

## Collaboration Network: Botanists and Entomologists (including Arachnid specialists)

### Botany

#### Institutions

ARIZ	University of Arizona
ASU	Arizona State University
AUB	Andrews University, Berrien Springs, Michigan
BG	University of Bergen, Norway
CAS	California Academy of Sciences
CICY	Herbario CICY, Centro de Investigación Científica de Yucatán
CM	Carnegie Museum of Natural History, Pittsburg, Pennsylvania
COL	Universidad Nacional de Colombia
FCME	Facultad de Ciencias, Universidad Nacional Autónoma de México
HRCB	Universidade Estadual Paulista, São Paulo, Brazil
HUA	Universidad de Antioquia, Medellín, Colombia
HUEFS	Universidade Estadual de Feira de Santana, Brazil
IA	University of Iowa
IE-BAJIO	Herbario del Instituto de Ecología, Pátzcuaro, Michoacán, Mexico
ILLS	Illinois Natural History Survey
K	Royal Botanic Gardens, Kew, England
MA	Real Jardín Botánico, Madrid, Spain
MEXU	Herbario Nacional, Universidad Nacional Autónoma de México
MICH	University of Michigan
MO	Missouri Botanical Garden
NY	New York Botanical Garden
ODU	Old Dominion University
OXF	University of Oxford
SPF	Universidade de São Paulo, Brazil
TEX	University of Texas
UC	University of California, Berkeley
UNAM	Universidad Nacional Autónoma de México
US	National Herbarium, Smithsonian Institution
USF	University of South Florida
UVIC	University of Victoria, British Columbia, Canada
VPI	Virginia Polytechnic Institute
WIS	University of Wisconsin

#### Experts

**Acanthaceae:** Tom Daniel (CAS); **Agavaceae:** Abisaí García (MEXU); **Amaryllidaceae:** Abisaí García (MEXU), Robert Cruden (IA); **Anacardiaceae:** Rosa María Fonseca (FCME), John Mitchell (NYBG); **Apocynaceae:** Nelly Diego (FCME), Douglas Stevens (MO); **Araceae:** Thomas Croat (MO); **Aristolochiaceae:** Larry Kelly (NY); **Asclepiadaceae:** Douglas Stevens (MO), Lucio Lozada (FCME); **Asteraceae:** Harold Robinson (US), José Panero (TEX), John Strothers (UC); **Begoniaceae:** Kathleen Burt-Utley (USF); **Bignoniaceae:** Lúcia Lohmann (SPF); **Bombacaceae:** Larry Dorr (US); **Boraginaceae:** Jim Miller (NY), María Goreti Campos-Rios (CICY); **Burseraceae:** Jerzy Rzedowski (IE-BAJIO), Rosa Linda Medina (FCME), Douglas Daly (NY); **Cactaceae:** Leia Scheinvar (MEXU); **Capparaceae:** Hugh Iltis (WIS); **Cannaceae:** John

Kress (US); **Celastraceae**: Lucio Lozada (FCME); **Commelinaceae**: Robert Faden (US); **Convolvulaceae**: Manuel Castro (FCME), Dan Austin (ARIZ), Andrew MacDonald (TEX); **Cucurbitaceae**: Michel Nee (NY); **Cuscutaceae**: Lytton J. Musselman (ODU); **Cyperaceae**: Nelly Diego (FCME), Mark Strong (US); **Dioscoreaceae**: Lauren Raz (COL); **Euphorbiaceae**: Paul Berry (MICH); Martha Martínez (FCME); Geoff Levin (ILLS; Genus *Acalypha*), Javier Fernández Casas (MA; Genus *Cnidocolus*); **Fagaceae**: Susana Valencia (FCME); **Fern and fern allies (including Selaginellaceae)**: John Mickel (NY), Robbin Moran (NY), Ernesto Velázquez (FCME), José Daniel Tejero Díez (UNAM); **Lamiaceae**: Ray Harley (K), Martha Martínez (FCME), Gemma L.C. Bramley (K); **Leguminosae**: Mario Sousa (MEXU), Rosaura Grether (MEXU; genus *Mimosa*), Ramiro Cruz (MEXU; subfamily Papilionoideae), Lourdes Rico (K; genera *Acacia* and *Acaciella*), Gwilym Lewis (K; subfamily Caesalpinoideae), Colin Hughes (OXF; genus *Leucaena*), Terry Pennington (K; genus *Inga*); **Liliaceae**: Abisai García (MEXU); **Loasaceae**: Nelly Diego (FCME), Rosa María Fonseca (FCME); **Loranthaceae**: Job Kuijt (UVIC); **Lythraceae**: Shirley Graham (MO); **Malpighiaceae**: William and Christiane Anderson (MICH); **Malvaceae**: Paul Fryxell (), Larry Dorr (US); **Melastomataceae**: Frank Almeda (CAS), Ricardo de Santiago (FCME); **Meliaceae**: Terry Pennington (K); **Moraceae**: C.C. Berg (BG); **Myrtaceae**: Les Landrum (ASU), Eve Lucas (K); **Nyctaginaceae**: Richard Spellenberg (New Mexico State University); **Onagraceae**: Warren Wagner (US); **Orchidaceae**: Gerardo Salazar (MEXU); Cássio van den Berg (HUEFS); **Papaveraceae**: Robert Kiger (CM); **Passifloraceae**: John MacDougal (MO); **Piperaceae**: Ricardo Callejas (HUA); **Poaceae**: Paul Peterson (US), A. Carrillo and L. Aragón (COTECOCA); **Rubiaceae**: Helga Ochoterena (MEXU), Charlotte Taylor (MO); **Sapindaceae**: Pedro Acevedo (US); **Sapotaceae**: Terry Pennington (K); **Solanaceae**: Robert Bye (MEXU), Michael Nee (NY); **Sterculiaceae**: Larry Dorr (US); **Tiliaceae**: Larry Dorr (US), Paul Fryxell (TEX); **Urticaceae**: Dennis Woodland (AUB), C.C. Berg (BG), Rosa María Fonseca (FCME); **Verbenaceae**: Sandy Atkins (K), Gemma L.C. Bramley (K); **Vitaceae**: Julio Lombardi (HRCB); **Zingerberaceae**: John Kress (US); **Zygophyllaceae**: Duncan Porter (VPI)

## Entomologists (including Arachnid specialists)

### Institutions

AMNH	American Museum of Natural History, New York
ARS	Agricultural Research Service, United States Department of Agriculture
Barry	Barry University, Florida
CAS	California Academy of Sciences
CDFA	California Department of Food and Agriculture
Chamela	Estación de Biología Chamela, UNAM
Clemson	Clemson University, South Carolina
FSCA	Florida State Collection of Arthropods, Gainesville, Florida
Ind	Independent researcher
ISZE	Institut für Spezielle Zoologie und Evolutionbiologie, Jena, Germany
Missouri	University of Missouri
MSU	Michigan State University
NCSU	North Carolina State University
NKU	Northern Kentucky University
Ret	Retired
SDSU	South Dakota State University
UCDavis	University of California, Davis
UCR	University of California, Riverside
UNAM	Instituto de Biología, Universidad Nacional Autónoma de México
UNL	University of Nebraska, Lincoln
USU	Utah State University, Logan
UTEP	University of Texas, El Paso
WSU	Washington State University

### Experts

#### Araneae (spiders)

G.B. Edwards (FSCA)

#### Blattaria (cockroaches)

Enrique Mariño (UNAM)

#### Coleoptera (Beetles)

*Buprestidae* (jewel beetles): Charles Bellamy (CDFA); *Cerambycidae* (long-horned beetles): Steven Lingafelter (SI); *Chrysomelidae* (leaf beetles): Charles Staines (SI); *Elateridae* (click beetles): Paul Johnson (SDSU); *Meloidae* (blister beetles): John Pinto (UCR-Ret); *Scarabaeidae* (scarab beetles): Brett Ratcliffe (UNL); *Tenebrionidae* (darkling beetles): Warren Steiner (SI), Aaron Smith (MSU), Rolf Aalbu (CAS)

#### Dermaptera (Earwigs):

Fabian Haas (ISZE)

#### Diptera (true flies)

*Asilidae* (robber flies): Eric Fisher (CDFA); *Calliphoridae* (blow-flies): Terry Whitworth (WSU); *Ceratopogonidae* (biting midges): Art Borkent (Ind); *Culicidae* (mosquitos): Richard Wilkerson (SI); *Muscidae* (house or stable flies): Norman Woodley (SI); *Sarcophagidae* (flesh flies): Greg

Dahlem (NKU); *Simuliidae* (*Black flies*): Peter Adler (Clemson); *Tabanidae* (*horse flies*): Shelah Morita (NCSU); *Tachinidae* (*tachina flies*): Norman Woodley (SI)

### **Hemiptera (true bugs)**

*Cercopidae* (*Spittlebugs and Froghoppers*), *Cicadellidae* (*leafhoppers*), *Membracidae* (*Treehoppers*): Stuart McKamey (SI); *Belostomatidae* (*Giant Water Bugs*): Harry Brailovsky (UNAM), Robert Sites (Missouri); *Gerridae* (*Water Striders*), *Naucoridae* (*Creeping Water Bugs*), *Veliidae* (*Smaller Water Striders*): Robert Sites (Missouri); *Coreidae* (*Leaf-footed bugs*): Harry Brailovsky (UNAM); *Cicadidae* (*cicadas*): Allen Sanborn (Barry)

### **Hymenoptera (sawflies, wasps, bees, ants)**

*Apidae* (*bees*), Charles Michener (Kansas), Terry Griswold (ARS), Ricardo Ayala (Chamela); *Chrysididae* (*cuckoo wasps*): Lynn Kimsey (UCDavis); *Crabonidae and Sphecidae* (*digger wasps and mud daubers*): Wojciech J. Pulawski (CAS); *Formicidae* (*ants*): Ted Schultz (SI), Jeffrey Sosa-Calvo (SI), William Mackay (UTEP); *Halictidae* (*sweat bees*): John Ascher (AMNH); *Mutillidae* (*Velvet Ants*) and *Pompilidae* (*Spider Wasps*): James Pitts (USU); *Vespidae* (*wasps*): James Carpenter (AMNH)

### **Isoptera (termites)**

David Nickel (ARS)

### **Megaloptera**

*Corydalidae* (*dobson flies*): Atilano Contreras (UNAM)

### **Neuroptera**

*Myrmeleontidae* (*antlions*): Lionel Stange (FSCA)

### **Orthoptera (Grasshoppers, crickets and katydids), Phasmatodea (Walking sticks),**

### **Mantodea (mantids)**

Enrique Mariño (UNAM), David Nickel (ARS)