| *Syngonium auritum* (five fingers syngonium) | Low risk |
| *Syngonium podophyllum* (nephthytis) | High risk |
| *Tecomanthe dendrophila* (tecomanthe) | Not assessed |
| *Telosma cordata* (pakalana) | Not assessed |
| *Tetrastigma voinieranum* (chestnut vine) | High risk |
| *Thunbergia fragrans* (white thunbergia vine) | High risk |
| *Thunbergia grandiflora* (blue trumpet) | High risk |
| *Thunbergia grandiflora* 'Alba' (white trumpet) | Not assessed |
| *Thunbergia laurifolia* (laurel-leaved thunbergia) | High risk |
| *Thunbergia mysorensis* (Mysore trumpet) | Low risk |
| *Tristellateia australasiae* (galphimia) | Low risk |
| *Vanilla planifolia* (vanilla) | High risk |

**8. *Marsdenia floribunda* (stephanotis)**

**9. *Petrea volubilis* (sandpaper)**

**10. *Macfadyena unguis-cati* (cat's claw creeper)**

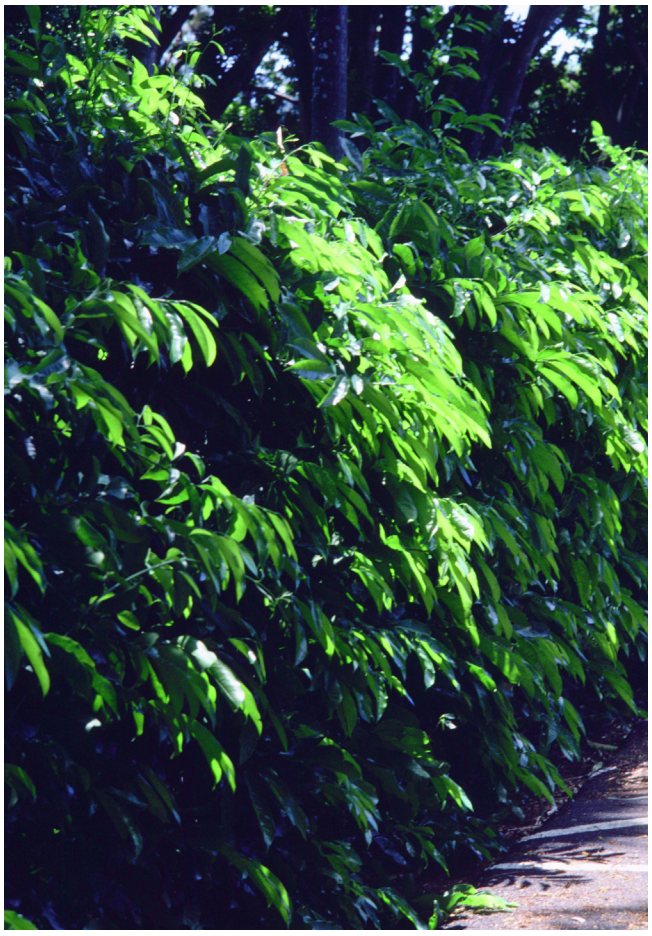
**12. *Epipremnum pinnatum* 'Aureum' (golden pothos)**

**11. *Ficus pumila* (creeping fig)**

**13. *Thunbergia mysorensis* (Mysore trumpet)**

**14. *Artabotrys hexapetalus* (climbing ylang ylang)**

**14. *Artabotrys hexapetalus***



**14. *Artabotrys hexapetalus***

**15. *Begonia convolvulaceae***

**16. *Hedera helix* (English ivy)**

**17. *Thunbergia grandiflora* 'Alba' (white trumpet vine)**


**17. *Thunbergia grandiflora* 'Alba'**

**18. *Bougainvillea* 'Raspberry ice' (raspberry ice)**

**19. *Solanum seaforthianum* (star potato)**

**20. *Pseudogynoxys chenopodioides* (Mexican flame vine)**

**20. *Pseudogynoxys chenopodioides***

**21. *Saritaea magnifica* (purple bignonia)**

**22. *Clerodendron splendens* (red clerodendron vine)**

**23. *Pandorea jasminoides* (pandorea)**

**24. *Argyreia nervosa* (baby wood rose)**

**24. *Argyreia nervosa***

**25. *Mansoa hymenaea* (garlic vine)**

**26. *Podranea ricasoliana* (pink trumpet vine)**

**27. *Antigonon leptopus* (Mexican creeper)**

**28. *Stigmaphyllon floribundum* (orchid vine)**

**28. *Stigmaphyllon floribundum***

**29. *Tristellateia australasiae* (galphimia vine)**

**30.** ***Quisqualis indica*** **(Rangoon creeper)**

**31.** ***Thunbergia grandiflora*** **(blue trumpet vine)**

**32.** ***Passiflora mollissima*** **(banana poka)**

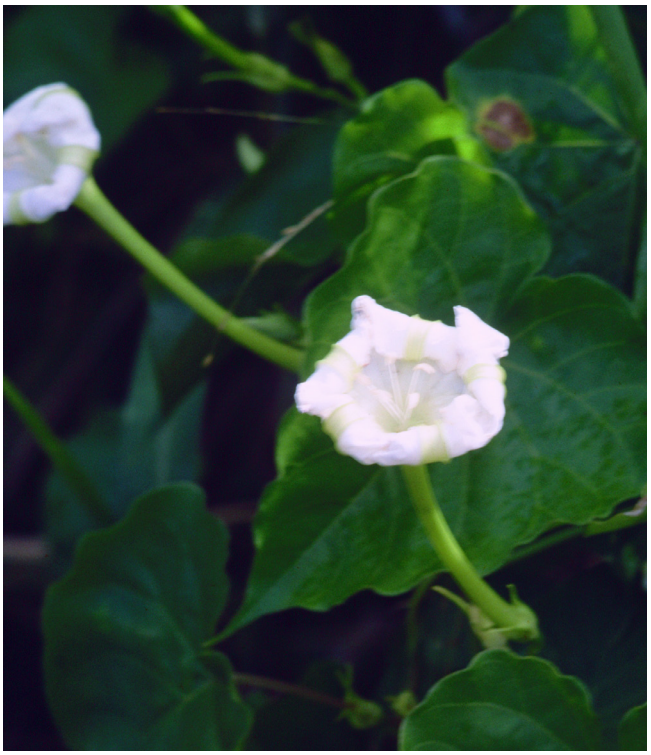
**32.** ***Passiflora mollissima*** **(banana poka)**

**33. *Coccinea grandis* (ivy gourd)**

**33. *Coccinea grandis***

**33. *Coccinea grandis***

**34. *Ipomoea alba* (moonflower)**



**34. *Ipomoea alba***

**35. *Paederia foetida* (maile pilau)**

**35. *Paederia foetida***