

BREADFRUIT INSTITUTE



PROGRESS REPORT - Summer 2007

First International Breadfruit Symposium

This momentous meeting took place in Fiji, 16-19 April 2007. Close to 50 participants came from Africa (Benin, Ghana, Nigeria, Tanzania), the Caribbean (Trinidad and Jamaica), Sri Lanka, the Seychelles, the Pacific (Federated States of Micronesia, Fiji, Hawaii, Kiribati, New Caledonia, Papua New Guinea, Samoa, Tonga, Tuvalu, and Vanuatu), Australia, Italy, and the Netherlands. Participants included researchers from national, regional, and international organizations, universities, government ministries, NGOs, and the private sector.

The Symposium was organized by the Breadfruit Institute and the Secretariat of the Pacific Community (SPC) Land Resources Division, in collaboration with international partners: the Technical Centre for Agriculture and Rural Cooperation (CTA), German Technical Cooperation (GTZ), International Centre for Underutilised Crops, Global Facilitation Unit for Under-Utilized species, and the Global Crop Diversity Trust.

The keynote address was given by Dr. Diane Ragone, Director of the Breadfruit Institute, and more than 35 papers were presented. The proceedings for this Symposium will be published by the International Society for Horticultural Science in the journal *Acta Horticulturae*.

Participants considered key issues related to breadfruit conservation, research, and development, and made recommendations concerning projects and future priorities. The meeting was structured around five major themes: 1) Breadfruit in Society, 2) Diversity and Conservation, 3) Germplasm Exchange and Crop Improvement, 4) Production and Production Constraints, and 5) Product Development and Marketing. The Symposium provided a venue for sharing experiences and information related to breadfruit and looking at ways in which the future of breadfruit, both as a food security crop and as a marketable commodity, could be strengthened. It was interesting to see that although breadfruit is considered an under-utilized crop, it is widely grown. A significant amount of work has been carried out with a great deal of information available.

An extensive Symposium Report was distributed to all participants and will be available on the Symposium and the Breadfruit Institute websites for wider availability.

SHI - Honduras Project Update

In March 2007, Dr. Ragone enjoyed visiting Sustainable Harvest International's (SHI) program in Honduras (FUCHOSO) to meet with Yovany Munguia, National Director, Greg Bowles, SHI Program Director, and extension staff, to consult on this collaborative project. In November 2006, 200 plantlets were shipped to Honduras with a follow-up delivery of 1,500 plantlets in February 2007. Both shipments readily cleared customs and were transplanted into a field nursery at the Florence Reed Center (see photo). The group discussed how to best tend to the tiny plantlets, which surprisingly, were showing some signs of cold stress due to chilling during their journey from Canada and unseasonably cool nights after arrival in Honduras.



Photo Courtesy: SHI

Transplanting breadfruit plantlets into the field nursery.

The itinerary also included visits to two communities to meet with farmers who participate in SHI projects to implement more sustainable farming practices. The work the villagers are doing to transform barren hillsides into healthy agroforests of native trees, coffee, cacao, fruit trees and more, was inspiring. When asked why they wanted to grow breadfruit, farmers replied that they know it is nutritious and good to eat, but because their villages are so remote, it is difficult for them to get plants. They were very excited about receiving breadfruit plants and many farmers participated in transplanting at the nursery.

More than 450 plants survived the trial acclimatization period and will be distributed to farmers this summer. A shipment of 2,000 plantlets was shipped in June 2007 and should be in farmers' hands by the end of the year.

**From lab to farm:
breadfruit plant ready
for its new home**



Photo Courtesy: SHI

EARTH University - Costa Rica

This impressive facility was established in 1992. With a student body of 400 undergraduates, EARTH is training a new generation of bright and motivated students from Latin America and elsewhere for careers in agriculture and natural resources. Their food technology program is one of the campus highlights. The focus is on sustainability, from growing food for the cafeteria and developing new products for markets to recycling all paper and waste from farm operations into lovely 'banana' paper. Dr. Ragone's seminar on breadfruit was attended by more than 40 students, faculty and staff, many of whom were excited to learn about this crop and are interested in partnerships with the NTBG.

Tissue Culture Workshop

Research partners from the University of British Columbia, the Regional Germplasm Centre (Fiji), and NTBG convened at the Breadfruit Institute Field Station for a stimulating five-day tissue culture workshop in early May 2007. This was the first time the team has worked together, sharing experiences, techniques, ideas, and observations on this challenging project. The breadfruit collection and Field Station are ideal complements, allowing plant material to be collected and processed immediately before shipping to off-site research facilities for in-depth work. A major outcome of the workshop was a detailed three-year collaborative strategy for *in vitro* research activities.