

# STRI newsletter

December 9, 1994

SMITHSONIAN TROPICAL RESEARCH INSTITUTE - Apartado 2072, Balboa, Panamá

No. 48

## TUPPER CENTER SEMINARS

Tuesday, December 13, noon seminar speaker will be Carlos Alberto Machado, University of California, Irvine

### *Molecular Phylogenies of Fig-Associated Wasps*

#### *Abstract*

Figs and their pollinating wasps constitute one of the classic examples of pollination mutualisms known. In addition to the pollinating wasps a diverse community of non-pollinating wasps also exploit figs. Almost nothing is known about the evolutionary history of these organisms. I will present molecular-based phylogenies for different species of fig-associated wasps at different taxonomic levels. I will discuss the implications of these results for basic questions about coevolution (historical and adaptive perspectives) and evolutionary ecology. Finally I will also discuss the utility of this biological system for testing the "generation time hypothesis" in the neutral theory of molecular evolution.

## BAMBI SEMINAR AT GAMBOA

Thursday, December 15, Bambi seminar speaker will be Rex Cocroft, Cornell University, 7:30pm, at the Gamboa Schoolhouse

### *Substrate Communication and Parental Behavior in Treehoppers (Insecta: Membracidae)*

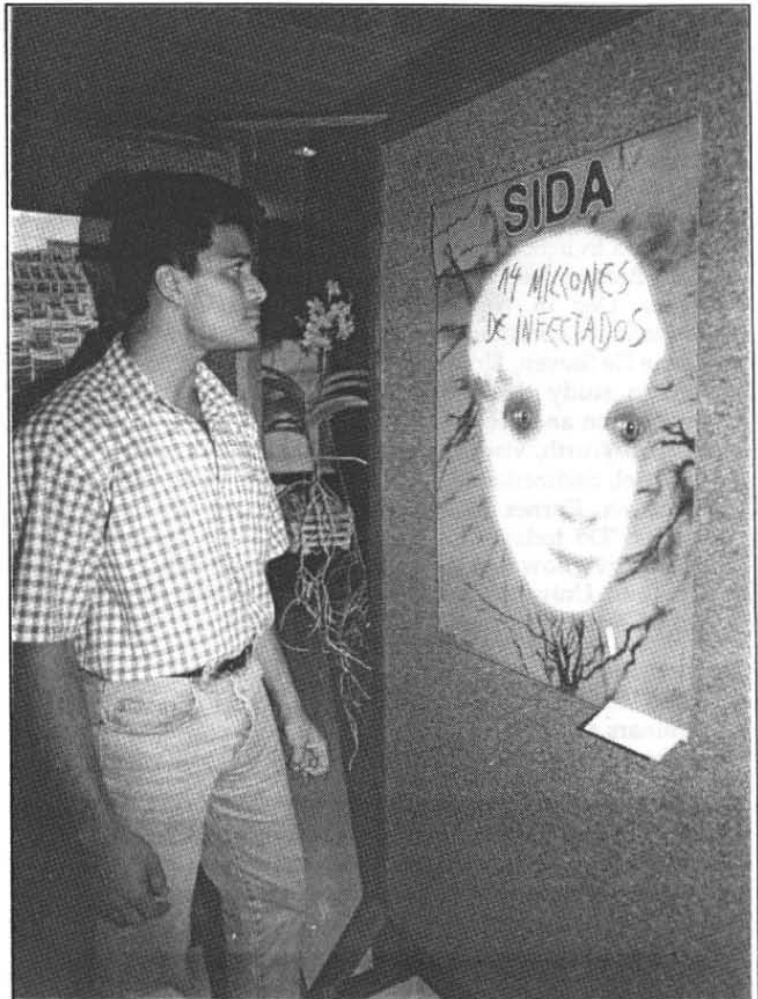
Dinner will be available at 6pm. Those interested should get in contact with Gregory Gilbert or Stanley Rand before Tue, Dec 13.

## PEOPLE

### Arrivals

- Nine scholars from the Biological Education Program of the Costa Rican Guanacaste Conservation Area, Dec 12-16, to visit STRI facilities and consult with the staff of the marine and terrestrial environmental programs.
- Michael Dreyfuss, Research Division of Sandoz Pharma Ltd., Dec 12-15, to visit

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"*Imágenes Contra el SIDA*" is an educational exhibit designed to support local initiatives in HIV/AIDS prevention education while providing multi-cultural and worldwide access to its messages. 36 prints created by well known international artists were selected to progressively acquire awareness about the disease and its dimensions. Another 6 posters provide relevant information. The exhibit is open to everyone, relatives and friends, at the Tupper Center Exhibit Hall, from Mon-Fri, 1-5pm ••• "*Imágenes Contra el SIDA*" es una exhibición educativa diseñada para apoyar iniciativas locales en la enseñanza de la prevención del VIH y el SIDA que suministra acceso a sus mensajes multiculturales. Se seleccionaron 36 ilustraciones creadas por artistas internacionales de renombre para crear conciencia progresiva sobre la enfermedad y sus dimensiones. Otros 6 carteles suministran información sobre el tema. La exhibición está abierta a todos, familiares y amigos, en el Salón de Exhibiciones del Centro Tupper, de lunes a viernes, de 1:00-5:00pm.

(Foto: M.A. Guerra)

STRI facilities and consult with staff about possible cooperative research with STRI.

- David Zeh, University of Houston, and Jeanne Zeh, Dec 13-31, to conduct experiments on reproductive success in the Harlequin beetle-1 associated pseudoscorpions, on a Scholarly Studies Grant, at Gamboa.
- Kaoru Kitajima, Mellon Postdoctoral fellow from the University of Missouri, Dec 14-31 Aug, to study the canopy plant allocation responses to seasonal and spatial variation in light and water availability, at Tupper.
- John Brown, Dec 14, and Tim Scoones and Justine Evans, Dec 15, from the Oxford Scientific Films, England, to continue on-going projects, at Gamboa.
- Diane De Steven, University of Wisconsin, Dec 15-12 Jan, to study the dynamics of tropical tree seed production and seedling recruitment, on BCI.
- Mirjam Wurth, visiting student from the University of Basel, Switzerland, Dec 15-28 Feb, to work with Christian Korner, Mellon Senior Fellow, on his project "Do today's tropical forests already exhibit carbon overflow reactions?", at Tupper and BCI.
- Urs Roth, University of Basel, Dec 15-28 Feb, to work with Christian Korner, at Tupper and BCI.

#### Departures

- Allen Herre, Dec 14-30, to Washington DC, to present seminars at the NIH and to consult with colleagues at the SI National Museum of Natural History.

#### News of Martin Moynihan

As many already know, Dr. Moynihan became seriously ill last week in France. We are very glad to report that he is recovering slowly but surely. We send him our best wishes and hope that he will soon be back to his research and manuscript.

#### Our Condolences

To George Angehr, for the death of his father.

### THINGS YOU SHOULD KNOW

#### At the Tupper Center

- Tue, Dec 13 ■ Tupper Scientific Support Staff Meeting, Small Meeting Room, 9am
- Noon seminar by Carlos Machado, AUD
- Scientific Staff Meeting, LMR, 1:30pm
- Fri, Dec 16 ■ Christmas Party, Conference Center, 4pm

#### At the Culebra Marine Reserve

- Tue, Dec 13 *Escuela República de Haití*
- Wed, Dec 14 *Escuela República de Haití*
- Thu, Dec 15 *Educadores Ambientales, Ministerio de Educación*
- Fri, Dec 16 *Escuela José Agustín Arango*
- Sat, Dec 17 *Colegio Zaida Cela Núñez*

#### At Barro Colorado Island Station

- Sat, Dec 10 *Universidad Latina de Costa Rica, Chiriquí*
- Sun, Dec 11 *Colegio Pedro Pablo Sánchez, La Chorrera*
- Sat, Dec 18 Groups from Panama and the Canal Area
- Sun, Dec 19 Groups from Panama and the Canal Area

#### At the Gamboa Schoolhouse

- Thu, Dec 15 ■ Dinner for Bambi participants, 6pm
- Bambi seminar by Rex Cocroft, 7:30pm

#### Reminder for Tupper Center Auditorium Users

No food or drinks are allowed at the Tupper Center Auditorium. Prior to the Tuesday seminars, coffee will continue to be served at the Conference Hall. Your cooperation is highly appreciated.

#### At the Christmas Party •• Para la Fiesta de Navidad



Tickets for STRI Xmas party guests can be purchased from Marcela Vargas at the Tupper Center Reception until Dec 14. Adults: \$5 • Children \$2.50 ••• *Boletos para invitados a la Fiesta de Navidad de STRI pueden comprarse en la Recepción del Centro Tupper con Marcela Vargas hasta el 14 de diciembre. Adultos: \$5 • Niños: \$2.50.*

A big box for gifts for the children (1-6 years old) of the Las Pavas community Xmas party will be at the entrance of the Tupper Conference Hall next Friday. Please indicate age and sex. Fifty children are waiting for STRI's "Santa" this year



••• *Una gran caja para recoger regalos para la Fiesta de Navidad de los niños (1-6 años) de la comunidad de las Pavas estará esperando en la entrada del Salón de Conferencias del Tupper el próximo viernes. Favor de indicar edad y sexo. Cincuenta niños están esperando al "Santa" de STRI este año.*

### ANNOUNCEMENTS

#### Federal Employees Helping Federal Employees

##### *Ayuda Mutua Entre Empleados Federales*

FEEA (Federal Employee Education & Assistance Fund) is a self-help agency of, by, and for all civilian federal and postal employees. FEEA receives virtually all of its funding from federal employees who designate their pledges to FEEA #1237, in the Combined Federal Campaign (CFC). Funds are returned to each federal community based on a formula that reflects the amount donated by federal workers in that area. Thus, FEEA funding in your area or region directly depends on the

generosity of you and your fellow workers in the CFC. FEEA helps federal employees and their dependent family members by providing scholarships, educational loans and emergency loans and grants. FEEA provides no-interest loans to federal families with nowhere else to turn. FEEA emergency assistance is based on need, which exists when an individual or family lacks resources to acquire basic necessities such as food, shelter, and utilities. FEEA helps federal families cope with medical emergencies, homelessness, gas and electric shutoffs, eviction threats, natural disasters, and the unexpected death of a family member. As a private, non-profit organization, FEEA receives no government funds. Thus, FEEA's ability to provide benefits depends totally on federal employees who donate their time and money. The amount and number of scholarships available in each particular area is determined by the contributions of federal workers in that region. If anyone is interested in obtaining more information, please send a self-addressed stamped envelope to the address below, and specify whether you are interested in the FEEA educational programs, the emergency assistance program and/or volunteering to help FEEA in your agency: FEEA, Suite 200, 8441 W. Bowles Ave., Littleton, CO 80123 ••• FEEA (Federal Employee Education and Assistance Fund) es una agencia creada por y para la asistencia de todos los empleados civiles federales y del servicio postal. FEEA recibe virtualmente todos sus fondos de parte de los empleados federales, quienes designan sus donaciones por medio del No. FEEA 1237, en la Campaña Federal Combinada (CFC). Los fondos son revertidos a cada comunidad federal basándose en una fórmula que refleja la cantidad donada por los empleados federales en esa área. Por lo tanto, los fondos de FEEA en su área o región dependen directamente de la generosidad suya y de sus compañeros de trabajo a la CFC. FEEA ayuda a los empleados federales y a sus familiares proporcionándoles becas, préstamos educativos, y préstamos y subsidios de urgencia. FEEA



STRI mothers and "Grandma Gloria" (center) enjoyed a moment full with emotions while watching a televised message from their children (and grandchildren) during the Panamanian Mothers' Day celebration at the Tupper Center Conference Hall, on Wednesday, December 7. This ceremony was organized by the STRI Procurement Department with the collaboration of Alejandro Caballero, from PhotoLab ••• Madres y "Abuela Gloria" (centro) disfrutaron de un momento lleno de emociones al recibir un mensaje televisado de sus hijos (y nietos) durante la celebración del Día de Las Madres panameño, en el Salón de Conferencias del Centro Tupper, el miércoles 7 de diciembre. La ceremonia fue organizada por el Departamento de Compras de STRI, con la colaboración de Alejandro Caballero, de Fotografía. (Foto: M.A. Guerra)

también proporciona préstamos sin intereses a las familias federales que no tienen dónde recurrir. La asistencia para urgencias de FEEA se basa en las necesidades que surgen cuando un individuo o una familia queda sin recursos para adquirir las necesidades básicas, tales como alimentos, vivienda, agua y luz. FEEA ayuda a las familias federales a hacer frente a las urgencias médicas, al quedarse sin vivienda, a cortes de gas y electricidad, a las amenazas de desalojo, a los desastres naturales, y a la muerte inesperada de algún miembro de la familia. Como organización privada, sin fines de lucro, FEEA no recibe aportación gubernamental de fondos. Por lo tanto, su capacidad de proporcionar beneficios depende totalmente de los empleados federales quienes donan su tiempo y su dinero. El monto y el número de becas disponibles en cada área en particular se determina por las contribuciones de los trabajadores federales en esa región. Si hay alguna persona interesada en obtener más información, deberá enviar un sobre con porte pagado a la dirección que se da a continuación, especificando si le interesan los programas educativos, el programa de asistencia o el de voluntarios para ayudar a FEEA: FEEA, Suite 200, 8441 W. Bowles Ave., Littleton, CO 80123.





Co-workers and friends organized a farewell lunch hour for Pablo Amarís (center), STRI Assistant Security Officer, who left the Institute to accept a new opportunity in the Panamanian private sector. He will be especially missed for his charm and politeness. Good Luck! ••• Compañeros y amigos organizaron un almuerzo de despedida a Pablo Amarís (centro), Sub-director de la Oficina de Seguridad de STRI, quien dejó el Instituto para aceptar una nueva oportunidad en el sector privado panameño. Lo extrañaremos especialmente por su encanto y gentileza. ¡Buena Suerte!

(Foto: A. Montaner)

### NEW STRI PUBLICATIONS

- Bush, Mark B. and Colinvaux, Paul A. 1994. "A Paleoecological Perspective of Forest Disturbance: Records from Darien, Panama." *Ecology* 75: 1761-1768.
- Cooke, Richard and Tapia Rodríguez, Gonzalo. 1994. "Marine and Freshwater Fish Amphidromy in a Small Tropical River on the Pacific Coast of Panama: A Preliminary Evaluation Based on Gill-Net and Hook-and-Line Captures." In: *Fish Exploitation in the Past: 99-106*, edited by W. Van Neer. Tervuren: Annales du Musée Royal de l'Afrique Centrale, Sciences Zoologiques no. 274.
- Desteven, D. 1994. "Tropical Tree Seedling Dynamics: Recruitment Patterns and Their Population Consequences for 3 Canopy Species in Panama." *Journal of Tropical Ecology* 10(3): 369-383.
- Galdames, Carmen. 1994. Estudio de las Plantas Herbáceas, Terrestres y Hemiéfitas en el Sendero de Interpretación del Parque Nacional Altos de Campana. Thesis, University of Panama.
- Lafrankie, John V. 1994. "Population Dynamics of Some Tropical Trees that Yield Non-Timber Forest Products." *Economic Botany* 48(3): 301-309.

Leigh, Jr., Egbert Giles. 1994. "Do Insect Pests Promote Mutualism Among Tropical Trees?" *Journal of Ecology* 82(3): 677-680.

Nedved, O. and Windsor, Donald M. 1994. "Supercooling Ability, Fat and Water Content in a Diapausing Tropical Beetle, *Stenotarsus rotundus* (Coleoptera, Endomychidae)." *European Journal of Entomology* 91: 307-312.

Patiño, Sandra, Herre, E. Allen and Tyree, Melvin T. 1994. "Physiological Determinants of *Ficus* Fruit Temperature and the Implications for Survival of the Pollinator Species: Comparative Physiology Through an Energy Budget Approach." *Oecologia* 100: 13-20.

Rodríguez, Viterbo. 1994. "Function of the Spermathecal Muscle in *Chelymorpha Alternans* Boheman (Coleoptera, Chrysomelidae, Cassidinae)." *Physiological Entomology* 19(3): 198-202.

Tennant, Leeanne Elizabeth. 1994. Ecology of a Facultative Ant-Plant "Mutualism". Ph.D. Thesis. Cambridge, Massachusetts: Harvard University.

