

THE HSPR NEWSLETTER
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DECEMBER MEETING

Our Christmas meeting will be hosted by Ray & Migdalia Jerome in Canovanas at Barrio Cambalache at 10:00 AM on December 9. Directions and a map are appended at the end of this newsletter. PLEASE NOTE THAT THIS MEETING WILL BE HELD ON SATURDAY!! In view of the planned festivities, formal aspects of the meeting will be kept to a minimum. However, please bring plants for the raffle, sale, or exchange (as well as any interesting information and observations you have acquired about heliconias and other Zingiberales.) Also, although Ray and Migdalia will be providing food and refreshments, please feel free to contribute any sidedishes, drinks, etc. for this occasion.

PRESIDENT'S CORNER

As an important step in our Society's desire to straighten out the chaos in the naming of heliconia varieties/cultivars, Bryan Brunner has kindly provided some vital information about registering new cultivars in the following article (Part I). In a later newsletter, Bryan will discuss "The Registration Process" (Part II).

REGISTRATION OF NEW HELICONIA CULTIVARS

Part I. Taxonomy and the need for cultivar registration.

Bryan Brunner
Associate Researcher
Department of Horticulture
University of Puerto Rico
Mayaguez, PR 00681

The introduction of new heliconia species and cultivars to Puerto Rico has been increasing steadily over the past 40 years. This increase has been especially notable in the last few years, due primarily to interest created following the founding of the Heliconia Society of Puerto Rico in 1996, and Zingiberales Gardens in 1997. At present, there are at least 140 different types of heliconias flowering in Puerto Rico, and many more recent introductions that are not yet of flowering size, bringing the total number of heliconia species and cultivars to over 200 (Guttman, 2000).

This great increase in diversity of heliconias on the island, combined with an abundance of pollinators, especially hummingbirds, creates the ideal situation for the development of new natural hybrids. In a tropical

environment such as Puerto Rico, heliconias readily set seed and produce volunteer plants as seeds are disseminated and germinate. In addition to naturalized volunteer plants, many growers are also using seeds for heliconia propagation. Recently, several members of both heliconia societies have reported observing new heliconias that possibly represent natural hybrids, natural genetic recombination, or natural mutations.

New, attractive heliconia cultivars have potential value as novel cut flowers and ornamental plants. Cultivar registration is a process by which the originator of a new cultivar creates a permanent record of the new plant, allowing standardization of the cultivar name and giving credit to the originator.

Taxonomy Basics

A cultivar, or cultivated variety, is a descriptive term for a plant population with a distinct genetic composition and unique characteristics that allow it to be distinguished from other members of the same species. The International Society for Horticultural Science, which coordinates cultivar registration worldwide, defines cultivar as “a taxonomic group of cultivated plants that is clearly distinct, uniform and stable in its characteristics and which, when propagated by appropriate means, retains those characteristics” (ISHS, 2000).

Although the terms “variety” and “cultivar” are sometimes used interchangeably, there is an important difference. Variety refers to a natural population of plants that differs in some distinguishable way from the typical species. It is a botanical term, and thus is written in Latin in lower case letters and italicized. For example, individuals of *Heliconia indica* var. *micholitzii* may be distinguished from individuals of *Heliconia indica* var. *rubricarpa*, and both varieties may be distinguished from the “typical” individual of *Heliconia indica*.

A cultivar, on the other hand, is a cultivated population of plants that differs in some distinguishable way from the typical species. A cultivar name is not written in Latin and not italicized, but instead is a name in a modern language beginning with a capital letter and designated by the abbreviation “cv.” or single quotes (for example, *Heliconia angusta* cv. Orange Christmas or *Heliconia angusta* ‘Orange Christmas’). According to the *International Code of Nomenclature for Cultivated Plants* (Trehane et al., 1995), the use of single quotes is preferable to the abbreviation “cv.”

Individual plants within a cultivar are generally more genetically similar than those within a variety. Some types of cultivars may have slight genetic differences, such as in the case of seed propagated grain, legume or vegetable cultivars. Other types of cultivars, which are clonally propagated, have members which are genetically identical.

Clonal propagation is the production of “daughter” plants from one original “mother” plant. This can be accomplished through grafting, division of mother plants, or tissue culture. Clonal propagation is typically practiced with many fruits and ornamentals. Thus, all ‘Valencia’ orange trees (*Citrus sinensis* ‘Valencia’), all ‘Red Delicious’ apple trees (*Malus domestica* ‘Red Delicious’), and all *Heliconia caribaea* ‘Black Magic’ plants are clones of a single original mother plant.

Seedlings from a named clone, although similar in appearance to the mother plant, will have different degrees of genetic difference from the parent cultivar, just as each child in a human family shares genetic traits with parents, brothers and sisters, but is unique. For this reason, seedlings resulting from *Heliconia chartacea* ‘Sexy Pink’, even though they resemble the parent, are not actually ‘Sexy Pink’, just *Heliconia chartacea*. This distinction is important, as through the years considerable genetic change can occur with seed propagation, leading to confusion when it comes to identifying a cultivar, and different clones with the same cultivar name.

Cultivar Registration

Registration of new cultivars of any crop is important for several reasons. One of the most important reasons is to permanently document a description, preferably with a color photograph, so that a given plant can be properly identified. For example, if new genetic combinations from seed propagated heliconia cultivars arise, it would be easier to distinguish the original cultivar from the new variants if a published description exists. A properly documented cultivar name is also less likely to be renamed by somebody else as yet another new cultivar, further adding to the confusion. Correct cultivar identification is extremely important when purchasing expensive plants from local nurseries or through mail order, as unpleasant surprises can otherwise result.

REFERENCES

- Guttman, E. 2000. Heliconias in bloom in May and June in Puerto Rico. Zingiberales Gardens News 4(6-7):5-7.
- Guttman, E. 2000. Personal communication.
- International Society for Horticultural Science. 2000. Internet <http://www.ishs.org/sci/iraexpla.htm>
- Trehane, P., C.D. Brickell, B.R. Baum, W.L.A. Hettterscheid, A.C. Leslie, J. McNeill, S.A. Spongberg and F. Vrugtman (eds.). 1995. International Code of Nomenclature for cultivated plants - 1995. Quarterjack Publishing, Wimborne, UK.

DIRECTIONS TO:

RAY & MIGDALIA JEROME'S HOUSE
100 VISTA ROYALE
BO. CAMBALACHE, CANOVANAS

PHONE # 886-3147

1. Take **Highway 3** (65th Infantry) to the first exit past the entrance to El Comandante Race Track.
2. Exit **right** at this first exit past El Comandante. (This access road takes you between McDonald's and Econo)
3. Turn **right** onto **185** at Burger King.
4. Follow 185 past El Comandante's stables (on right) to the top of the hill
5. Turn left on Car. **962** (at top of hill).
6. Stay on Car **962**. until it "dead-ends" at Colmado Rosa.
7. At Colmado Rosa, make a 90° right turn to "Bella Vista-962" (green sign). Don't turn left onto "Ramal (State Road) 962".
8. Stay on "**Bella Vista-962**" past Car. "**Los Monges** (#1) (sign) on left, past Car. "**Vista Del Mar**" (sign) on right, past **Johvy's Market** on right, and past Car. "**Los Monges**" (#2) (sign) on left.
9. Continue on "**Bella Vista - 962**" to "**Vista Royale**" (sign), which is the next road to the left after "Los Monges (#2).
10. Turn left onto "**Vista Royale.**"
11. Our house is the **first** house on the **left**, with the sign, "**100 VR**" on the gate post. (There are only two other houses on this street, which "dead-ends" at our house).
12. If, by chance you by-pass "Vista Royale," it is only about two blocks further until "Bella Viata-962" "dead-ends" at "**Alta Vista.**" ("Colmado El Cruce" is located at this juncture). Turn around and come back the two blocks. "Vista Royale" is at the top of the hill--Turn right on "Vista Royale" and proceed to our house.

***There is only parking space at our house for the first **eight** cars. The other cars will have to find parking along "Bella Vista-962" and walk about one block up to our house.