

**THE HSPR NEWSLETTER**  
**Published by the Heliconia Society of Puerto Rico, Inc.**  
**2000 No. 2**

---

JUNE MEETING

Our next meeting will be hosted by Kelly and Susan Brooks and Judy Nelson on Sunday, June 11, 2000 from 9:30 AM to 1:00 PM at **Marin Alto Tropicals**. This meeting should be especially exciting and instructive for HSPR members. Included on the agenda for this meeting is a talk by Judy Nelson and a tour of the grounds. Members planning to go on the tour should bring good walking shoes and rain gear. Also, please remember to bring your chairs and refreshments. (A good restaurant is nearby for those wishing to have lunch after the meeting.) If possible, try to carpool because of limited parking at the farm itself; most members will probably have to park along highway 181 near the farm entrance.

Also, in addition to the regular raffle, plant exchanges, etc. Judy will have some of the more difficult-to-obtain heliconia rhizomes for sale.

PRESIDENT'S CORNER

I believe that one of the primary reasons for joining the HSPR is to one's knowledge about heliconias and related plants. In addition to benefiting the individual member, I feel that the sharing of information and thoughts among the membership benefits HSPR as a whole by serving as a "springboard" for making new observations, trying new growing techniques, etc. (i.e., the "whole is greater than the sum of its parts" argument). With this in mind, I believe that this newsletter is useful in documenting some of the discussions occurring at our meetings.

During the last HSPR meeting in March, Judy Nelson presented some very attractive hybrids of *H. bihai* 'Jade Forest' and *H. caribea* and other heliconias. These heliconias were planted close to each other and hummingbirds were presumably responsible for cross-pollination between plants. Unfortunately however, hybridization was relatively rare; the vast majority (about 90%) of the seedlings did not differ from the 'Jade Forest' parent. As a consequence, the development of hybrids requires a relatively large number of seedlings, and therefore, considerable space for the planting-out process. Patience is also required; it takes several years for the seeds to germinate, grow, and finally flower.

An obvious problem in the quest for new hybrids is the low rate of hybridization. Several causes may be responsible for this problem. An obvious one is low rates of cross-pollination by hummingbirds or other natural agents. Assuming that natural pollination is the "bottleneck" in hybridization, then the obvious solution would be "artificial" cross-pollination by the grower. However, nobody has succeeded in artificially pollinating heliconias even within a species, at least to my knowledge. It appears that pollination techniques deserve further attention. Another possibility for low hybridization success is a fertilization barrier between species (e.g., *H. bihai* and *H. caribea*) wherein pollen of one species have poor success in fertilizing ovules of other species. If so, I feel that the situation may be much more complex and subtle. On a recent trip to Dominica, Bob Lankford and I often

observed distinct forms of *H. caribea* growing in the same locale. The majority of plants had either dark red or greenish-yellow bracts, which I will call 'Black Magic' and 'Chartreuse' for convenience, respectively. Mixtures (or, "hybrids") of the two forms were much less common. Given that 'Black Magic' and 'Chartreuse' belong to the same species, it would seem that the mixtures should be the most common form with the mixing ("mongrelization") of the gene pool. That is, unless some barriers against cross-pollination within this species exist. (I am assuming that 'Black Magic' and 'Chartreuse' truly belong to the same species. Otherwise, the question of "What is a heliconia species?" would have to be addressed.) In summary, there appears to be much more to be investigated about the reproductive biology of heliconias.

As many of us have found out, rhizomes of some heliconias are easy to grow, while others are difficult. One of the problem species for me is *H. standleyi*. Only about a third of the rhizomes survive with my usual procedures. A different technique appears to be more successful. Instead of digging rhizomes out of the ground, the rhizomes are cut between the stems. This can be done relatively easily if the stems are previously cut about a foot above the ground. Rhizomes are then dug up about 2-4 months later, depending upon the development of new shoots.

To be sure, I have only conducted some "pilot" trials of this procedure, largely to satisfy my curiosity. Certainly, more rigorous studies would be required to fully evaluate its effectiveness. However, there are several reasons to believe why this approach may ultimately prove to be useful. First, many of the roots are left undisturbed so trauma to the plant is minimized. Second, under natural conditions, the growth of new shoots on younger parts of the rhizome inhibits shoot development on older parts, a feature which is technically described as apical dominance. The rhizome cutting disrupts this process and probably stimulates older parts of the rhizome to produce new shoots. (For similar reasons farmers cut potatoes into several pieces before planting.) Shoot development is probably also stimulated by the loss of the apical meristem in the stem.

In an admittedly speculative context, I feel that rhizome cutting may also be useful for other purposes. One of the undesirable features in several heliconias is the development of a "dead spot" in the center of older clumps. This pattern is evidently results from the pattern of apical dominance in heliconia rhizomes. Thus, the cutting of rhizomes may prevent such dead spots by promoting the development of new stems in older parts of the clump. Also, my observations suggest that the "disease" that kills "Sexy Pink" (*H. chartacea*) spreads from older to younger shoots, eventually killing the entire plant. Rhizome cutting may prevent the spread of this disease, allowing at least some parts of a clump to survive.

#### HELICONIA SOCIETY INTERNATIONAL

The International Heliconia Society will be meeting July 26-30, 2000 in New Orleans, Louisiana. Registration is \$280 (\$160 for accompanying spouse). Among various tours of the meeting will be a visit to Stokes Nursery and various southern plantations and gardens. For more information contact Rada's World of Travel: Phone 504-467-9450 (toll free 1-800-477-7232); Fax 504-465-9822; E-mail [radatvl@aol.com](mailto:radatvl@aol.com)

NEW MEMBERS: PROFILES (by German Charron)

Some new members of HSPR include:

Doña Ana Vazquez who has over 100 heliconia varieties on her 200 acre farm in Humacao, and has started a "mariposario" (the only one in Puerto Rico). The mariposario is a nonprofit organization dedicated to her husband who died on a recent trip to Costa Rica. Doña Ana was also recently named "woman of the year" in Humacao.

Bonnie and Guillermo Oliver live on a 900 acre farm near Maricao. Formerly known as the "queen and king of coffee of Maricao", Bonnie and Guillermo's efforts are currently directed to growing orchids and restoring their home, "Hacienda Delfina", which was severely damaged by Hurricane Georges.

Amelia and Barry Villaneuva have a lovely 5 acre farm below El Yunque. Their farm is well stocked with palms, fruit trees, eucalyptus and, of course, heliconias.

Otto and Jasmin Rosario have over 100 different heliconias on their 8 acre farm in Utuado. Jasmin plans to use her heliconia flowers in a flower arrangement business she plans to open in Isabela.

Dr. Sergio Tejedor, a dentist by profession, also has more than 100 heliconias, some of them very rare, on his 40 acre farm in Jayuya. The farm is a perfect place to grow heliconias: rolling hills, sandy soil, and a beautiful clear water stream.

Dr. Raymond Lawrence and his wife Migdalia Batiz are both opera singers. Ray, a retired medical doctor, is also a published writer. Ray and Migdalia own a 2 acre urban farm in Canovanas where they have over 150 heliconia varieties. Among the flowering specimens on their farm are *H. velligera*, *H. xanthovillosa* (including 'Barnum and Bailey'), and *H. magnifica*.