Research with Araceae Living Collections

Presented November 2004
Forest canopy on Barro Colorado
Climbing trees with climbing spikes enables one to go nearly anywhere to get to epiphytes.
Climbing trees gives an opportunity to take photos of epiphytes in natural conditions.
Method of Field work

Use of boats to get into remote areas without roads
Collecting with pack animals
Use of helicopters to reach inaccessible areas.
Helicopter over a clearing at gold mine
Landing in clearing in forest
Use of light aircraft
Travel with small river craft
Sleeping in hammocks
Larger river craft on Amazon
Smaller boats on smaller streams
Collecting with landing craft
Use of all-terrain vehicles
Use of propane dryer
Modern field vehicle
Cooking facilities
Constructing special camper
Automated fire extinguisher
Plant dryer
Clipper pole storage
100 pound propane tank
Deeply rutted roads
Camping can be anywhere
Camper fully set up with awnings
Processing film in camper
Some roads are very bad
Camping by stream
Collecting with climbing irons
Collecting in plastic bags
Collecting with rental vehicle
Plant pressing operation
Washing plants for shipment
Stem cuttings ready for shipment
Greenhouse at MBG
Aroid House before opening
Air moving system
Air moving system with view of fan
Shade cloth
Shade cloth on ceiling and walls
Heating system – hot water with fins
Sphagnum wall
Catwalk shelf for seedlings
Central wall for epiphytes
Tiered fiberglass shelving
Mist lines provide humidity
Cool cells allow water to pass through
Laboratory and office
Center or Operations- computerized record keeping system
Potting area for repotting and planting
Oak bark
General soil mix
General soil mix
Sphagnum moss
Newly potted plants
Holding area for problem plants
Rooted plants in sphagnum moss
Plants potted directly in sphagnum moss
Plants in trays of sphagnum
Cuttings beginning to leaf out
Cuttings with bottom heat
Anthurium sect. Cardiolonchium
Anthurium rupicola
Vine in hanging basket
Dieffenbachia collections
Plants ready to be filed
Anchomanes collection
Amorphophallus collection
Pots labeled with stainless steel tags
Aquatic collection
Aquatic collection
Philodendron giganteum
Dieffenbachia collection
Anthurium sect. Pachyneurium
Anthurium sect. Pachyneurium
Anthurium sect. Porphyrochitonium
Anthurium lazorii
Misc. genera
Philodendron fendleri
Anthurium sect. Calomystrium
South end of center wall
East catwalk shelves with hanging baskets
Catwalk along west side of wall
View from beneath catwalk
Temperate room
Anthurium warocqueanum
Arisaema heterophyllum
Research in Office
Preparing descriptions of live plants
Use of color chart
Apical meristem culture

Aroid seedlings in culture bottles
Apical meristem culture

Aroids in culture
Apical meristem culture
Revisionary work for the past 10 years has been in South America.

Most work has been in Ecuador producing florulas:

- Flora of Lita-San Lorenzo (Esmeraldas)
- Flora of Shell-Mera (Pastaza)
- Flora of Cordillera del Condor
Other aroid projects in South America

Flora of Paraguay
Flora of the Guianas
Checklists for Colombia, Ecuador, Peru and Bolivia
Review of Araceae of Venezuela
Florulas are efficient means of learning a flora

Colombia-  Flora of Bajo Calima (Valle Department)
           Flora of La Planada (Nariño Department)
Ecuador-   Flora of Lita-San Lorenzo (Esmeraldas) 
           Flora of Shell-Mera (Pastaza Province)
           Flora of Cordillera del Condor (Zamora-Chinchipe)