



The Gardens at Post Hill

Winter 2010 Newsletter

December 2010, copyright Gardens at Post Hill LLC

THE WEATHER during 2010 was challenging! Spring arrived early. We actually pollinated our first flowers at the end of April, two to three weeks ahead of our earliest pollinations in previous years. This was followed by prolonged subfreezing weather in mid-May which severely damaged some flower buds and developing pods. Several interesting new crosses were lost that we will have to try again in 2011. The summer was hot with day after day above 90° F. With lots of watering and shading everything pulled through.

New *Cypripedium* Registrations

This year we were fortunate to be able to register five new *Cypripedium* hybrids.

Cyp Dieter is the backcross of *Cyp xandrewsii* (*parviflorum* var. *parviflorum* x *candidum*) with *candidum*. Dieter Hach is a Cyp enthusiast in Germany. *Cyp Dieter*'s habit is reminiscent of *Cyp xandrewsii* and the flowers are *xandrewsii*-like. First time blooming plants had several stems and flowers.

Cyp Gisela is *Cyp macranthos* x *Cyp parviflorum* var. *parviflorum*. We crossed *Cyp Gisela* with *Cyp candidum*, a plant even smaller in stature than *Cyp Gisela* with tiny white flowers to achieve **Cyp Geisha**. *Cyp Geisha* has flowers intermediate in size between *Gisela* and *candidum*. The flowers open with very dark sepals and white pouch. The pouch develops a nice purple blush over 2-3 days and the sepals lighten.

Cyp GPH Tom Velardi is a backcross of the extremely large-flowered *Cyp Sabine* (*fasciolatum* x *macranthos*) with *Cyp*



Cyp Dieter Burch & Perakos 2010



Cyp GPH Tom Velardi Burch & Perakos 2010



Cyp Geisha Burch & Perakos 2010

macranthos var. *alba*. Tom is a great Cyp friend who has been a strong inspiration for our Cyp propagation efforts. *Cyp* GPH Tom Velardi has the extremely large flowers. Its first flower was 9.5 cm from sepal tip to sepal tip.

***Cyp* GPH Crimson Promise** (*Gisela* x *Maria*) was a nice surprise. Both parents have *Cyp parviflorum* var. *parviflorum* as one parent and both have *Cyp macranthos* as the other. The difference is that the parent of *Maria* is *Cyp macranthos* var. *speciosum*. Thus, GPH Crimson Promise can be viewed as a cross between unrelated individuals of the “same” grex. We intend to continue this direction with line breeding.

Cyp Aki and *Cyp Gisela* are both *Cyp macranthos* x *Cyp parviflorum*, *Aki* with var. *pubescens* and *Gisela* with var. *parviflorum*. Last year we registered *Cyp* GPH Memoria Charles Frail Jr, the same cross as *Aki* but using *Cyp macranthos* var. *alba*. This year the *Gisela* version (using an even smaller variety, *Cyp parviflorum* var. *makasin*) of the *macranthos* var. *alba* cross bloomed, registered as ***Cyp* GPH Little Charlie**, (compared to *Cyp Gisela* at right).

The number of registered Cypripedium hybrids continues to rapidly expand. During 2010 there were 20 new hybrids registered. In addition to the five discussed above, the following were registered: Amelie (*passerinum* x *flavum*), Ann Elizabeth (*tibeticum* x *franchetti*), Annegret (*parviflorum* x *shanxiense*), Cornelia (*Doreen* x *froschii*), Doreen (*xventricosum* x *cordigerum*), Henric (*macranthos* var. *hotei-asumatorianum* x *tibeticum*), Lusarem (*xandrewsi* x *Sebastian*), Marianne (*Sebastian* x *montanum*), Ruby Icate (*macranthos* var. *speciosum* x *Carolin*), Sarah Louise (*Ulla Silkens* x *reginae*), Silvia (Lothar Pinkepank x *Sabine*), Stefanie (Otto x *henryi*), Tasio (Dietrich x Lothar Pinkepank), and Vilma (*Tower Hill* x *tibeticum*).



***Cyp* GPH Crimson Promise** Burch 2010



***Cyp* GPH Little Charlie** Burch 2010

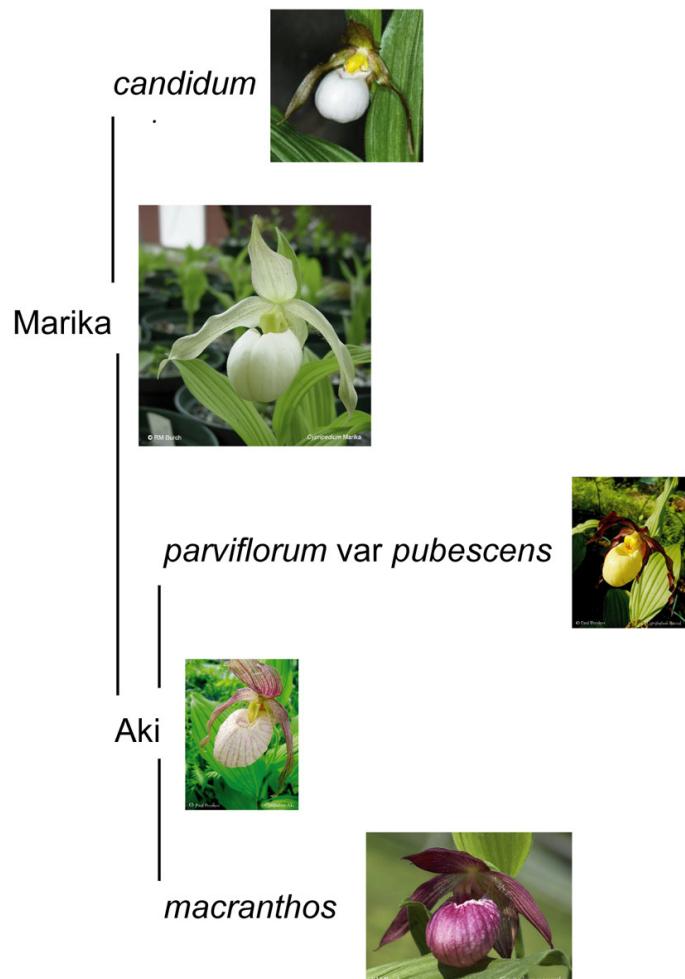


***Cyp* Gisela** Frosch 1992

Using Family Trees to Aid Decisions in Hybridizing

Hybridizing orchids toward specific goals should be undertaken carefully since each generation requires 4-6 years before first flowering. Mistakes waste enormous amounts of time and care!

Here is the family tree of *Cyp Marika*.



Cyp Marika is an attractive white flowered hybrid of *Cyp Aki* and *Cyp candidum*. *Aki* is a large-flowered, tall hybrid of *Cyp. parviflorum* var. *pubescens* and *Cyp macranthos*. Paul Perakos is pursuing several lines of breeding toward large plants with large, pure white flowers. He had a specimen of *Aki* with nearly white pouch (pictured). In an attempt to create a white

flower, Paul crossed this *Aki* with a *Cyp candidum* with light green sepals to lighten the dark sepals of his *Aki*. *Cyp Marika* resulted. Some *Marika* have flowers with light yellow sepals but one, pictured, has white sepals as well as pouch. *Marika* is a medium-sized plant with small to medium-sized flowers due to the *candidum* parent, which has very small flower.

While *Marika* is a very attractive flower and a nice-sized plant, we would like to increase flower size while maintaining the white coloration and we would like to obtain larger plants. We are pursuing several lines of breeding: to increase plant size while maintaining white flowers we have crossed *Marika* with *Cyp reginae* var *alba*, the tallest *Cypripedium*. *Cyp reginae* flowers are not particularly large so we may have to do additional work to increase flower size.

We are also crossing *Marika* with the white form of *Cyp Sabine* (Michael Wienert's "Sabine Pastel"). *Sabine* has flowers among the largest of any *Cypripedium*; our recent hybrid *Cyp GPH Tom Velardi*, which has *Sabine* as a parent, has the largest flowers we have observed in any *Cypripedium*.

There are additional breeding paths that we will also undertake, using hybrids such as *Uta*, another large-flowered hybrid with white flowers and yellowish sepals. To achieve the goal of very large flowers on very large plants, we will likely have to keep introducing *reginae* genes for large plant size as well as *Sabine*, *Uta*, and *GPH Tom Velardi* and others.

Short Takes

Pogonia. *Pogonia* is a genus of small bog orchids that occur around the world and can form large colonies. We have been experimenting with the alba form of *Pogonia japonicum* in our small artificial cranberry bog to assess hardiness over winter.

Dactylorhiza. Marsh orchids are common meadow orchids in Europe with limited occurrence in East Coastal Canada as well. *Dactylorhiza* make nice racemes of purple to red with alba forms as well, during the summer. We are assessing ease of cultivation and hardiness of several species and hope to introduce one or more in the coming years.

Flasking service. We generated 600 seedlings for clients in 2010 and have more than 1000 in flask for delivery in 2011. In flask now for clients are *Cypripedium*, *Phalaenopsis*, *Cattleya*, *Phragmipedium* and *Bletilla*.



Dactylorhiza fuchsii raceme



Pogonia japonicum



Pogonia japonicum

Our new plant list, including the Spring Seedling List will be posted to the website on January 21, 2011.
www.gardensatposthill.com