

Common Plant Listing – (reprint) Part of the larger usenet “Aquatic Plant FAQ” series of articles in Tank Talk Volume 19 No. 3 1996

FAQ: COMMON PLANT LISTING

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The information on this page is collected from my own firsthand knowledge, the plant list in the previous FAQ (author unknown), TAG (further info indicated as volume:number), Aquarium Plants Manual by Scheurmann (1993), various aquarium society bulletins, and old articles on the Krib. Contributions by Elaine Thompson, Len Trigg, Eric S. Deese, Shaji Bhaskar, and Peter Konshak.

Contents:

- * Blacklisted Plants
- * Explanation of Symbols
- * Stem Plants
- * Rosette Plants
- * Ferns

Blacklisted Plants

These plants are so-called “blacklisted” because though they are sold under the guise of being true aquatic plants, they are actually land or emersed plants. Typically what happens is you buy one of these, it lives for a month, then dies. Don't buy them, unless you are setting up a paludarium and want to keep their leaves above water. The main problem with identifying all the blacklisted plants is that they are mostly known by goofy trade names which vary from region-to-region... To make things worse, “true” aquatics are sometimes sold under one of these trade names as well, so it's best to know the plant's scientific name!

- * umbrella pine
- * aluminum plant (_Pilea cadairei_)
- * crinkle (_Hemigraphis_)
- * green hedge
- * underwater palm
- * spider plant (_Chlorophytum_)
- * Chinese evergreen
- * arrowhead -- either _Syngonium_ (the houseplant) or a species of _Sagittaria_ that doesn't do well submerged.
- * pongol sword
- * sandriana, green dragon plant (_Dracena sanderana_) -- tall corn-like stalk, dark green sword-like leaves with white edges.
- * mondo grass, fountain plant (_Ophiopogon japonicus_) -- Grassy, leaves in one plane.
- * Japanese rush (_Acorus gramineus_) -- looks like mondo.
- * Brazil sword, Borneo swords (_Spathiphyllum sp._) _S. wallisii_ may be suitable for submersion according to Rataj.
- * scarlet hygro/dragon flame/alligator weed (_Alternanthera_) -- see stem plant listing as some varieties can be grown.
- *

Legend

Most plants that grow under low or medium light will usually do even better under higher light. Exceptions are noted. Here is what each symbol means:

- * [HIGH] High light requirement
- * [MED] Medium light requirement
- * [LOW] Low light requirement
- * [HI pH] Tolerates brackish or high-pH water.
- * [FAST GROW] Fast grower
- * [FLOATING] Floating plant

Stem Plants

To propagate most stem plants, cut the stem and replant the top cutting. You can also leave the bottom part (the mother plant) planted, and it will sprout two or more new side shoots. Some stem plants will grow out of the water (emersed) and produce flowers. Most stem plants are suited for grouping as background plants.

Alternanthera (scarlet hygro, etc.) [HIGH]

Scarlet to deep red color, which turns olive in lower light conditions. Usually the cuttings you buy have been grown emersed, and will die underwater like a blacklist plant. (TAG 6:4, 6:5)

Bacopa (water hyssop) [MED]

A bog plant that grows OK underwater, background or filler plant. Pale green-to-red fleshy leaves, up to 16" tall stem. 68-78F. Makes good background or side plant, in groups.

Cabomba (fanwort) [HIGH]

Stems up to 20" (50cm) tall. Leaves resemble fine pine needles, fanning out from central stem. Pair of leaves at each node. Will tend to break apart and litter the aquarium if light is too low. Difficult to grow; needs high fertilization.

Cardimine lyrata [MED]

Beautiful, delicate plant. Small (1/2 - 1") heart-shaped leaves with wavy edges on a thin stem. Grows roots above water at each node. Tolerates cold water very well; will overwinter outdoors at temperatures around freezing, even when emersed. Leaves look kind of like _Hydrocotyle sp._, but stem is straight.

Ceratophyllum demersum (hornwort) [HIGH] [HI pH] [FLOATING]

Very hardy. Whorls of forked leaves. Grows leggy under medium light, quickly under better conditions. No roots, so can be kept free-floating or planted. Lengths up to 2 feet.

Elodea/Egeria (anachris) [FAST GROW] [MED] [FLOATING]

Prefers low temperature (50-77F) tanks, somewhat alkaline pH. Translucent green whorled leaves. Good goldfish food and tank oxygenator. Can be kept free-floating or rooted. Nice beginner plant.

Hydrocotyle leucocephala (water pennywort) [HIGH]

Tall stem plant (over 20") with heart-shaped green leaves of 1" diameter. Develops several small roots at each node. Tolerates 50-82F. Will grow floating when it reaches the top of the water and flower in the aquarium. Doesn't root well, so needs to be refreshed occasionally from cuttings.

Leaves look kind of like

Cardimine lyrata.

Hygrophila corymbosa (giant hygro, temple plant) [HIGH]

Also known as _Nomaphila stricta_. Light green leaves, sometimes with reddish veins. Easily grows out of the water, where leaves turn dark reddish green. Big plant; makes good corner/background in large deep tanks. Grows quickly given high fertilization. Fairly hardy. Another species with similar appearance and requirements is “narrow-leaved hygro” (probably _H. augustifolia_).

Hygrophila difformis (water wisteria) [MED]

Easy to grow. Prefers high light, but grows slowly under medium. Fine

branched light green leaves. Has different emerged leaves, and flowers above water. Propagated from cuttings. Also known as *Synnema triflorum*. Sometimes confused with water sprite.

Hygrophila polysperma (green hygro, Indian hygro) [FAST GROW] [MED]

Spreads like a weed. Green under medium light, but gets brownish tinge (and grows larger) in high light. ``Sunset" and variegated varieties are available, but harder to grow. (TAG 7:4)

Limnophila sp. (ambulia) [MED]

Similar in appearance to *Cabomba*, but less light-demanding. Grows light green leaves in whorls at each node (*Cabomba* has a pair of leaves at each node). There are two common species, *L. aquatica* and *L. sessiliflora*. The former is larger, more bushy, and has finer leaves. It is hardy in tropical aquaria with high light.

Lobelia cardinalis

Similar/same the red-flowered land garden plant. Rumored to leach poison if cut.

Ludwigia repens [MED]

Spade-shaped leaves, dark green to brownish colored. Stiff stems, up to 20" (50cm) long. For me, transplant stems sometimes rot.

Mayaca fluviatilis [MED]

Very pretty plant. Light green, narrow leaves about 1/2" long, arranged in whorls. Attractive for background plantings. Became commonly available in 1994. Like *Hygrophila* species, it seems to be a delicacy for fish. Doesn't root well, so plantings need to be refreshed from cuttings.

Myriophyllum (water milfoil) [MED]

Temperate water plant that needs good lighting. Good for background. Fine, green to reddish green leaves, depending on the species. Produces coarser leaves above water, which will flower.

Rotala [HIGH]

Very delicate leaves, easily damaged. Grows up to 20" tall, so they make excellent background plants. *R. indica* can grow in medium light, but just will not stay as green. *R. macrandra* is largest, and hardest to cultivate. It has red leaves with pink undersides, turning to green in

lower light, and requires iron fertilization to maintain its red color.

Utricularia (bladderwort)

``Rosette" Plants

These plants reproduce vegetatively (asexually) by runners or stalks, which you can usually cut after the new plant is large enough to grow on its own. Like stem plants, many will grow emerged and produce flowers in that state. Generally, they prefer slightly-soft acidic water (2-3dKH, pH 5.5-7).

Anubias [LOW]

72-82F (22-28C). Not really a rosette plant, *Anubias* all have a creeping rhizome that grows very slowly, throwing out new leaves as it grows. The plant is built like a tank, some having reported keeping the in a closet for six months in a plastic bag yet still surviving. It is also one of the most expensive aquarium plants. If grown emerged, they may produce larger leaves, and will grow faster, and flowers will produce seeds. *Anubias* will frequently flower underwater, but not seed. You can grow the roots in gravel, or even train the rhizome to grow on bogwood like Java fern does. (TAG 6:2) Most commonly kept species is *A. barteri* var. *nana*, the smallest *Anubias*, which has egg-shaped leaves and makes a great foreground plant in medium-to-large aquariums. *A. barteri* var. *barteri* looks similar to the *nana* variety, but with bigger leaves. *A. congensis*, *A. lanceolata* and others grow very tall and make good background plants. They can sometimes be seen in better stores.

Aponogeton [MED]

Tuber. Needs rest period (triggered after blooming? drops its leaves), except for hybrid *crispus*. Easy beginner plant. Foreground plant singly, or background in groups. Most species flower by sending up a stalk with single or double-spike and seed easily. (Grows very slowly from seeds, and you must protect the young seedlings from fish.) (TAG 4:3) Oft seen Species:

- + *bouvianus*
- + *crispus*: up to 20" (50cm) tall, red to green leaves; easy starter plant, often sold as bulbs at Wal-Mart. Single-spike flower stem, slightly-undulating leaf margins.
- + *elongatus*,
- + *ulvaceus*: 10-20" (25-50cm) wavy light green leaves, twin-spiked flower.
- + *undulatus*: 16" (40cm) slightly-undulating leaves, smooth in low light. Flowers rarely.

Aponogeton madagascariensis (Madagascar Lace Plant) [HIGH]

Very desired plant because of its 6-18" leaves which are actually a lace-like skeleton. Pink self-fertile flowers on double-spiked stalk. Likes rich substrate. Observe dormancy period! Dies in water over 80F. Difficult plant to grow.

Barclaya longifolia (orchid lily) [HIGH]

10-20" (25-50cm) delicate brownish or olive-green leaves, moderately-undulated margins. Likes warmed substrate and warm aquariums (75-82F). Foreground single plant. Often rots on transplant. Flowers and seeds easily by sending a stalk to the surface, or will remain submerged and closed (seeds still viable). Very difficult to grow. (TAG 4:1).

Crinum (``onion bulb") [MED]

As the name implies, it grows from a bulb and looks like a scallion. Bright-green leaves are huge 20-40" (50-100cm), and recommended only for large aquariums. Does better in bright light.

Cryptocoryne [LOW] (most species)

Shocks on transplant, takes up to months to adjust to new tank, so don't move them once you've planted them. Crypt rot caused by sudden water chemistry/quality changes. Spreads by rhizome; new plants develop at nodes. -> Not a good beginner plant. Often sold potted in rockwool, which reduces the above shocks. Usually prefers acidic water. Some species will not tolerate high light. Requires iron fertilization and likes rich substrate. (TAG 4:1, 4:2, 5:1, 5:2, 5:3, 5:4) Oft-seen species:

- + *affinis*: emerald-green 4-12" (10-30cm) leaves, red undersides. Foreground plant in large aquariums or center plants in small tanks. Grows OK in alkaline water.
- + *balansae*: likes higher light?
- + *beckettii*: likes higher light?
- + *lutea*: easier crypt to grow.
- + *walkeri*
- + *wendtii*: easier crypt to grow. bronze, red, green varieties. wrinkled leaves. Up to 8" tall. Adaptable to high light and will grow with CO2.

Echinodorus (Amazon swords) [MED]

Most are good as single highlight plant, or background groups in large aquariums. Like high levels of fertilizer. Can grow emersed. Reproduce by adventitious plants on end of stalks runners, or root division, depending on species. (TAG 4:5, 5:5, 7:1, 7:5) Common species:

- + bleheri, paniculatus, amazonicus: Your generic amazon swords, usually available in small, medium or large. Light green leaves can be over 20" (50cm). Produces plantlets directly on the flower stalk.
- + cordifolius (radican sword): heart-shaped leaves. Likes being emersed; will flower in open-top aquarium. Sends floating leaves if illumination is low.
- + major/maior (ruffle sword)
- + osiris (melon sword): blood-red slightly-undulate leaves.
- + parviflorus (tropico sword): smaller variety.
- + tenellus, quadricostatus (pygmy chain sword): leaves up to 6", 72-86F. Fast reproduction by runners; can create a lawn on large enough tank. Small plants; nice foreground display.

Lemna (duckweed, green plague) [FLOATING] [FAST GROW]

Tiny (1/4") plant with a pair of leaves and a root. Reproduces very quickly. A very noxious weed, hard to eradicate, and most fish don't like to eat it. Try a floating fern such as *Salvinia* instead of this one.

Lilaeopsis novae-zelandiae ("micro sword") [HIGH]

64-77F. This plant sold under this name is probably *L. braziliensis*, a South American *Lilaeopsis*. It slowly spreads out in thick "turf" of grass, about three 1-3" long light green grass-like leaves per plant. Nice spawning medium, foreground plant.

Nuphar (spatterdock) [HIGH]

Water lily-like plant. Usually sold as rhizome end-cutting, which rots away in a month. Likes colder temperatures.

Nymphaea (Water Lily, tiger lotus) [HIGH]

Bulb. Delicate leaves, colors varying from red to green with possible mottled spots, depending on the variety. Pinch off floating leaves if you want only submerged ones. Reproduction is by blooms, or side-tubers from the main bulb. Need 3-5 floating leaves for it to bloom.

Nymphoides aquatica (banana plant) [HIGH]

Olive-colored Heart-shaped leaves that look superficially like water lily, and banana-like tubers on roots. Plant by sticking the tubers 1/3 in the gravel. Prefers lower temperatures. Throws out floating leaves if light and fertilization is good.

Pistia stratiotes (water lettuce) [HIGH] [FLOATING] Very demanding plant that prefers full sun (where it will grow the size of actual lettuce) over aquarium conditions (where it might be the size of a quarter). Reproduces by runners. Buy at water garden supply stores.

Sagittaria (sag, arrowhead)

Straight-bladed green grass. Many different varieties, some small foreground plants, some rather big. Hardy. Propagates by runner. *S. subulata* grows 4-24" leaves and throws up small white flowers in shallow water. 63-82F.

Valisneria [MED] [HI pH]

Grass. Reproduction by runners. Some find it grows wildly, then mostly dies off, in a cycle. Wide temperatures 59-86F. *V. spiralis* (Italian val) has ribbon-like leaves up to 20" (50cm) and throws up a spiral stalk when flowering. *V. tortifolia* grows "corkscrew" leaves, hence its name Corkscrew val. Other common species: *V. gigantea* (Jungle Val).

Wolffia (watermeal)

Similar to duckweed (*Lemna*), but even smaller.

Ferns and Mosses

Azolla (floating fern) [HIGH] [FLOATING]

Floating fern that grows out in triangular "rafts". Buy at water garden stores.

Bolbitis heudelotii (African water fern) [LOW]

Slow-growing creeping rhizome with dark green, 8" (20cm) lobed leaves. Tie roots to bogwood like Java fern. Don't bury the rhizome in the gravel. Can be grown emersed with fast-moving water.

Ceratopteris (water sprite) [LOW] [FAST GROW] [FLOATING]

Up to 20" (50cm) tall. Exists as rooted or floating specimens. Good fry shelter, shade plant. Baby plants grow on older leaves. Confused with *Hygrophila difformis* sometimes. Several different species and/or forms, which may require more light than others.

Microsorium pteropus (Java fern) [LOW] [HI pH]

"It's actually *Microsorium* but everyone writes it as *Microsorium*," says Arie De Graff (FAMA, 1991). This is one of the more hardy aquarium plants. It roots itself to solid objects like bogwood and rocks (attach with a piece of string or rubber band to hold it in place at first) and has a creeping rhizome which may be divided for cuttings. Young plants will also develop directly off spores, attached to old leaves, and can be cut off and rooted. In high light, it produces tough, plastic-like leaves; under low light the leaves are more delicate. Fronds are up to 8" (20cm) long and undivided, though on older plants are trilobate (three lobes to a frond).

Riccia fluitans (floating liverwort, crystalwort) [MED] [FLOATING]

Big tangly glop like Java moss; good livebearer fry cover. Grows fast under high light.

Salvinia (floating fern) [FLOATING]

Small floating fern that grows in long chains of two oval leaves and a "root-like" third leaf. Easier to control than duckweed. Buy it at water garden supply stores, as it's too cheap for most aquarium shops.

Vesicularia dubyana (Java moss) [LOW]

Grows in branching strands, tangling around other plants. Dark green. Makes good spawning medium and cover for young fry. Min temp 75F. May dislike salt.