

Rhynchostylis

Originally classified as *Saccolabium* (a 'super genus', which has shrunk considerably as many species have been transferred to other genera), three species are recognized in the *Rhynchostylis* genus.

All three species have 'succulent style' leaves, with *Rhy. gigantea* having very thick leaves, followed by *Rhy. coelestis* and *Rhy. retusa* to a lesser extent. Some plants grow in regions with a noticeable dry season, which makes these plants one of the few exceptions in the Vandaceous group, in that they should dry out between waterings. In keeping with leaf thicknesses, *Rhy retusa* barely so, but *Rhy coelestis* and in particular *Rhy gigantea* pronouncedly so.

Both *Rhy coelestis* and *Rhy retusa* grow at elevations up to 4-5,000', so they tolerate a considerable temperature range. While *Rhy gigantea* usually grows at lower elevations, this plant readily adapts to somewhat lower temperatures, than those in its home range. All 3 species do very well under Cattleya conditions, both in terms of light, temperature & watering schedule.

They grow best in baskets, which provides good air circulation around the roots. *Rhy gigantea* HATES having its roots disturbed, so this plant should be grown in a medium that can last as many years as possible. When repotting *Rhy gigantea*, I try to leave the plant in the same basket, so I carefully pluck out the broken down medium, and repack it with fresh mix (when I use sphagnum & bark in 3:1 ratio).

More recently I have been experimenting with Aliflor (expanded clay nuggets), which never need to be replaced. Most of the plants have accepted this, and are doing very well; but, two plants did not (they died, but those were weaker plants, which might have died no matter what medium I tried).

- ***Rhy retusa***, range: From India throughout SE Asia, including southern China & the Philippines.

As can be expected from a species growing in such a large area, *Rhy retusa* shows considerable regional variation.

It has repeatedly been published as a new species (*albiflora*, *densiflora*, etc.), but all of these have now



been identified as synonyms for *Rhy. retusa*. These plants have attractive & fragrant flowers, though they differ a great deal.

Rhy retusa has slender leaves & many small flowers on pendant racemes, one of the classic 'foxtail' orchids. Some plants have densely packed flower heads, while flowers are spaced further apart on others (leading to the repeated publication of 'new' species). The standard color form is white with pink speckling & lip. A still somewhat rare alba color form is known also. A close-up from two different plants illustrates the regional variation:



Rhy retusa has seen limited use in breeding. As of 2013 there were 36 hybrids, but only 6 of these are recent (2000-2013).

- ***Rhy coelestis***, range: Thailand, Cambodia, Laos & Vietnam.



The standard color form has white flowers with a blue lip and an overlay of blue on the tips of the petals and sepals. It is also known in a pink form, as well as a true alba.



Mature plants can set large spikes, densely packed with flowers. This makes *Rhy coelestis* a valuable species for breeding moderately sized plants, which will bloom for hobby growers.

The plant stature looks more like a *Vanda*, it has flower spikes pointing straight up, with 1" flowers. In proportion to plant size, it is the largest flower in the genus. It imparts good cold tolerance to its progeny, so it has been used extensively in breeding (144 hybrids, 38 recent).

The most commonly seen hybrid is ***Vandachostylis Lou Sneary*** (*Rhy. coelestis* x *V. falcata*), while the most successful larger flowered hybrid is ***Van. Pine Rivers***, which comes in many color forms.



The traditional color form has white flowers with pink speckling. Both solid red and alba forms have been known for a long time, and in recent years peach, orange, yellow & coerulea color forms have been introduced, as well as white flowers with bold red/purple spotting.



- ***Rhy gigantea***, range: Malaya, Burma, Thailand, Cambodia, Laos, Vietnam, southern China, Borneo & Indonesia.

Rhy gigantea is the largest member of the genus. It has thick fleshy leaves, which can be 3-4" across and 12" long. It sets gracefully arching spikes with large flowers (1¼"-1½"), though they appear smaller on these very large plants.

There is some debate whether the *Rhy gigantea* fragrance is pleasant or not; to my nose it falls in the spicy-musky category. It remains my favorite orchid, and my goal is to grow a plant exceeding the one my father grew many years ago (plant with 3 basal keikis and combined 9 flower spikes).

Rhy gigantea has been used in breeding as well. As of 2013 there were 123 hybrids, including 27 recent.

One of the most spectacular hybrids is *Vandachostylis Azure* (*Rhy. gigantea* x *V. coerulea*). The flowers on my plant are somewhat 'spindly'; in the reciprocal cross (*V. coerulea* x *Rhy. gigantea*) the flowers are considerably fuller, but the flower count is also lower.



Rhy. gigantea has also been bred with smaller plants, producing some very attractive, and in many cases, easy to grow plants. A couple of examples are:



Vandachostylis Pinky (*Neofinetia falcata* x *Rhynchostylis gigantea*, formerly *Neostylis Pinky*), which comes in many color forms. Plant size & flower shape reflects which plant carried the seed pod:

- When *V. falcata* carries the pod, the plants are small, flowers are open/star shaped, and the flower count is usually less than 12.
- When *Rhy. gigantea* carries the pod, the plants are medium size, flowers are fuller, and the flower count is can range from 20 to 40+.



1. = *V. (Neofinetia) falcata*
2. = *Van. Pinky* from *V. falcata* seed pod.
3. = *Van. Pinky* from *Rhy. gigantea* seed pod
4. = A compact *Rhy. gigantea*

#2



'Starry Night' AM/AOS



'Takahashi'

#3



'Eric the Red' 'Fairy Dust' 'Moon Light'

Holcostylis M S Sunlight (*Holcoglossum flavescens* x *Rhy. gigantea*). *Holcoglossum flavescens* is a true miniature (plant approx. 2" across, with 3/4" flowers), so the progeny is a very compact plant. The clone most commonly available grows to 6-8" across (in this photo it is grown in 3" net pot):



All three species and their hybrids have long lasting flowers, making these plants well worth the effort to seek them out.



In the case of the *Rhy. gigantea*, species, it is of course to some extent a question of, whether you have room for these rather large plants.