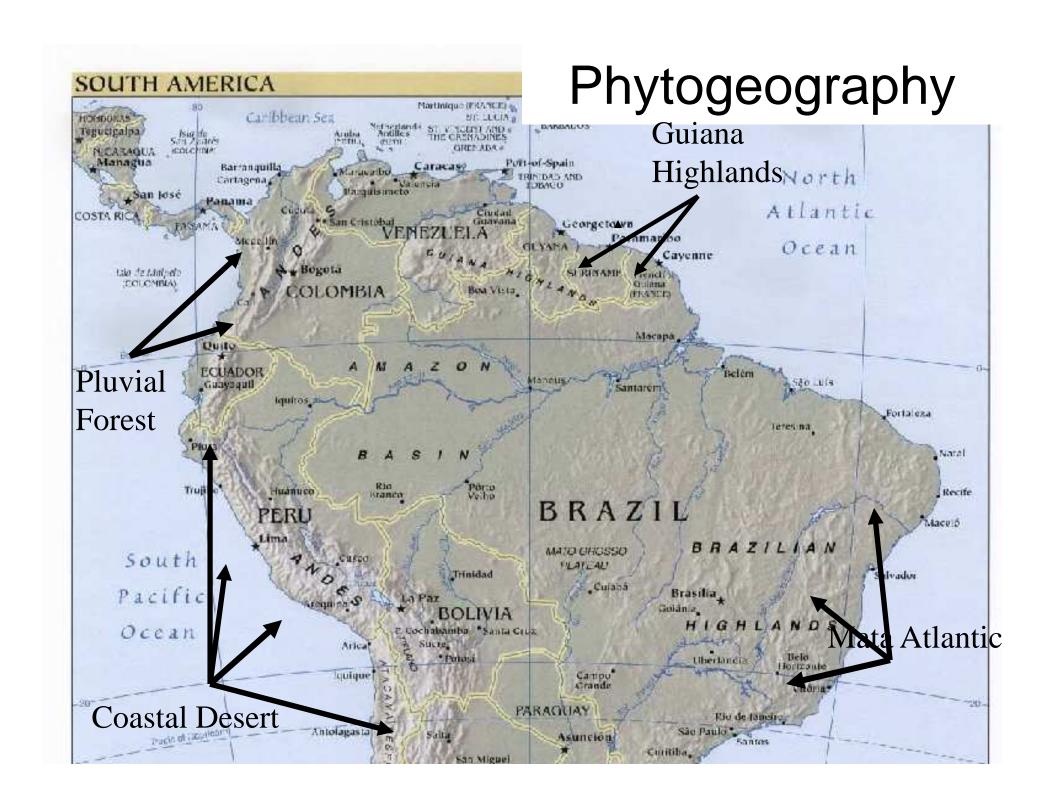
# Overview of Research with Neotropical Araceae Thomas B. Croat

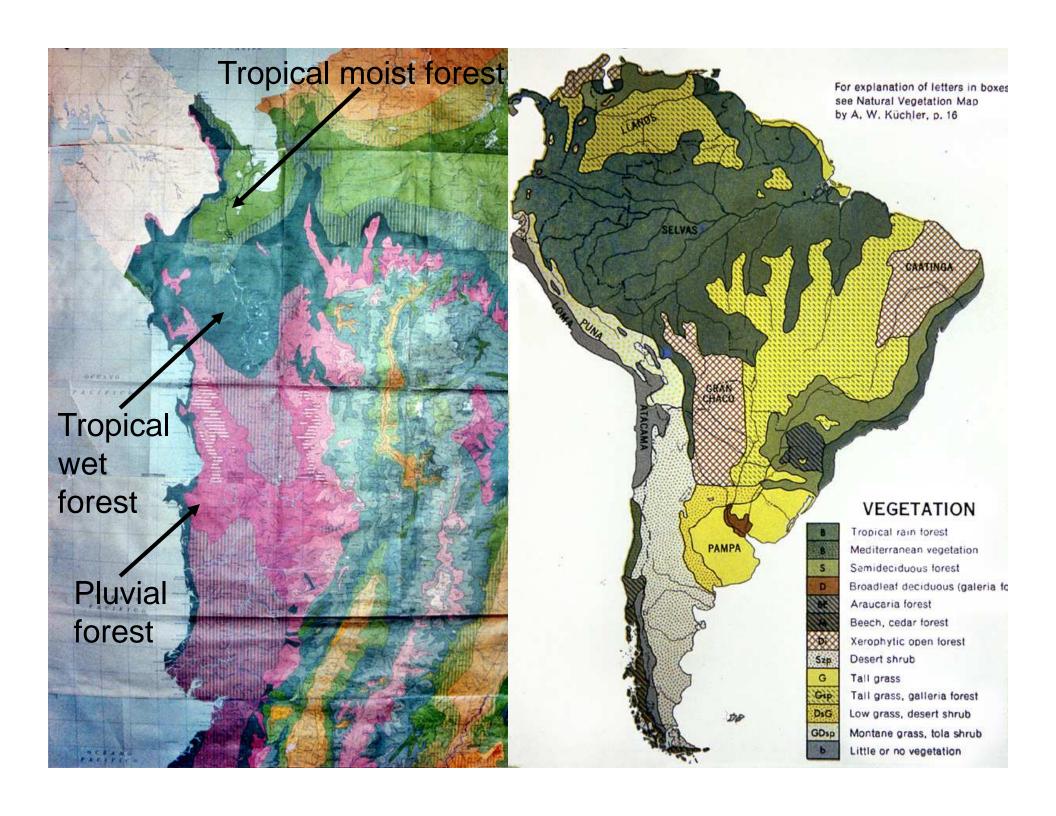
### Map of Western Hemisphere

- Mexico has high endemism and two unique sections of Anthurium
- Middle America is low in endemism and species diversity
- Costa Rica and Panama richest in species diversity with high endemism
- Richest areas of species diversity is in Andes, especially NW South America



Neotropics are home to 44 genera and nearly 4000 species.

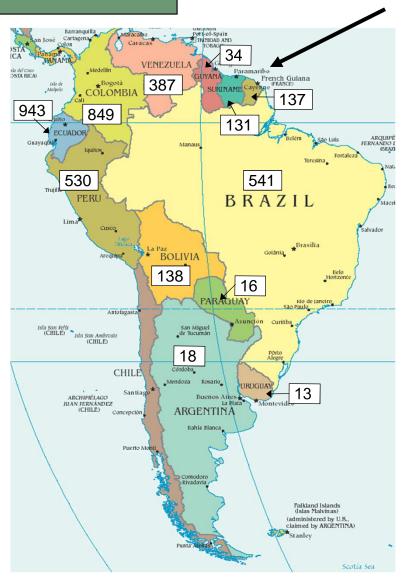




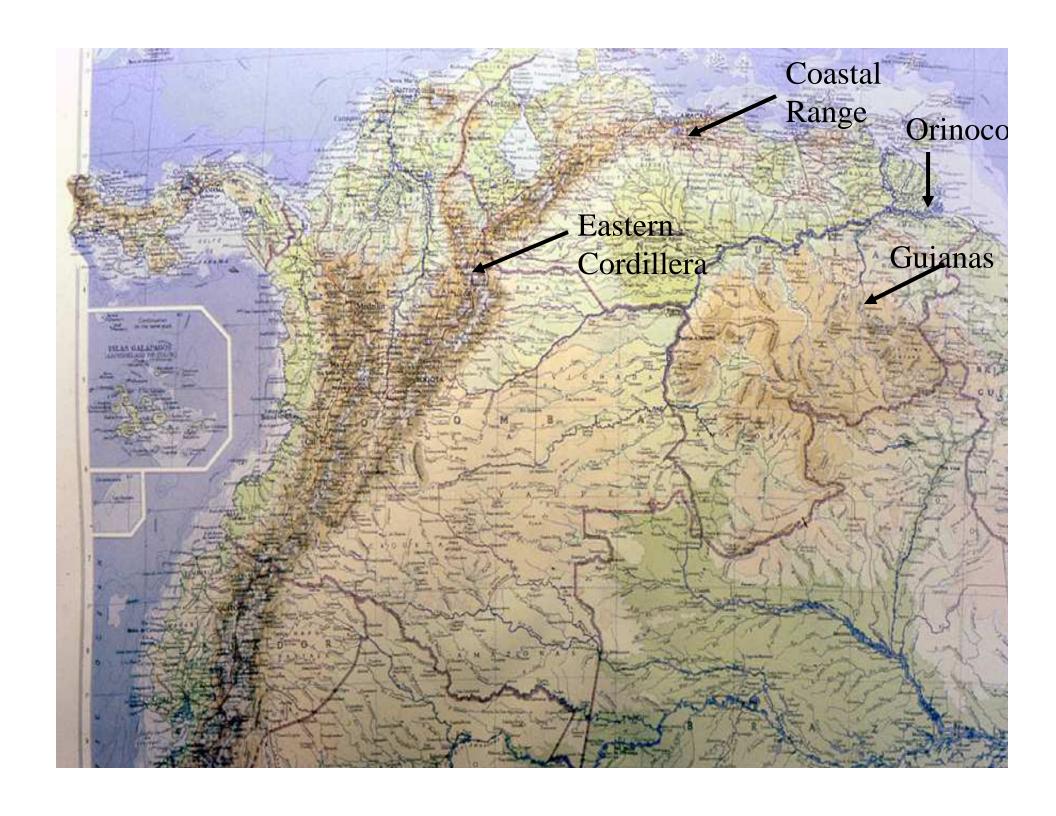
#### South America

165 taxa for all the Guianas

South America has 44 genera and 1433 published species



Species of Araceae by Country



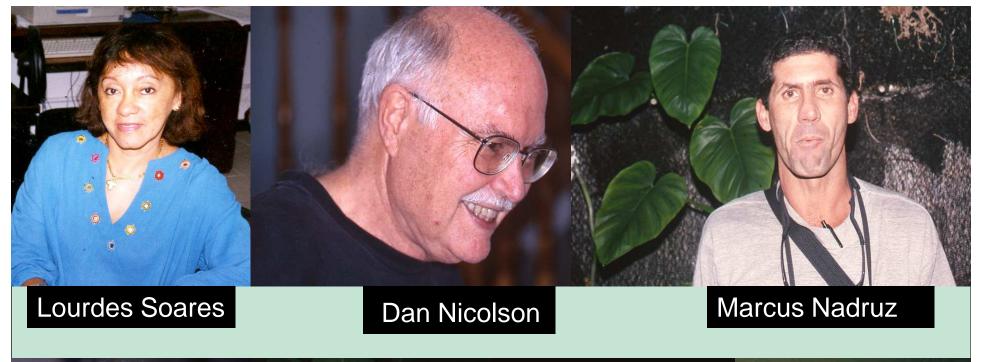




# Current Researchers with Araceae in Neotropics

 Principal Researchers still active in research with Neotropical Araceae

<ul><li>Andrade</li></ul>	<ul><li>Gonçalves</li></ul>	<ul><li>Mora</li></ul>
<ul><li>Bogner</li></ul>	<ul><li>Grayum</li></ul>	<ul> <li>Nadruz</li> </ul>
<ul><li>Croat</li></ul>	<ul> <li>Hetterscheid</li> </ul>	<ul> <li>Sakuragui</li> </ul>
<ul><li>Cardona</li></ul>	<ul><li>Mayo</li></ul>	<ul><li>Soares</li></ul>
		<ul> <li>Zuluaga</li> </ul>







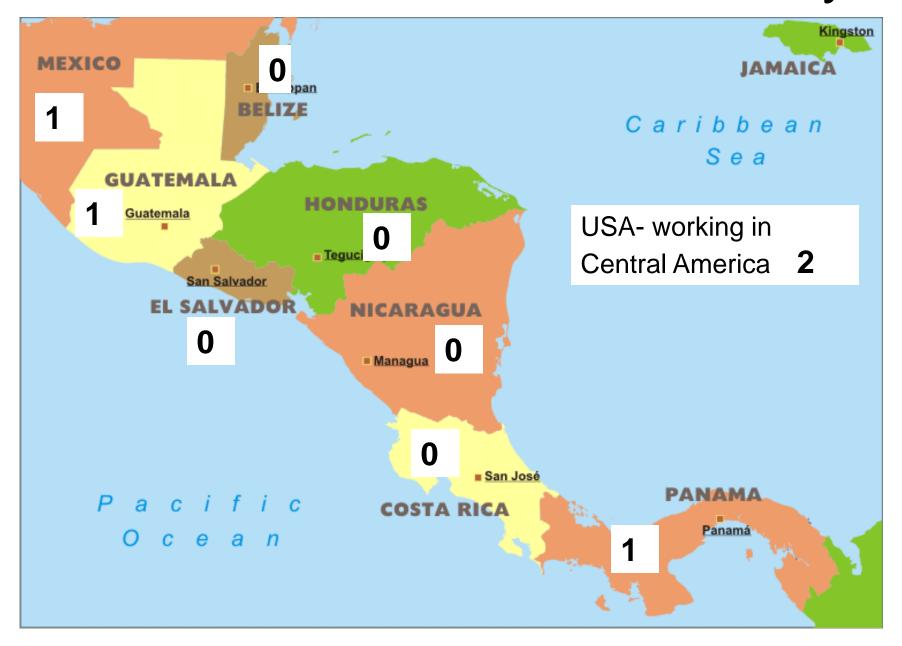
Tom Ray

Jim French

Richard Keating



### Aroid Researchers Per Country



# Map of South America with number of aroid researchers per country



#### Brazilian Aroid Researchers

Brazil, owing to its large size and more developed status, has the largest component of researchers.

- Gonçalves Spathicarpeae; Xanthosoma; Dieffenbachia
- Ivanilza Andrade Co-organizer of this symposium; works with Monstera; floristics of NE Brazil.
- Marcus Nadruz Anthurium sect. Urospadix; floristics
- Lourdes Soares Revision of Heteropsis.
- Livia Temponi Anthurium sect. Urospadix molecular studies; floristics
- Alba Lins -
- Add some the lesser known individuals-See the 62<sup>nd</sup> Brazilian Aroid Conference roster. Mention André Cardosa and Joao Batiste Silva.
   Chromosome person, etc. Student working on Monstera?

#### **Brazilian Aroid Researchers**



#### Colombian Aroid Researchers

- Felipe Cardona Spathiphyllum
- Alejandro Zuluaga Monstera
- Natalia Cardona Spathiphyllum
- Marta Galeano Dieffenbachia
- Jorge Jácome Floristic studies
- German Oyuela Araceae of Tolima

#### Colombian Aroid Researchers



#### Full List of Araceae Genera

Adelonema	13	20	Dracontium	24	24	Monstera	38	60	Synandrospadix	1	1
Alloschemone	2	2	Filarum	1	1	Montrichardia	2	2	Syngonium	34	36
Anaphyllopsis	3	4	Gearum	1	1	Philodendron	482	700	Taccarum	6	6
Anthurium	905	1500	Gorgonidium	8	8	Philonotion	3	3	Ulearum	2	2
Asterostigma	8	8	Heteropsis	17	20	Pistia	2	2	Urospatha	11	15
Bognera	1	1	Incarum	1	1	Rhodospatha	28	70	Wolffia	11	11
Caladium	12	17	Jasarum	1	1	Scaphispatha	2	2	Wolffiella	10	10
Chlorospatha	28	71	Landoltia	1	1	Spathicarpa	4	7	Xanthosoma	78	90
Croatiella	1	1	Lemna	13	13	Spathiphyllum	49	63	Zantedeschia	8	8
Diffenbachia	57	140	Lorenzia	1	1	Spirodela	3	3	Zomicarpa	3	3
Dracontioides	2	2	Mangonia	2	2	Stenospermation	50	250	Zomicarpella	2	2

(Tom to change slide title)

#### Subset of Araceae Genera

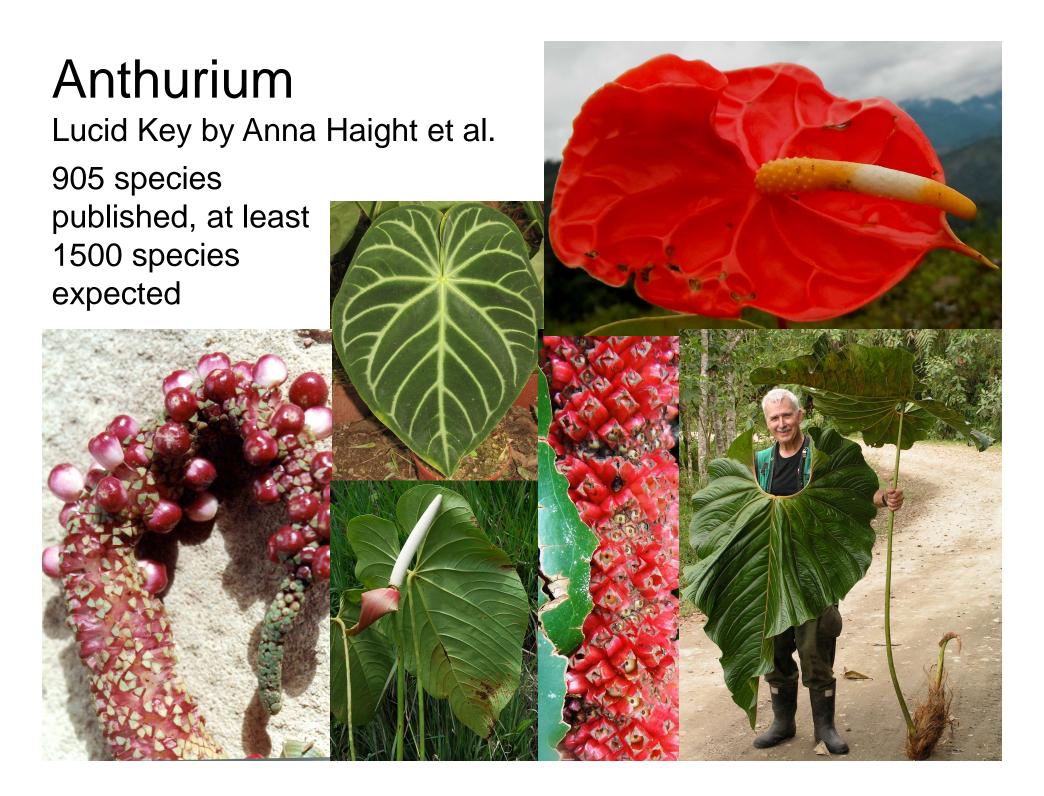
2.15.5.5		5.757.878.8		
13	20	Monstera	38	60
905	1500	Philodendron	482	700
1	1	Rhodospatha	28	70
12	17	Spathiphyllum	49	63
28	71	Stenospermation	50	250
57	140	Syngonium	34	36
24	24	Urospatha	11	15
17	20	Xanthosoma	78	90
		Zantedeschia	8	8
	905 1 12 28 57	905 1500 1 1 12 17 28 71 57 140 24 24 17 20	905 1500 Philodendron 1 1 Rhodospatha 12 17 Spathiphyllum 28 71 Stenospermation 57 140 Syngonium 24 24 Urospatha 17 20 Xanthosoma	905       1500       Philodendron       482         1       1       Rhodospatha       28         12       17       Spathiphyllum       49         28       71       Stenospermation       50         57       140       Syngonium       34         24       24       Urospatha       11         17       20       Xanthosoma       78

(Tom to change slide title.

Spreadsheet from which this list was made is in folder that contains the slide presentation.)

#### Genera Subset Slide 3

(Tom to add genera and change slide title)



#### Researchers with Anthurium

- Madison Palmately lobed Anthurium
- Croat Anthurium of Central America
  - Anthurium sect. Pachyneurium
  - Lucid key to Anthurium
  - Ongoing revisions of 6 different sections
- Carlsen Anthurium sect. Semaeophyllium
  - Phylogeny of sectional classification
- Nadruz Anthurium sect. Urospadix

#### Philodendron

-more than 700 species, many undescribed



#### Research with Philodendron

- Bunting principle role in discovering and describing Philodendron
- Mayo subgen. Meconostigma; developed CATE and Lucid
- Croat subgen. Philodendron for Central America; further development of Lucid key
- Grayum subgen. Pteromischum of C. Amer., W. Indies
   & W. South Amer.
- Marcela Mora wrote Lucid key for Philodendron
- Cassia Sakuragui revised Philodendron sect. Macrobelium for Brazil



**SPATHIPHYLLUM** 

Revised by Bunting in 1960 but needs more work; 49 species published-63 expected



Revised by Madison in 1977 but needs more work; 38 species known; 60 expected

## Medium sized genera that have been revised

Add picture of plant from Suriname, Bare van der Djin?

**DRACONTIUM** 



## Genera at least partially revised in recent times

Adelonema - 13 species; all now described but full revision not published.

Chlorospatha - 73 species; revision in press

Rhodospatha - 79 species; partly revised



## Genera in greatest need of work

Dieffenbachia - 57 species; estimated 140; C. Amer. Revised; key to S. Am. species



Stenospermation - 50 species; estimated 250



Xanthosoma - 78 species; 90 estimated

