

Hengduan Mountains Biotechnology Ltd.

Chengdu, Sichuan, P.R. China - www.hengduanbiotech.com



四川横断山生物技术(有)

Orchid-List USA, Autumn 2013

(We attend the 2013 Fall Mid-America Orchid Show and Sale in Dayton, Ohio, October 19-20)

Welcome at Hengduan Mts. Biotechnology!



Hengduan Mts. Biotechnology is a German-Chinese company dedicated to the conservation and cultivation of native Chinese orchids. Our base is in Sichuan, Southwest China, in one of the biodiversity hotspots of the world, the Hengduan Mountains System (synonym Mountains of Southwest China), home to about 400 orchid species and the Giant Panda. Our laboratory and subtropical nursery in Chengdu, Sichuan's capital, as well as the alpine nursery beds in North Sichuan are the tools for in vitro propagation and subsequent raising of a wide range of Chinese orchids, with our specialty being slipper orchids (*Cypripedium* & *Paphiopedilum*, but also *Phragmipedium* and *Mexipedium*). We create also orchid hybrids and our modern laboratory is further engaged in the production of fruit crop plants and medicinal herbs.

Hengduan Mts. Biotechnology is registered with the State Forestry Agency (SFA, the CITES authority of the Peoples Republic of China), as in-vitro propagation facility of CITES appendix I & II orchids and grower of these artificially produced plants. We legally export flasks as well as seedlings of all stages from recently deflasked to flowering size of *Paphiopedilum*, *Cypripedium* and many other types of orchids to North America, the European Union, Japan and other countries. Because the paperwork for every single export involves 7 different governmental agencies with 12 steps, and requires at least 3 months (usually more), we only export once or twice a year to a given region. We attend the orchid show listed above, where we sell our plants. All costs for CITES, phyto, and import are included in the list prices! And at this occasion we take preordered plants with us, which are locally shipped to the customers (domestic shipping has to be added to the list price) or can be picked up at our sales booth at the show (no additional costs). For further information regarding plant availability and ordering please contact us through sales@hengduanbiotech.com.

Every year we organize and lead eco-tours through China. The tours are conducted in cooperation with the Jiuzhaigou International Travel Agency and insured according to Chinese law. Main focus is orchids and general flora, but the fascinating culture of China is inevitably part of each tour as well! In 2014 a spring tour in May will lead us to paphiopedilums flowering in the wild in South China. Possibly a summer tour will go to cypripediums and other alpine orchids in the mountains of North and Northwest Sichuan. Please send inquiries to info@hengduanbiotech.com or sales@hengduanbiotech.com.

Wenqing & Holger Perner



Aerides rosea

A great foxtail orchid with very attractive inflorescences. The breeding stock is of Chinese origin and the plants grow dry and cool 5-15 °C (41-59 °F) in winter and humid and warm 18-30 °C (64-86 °F) in summer. Plant in an open mix. It can be grown in pots but does best in a basket in bright conditions. Flowers in spring.

FS, US \$ 20.-



Oriental Cymbidiums

We have an assortment of selected strains of Oriental cymbidiums of Mainland Chinese origin. Many of these types are rarely available from Taiwanese sources!

Please see the attached list!



Coelogyne calcicola

A lithophyte and epiphyte from Southwest Yunnan which can be grown in a pot with porous material or in a basket. In winter keep cool and bright with reduced watering. In summer the plant likes intermediate to warm conditions with copious waterings, excellent drainage required. A fully grown the plant is up to 50 cm tall. Flowers in late spring. A very rare species!

Flower diameter ca. 5 cm.

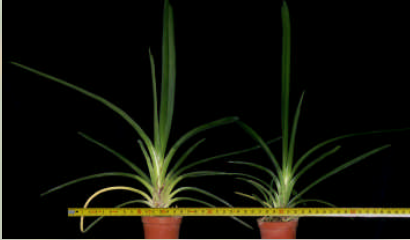
Flowering size, US \$ 35.-



Coelogyne prolifera

The type species of section Prolifera. This is 1 of 4 species of this section occurring in China. The compact plants, 8 inch (20 cm) tall, are flowering from this years and last years inflorescences. Like most Chinese orchids to be kept cool and slightly dry in winter, and warm with copious watering in summer. Flowers in spring.

FS , US \$ 20.-



Cymbidium finlaysonianum

A tropical species from Southeast Asia. The motherplant, from which the seed capsule was collected is depicted above growing in a private garden in South Thailand. The seedlings are about 4 years old and have a leaf span of 40 cm. They should approach flowering size in about 1 year.

The plant needs humid and warm conditions in summer but can tolerate cool-temperate conditions (5-15 °C = 41-59 °F) in winter if kept relatively dry. It can be grown in a pot but is better kept in a basket due to the hanging inflorescence.

FS, US \$ 25.-



Cymbidium lancifolium

Lovely miniature species, 10 to 20 cm tall, from China. Requires a cold dry winter and humid intermediate to warm summer. Needs a coarse medium with plenty of watering during summer. Flowers in spring.

FS, US \$ 20.-



Cymbidium sichuanicum

This is a genuine species from mountain forests at low altitudes (1000-1600 m) of Central Sichuan. It is a cool grower which needs cold dry conditions in winter and intermediate to warm humid summers. When kept reasonably dry it can stand longer periods of slight frost and is the hardiest of the large-flowered cymbidiums known to us. It is related to *Cym. iridioides* but clearly differs in the brighter flowers with broader segments, especially in the lip shape and color. Flowers in early spring.

FS, US\$ 40.-



Cymbidium wenshanense

The most spectacular new discovery in Chinese cymbidiums of the last 20 years, this is not a dwarf species. It can already flower from relatively small seedlings or divisions, but adult plants usually have the dimensions of *Cym. insigne* to *Cym. lowianum*. The pendulous inflorescence carries several large fragrant flowers. As most Chinese cymbidiums the plant needs cool dry winters and warm humid summers. Still rare in cultivation we offer the large Chinese form with seedlings which are 1-2 years from flowering as well as flowering size divisions. Flowers in spring.

FS , US \$ 40.-





Dendrobium crepidatum

The waxy candy-pink flowers of this compact species have a diameter of 3-5 cm and appear in spring. We offer flowering size specimens.

FS, US \$ 25.-



Dendrobium Green Swallow Liu Fangyuan (D. catenatum x scoriarum)

This horticultural hybrid, registered by Prof. Fangyuan Liu in 2010, incorporates the most important medicinal dendrobium in China, *D. catenatum* (syn. *D. officinale*) with the relatively rare *D. scoriarum* (syn. *D. guangxiense*) which is related but has an intensive magenta operculum (shield over the anthers). Her vigorous hybrid combines the floral characters of both parents. Flowers in spring. Flower spread is approx. 4 cm.

FS, US \$ 18.-



Dendrobium loddigesii

A compact species from southern China that easily forms large mats of shoots. It is best grown mounted but does also well in baskets. The attractive 3-5 cm wide flowers appear in spring.

FS, US \$ 18.-



Dendrobium scoriarum

Epiphyte and lithophyte from warm-temperate to subtropical regions in Guangxi and West Yunnan. Best grown in baskets or mounted. Modestly easy species. In winter keep cool and bright with reduced watering. In summer the plant likes intermediate to warm conditions with copious waterings, excellent drainage required. Erect to semi-erect stems 30-50 cm long. Flower spread ca. 2.5-3 cm. Flowers in spring.

Often known under its synonym *D. guanxiense*.

FS, US \$ 30.-



Dendrobium polyanthum

Still often known under its synonym *D. primulinum* this is a very attractive medium-sized dendrobium with strongly pendant stems. It needs to be grown mounted or in baskets. The deciduous last years stems are covered in flowers in spring.

FS, US \$ 20.-



Eria coronaria

The twin-leafed compact species carries one of the largest flowers in the genus and is perhaps the most attractive of all erias. The plants origin is southern China, where they occur mostly as lithophytes forming large colonies. Can be grown potted or in a basket. Flowers in spring.

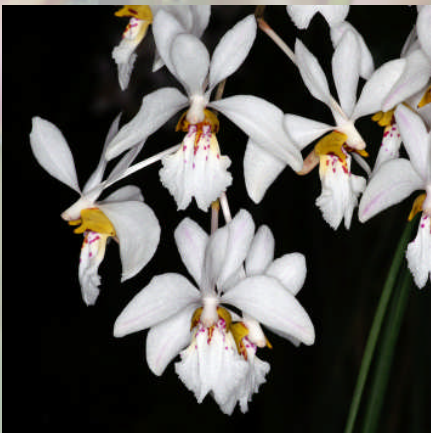
FS, US \$ 20.-



Holcoglossum flavescens

Its is the smallest species of the genus and a true miniature, but at flowering time a well grown specimen is covered in proportionally large flowers. Best grown mounted under bright conditions but without direct sun. The species is widespread in the central part of China and flowers in early spring.

FS, US \$ 20.-
FS XL, US \$ 30.-



Holcoglossum wangii

This species originates in SE Yunnan, SW Guangxi and directly adjacent parts of NE Vietnam. Our breeding stock is from SE Yunnan. It is a compact plant with pendant growth that needs to be mounted. It flowers in autumn, the flowers have a diameter around 4 cm.

FS, US \$ 25.-
FS XL, US \$ 35.-



Paphiopedilum areeanum

Closely related to *Paph. insigne* and *Paph. barbigerum* this species is unique by forming elongated stems. In nature these stems can become over half a meter long and such plants remind more at a vanda than a paphiopedilum. In cultivation only slightly elongated stems are formed (3-6 cm). The flowers on tall stems are the size of *Paph. insigne* but remind more of *Paph. barbigerum*. A rare and unique slipper orchid. Flowering in autumn.

NFS, US \$ 35.-
FS, US \$ 40.-



Paphiopedilum armeniacum

The spectacular yellow slipper orchid from West Yunnan with some contrasting red on the staminode. This is perhaps the most cold tolerant of all paphiopedilum species and often faces slight and brief frosts during the dry winter season in its native habitat. Increases vegetative through stolons (runners). Flowers in spring.

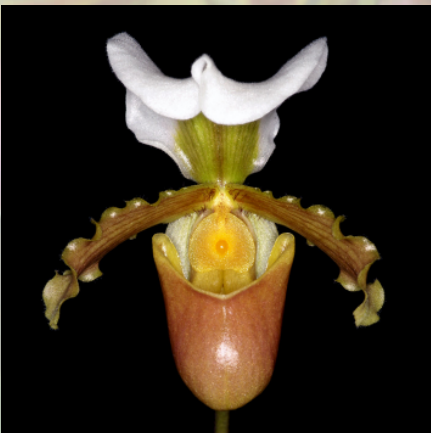
FS, US \$ 30.-



Paphiopedilum armeniacum* forma *markii

The album form (= free of all red pigments) of this species, a pure yellow flower with bright green leaves showing whitish-green undersides. This is a rare form of which we can only offer in a small number. We expect pure yellow flowers in all offspring, the leaves of all plants are free of red pigments. Flowers in spring.

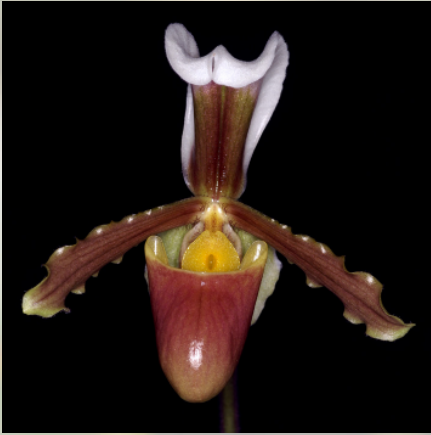
FS, US \$ 150.-



Paphiopedilum barbigerum* var. *barbigerum

This is a variable species has 4 varieties, of which two are known from China, the type variety (see left) and *Paph. barbigerum* var. *coccineum*. Plants of the type variety can differ in size from miniature plants to compact size plants and the flowers from small and brownish to medium sized and yellowish. We offer seedlings of flowering size to near flowering size. Flowers in autumn.

var. *barbigerum* FS, US \$ 30.-



Paphiopedilum barbigerum* var. *coccineum

Like the type variety this plant can occur in smaller or slightly larger forms. Both varieties need the typical cultural conditions for Chinese orchids with cool dry winters and warm humid summers. Light requirements for both varieties are modest, i.e. open shade like for Paph. Maudiae types is recommended. Flowers in autumn.

NFS, US \$ 25.-

FS, US \$ 30.-



Paphiopedilum bellatulum

This is a cool to intermediate species that needs a cool dry winter with reduced watering and an intermediate to warm summer with increased watering, but excellent drainage has to be provided and stale wet substrate absolutely avoided. Our breeding stock is of Chinese origin. We offer flowering size plants. Flowers in spring.

FS, US \$ 30.-



Paphiopedilum charlesworthii

Our parent plants are of Chinese origin and don't differ in size or coloration from plants in Myanmar. We offer seedlings of the regular wild type, which is a miniature paphiopedilum with a leaf span of 12-15 cm.. Flowers in autumn.

FS, US \$ 25.-



Paphiopedilum concolor

Our breeding stock is of Chinese origin. The Chinese type is easier to cultivate than plants from Thailand or neighboring tropical regions, and in winter under dry conditions they can stand temperatures close to freezing, but do not tolerate frost. In summer warm conditions with regular watering are required. Excellent drainage and strict avoidance of stale wet conditions are essential for successful cultivation of *Paph. concolor*! Flowers in late spring.

FS, US \$ 28.-



Paphiopedilum delenatii f. vinicolor

While the regular form of this Vietnamese and South Chinese (SE Yunnan & adjacent W Guangxi) slipper orchid is already a beauty in itself, this unique form is most attractive even out of flower, because the leaves are of a bluish purple, on the upper surface adored with greenish-silver reticulation. The lip is dark vine-red. Our seedlings are of second-generation breeding and those that already flowered proved to be of exceptional quality.

FS, US \$ 45.-



Paphiopedilum dianthum

This elegant species has its main distribution in Southern China and adjacent North Vietnam. Unlike tropical strap-leaved multi-flowered paphiopedilums like *Paph. lowii* or *Paph. philippinense*, it needs cool dry winters at 10-15 °C (50-59 °F) with night temperatures down to 4-8 °C (39-46 °F) for best development and good flowering. Summers should be warm and humid with copious waterings in well draining substrate. Flower diameter 14-20 cm. Flowers late summer to early autumn.

25-30 cm leaf span, US \$ 30.-

FS, US \$ 40.-



Paphiopedilum emersonii

An exceptional beautiful species with very large flowers for its compact size. Like most Chinese paphiopedilums it needs cool and dry winters and warm summers (see *Paph. dianthum* for details) and can even stand slight frosts if they are brief and the plant relatively dry. The species is somewhat difficult to keep strong and healthy over the years and needs experience to be grown continuously. Flowers in spring.

NFS, US \$ 45.-

FS, US \$ 55.-



Paphiopedilum gratixianum var. daoense

Described by Leonid Averyanov in 2002, this represents the variety with wide leaves and short inflorescences from South China and North Vietnam. Intermediate between the long-lost type variety and the erect-leaved variety of horticulture with tall inflorescences. The main character of var. *daoense* is the white dorsal covered in dark spots and with only the basal quarter greenish on a short inflorescence. Leaves 15-30 cm long and 3-4 cm wide. Flowers in autumn.

FS, US \$ 30.-



Paphiopedilum gratrixianum* var. *guandongense

The plant was published in 2010 as a new species but seems best regarded as a variety of *Paph. gratrixianum*. Lithophytic orchid from subtropical regions in Southwest Guangdong, probably also further west (Guangxi, SE Yunnan). In winter keep cool with slightly reduced watering. In summer the plant likes intermediate to warm conditions with copious watering, excellent drainage required. A very compact plant with narrow leaves spanning 25-30 cm. Flowers in autumn. Rare!

FS, US \$ 35.-



Paphiopedilum hangianum

A close ally of *Paph. emersonii* this species was first described from North Vietnam, but later it was also discovered in adjacent regions of China in SE Yunnan and SW Guangxi. The flowers are larger than in *Paph. emersonii* and of a uniform pale yellow, more or less overlaid with some red from the base of the petals. We are the first and currently only legal importer of this species to the US and offer flasks (see flask list) and a limited number of flowering sized plants. Flowers in spring.

NFS, US \$ 80.-
FS, US \$ 150.-



Paphiopedilum helenae

Like with *Paph. hangianum* we are the first and so far only legal importer of this beautiful species into the US. Beside *Paph. armeniacum* most clones show the brightest yellow in all paphiopedilums, namely in the dorsal. It is a miniature species but carries proportionally large flowers. Under bright conditions (no direct sun) with reduced waterings at cool overwintering followed by a warm humid summer with copious watering this species easily forms clumps with several flower shoots, neatly fitting in the palm of your hand. Flowers in autumn.

FS, US \$ 35.-



Paphiopedilum henryanum

A compact species *Paph. henryanum* can flower with a span of 10 cm, but fully grown usually has a span of 25-30 cm with increased flower size as well. This is a very interesting parent in hybridization because it usually transmits a colorful lip and bold spotting while keeping a relatively good shape. But already on its own the pure species is a lovely plant that will grace every collection! Flowers in late summer and early autumn.

NFS, US \$ 20.-



Paphiopedilum hirsutissimum

We have used our best parents of *Paph. hirsutissimum* from China for producing our seedlings. Often the Chinese form is named *Paph. hirsutissimum* var. *esquirolei*, but from a scientific point of view the difference to the Indian plants is minimal. However, selected Chinese plants are consistently larger, with wider segments and better shape (petals held more horizontally) than selected Indian plants. Flowers in spring.

FS (multiple shoots), US \$ 30.-



Paphiopedilum malipoense

This is the jade slipper orchid from China with flowers of an intensive raspberry-candy fragrance. The flower buds need several months from winter to spring for their development and it is crucial to keep the plants cool and modestly dry during this time to prevent bud drop. In summer the plant grows well in warm humid conditions with copious watering. Flowers in spring.

FS, US \$ 35.-



Paphiopedilum micranthum* var. *micranthum

In size, leaves and growing pattern very similar this species with its beautiful pink flowers adorned with huge inflated lips (the scientific name *micranthum* = small flowered is a joke!) is somewhat easier to grow. It can accept warmer winter conditions, although if kept too warm it will proliferate happily vegetatively but hardly ever flowers. Flowers in spring.

FS, US \$ 30.-



Paphiopedilum micranthum* var. *eburneum

This variety is also known as 'Guangxi type' and is the true var. *eburneum*. The flower is more harmonious due to the small, more rounded white lip, and the leaves are shorter, wider, and of a darker green with a silvery pattern, the underside is nearly continuously dark red. A rare type, not identical with so called 'eburneum types' with large inflated lips and large leaves, which are usually from Vietnam, or with simply pale types showing narrow leaves, which are both of the typical variety. For flasks see flask list. Flowers in spring.

FS, US \$ 70.-



Paphiopedilum purpuratum

The well-known but rarely offered miniature to compact Paphiopedilum with mottled leaves from South China. A cool grower with reduced watering in winter, but needs intermediate to warm conditions with copious watering in summer. We offer near flowering sized seedlings. The first of this batch already flowered (see photo left from July 26, 2013). Flowers in late summer to early autumn.

NFS, US \$ 20.-



Paphiopedilum tigrinum

The tiger slipper orchid occurs in a restricted area in West Yunnan and North Myanmar. It has become very rare in the wild with all known populations extinct. And is very difficult to propagate in-vitro. After years of trial we have managed to work out a reproducible method of in-vitro propagation. De-flasked seedlings are difficult to establish, but flowering size specimens are easy to grow under cool and dry conditions in winter (see Paph. dianthum, page 9 for details) and a warm humid regime in summer. Only very few plants available! Flowers in early summer.

FS, US \$ 180.-



Paphiopedilum tranlienianum

Like *Paph. hangianum* and *Paph. helenae* this species occurs on both sides of the border, in Vietnam and in China. It is a compact to miniature species and carries a unique flower somewhat reminding at *Paph. spicerianum*. Under the usual growing conditions for Chinese paphiopedilums (cool dry winters, warm humid summers) it is relatively easy and persevering in cultivation. We are currently the only importers of legal plants to the US! Flowers in winter.

NFS, US \$ 35.-



Paphiopedilum villosum* var. *villosum

The variable species is a long-standing denizen in cultivation and an important early parent in the long line of standard complex hybrids. Our parent stock is of Chinese origin. This epiphytic paphiopedilum is easy to maintain in cultivation and develops into a nice specimen plant if cool to cold winters, warm humid summers and a free draining substrate are provided.

FS, US \$ 30.-



Paphiopedilum villosum* var. *boxallii* f. *atratum

The meaning of atratum is 'wearing black', and our selected parent stock of SW Yunnan origin contains some outstanding types. The best is 'Hengduan Deep Dark' with a near solid blackish-brown dorsal. All seedlings that have flowered so far are of excellent quality, several are outstanding. The photo left shows the selected seedling 'Hengduan Popeye' with very wide petals for var. boxallii. Flowers in winter.

FS, US \$ 35.-



Paphiopedilum wardii

This is the chocolate slipper orchid which carries a contrasting green and white stripe dorsal and a lip and petals in chocolate colors. The leaves have an attractive mottling that makes plants out of flower interesting as well. The species is an intermediate grower which develops flower buds with decreasing temperatures at the end of a warm and humid summer. Flowers in winter.

FS, US \$ 20.-



Paphiopedilum x wenshanense

This is the natural hybrid between *Paph. concolor* and *Paph. bellatulum*. Although often treated as a species the enormous variability in color and shape, as well as the constantly intermediate shape of the staminode leaves no doubt that this is the hybrid as indicated above, which forms populations in the wild and is fully fertile. We offer a wide range of forms in flowering size. Flowers in spring.

FS, US \$ 30.-

Horticultural Paphiopedilum Hybrids



***Paphiopedilum Conco-callosum* (*concolor* x *callosum*)**

This is a remake of the primary hybrid registered by R. H. Measures, England, in 1895. The resulting flower is of a quite unusual color and interesting shape and stands out of the crowd. Flowers in spring.

FS, US \$ 20.-



***Paphiopedilum* Ho Chi Minh**
(delenatii x vietnamense)

This is one of the most attractive crosses in subgenus Parvisepalum. It appears like a very much improved Paph. delenatii. A very strong growing second generation seedling of Paph. delenatii was crossed it with a Paph. Vietnamese of good shape and petal stance. The resulting Paph. Ho Chi Minh are expected to show high-quality flowers. Flowers in spring.

NFS, US \$ 20.-



***Paphiopedilum* Hengduan Grace Helen**
(helenae x Grace Darling)

Registered by Hengduan Mts. Biotechnology in 2012, this hybrid is a miniature paph combining the deep yellow of the tiny Paph. helenae with the lime-yellow of the old Standard complex Paph. Grace Darling. The first seedlings bloomed with flowers half the width of the entire plant!

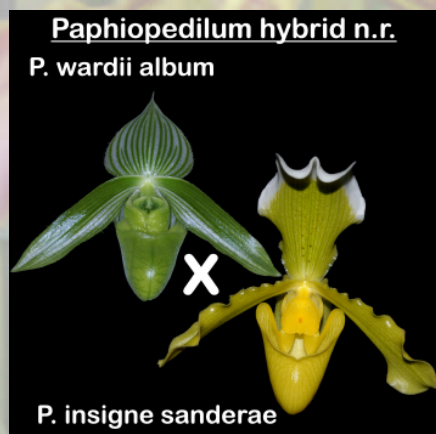
FS, US \$ 20.-



***Paphiopedilum* Hengduan Sweetheart**
(helenae x spicerianum)

Registered 2010 by Hengduan Mountains Biotechnology, this is a miniature paphiopedilum which offers considerable potential in creating new generations of mini paphs. *Paph. spicerianum* has introduced a white dorsal with the typical maroon central stripe into a plant of *Paph. helenae* dimensions. Flowers in autumn

FS, US \$ 20.-



***Paphiopedilum* hybrid n. r.**
(wardii album x insigne sanderae)

The hybrid is not registered. Paph. wardii f. album was used as seed parent (photo of actual parent plants on the left), and Paph. insigne f. sanderae, which is known to often produce red pigments in the offspring, as pollen plant. Most of the seedlings show some red at the base of the leaves and have very bright green leaves with a slightly darker delicate snake pattern. The plants have attained considerable size and flowers are expected for December 2013. Flowers in winter.

FS, US \$ 20.-



Paphiopedilum Maudiae
(*callosum* x *lawrenceanum*)

We have remade the classic *Paphiopedilum Maudiae* of the *coloratum* type using *Paph. callosum* as the seed parent and *Paph. lawrenceanum* as the pollen parent. The resulting seedlings are true primary hybrids. They show beautiful patterned leaves and a flower that preserves the charm of the species. Flowers mainly in early summer.

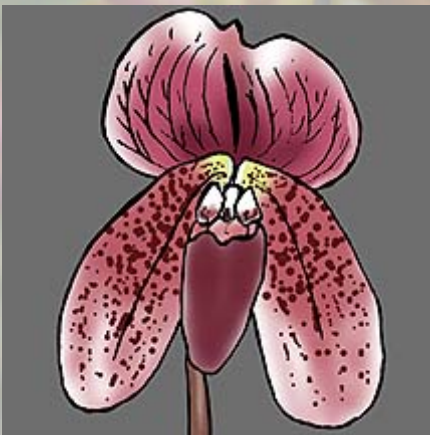
FS, US \$ 20.-



Paphiopedilum Virginia Moffett
(*callosum* x *acmodontum*)

Jerry Fisher registered this attractive primary hybrid between *Paph. callosum* and *Paph. acmodontum* in 1977, which was created by Ray J. Rands from California. We remade this lovely hybrid and offer flowering sized seedlings that combine the leaves of *Paph. callosum* with the flower color of *Paph. acmodontum*. Flowering in late spring and early summer.

FS, US \$ 20.-



Paphiopedilum Wottonii

The excepted name for the cross *Paphiopedilum bellatulum* x *Paph. callosum* is *Paph. Wottonii*, and the breeder and registrant was R.H. Measures in 1896. In the 19th century breeders used to give different clones of a grex different names, and so Measures named another clone of this cross *Paph. Westpointense*, a name more commonly known today, but in fact just a synonym, like *Paph. Calo-bellum* and *Paph. Rubens*. We remade this rarely seen hybrid, which combines the full segments and some of the spotting of *Paph. bellatulum* with the intensive colors of *Paph. callosum*.

NFS, US \$ 18.-



Paphiopedilum Madeline

Registered in 1895 by G.E. Palmer from a cross of *Paph. argus* x *Paph. bellatulum*. Though the shape will be more influenced by *Paph. argus* and is usually less full than in the preceding hybrid *Paph. Wottonii*, the strongly spotted petals of both parents are a prominent feature of *Paph. Madeline*. We expect our plants to flower similar to the sketch shown on the left, which is based on a photo of a contemporary *Paph. Madeline*.

NFS, US \$ 18.-



Phalaenopsis wilsonii

This species is the hardiest of all phalaenopsis. Forms from Sichuan have even to stand brief frosts in winter! Our breeding stock is from Yunnan and used to slightly warmer winters. In summer it can be grown under tropical conditions with night-day temperatures from about 26-36 °C (79-97 °F) and copious watering. Winters have to be cool (15-20 °C / 59-68 °F) and dry for successful flower set. In nature the leaves are dropped in winter, in cultivation it is better to retain the leaves through regular watering. Needs to be mounted. Flowers are fragrant and appear in spring.

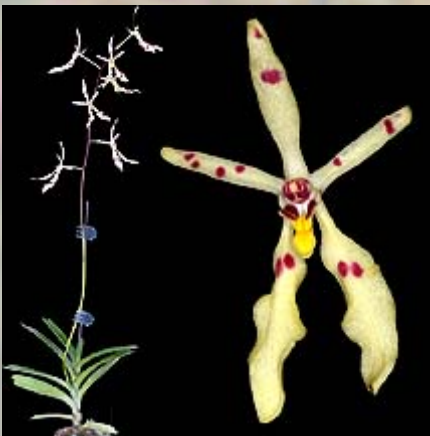
FS, US \$ 25.-



Phalaenopsis japonica (syn. Sedirea japonica)

DNA analysis have confirmed what the habit of the plants always suggested: *Sedirea japonica* is a *Phalaenopsis*! Despite the epitheton 'japonica' the species is also native to China, from where the Flora of China lists it from West Yunnan and Fujian. Our breeding stock comes from a nursery in Yunnan. The attractive species with its lemon-fragrance stays compact and needs cool conditions in winter to successfully set flowers. In summer conditions should be humid and intermediate to warm. Flowers in spring.

FS, US \$ 28.-



Renanthera citrina

This rare species was first published from North Vietnam in 1997, but it also occurs in South China (SE Yunnan). Like with most Chinese orchids a monsoon cultivation regime with cool dry winters and warm humid summers insures healthy growth and regular flowering. The plant can be grown in pots with coarse substrate but is best kept in baskets or mounted. We offer seedlings that have reached flowering size. The first of the batch have already flowered (see photo on the left). Flowers in spring.

FS, US \$ 35.-



Vanda coerulescens

A lovely compact vanda with small whitish flowers possessing intensively purple to blue lips. Our breeding stock is of Chinese origin and very cold tolerant in winter (in dry state near freezing temperatures are without consequences and even brief slight frosts are tolerated). Keep the plant cold and on the dry side in winter, warm and humid in summer. The plant can be grown in pots with coarse medium but does best in baskets or mounted. Flowers in spring.

FS, US \$ 35.-



Vanda cristata

A miniature to compact vanda that is rarely offered in the US. Typical are the fringed leaf tips that look like bitten off with three strips standing out. The plant can be grown in pots with very coarse substrate. But best culture is in baskets, again with coarse substrate, or mounted. In winter the plants needs cool conditions with reduced watering (can stand temperatures just above freezing but not below) and intermediate to warm temperatures with copious watering in summer.

FS, US \$ 35.-



Vanda flabellata (syn. Aerides flabellata)

Until recently this plant was known as *Aerides flabellata*, but DNA analysis has shown that it belongs to *Vanda*. Like with many such recent transfers which are not welcomed by many growers, the plants have long known better than the growers, because they cross with species of supposedly different genera! Cultivation for *Vanda flabellata* is like for most Chinese orchids, cool and drier in winter, warm and humid in summer. Best kept in a basket or mounted. Flowers in spring.

FS, US \$ 28.-

Ferns & Foliage Plants



Neolepisorus ovatus f. variegatus

This attractive form of *Neolepisorus ovatus* is rarely offered. It makes a great companion for subtropical and tropical orchids. Please note that this is a tropical fern that cannot be grown outdoors in temperate climates! The origin of our breeding stock is Southwest Yunnan

FS, US \$ 20.-


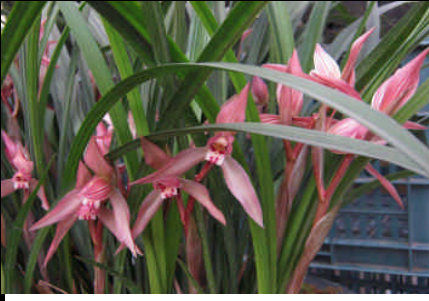

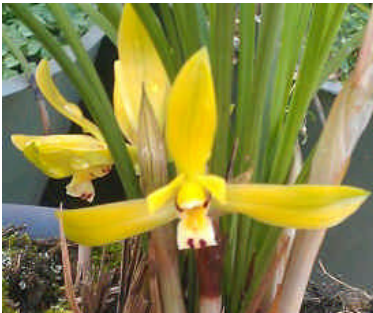










Asarum splendens




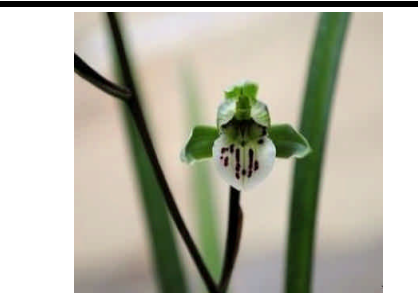
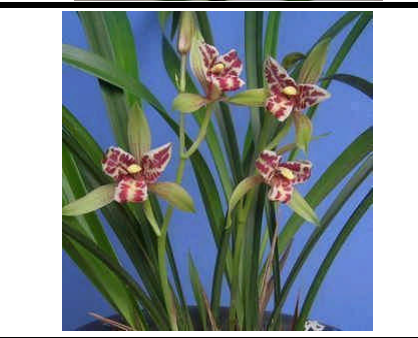

The foliage of *Asarum splendens* is highly attractive and the large evergreen leaves form an attractive groundcover in gardens of zones 6-9, where they are reported to be frost resistant down to 10 °F (-23.4 °C) if given some protection. However, we grow them in subtropical conditions where they are not exposed to strong frosts of any length.







FS, US \$ 18.-







Chinese Cymbidium Price List 2013



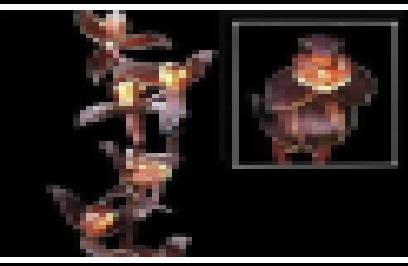




Name	Photo	Price US\$
Cymbidium tortisepalum var. longibracteatum		20.-
Cymbidium tortisepalum var. longibracteatum 'Dahongzhusha'		35.-
Cymbidium tortisepalum var. longibracteatum 'Longchangsu'		25.-
Cymbidium goeringii var. serratum		40.-
Cymbidium faberi 'Red Lip'		35.-

<p>Cymbidium faberi 'Bailiangzi'</p>		<p>35.-</p>
<p>Cymbidium faberi 'Wenzhousu'</p>	 	<p>45.-</p>
<p>Cymbidium dayanum 'Dongfenglan'</p>		<p>25.-</p>
<p>Cymbidium kanran forma album</p>		<p>45.-</p>
<p>Cymbidium kanran 'Pink'</p>		<p>45.-</p>
<p>Cymbidium kanran 'Red Lip'</p>		<p>60.-</p>

Cymbidium kanran 'Yellow Lip'		30.-
Cymbidium kanran 'Black Apple'		50.-
Cymbidium kanran 'Chikesu'		30.-
Cymbidium kanran 'Round Lip'		30.-
Cymbidium ensifolium 'Baodaoxiannu'		20.-
Cymbidium ensifolium 'Hongyimei' (strong fragrance)		75.-

<p>Cymbidium ensifolium f. album 'Qingshanyuquan'</p>		<p>45.-</p>
<p>Cymbidium ensifolium f. album 'Swan'</p>		<p>25.-</p>
<p>Cymbidium ensifolium f. album 'Hongxiangfei' (fragrant)</p>		<p>25.-</p>
<p>Cymbidium goeringii 'Biyuyanhe'</p>		<p>30.-</p>
<p>Cymbidium goeringii 'Cuitao'</p>		<p>65.-</p>
<p>Cmbidium goeringii 'Xueshanbian'</p>		<p>40.-</p>

Cymbidium goeringii 'Dafugui'		35.-
Cymbidium goeringii 'Datuan yuan'		30.-
Cymbidium goeringii 'Ruimei'		25.-
Cymbidium goeringii 'Songmei'		50.-
Cymbidium goeringii 'Yangshi hesu'		50.-
Cymbidium goeringii 'Xiaodamei'		45.-

<p>Cymbidium goeringii 'Zhanghesu'</p>	 <p><i>Cymbidium Goeringii album</i> 'Zhanghesu'</p>	<p>25.-</p>
<p>Cymbidium sinense forma album</p>		<p>25.-</p>
<p>Cymbidium sinense 'Compact'</p>		<p>25.-</p>
<p>Cymbidium sinense 'Fuguijinlong'</p>		<p>35.-</p>
<p>Cymbidium sinense 'Jinniao'</p>		<p>20.-</p>
<p>Cymbidium sinense 'Minnanludi'</p>		<p>45.-</p>
<p>Cymbidium tortisepalum var. tortisepalum</p>		<p>25.-</p>




Cymbidium qiubeiense

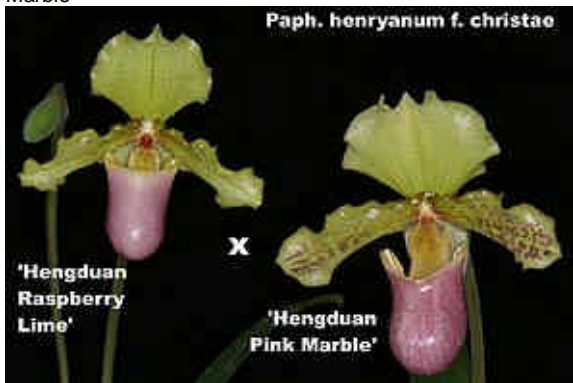







25.-

Flask list Hengduan Mountains Biotechnology Autumn 2013

Each flask contains a minimum of 20 seedlings. For ordering and inquiries please quote the flask code **and** the plant name.

flask code	Plant	flasks available	US \$/flask
10006030	<i>Paphiopedilum emersonii</i> , petals finely red spotted (sib-cross)	20	100.-
10006103	<i>Paphiopedilum hangianum</i> (sib-cross)	7	150.-
10012301	<i>Paphiopedilum purpuratum</i> (sib-cross)	2	80.-
10012304	<i>Paphiopedilum purpuratum</i> , (broad petals x dark petals)	1	90.-
10086001	<i>Paphiopedilum hirsutissimum</i> var. <i>esquirolei</i> 'Hengduan Waves' x 'Hengduan Flyer'	2	60.-
10086002	<i>Paphiopedilum hirsutissimum</i> var. <i>esquirolei</i> f. <i>viride</i> 'Hengduan Spoons' x self. One of the best clones of this album form worldwide! 	4	180.-
11008702	<i>Paphiopedilum charlesworthii</i> f. <i>bromilowae</i> (=album form) 'Pride of Tokyo' x self 	4	150.-
11009101	<i>Paphiopedilum helenae</i> (sib-cross)	2	70.-
11009201	<i>Paphiopedilum henryanum</i> 'Zhao select '2' x 'Hengduan Black Ruby' 	2	90.-

11009203	Paphiopedilum henryanum f. christae (=semi-album) 'Hengduan Raspberry Lime' x 'Hengduan Pink Marble'	4	200.-
	 <p>Paph. henryanum f. christae</p> <p>'Hengduan Raspberry Lime' X 'Hengduan Pink Marble'</p>		
11009401	Paphiopedilum gratixianum var. daoense x self (Large spots in dorsal, fine spots & stripes in petals)	5	60.-
			
11009501	Paphiopedilum villosum (sib-cross)	5	60.-
11012401	Paphiopedilum sukakhuli 'Horoscope' BM/JOGA x 'Hengduan Wings'	20	70.-
11012502	Paphiopedilum wardii 'Hengduan Chocolate' x self	2	60.-
11012505	Paphiopedilum wardii f. album (sib cross)	15	80.-
11012603	Paphiopedilum venustum (sib cross)	10	60.-
11012604	Paphiopedilum venustum f. measuresianum (= album form) (sib cross)	10	80.-
11012901	Paphiopedilum villosum var. boxallii f. atratum select seedling x 'Hengduan Deep Dark' (= 2nd generation line breeding)	3	80.-
	 <p>Paph. villosum var. boxallii f. atratum</p> <p>'Hengduan Deep Dark'</p>		
11012902	Paphiopedilum villosum var. boxallii 'Hengduan Cheetah' x self (bright dorsal with many fine cheetah spots)	2	80.-
11012904	Paphiopedilum villosum var. boxallii f. atratum 'Hengduan Deep Dark' x select seedling (= 2nd generation line breeding)	2	80.-

11013001	Paphiopedilum barbigerum var. coccineum (sib cross of the large type)	5	60.-
11027701	Paphiopedilum barbigerum var. vejvarutianum (syn. Paph. sulivongii) (sib cross) 	4	70.-
11014501	Phragmipedium humboldtii (syn. Phrag. warszewczianum) (sib cross) 	10	90.-
\$\$700310	Paph. Maudiae 'semi-vinicolor' x self	5	50.-
\$1450111	Paph. Grace Darling x henryanum f. christae	4	75.-
\$\$490211	Paph. henryanum f. christae 'pale' x charlesworthii f. bromilowae	10	100.-
\$1460111	Paph. venustum seedling x sukhakulii 'Hengduan Wings'	5	60.-
\$1000111	Paph. Lippewunder x Lippewunder 	2	75.-
\$1000112	Paph. Lippewunder 3007 x self	2	75.-