# THE HSPR NEWSLETTER Published by the Heliconia Society of Puerto Rico Inc. 1999 No. 4 

## FROM YOUR BOARD

Your present Board of Directors took office at our regular meeting in October, 1997. After completing their two year term office, election of Board members is scheduled for our next meeting on Sunday December 12th. This will include the offices of president, vicepresident, secretary, treasurer and three counsellors. Following HSPR By Laws, an ad hoc committee was formed last August to identify candidates and to determine their willingness to serve if elected. The committee's slate of officers was announced at our September meeting with the stated provision that other candidates may be nominated from the floor at the time of election.

For your information the committee's nominations are the following:

| President | Paul Yoshioka |
| :--- | :--- |
| Vice President | Arnaldo Astacio |
| Secretary | Jannette Crespo |
| Treasurer | Irma Cabrera |
| Counsellor | Bryan Brunner |
| Counsellor | Hiram Mercado |
| Counsellor | Federico Montealegre |

The newly elected Board members will take office immediately following the closure of the December meeting and will be in charge of the Society affairs for the next two years.

Meanwhile, the present Board wishes to thank all HSPR members for their warm support and dedication to the well-being of the Society -- and to extend best wishes to all for the coming Holiday Season, the New Year and the Millennium. Bob Lankford, Bryan Brunner, Martha Lankford, Sherry Ballester, Rafael Benitez and Judy Nelson.

## THE PRESIDENT'S CORNER

In last September's "President's Corner", I started a two-part article describing a collecting trip which Paul Yoshioka and I took to the Lesser Antilles last Summer. The first part of the series covered our four days in Grenada, the southernmost link of the arcuate chain of the Antilles. But before starting the second part describing our activities and impressions in Dominica, I want to add a short "PS" to the Grenada results.

You may recall that one of our observations in Grenada was that we felt there was reasonable doubt that the several Heliconia caribea $\times \mathrm{H}$. bihai $\mathrm{c} / \mathrm{v}$ 's reported from Grenada were actually inter specific hybrids -- our reason simply being that we were unable to find naturally occurring stands of $\underline{H}$. caribea, a necessary member of the proposed hybridizing pair. Since writing this, our view has been considerably strengthened by copied portions of a botanical report sent me by Arnaldo Astacio. The 1979 publication by Richard A. Howard, "Flora of the Lesser Antilles; Vol. 3; Monocotyledoneae", contains a section pertaining to the Heliconaceae (p. 519-523)
in which Howard specifically points out: "Heliconia sp. A number of plants from Grenada may represent either a new species or a series of hybrids between an undescribed species and $\underline{H}$. bihai," basically what we suggest. Some may say that all this about whether we have hybrids or something new and different is "much ado about nothing". But at least our exploration and observations in Grenada clearly illustrate the truth of the old saw -- "When you look for answers to a question, you generally uncover more questions than answers". Not a bad condition if it adds spice and interest to life. And so ends Grenada -- and on to Dominica.

After a very early and lengthy Sunday morning flight out of Grenada, Paul and I finally arrived in Dominica around 11:00 AM. We were met by Angus MacIntyre, a local horticulturist who Martita and I had met when we visited Dominica in 1997. Angus was to be our guide, driver and confident. Along for the ride was Lenis Bruno (his cousin is a well-known boxer) and who is an agronomist with the Ministry of Agriculture. So between Angus and Lenis, we not only had good company and transportation but a valuable source of information on the local fauna and flora.

We spent the rest of Sunday driving around the eastern and central parts of the island mainly to get a feeling and a sense of what to do and where to do it during the rest of our stay. Our afternoon tour immediately confirmed our visual impression as our Liat flight flew along the entire length of the island -- that Dominica is truly a tropical paradise little modified by man and with vast mountainous areas remaining in what must be described as in a "pristine state". (It's not often that you get to use that phrase, is it?).

Along the east coast we immediately encountered red $\underline{\mathrm{H}}$. caribea and were surprised to see widely distributed clumps of flowering $H$. wagneriana, a Central American species naturalized throughout much of the eastern Caribbean, including Puerto Rico. Paul pointed out that wagneriana was flowering here much later than at home where blooming typically occurs in Spring. South of the Carib Indian reservation, we turned inland along a broad valley and immediately encountered the beginnings of what was to be a bewildering array of $\underline{H}$ caribea varieties. Too dressed up in our traveling togs to do any collecting, we did make frequent stops to look and to take pictures.

Being a bit tired by now, we drove into Roseau, the capital on the southwest coast. Twenty minutes from Roseau and some 2000 feet higher, we checked in at Roxy's Mountain Lodge, a small guest house with a fine restaurant and a relaxing garden atmosphere. Being an early riser, I would say a very early riser, Paul took pre-breakfast hikes along the roads and trails near the Lodge and found not only many more H. caribea varieties, but also a red-yellow H. bihai. As it turned out, this was most likely H . bihai $\mathrm{c} / \mathrm{v}$ 'Arowak' and apparently the only variety of bihai on the island -- a striking contrast to the Grenada population. Our observations indicate that 'Arowak' is not only relatively rare but grows at higher altitude than its Grenada cousins.

Monday and Tuesday were devoted to further exploration and observations and to collecting rhizomes of selected varieties. And as always, the end of each day was occupied with cleaning and disinfecting the collected materials. In regard to the complex of $\underline{\text { H. caribea varieties in }}$ Dominica, the basic colors included red, light green, and yellow. There was, however, wide variation in color intensity or clarity, and also striking mixes of the basic colors. One rather outstanding variety has bracts which are a clear dark red on the distal portion which grades very sharply to a brilliant yellow on the inner portion, thus forming a striking zig-zag yellow band along the middle of the red inflorescence. It is somewhat like H . caribea c/v 'Flash' in Berry and Kress, but the yellow central band in our form is much broader and more pronounced. Less memorable ( 1 did not use the word "ugly") were plants which looked like a poorly mixed blend of red, green and yellow which came out as a rather unattractive greenish brown and yellowish mud-red. Frankly, only a mother could love this variety -- a condition that saved it from our collection bag. Near the
center of the island, we found the greatest concentration of the yellow-green caribea complex. There were some which were essentially a pale greenish yellow, some were a somewhat darker green and there were a few of the famous c/v 'Chartreuse'. Inter gradation was the rule which raised the question whether these color forms quite possibly represent different stages of inflorescence maturity. Our overall impression of the caribeas of Dominica was that dark red seems to dominate the complex, at least in relative abundance. Regarding the dark reds, we looked for but could not find anything to match the Berry and Kress illustration of $\underline{H}$. caribea c/v 'Black Magic'. Maybe it exists, but it is my personal opinion, or bias, that the $B$ and $K$ photo of 'Black Magic' was taken of a heavily shaded inflorescence and therefore would photograph darker than it really is. Check the illustration and see if you agree.

On Wednesday, Paul and I returned to Puerto Rico. Enroute we had a chance to summarize our observations and other personal experiences and came to a few general conclusions which I will pass on now.

- Heliconia caribea seems to have a rather limited geographic distribution -- from Puerto Rico south to St. Lucia, with questionable outlyers or extensions in Hispanola, and in St. Vincent, immediately south of St. Lucia.
- Color varieties of H. caribea show a trend from predominantly yellow in the North to mainly red in the South with yellow-greens and yellow-reds in between, eg: Dominica.
- Heliconia bihai is more widely distributed than H. caribea, being common in northern parts of South America and extending northward in the Lesser Antilles to Dominica, at least; it shows progressively fewer color varieties and becomes less abundant as you move northward.

All in all, our trip to Grenada and Dominica was a most interesting and rewarding experience. Frankly, I am ready to go back at any time.

Best wishes to you all, Bob Lankford

## HORTICULTURAL NOTES

## Experiments on Rhizome Propagation.

Those of us who purchase heliconia or ginger rhizomes are accustomed to receive wellcleaned, rootless corms with varying lengths of attached pseudostem. Such treatment comes mainly from phytosanitation concerns, particularly when distant shipping is involved. It is also true that such trimming has adverse effects on the living material, resulting in varying amount of lost or reduced vigor. Unfortunately the "scrub and trim" technique has carried over to at-home practice when dividing and replanting clumps. Losses are often encountered. Bryan Brunner began to wonder about alternate techniques which would reduce such losses.

Along with a graduate student at UPR Mayaguez, Bryan conducted a number of experiments to identify the best divide-and-plant technique. Using Heliconia psitticorum, they established three categories of experimental material: A. rhizomes cleaned and trimmed with about 2 inches of pseudostems; B. rhizomes with roots and long pseudostems; C. rhizomes with the entire plant left intact. Material of each category was planted and monitored. Success of propagation was defined by the least mortality, the greatest growth rate, and the largest number of
new leads produced. The results are most instructive:
Category C was the best technique,
Category A was the poorest, and
Category B produced intermediate results.
Bryan says these results can best be explained in terms of biomass and trauma. In simple terms, Category C (the untrimmed and intact plant) maintains the largest biomass and hence food supply to support new growth from meristems, and has suffered the least injury or wounds which invite infection. Category A (the sharply trimmed rhizome with almost no pseudostem) has the least biomass for potential nurishment to new growth and the greatest potential for infection. Category B is between A and C in successful propagation.

## Some Guidelines for Collecting in the Antilles.

The following information and suggestions come from the experiences of Paul Yoshioka and Bob Lankford during recent trips to Grenada and Dominica and previously to St. Lucia and St. Vincent.

- First, you will need a U.S.D.A. Import Permit for Plants and Plant Products to bring living plant material into Puerto Rico and the U. S. Follow the U.S.D.A. requirements.
- Second, it would be helpful to request tourist information, usually in the form of a well prepared magazine, from the Ministry of Tourism.
- Third, when you arrive at your Antillian destination, you should contact local government officials regarding your intentions and their restrictions and requirements.
- Fourth, make sure that all plant material collected is legally obtained, clean and free of soil, pathogens and insects. Obtain a phytosanitation permit, usually at the Ministry of Agriculture, before leaving the country.
- Finally, it most likely would be beneficial to contract a guide/chauffeur for moving around the island. Your hotel or possible the Ministry of Agriculture could help you locate a qualified individual. The follow two persons are recommended by Yoshioka and Lankford.

In Grenada:
Mr. Gordon Pascal
P. O. Box 389

St. Georges, Grenada, WI
Tels: (473) 440-4418, (473) 440-9251 (sister)
In Dominica: $\quad$ Mr. Angus Macintire
Fond Canie, P. O. Box 1810
Commonwealth of Dominica, WI
Tel/Fax (767) 448-6856

- Hotel accommodations range widely in price -- from US $\$ 30.00$ to US $\$ 300.00$ per day. Lankford and Yoshioka found very adequate quarters at a modest price at:

In Grenada: Roydon's Guest House, near Airport in Grand Anse, St. George's. US \$ 35.00 per night, with breakfast. Tel/Fax: (473) 444-4476<br>In Dominica: Roxy's Mountain Lodge, in mountains above Roseau in Laudat. US \$ 35.00 per night, meals extra Tel/Fax: (767) 448-4845

## ANNOUNCEMENTS

## Next meeting of HSPR.

The fourth and last regular meeting of our Society in 1999 will be convened at 10:00 AM, Sunday, 12 December. The meeting will be held at the home and gardens of Paul and Beverly Yoshioka in Rosario near San German. A detailed map is attached for your use.

Following past custom, our December meeting will be more social than technical. The business, including election of officers for the next biennium, will be as short as possible. There will be our usual plant raffle, exchange and sale and the Member's Forum followed by a Puerto Rican style holiday buffet. Afterwards, Paul will show people around his extensive and beautifully landscaped collection of rare and exotic plants -- heliconias, gingers, orchids, whatever. They are all there. Please be punctual and please bring your folding chairs. Let's make this truly a great and memorable meeting -- the last of the year, the last of the century, the last of the millennium.

TPIE-2000.
The Tropical Plant Industry Exhibition (TPIE) has announced the three-day show and activities for the year 2000. The dates are: Thursday, January 20 through Saturday, January 22. As in the past, TPIE 2000 will be held at the Broward County Convention Center in Fort Lauderdale, Florida. This undoubtedly is the largest and most important exhibition devoted to the tropical plant industry in the world today. Hundreds of exhibitors will be present showing a wide spectrum of tropical plants, propagation equipment, supplies and materials of all sorts. There are also scheduled conferences, training courses, seminars and lectures. To participate in TPIE, you must be registered.

For further information on TPIE - 2000, write the sponsoring organization:
Florida Nurserymen and Growers Association
1533 Park Center Drive
Orlando, FL 32835-5705
Or contact by:
Telephone: 1-800-375-3642
Fax: $\quad 1$-407-295-1619
E mail: info@fnga.org
Website: http://www.fnga.org

## New Heliconia Book.

"Heliconias: Llamaradas de la Selva Colombiana", by W. John Kress, Julio Betancur and Beatriz Echeverry, has just been published (1999) in Spanish by Cristina Uribe Editores Bogota. This well bound hard cover publication is basically a field guide to the 91 species of Heliconia in Colombia. There are, however, informative chapters on morphology, habitat and distribution and a classification scheme of subgenera and sections for the Colombian species. A single page is given to each species with a large clear color photo, a short description, and the species distribution in Colombia with habitat notes and an inset map.

In regard to availability, HSPR has learned that Endre Guttmann has copies for sale; contact Endre by phone: Off: 767-6607, Home: 727-0961; or by Fax: 767-4427

## HSPR Logo.

This is the last call for entries in the HSPR Logo contest which was announced in the March 99 Newsletter. The deadline for submissions is at the "call to order" of our December meeting (see above). Judging will be by the entire membership during this meeting. Response so far has been small. Please, we need your entries.

