

Habenarias and Pecteilis Culture

By Brett Moloney

Brett Moloney Habenarias and Pecteilis have long been put about as being hard to grow and fussy. I find them to anything but that as long as you obey certain rules. Rewarding, blooming can last a few weeks to several months depending on the species and plant size.



I have grown *Pecteilis sussanae*, *hawksiana*, and *sagarikii*; *Habenaria hosseusii*, *dentata*, *malintana*, *lindleyana*, *myriotricha* (syn. *Medusae*), *rhodocheila*, *erichmichellii*, *xanthocheila*, *roebelenii*, *carnea*, *X regneirii*, spp. sff. *rhodocheila*, and the less common *humistrata*, *rumphii*, *chlorina*, and *rostellifera*. While most are easy to grow with correct culture, the later four are the more challenging species to keep going and more particular to growing media and I would not recommend them to anyone who has not grown terrestrials before.

Tropical cycle terrestrials, they require defined periods of dry rest and wet season growth. This tends to be fairly common to most of the SE Asian deciduous terrestrial species. Even when they come from the higher elevations, they follow this distinct cycle. Some species are lithophytic, others terrestrial, but you find them in very dry conditions while dormant, and sometimes quite dessicated to the point you may think them dead, but with the rains back they come. Growing at a phenomenal speed during the wet season, the spike emerges from the centre of the rosette.



While in growth they must be kept moist until the last of the flowers fall from the spike. This is normally at 6 months after growth started, but can vary with the species. It is at this stage that the new tubers are made for the coming season. At this point you must stop watering frequently and allow the plant to dry out between waterings. As leaves begin to die back and the plant begins to look as though its dying you must cease watering. Put the plant in a place where it will not be watered at all unless you intend to do so.

Some growers advocate no water at all until new growth shows in the spring, but I give a little water here and there, just enough to moisten the mix periodically, but not wet it through, but so that there is a little hydration given to the bulbs. Alternatively you can store them in barely damp media in a sealed bag while dormant, and watch frequently for the new growth. If tubers become dehydrated, they will begin to shrivel.

When potting the ducksfoot tubered species *Hab. Roebelenii*, *xanthocheila*, etc, I have seen them lightly tied to a peice of broken clay pot to simulate the lithophytic nature of the plant. The crock is then planted below soil.



Once the new growth is a centimetre or so about the mix, commence watering regularly again, but avoid getting water in the rosette when young. Provide good air movement. Fertilise with a quarter to mid strength fertiliser while in growth, weekly to fortnightly depending on the strength. The larger species such as *Pecteilis susannae* are heavier feeders.

Provide bright light for the harder leaf grassland species such as *Pecteilis susannae*, *Habenaria hosseusii*, *dentata*, *malintana*, *rumphii*, and *rostellifera*. Others like the *rhodocheila* group are found in forested areas so give mid-range light accordingly. *Pecteilis sagarikii*, *hawksiana*, *Habenaria lindleyana* I grow in bright light.

In cultivation I have found *Pecteilis* and *Habenaria* to not be fussy about medias. *Pecteilis susannae*, *hawksiana* and *sagarikii* are found in clay soils to sand soils in nature. *Habenaria rumphii*, *chlorina*, and *rostellifera* I have seen in mostly sandy soils. *Habenaria rhodocheila* grows in soil (having a

carrot shaped tuber), where as roebelenii, xanthocheila (having a ducks foot like tuber) grow lithophytically in moss on rocks. My preference is to use a well drained terrestrial type media for all. I have used a mix akin to this in the past.

40% porous grit such as perlite or pumice

30% organics such as a general purpose potting mix

10 to 15% fine bark/charcoal

10 to 15% coarse sand

Plant tubers 1 to 3cm deep. It is important to keep temperatures constant. No lower than 10-12c at night and 18c to 25c day during dormancy. They enjoy a warm summer.

Lastly, some of the grassland species may benefit from burning off some leaf matter on top of the soil while dormant, having charcoal in the mix, or using smoke water as some Australian terrestrials do. I didnt follow this, but then some growers say they find it helps induce flowering.

With a detail to cultivation, the SE Asian Pecteilis and Habenarias are rewarding and worthy of a place in any collection. I highly recommend them.

And endnote to this article. There is work being done to determine the nomenclature of the rhodocheila group (Hab. rhodocheila, xanthocheila, roebelenii, spp. aff. rhodocheila). I weigh into this the argument as against lumping them all under rhodocheila. Rhodocheila has carrot shaped tubers and is a tall plant. The others have ducks foot like tubers. Spurs orientate in different directions. They come from disparate areas. To lump them under the one species name is ludicrous I say.

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