

A close-up photograph of a large, vibrant green leaf with prominent, light-colored veins. The leaf is covered in small water droplets, giving it a fresh and glistening appearance. The background is a soft, out-of-focus green, suggesting a lush environment.

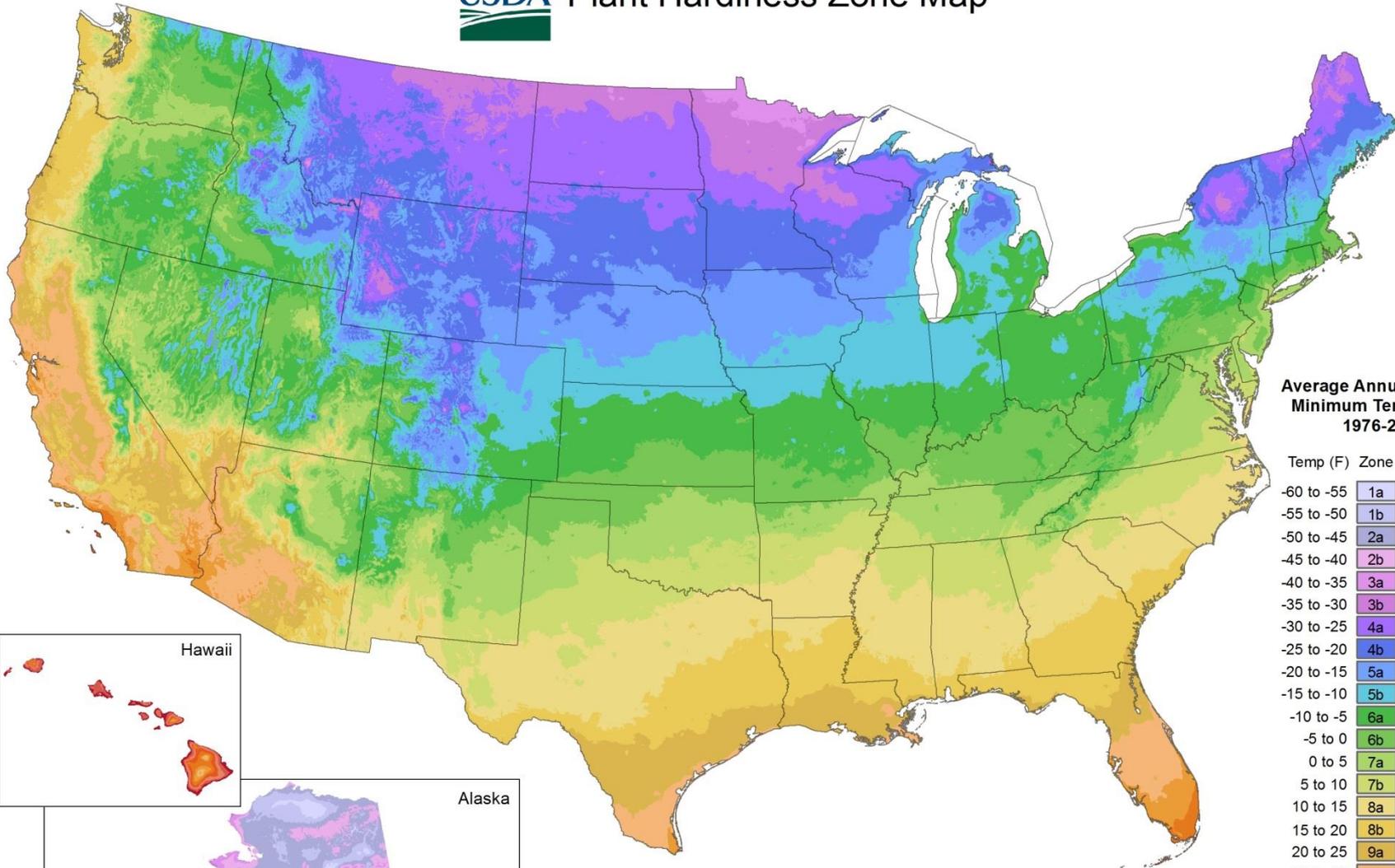
Unusual, Beautiful and Weird Aroids to Grow in South Florida

**Thomas Croat
P. A. Schulze Curator
Missouri Botanical Garden**

USDA Temperature Zone map

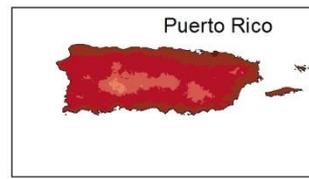
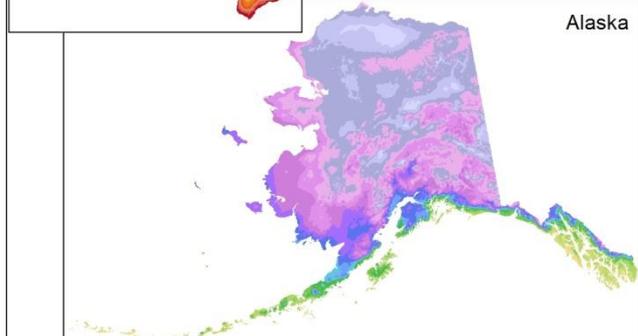
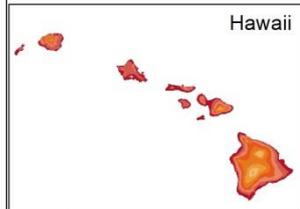
- Miami is the only part of conterminous USA with a truly tropical zone
- Miami weather is usually sufficiently humid
- Frost is rare or non existent

USDA Plant Hardiness Zone Map

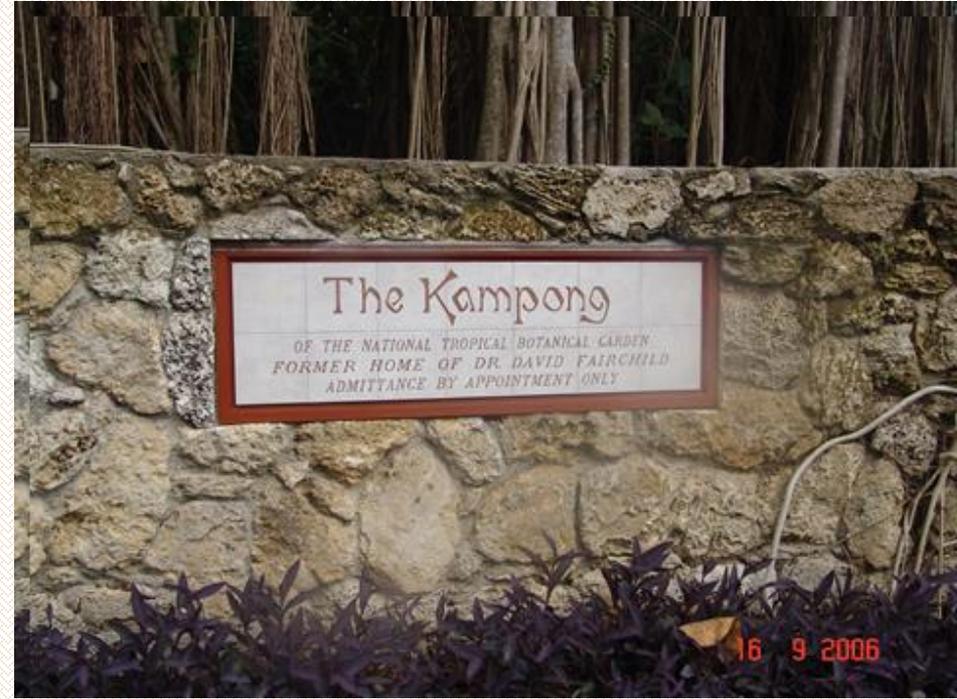


Average Annual Extreme Minimum Temperature 1976-2005

Temp (F)	Zone	Temp (C)
-60 to -55	1a	-51.1 to -48.3
-55 to -50	1b	-48.3 to -45.6
-50 to -45	2a	-45.6 to -42.8
-45 to -40	2b	-42.8 to -40
-40 to -35	3a	-40 to -37.2
-35 to -30	3b	-37.2 to -34.4
-30 to -25	4a	-34.4 to -31.7
-25 to -20	4b	-31.7 to -28.9
-20 to -15	5a	-28.9 to -26.1
-15 to -10	5b	-26.1 to -23.3
-10 to -5	6a	-23.3 to -20.6
-5 to 0	6b	-20.6 to -17.8
0 to 5	7a	-17.8 to -15
5 to 10	7b	-15 to -12.2
10 to 15	8a	-12.2 to -9.4
15 to 20	8b	-9.4 to -6.7
20 to 25	9a	-6.7 to -3.9
25 to 30	9b	-3.9 to -1.1
30 to 35	10a	-1.1 to 1.7
35 to 40	10b	1.7 to 4.4
40 to 45	11a	4.4 to 7.2
45 to 50	11b	7.2 to 10
50 to 55	12a	10 to 12.8
55 to 60	12b	12.8 to 15.6
60 to 65	13a	15.6 to 18.3
65 to 70	13b	18.3 to 21.1



The Kampong and Fairchild Tropical Garden serve as testing grounds for new introductions





Other Aroid Resources in Miami

- USDA Plant Introduction Station
- Commercial growers, especially Silverkrome Nurseries specialize in many aroid introductions
- International Aroid Society has many Florida members

Aroid Growers in Miami Area

- Steve & Marie Nock
- Redland Nursery
- Silverkrome Nursery
- Fantastic Gardens
- Original Orchid Jungle, Tom Fennell
- Agristarts in Apopka
- Tropiflora in Sarasota
- International Aroid Society Sale and website

Considerations for what grows best in Miami Area

- Aroids come from many areas of the world but there are many differences in regions
- Neotropics have largest concentrations of species
- Neotropics are diverse in habit and life zone
- South America richest and most diverse
- TOM WHAT REGION IS MOST SIMILAR TO SOUTH FLORIDA?

Phytogeography

SOUTH AMERICA

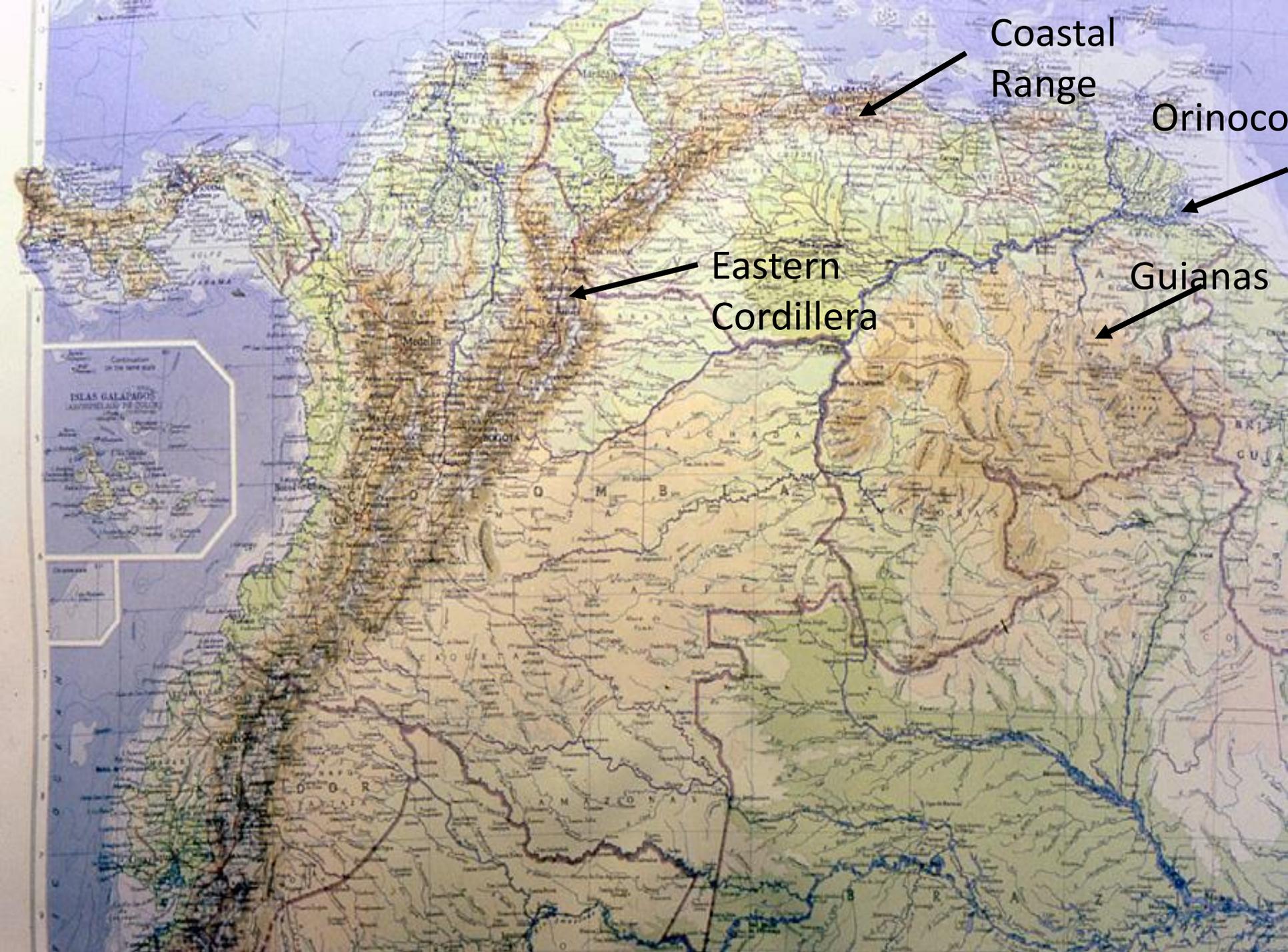


Guiana Highlands

Pluvial Forest

Coastal Desert

Mata Atlântica



Coastal Range

Orinoco

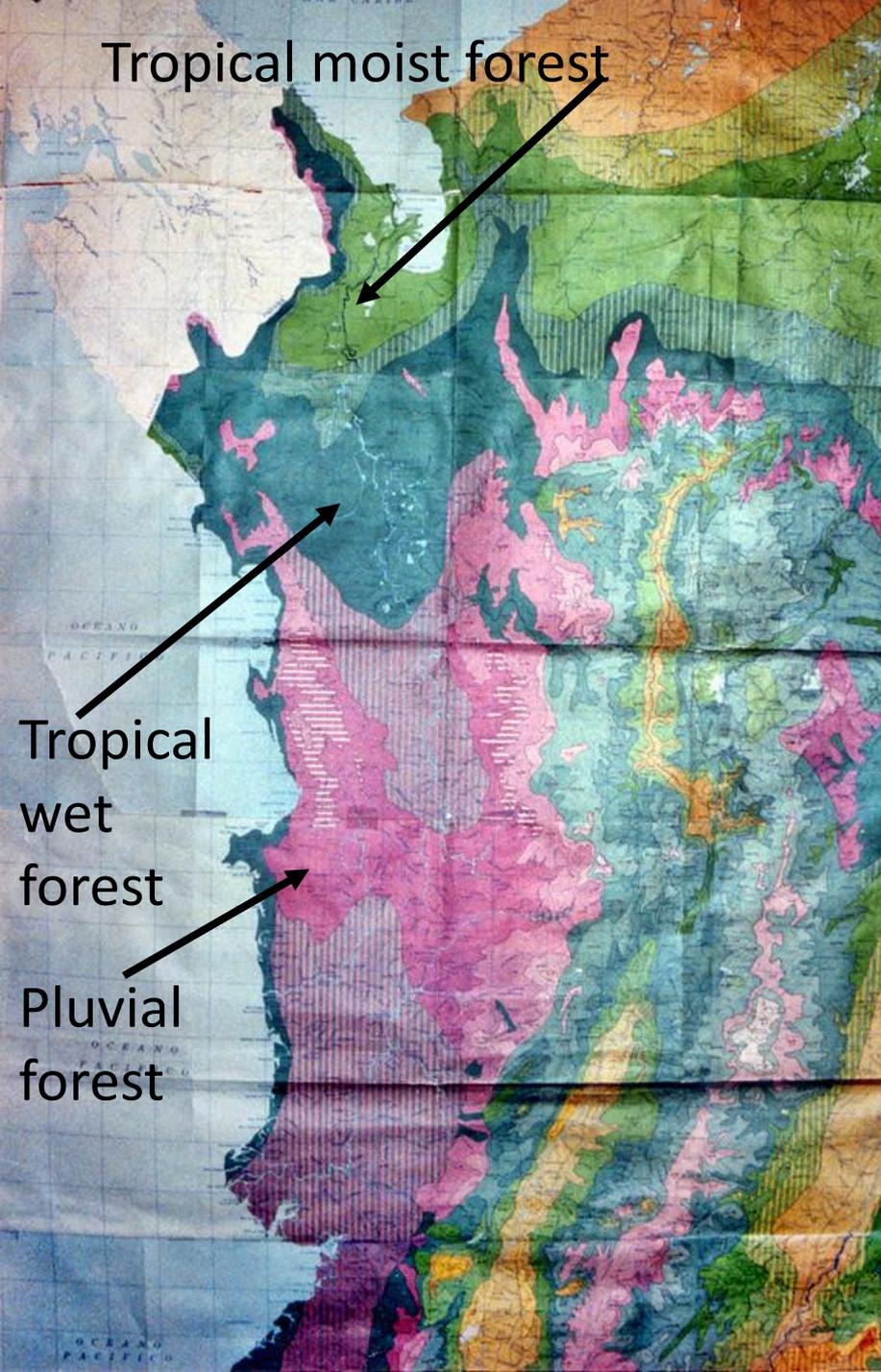
Eastern Cordillera

Guianas

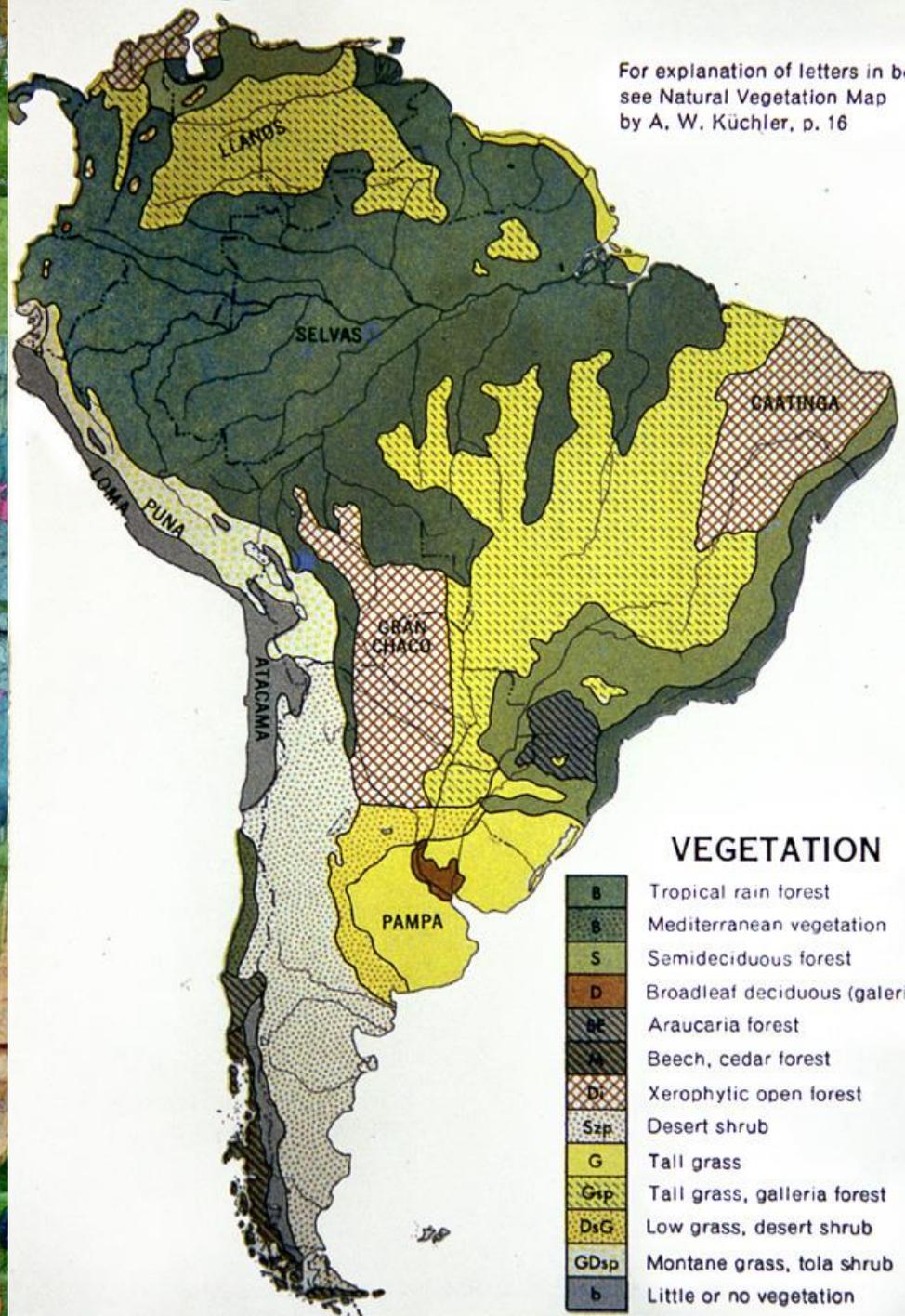
Tropical moist forest

Tropical wet forest

Pluvial forest



For explanation of letters in boxes see Natural Vegetation Map by A. W. Küchler, p. 16



Chocoan forest near Tutunendo, 465 m.



Desert coast of northern Peru





Upper Río Magdalena in Huila
Department, Colombia



Corillera de Merida between La
Chorrera to Merida



Cordillera de la Costa, N. of Altos de
Choroní, Pittier Park, Venezuela

Cordillera de la Costa between Victoria
and Parque Nacional Henri Pittier, Venezuela





Northern Trinidad

Eastern South America Guiana Highlands

- Oldest part of South America
- Anthurium section *Urospadix*
- *Philodendron* subgen *Meconostigma*



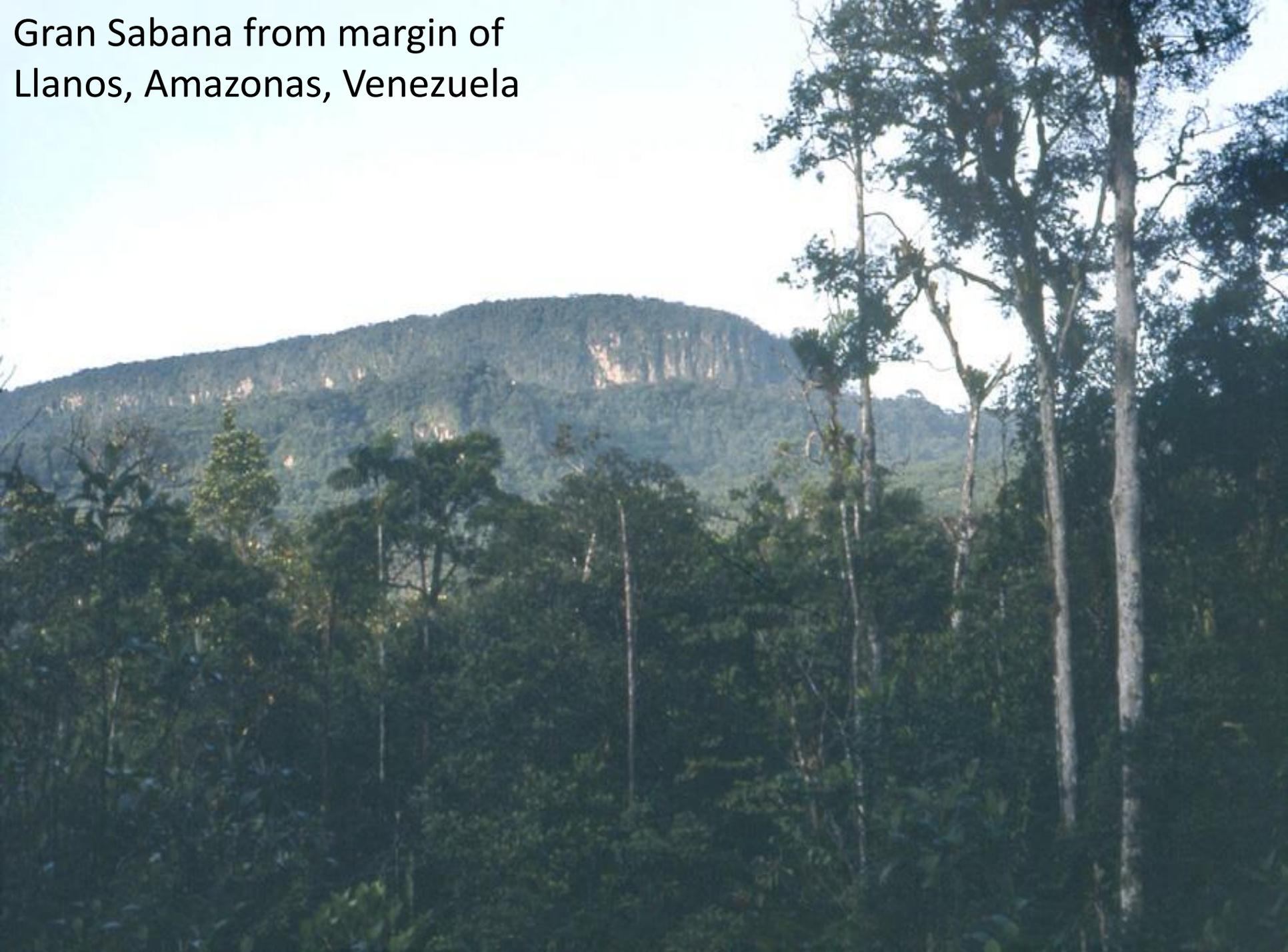
Brownsberg Park, Suriname



Philodendron werkhoveniae Croat



Gran Sabana from margin of
Llanos, Amazonas, Venezuela



Gran Sabana, Bolivar State, Venezuela



Gran Sabana between El Dorado and Santa Elena





Jasarum steyermarkii Bunting

Anthurium englerianum Bunting



Forest on margin of Gran Sabana,
Bolivar State, Venezuela





Philodendron callosum

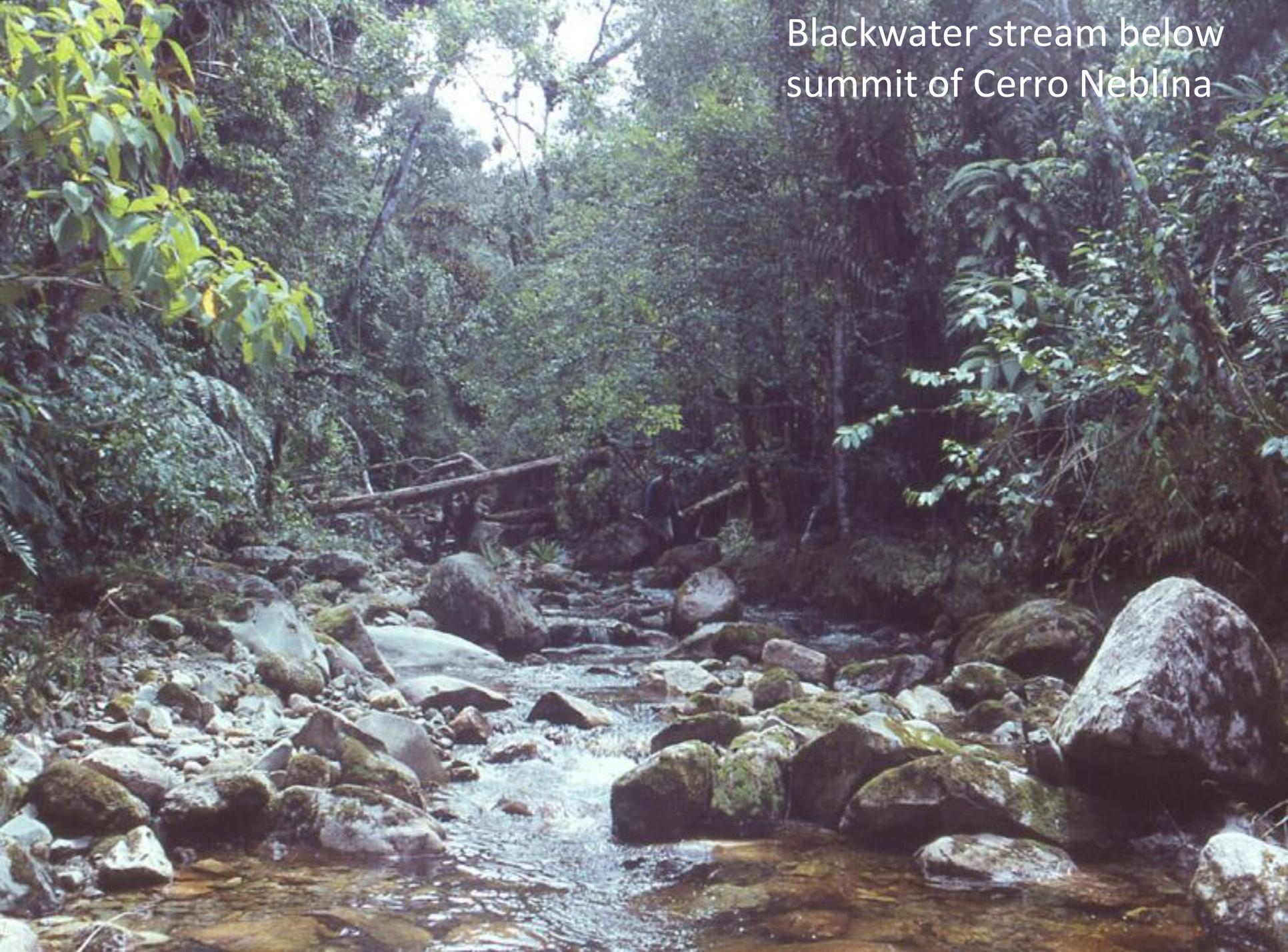
Tepui, Venezuela



Valle de Titiraco, Cerro Neblina,
Amazonas, Venezuela



Blackwater stream below
summit of Cerro Neblina



Rio Mawarinuma, below Cerro
Neblina, Amazonas, Venezuela

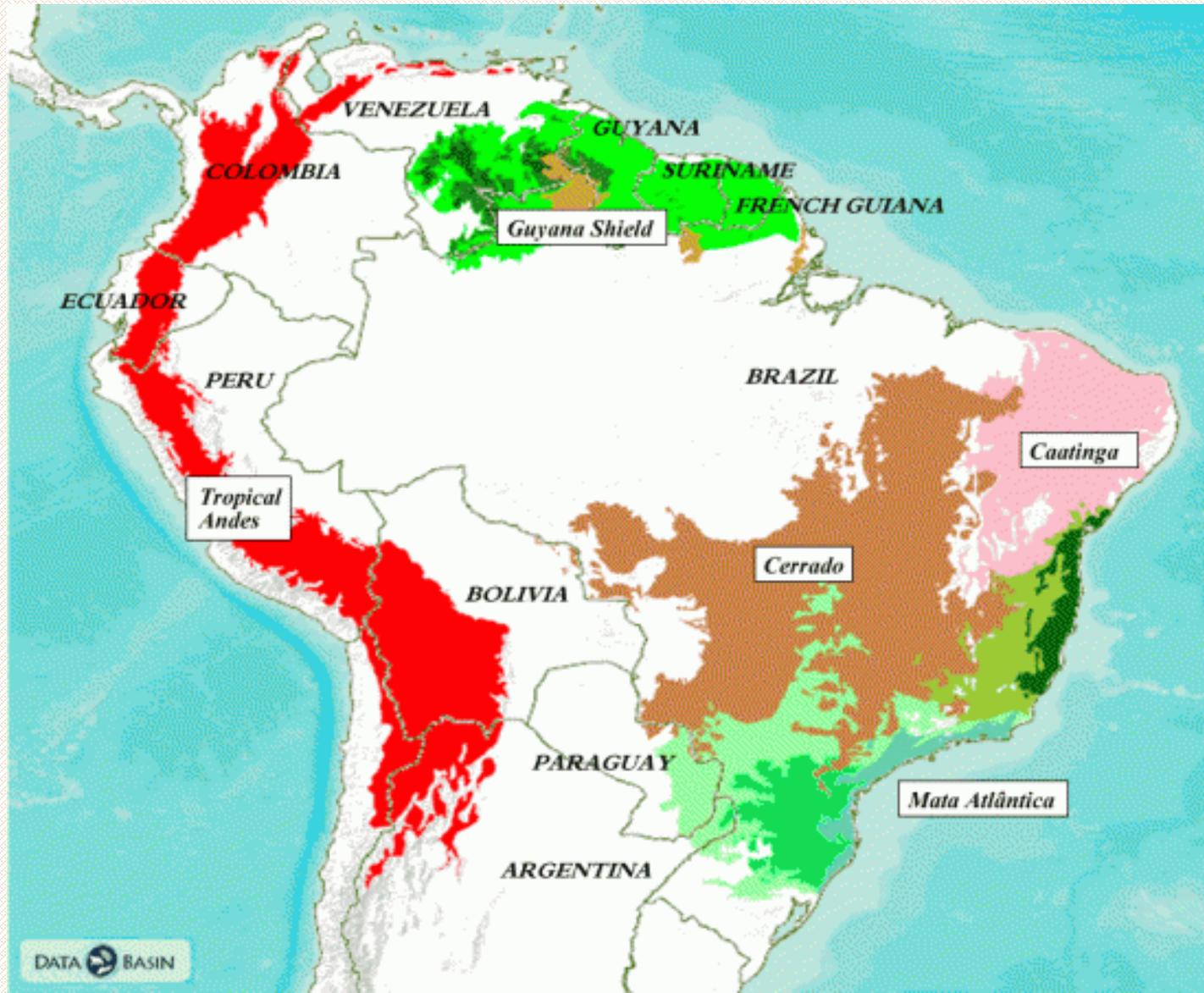


Anthurium moonenii Croat & Gonçalves



Eastern South America

Mata Atlantica of Brazil



Forest above Rio de Janeiro, Brazil



Forest above Rio de Janeiro, Brazil





Philodendron admantinum Mart.
ex Schott



Alta Moira, near Rio de Janeiro

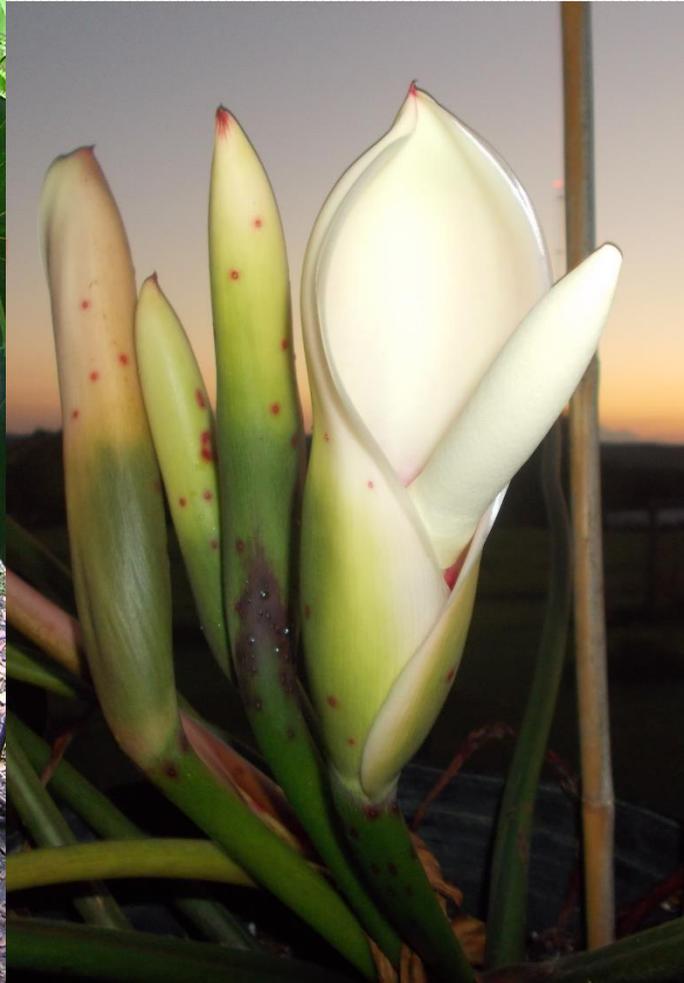


Anthurium acaule Schott

Anthurium coriaceum G. Don



Philodendron spiritus-sanctae Bunting



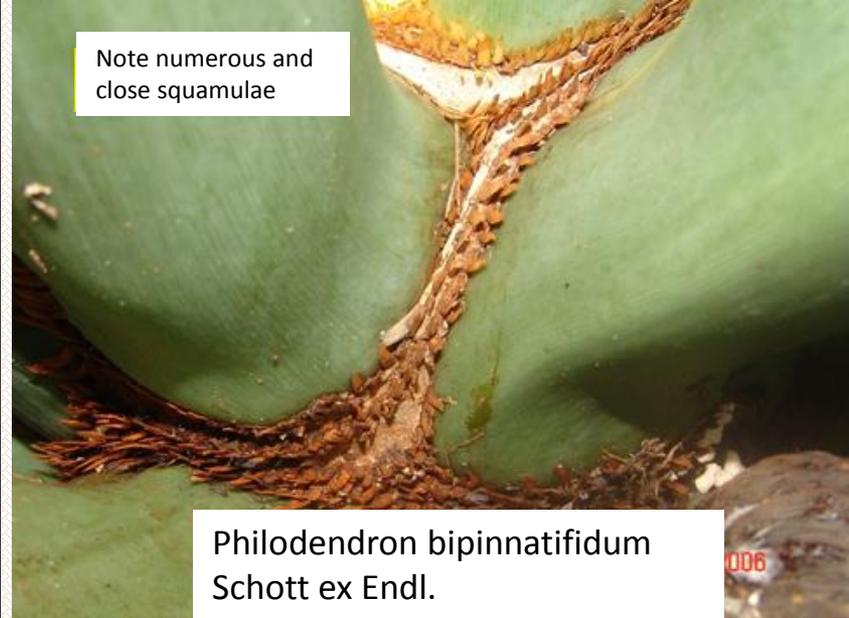
Philodendron subgen. Meconostigma
Mostly restricted to E. South America



Philodendron mello-barretoanum
Burle-Marx & G.M. Barroso



Philodendron undulatum Engl.



Amazon Lowlands

- Ranging from lowland Guianas to Bolivia
- Relatively depauperate in species
- Low rate of endemism



Amazon basin near Iquitos, Peru, 150 m



Varzea forest along Río Jurua, Acre State, Brazil



Anthurium scandens (Aubl.) Engl.



Anthurium sect. Pachyneurium



Anthurium plowmanii



Anthurium clavigerum Poepp.



Anthurium eminens Schott

Anthurium polyschistum Schultes



Anthurium nigrolaminum Croat





Dieffenbachia sp. nov.



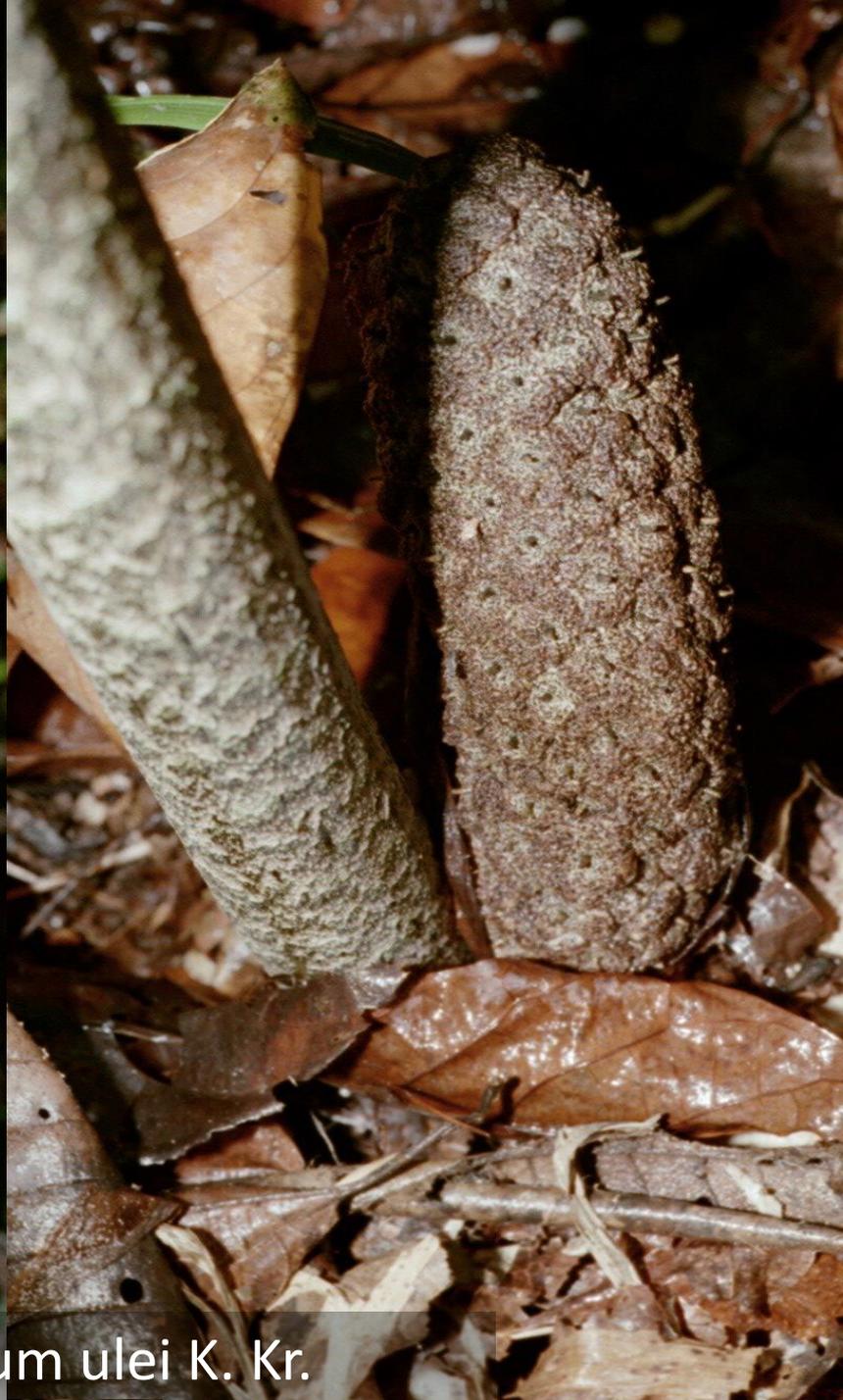
Dieffenbachia parlatorei



5-947



Dracontium ulei K . Kr.



Dracontium ulei K. Kr.

Dracontium pittieri



Philodendron ernestii Engl.





Philodendron ernestii Engl.

Philodendron brandtianum Engl.



Philodendron brandtianum





Philodendron camposportoanum Barroso



Philodendron tortum Mayo & M.L. Soares



Philodendron distantilobum K. Kr.

Philodendron distantilobum K. Kr.



Philodendron pedatum (Hook.) Kunth



Philodendron goeldii Barroso





Philodendron goeldii Barroso



Philodendron heleniae Croat,
ssp. amazonense Croat

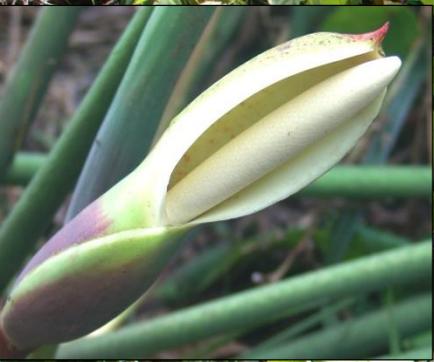
Philodendron
heterophyllum Poeppig





Philodendron maximum K. Kr.

Philodendron deflexum Poeppig



Philodendron deflexum Poeppig



Philodendron wurdackii G. S. Bunting





Syngonium yurimaguense Engl.

Xanthosoma helleborifolium (Jacq.) Schott



Xanthosoma viviparum Madison

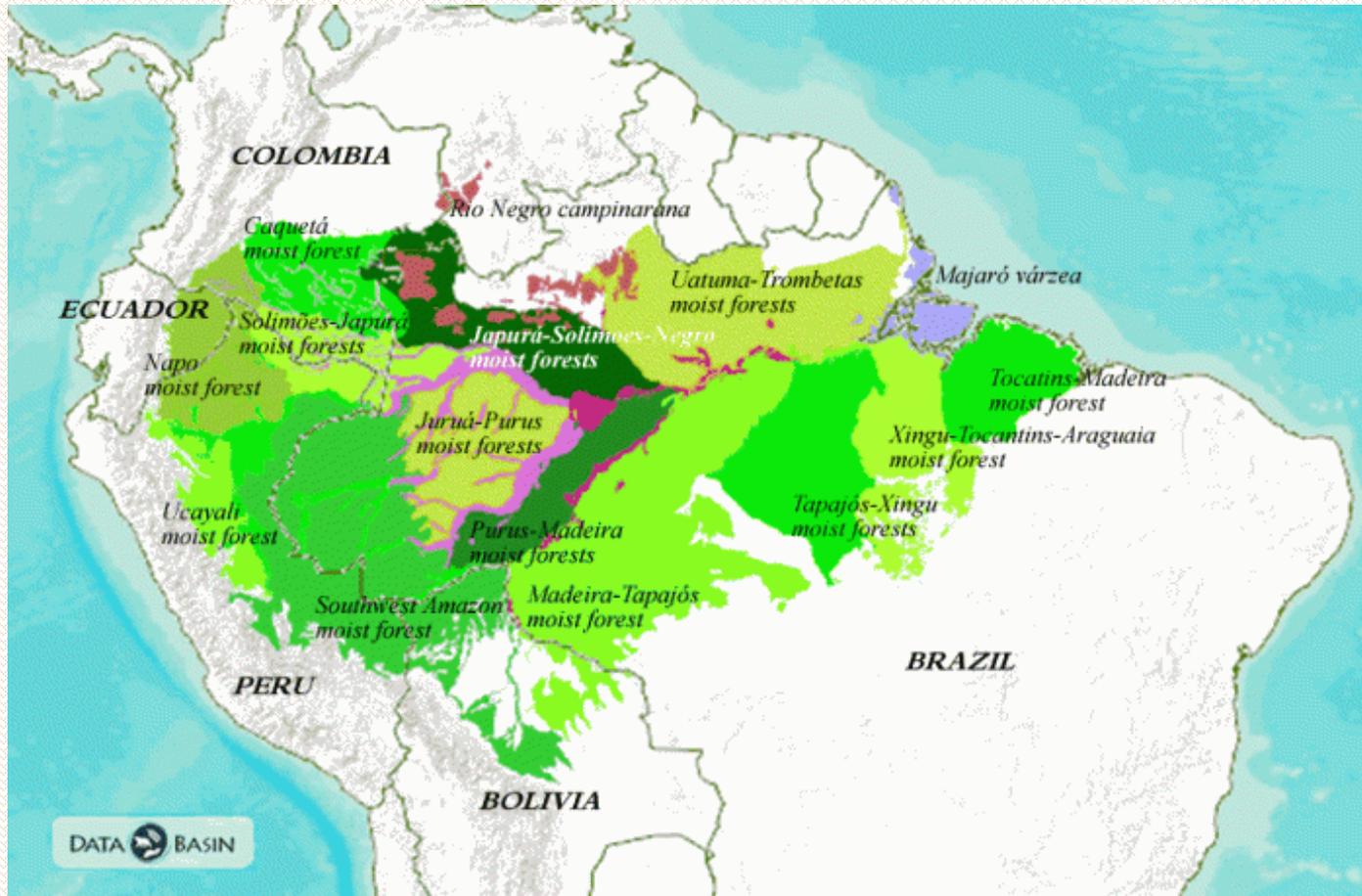


Xanthosoma viviparum Madison



Western Amazon Basin

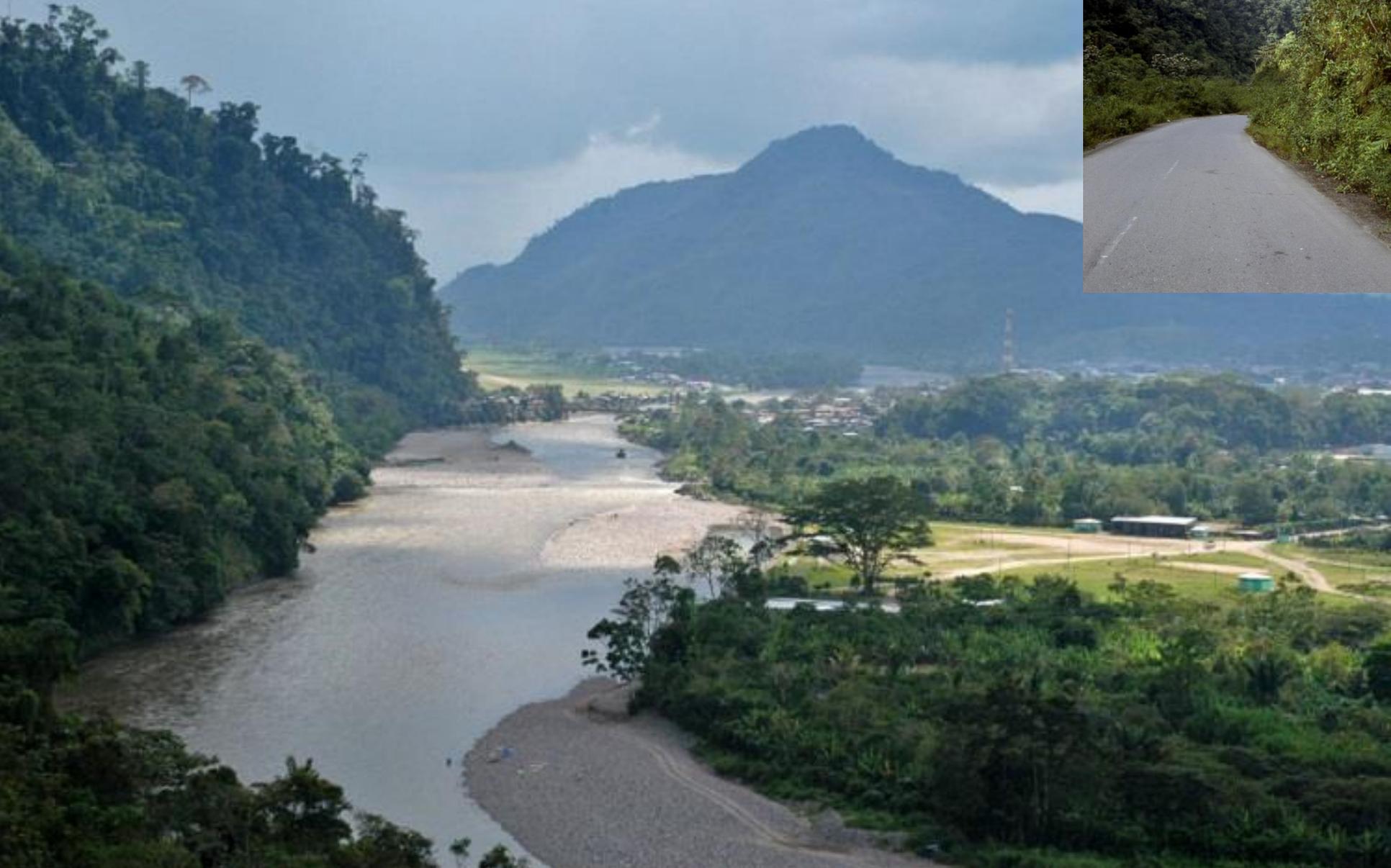
Species diversity increases near foothills of Andes



Río Napo near Tena, Pastaza
Province, Ecuador



Valley of Río Huallaga south of
Tingo María, Huanuco, Peru



Vicinity of Tingo María,
Huanuco, Peru, 900 m.



Anthurium amoenum Kunth





Anthurium breviscapum Kunth



Anthurium rugulosum Sodiro

Anthurium effusilobum Croat





Anthurium effusispathum Croat



Anthurium fornicifolium Croat

Anthurium ovatifolium Engl.





Anthurium versicolor Sodiro



Philodendron aureomarginatum Croat



Philodendron gloriosum André



Philodendron pastazanum K. Kr.



Anthurium regale Linden





Philodendron ruizii Schott



Philodendron wurdackii Bunting



Philodendron acutifolium K. Krause



Philodendron peduncumum Croat

Xanthosoma ceronii Croat



Xanthosoma purpureomaculata Croat



Old World Aroids Suitable to the Miami Area

Amorphophallus with its tendency to dormancy are suitable to the Miami Area

Amorphophallus
atroviridis is successful
in Florida





Amorhophallus albus



A. amygdaloides



A. albus



A. bangkokensis



A. barthlottii



A. bolikhmzayensis



A. cirrifer



A. coetaneus x *A. ochroleucus*



A. coudercii

Photo credits mostly Alan Galoway



crispifolius



dactylifer



decus-silvae



elatius



galbra



A. henryi



A. hottae



josefbogneri



kusianus



krausei



A. lewallei



longituberosus



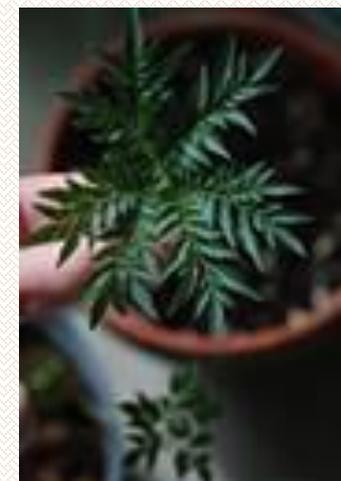
macrorhizus

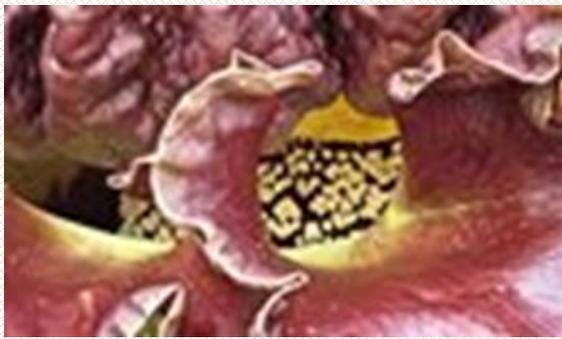


maxwellii

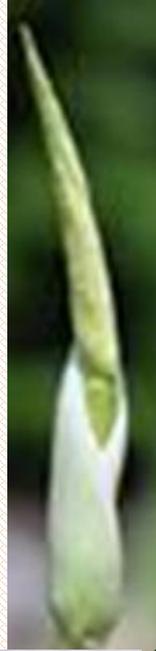


onsakulii





sinuatus

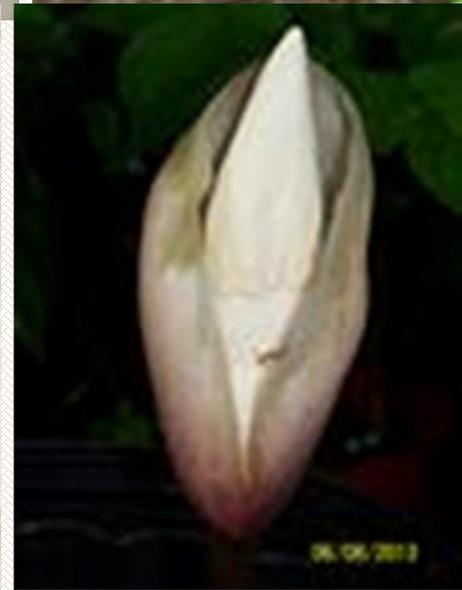


paeoniifolius

reflexum

sizemoreae

maxwellii



eburneus

titanum

urceiolatus

yuloensis



Raphidophora pinnatum
Arizona Biosphere Project



Rhaphidophora cryptantha



Rhaphidophora decursiva

Alocasia micholitziana



Alocasia fornicata



Alocasia



Alocasia clypeolata

Colocasia



Colocasia gigantea



Colocasia esculenta



Aglaonema marantifolium Blume



Raphidophora korthalsii Schott