

STRI newsletter

June 2, 1995

SMITHSONIAN TROPICAL RESEARCH INSTITUTE - Apartado 2072, Balboa, Panamá

No. 22

TUPPER CENTER SEMINARS

- Tue, Jun 6, at 10:30am, Oxford Scientific Films will present the video:
The Beeman
- Tue, Jun 6, noon seminar speaker will be Thomas Hartmann, visiting scholar from the Institut für Pharmateutische Biologie der Technischen Universität, Germany.
Chemical Interactions Between Plants and Insects: The Example Pyrrolizidine Alkaloids

Abstract

While still controversial, the importance of plant secondary metabolism in chemical interactions between plants and their environment is receiving increasing attention. We chose the pyrrolizidine alkaloids (PAs). The biochemistry and physiology of PA-formation and their metabolism, long-distance translocation and subcellular accumulation, will be discussed.

SPECIAL SEMINARS

- Tue, Jun 6, Ulrich Mueller, Cornell University, and Stephen Rehner, USDA Systematic Botany and Mycology Laboratory, will present a seminar at 3:30pm, Tupper Center Auditorium
Phylogenetic History of the Symbiosis between Fungus-Growing Ants and their Fungi
- Thu, Jun 8, Thomas Hartmann will present a seminar, Tupper Center Large Meeting Room, 3pm.
Chemical Ecology of the Pyrrolizidine Alkaloids: A Mechanistic View

Abstract

In respect to their attractiveness for specialized insects, pyrrolizidine alkaloids (PAs) are unique among alkaloids. The mechanisms of ingestion, uptake, storage and metabolism of PAs by specialized insects will be discussed.

BAMBI SEMINAR

Thursday, June 8, Bambi seminar speaker will be Robert Dudley, University of Texas, on Barro Colorado Island, at 7:30pm.

Animal Flight Performance in Physically Variable Gas Mixtures: Paleozoic and Present Perspectives

Transportation and dinner reservation are essential.

NAOS MARINE LAB LUNCHEONS

There is now a very informal noon seminar every Friday in the Conference Room at Surfside. Topics will largely be molecular. Please bring your lunch and join the discussions.

Fri, Jun 9, Naos noon seminar speakers will be Stephen Rehner, Cornell University, and Ulrich Mueller, USDA Systematic Botany and Mycology Laboratory

Molecules, Attines, Fungus, Co-Evolution, Symbiosis

PEOPLE

Arrivals

- Tyler Osburn, University of Kentucky, May 29-1 Aug, to work with Bruce Rogers, on the effects of condition on allocation to current vs. future reproduction by female bluehead wrasses *Thalassoma bifasciatum*, at San Blas.
- David McDonald, Smithsonian Institution, Jun 1-10, to work with Michael Braun on genetic studies of an avian hybrid zone (Genus *Macacus*), in Bocas del Toro.
- Howard Lasker, Kristini Kille and Walter Kapela, University of Buffalo, NY, Jun 4-8 Jul, to carry out a study on the fertilization success among broadcast spawning benthic invertebrates, at San Blas.
- Robert Anderson, Canadian Museum of Nature, Jun 4-29, to work with James Ashe on the biodiversity and community structure of forest floor Coleoptera, at Gamboa and Fortuna.
- Alejandro Cordoba, University of Oklahoma, Jun 5-8 Jan 96, to work with Ola Fincke (see below), at BCI.
- Elizabeth Losos, CTFS, Jun 4-9, on official business.
- Ina Park, SI intern, Jun 5-11 Aug, to work with Haris Lessios, at Naos.
- Carolyn Cruz, SI intern, Jun 5-14 Aug, to work with Jeremy B.C. Jackson, at Naos.
- Ola Fincke, University of Oklahoma, Jun 5-4 Aug, to work on the effects of male and female behavior of offspring survivorship in a tree-hole breeding damselfly, at BCI.
- Philip Hastings, University of Arizona, Jun 5-5 Jul, to study the phylogeny and behavioral evolution in chaenopsid biennies, at Naos and San Blas.

Informal Get Together

On Tue, Jun 6, there will be an informal "Get Together" for the STRI scientific community at the Tupper Corotu Cafeteria, 4:30pm. It will be on a cash basis, offering wine, beer, soft drinks, and snacks.

JUNE 5-9: ECOLOGY WEEK

1 5-9 DE JUNIO: SEMANA ECOLOGICA

- Jeffrey Hunt, Southampton College, NY, Jun 5-5 Jun 96, to work with Eldridge Bermingham, at Naos.
- Ulrich Mueller, Tupper 3-Year fellow from Cornell University Neurobiology and Behavior Department, Jun 5-10, to visit STRI and present seminars.
- Stephen Rehner, SI Molecular fellow from USDA Systematic Botany and Mycology Laboratory, Jun 5-10, to visit STRI and present seminars.
- Salleh Mohd.Nor and Cerilnu Tan, Forest Research Institute of Malaysia, Jun 6-9, to visit STRI facilities and consult with colleagues.
- Douglas Altshuler, Purdue University, Indiana, Jun 8-10 Aug, to study the avian frugivory and regeneration of disturbance regimes, on BCI.

Departures

- Penelope Barnes, May 31-8 Jul, to St. Thomas, Virgin Islands, to attend the meetings of the AMLC; then to Hilo, Hawaii, to participate at the American Malacological Union Meeting, and to Hong Kong as visiting research fellow at the Swire Institute of Marine Science, University of Hong Kong.
- Héctor Guzmán and Gabriel Jácome, Jun 6-9, to Honduras, on official business at Cayos Cochinos Research Station.
- Angel Aguirre, Jun 8-18, to Washington D.C., on official business at the SI Libraries.

THINGS YOU SHOULD KNOW

From BCI and Gamboa

En Gamboa y Barro Colorado

Please make a note that neither BCI nor Gamboa can be reached via GroupWise. Any message you send to any of these facilities must be done by fax or regular mail ••• *Gamboa y Barro Colorado no están equipados todavía para recibir mensajes a través de "GroupWise". Cualquier mensaje que se envíe a estas instalaciones deberá hacerse por medio del fax o por correo ordinario.*

At the Tupper Center

- Tue, Jun 6
- Video *The Beeman*, 10:30am, Auditorium
 - Noon seminar by Thomas Hartmann, Auditorium
 - Scientific Staff Meeting, 2pm, Large Meeting Room,
 - Seminar by Ulrich Mueller and Steven Rehner, 3:30pm, Auditorium
 - Informal Get Together, 4:30pm, Tupper Corotu Cafeteria.
- Thu, Jun 8
- Seminar by Thomas Hartmann, Large Meeting Room, 3pm

At the Culebra Marine Reserve

- Tue, Jun 6 Fort Davis Elementary School
 Wed, Jun 7 Escuela El Macao
 Thu, Jun 8 Instituto Comercial de Panamá
 Fri, Jun 9 Instituto Comercial de Panamá
 Sat, Jun 10 Boy Scouts of Panama No. 29

At Barro Colorado Island Station

- Sat, Jun 3 Asociación Conservacionista de Especies en Peligro de Extinción, Ministerio de Educación, and visitors from the United Kingdom
 Sun, Jun 4 Visitors from Panama City
 Sat, Jun 10 Audubon Society of Panama and Colegio Nuestra Señora de Lourdes
 Sun, Jun 11 Visitors from Panama City

For Pipeline Road Users

Para Usuarios del Viejo Camino del Oleoducto

Minor repair work will be done at the Pipeline Road before the second bridge, starting Saturday June 3. Please drive extra-carefully until further notice ••• *Trabajos de reparación menores se realizarán en el viejo camino del oleoducto, antes del segundo puente, a partir del sábado 3 de junio. Maneje con especial cuidado en este tramo hasta nuevo aviso.*

Soberanía National Park Support Group Meeting *Reunión del Grupo de Apoyo al Parque Soberanía*

The Parque Nacional Soberanía support group under the coordination of Stanley Heckadon, STRI, and Roberto Galán, INRENARE, held a meeting at Gamboa on Thursday, May 11 with the attendance of Pedro Campagnani, IPAT, Rodrigo Tarté, Fundación NATURA, M. Tejeira, FES, a team from USAID, community leaders from the villages on the eastern boundary of the Park and local authorities from Ancon and Chilibre. IPAT, NATURA and USAID representatives expressed a strong interest in supporting actions leading to the strengthening of the protection of the Park and the development of nature tourism ••• *El grupo de apoyo al Parque Nacional Soberanía, bajo la coordinación de Stanley Heckadon, STRI y Roberto Galán, INRENARE, llevó a cabo una reunión extraordinaria el jueves 11 de mayo en Gamboa, con la presencia de Pedro Campagnani, Director del IPAT, Rodrigo Tarté, de NATURA, M. Tejeira, del FES, un equipo de la USAID, dirigentes de las comunidades aledañas al límite este del Parque y autoridades locales de los corregimientos de Ancón y Chilibre. Los representantes del IPAT, NATURA y USAID expresaron un fuerte interés en apoyar acciones para reforzar la protección del parque y promover turismo naturalista.*

ANNOUNCEMENTS

Del Parque Natural Metropolitano

El personal del Parque Natural Metropolitano invita a toda la comunidad de STRI a asistir a la ceremonia de premiación del III Concurso Eco-Fotográfico *Realidad: No Película*, el lunes 5 de junio, las 5:30pm, Salón de las Oropéndolas, en Centro de Visitantes del Parque. A partir de esta fecha, se mantendrán exhibidas temporalmente todas las fotografías que participaron en el concurso.

SI 150th Anniversary T-Shirt Contest**Concurso de T-Shirts en el Smithsonian**

The Smithsonian Institution invites all SI employees and volunteers to enter a T-shirt contest to celebrate its 150th anniversary. "You don't have to be an artist to enter—cut and paste, get your kid to draw it, use the computer... just do it. The winning design will be exclusively for the SI family and will not be sold to the public. Imagine your design and signature worn by legions of Smithsonian staffers worldwide!" Submit entries to Tom Lawrence, 955 L'Enfant Plaza, Room 2100, MRC 912, Smithsonian Institution, Washington D.C. 20560, before June 30, 1995. For more information about the contests and its rules, stop by the STRI Office of Fellowships and Education, at the Tupper Center ••• *La Institución Smithsonian invita a todos sus empleados y voluntarios al concurso para escoger la camiseta de celebración de su 150avo aniversario. "No es necesario ser un artista para concursar—corte y pegue, use instrumentos para dibujar, use una computadora... solo hágala. El diseño ganador será usado únicamente para la familia del Smithsonian y no se venderá al público. ¡Imagine su diseño y firma siendo usada por todo el mundo por personal del Smithsonian!" Envíe su diseño a Tom Lawrence, 933 L'Enfant Plaza, Room 2100, Smithsonian Institution, Washington D.C. 20560, antes del 30 de junio de 1995. Para mayores detalles sobre el concurso, pase por la Oficina de Becas y Educación de STRI, en el Centro Tupper.*

NEW STRI PUBLICATIONS

- Achenbach, H., Lottes, M., Waibel, R., Karikas, G.A., Correa, Mireya D. and Gupta, Mahabir P. 1995. "Alkaloids and Other Compounds From *Psychotria correae*." *Phytochemistry* 38(6): 1537-1545.
- Artto, Jurani. 1994. "Nosturi vie tropiikin salaisuuksein ääreille." *Luonto* 12: 40.
- Backwell, Patricia R.Y., Jennions, Michael D., Christy, John H. and Schober, Ursula. 1995. "Pillar Building in the Fiddler Crab *Uca beebei*: Evidence for a Condition-Dependent Ornament." *Behavioral Ecology and Sociobiology* 36: 185-192.
- Carrión de Samudio, Julieta. 1995. "Patterns of Wildlife Use by Cultural Groups in Bocas del Toro Archipelago, Panama." In: *Integrating People and Wildlife for a Sustainable Future: 27-30*, edited by J.A. Bissonette and P.R. Krausman. Bethesda: The Wildlife Society.
- Dalling, James W. and Iremonger, S. 1994. "Preliminary Estimate of Landslide Disturbance in the Blue Mountains, Jamaica." *Caribbean Journal of Science* 30(3-4): 290-292.
- Dalling, James W., Swaine, M.D. and Garwood, N.C. 1994. "Effect of Soil Depth on Seedling Emergence in Tropical Soil Seed-Bank Investigations." *Functional Ecology* 9: 119-121.
- Duke, Norman. 1995. "Genetic Diversity, Distributional Barriers and Rafting Continents—More Thoughts on the Evolution of Mangroves." *Hydrobiologia* 295: 167-181.
- Freile, D., Milliman, J.D. and Hillis, Llewellya. 1995. "Leeward Bank Margin *Halimeda meadows* and Draperies and their Sedimentary Importance on the Western Great Bahama Bank Slope." *Coral Reefs* 14: 27-33.
- Graham, J.B., Dudley, Robert, Aguilar, N. and Gans, C. 1995. "Implications of the Late Palaeozoic Oxygen Pulse for Physiology and Evolution." *Nature* 375: 117-120.
- Hillis, Llewellya. 1995. "Transisthmian Tropical Reef Algae: Paleohistory and Molecular Evolution." In: *What About Increase? The First Science and Humanities Dialogue*: 32. Washington D.C. National Zoological Park, Smithsonian Institution.
- Ibáñez D., Roberto and Smith, Ellen M. 1995. "Systematic Status of *Colostethus florator* and *C. nubicola* (Anura: Dendrobatidae) in Panama." *Copeia* 1995(2): 446-456.
- Kramer, Donald L. and Bryant, Michael J. 1995. "Intestine Length in the Fishes of a Tropical Stream: 1. Ontogenetic Allometry." *Environmental Biology of Fishes* 42: 115-127.
- Kramer, Donald L. and Bryant, Michael J. 1995. "Intestine Length in the Fishes of a Tropical Stream: 2. Relationships to Diet—The Long and Short of a Convoluted Issue." *Environmental Biology of Fishes* 42: 129-141.
- Morgan, Steven G. and Christy, John H. 1994. "Plasticity, Constraint, and Optimality in Reproductive Timing." *Ecology* 75(8): 2185-2203.
- Pennisi, Elizabeth. 1994. "Tallying the Tropics." *Science News* 145(23): 362-363, 366.
- Rand, A. Stanley. 1994. "Introduction to Behavioral Ecology Section." In: *Lizard Ecology: Historical and Experimental Perspectives*: 91-93, edited by L.J. Vitt and E.R. Pianka. Princeton: Princeton University Press.
- Wilczynski, Walter, Rand, A. Stanley and Ryan, Michael J. 1995. "The Processing of Spectral Cues by the Call Analysis System of the Túngara Frog, *Physalaemus pustulosus*." *Animal Behaviour* 49: 911-929.

NEW STRI BOOKLIST

- Antiviral proteins in higher plants / edited by M.-Chessin et al. QK898.A59A58 1995X STRI.
- Ascomycete systematics: problems and perspectives in the nineties / edited by DL Hawksworth. QK623.A1A72 1994X STRI.
- Biodiversidad marina y costera de México / SI Salazar-Vallejo & NE González, eds. QH77.M6B56 1993X STRI.
- Biology of North American tortoises / edited by RB Bury & DJ Germano. QL666.C584B615 1994 STRI.
- Colobine monkeys: their ecology, behaviour and evolution / edited by AG Davies & JF Oates. QL737.P93C57 1995X STRI.
- DNA fingerprinting: state of the science / edited by SDJ Pena et al. RA1057.55.D637 1993X STRI.
- The Differences between the sexes / edited by RV Short & E. Balaban. QP81.5.D54 1994X STRI.
- Estrategias adaptativas en una comunidad subtropical / NG Basso. QL668.E2B32 1995 STRI.
- Flora of Australia, v.35: Brunoniaceae, Goodeniaceae, v.49: Oceanic islands 1, v.50: Oceanic islands 2, v.54: Lichens-introduction, Lecanorales 1, v.55: Lichens-Lecanorales 2, Parmeliaceae. QK431.F632 STRI.
- Handbook of microbiological media / RM Atlas [edited by LC Parks]. Ref QR66.3.A85 1993X STRI.
- Historical geography of crop plants: a select roster / JD Sauer. SB71.S38 1993X STRI.
- History of Latin American archaeology / edited by A. Oyuela-Caycedo. CC101.L29H57 1994X STRI.
- The Indo-Australian Agaoninae (pollinators of figs) / JT Wiebes. QL568.A23W64 1994 STRI.
- Innes's exotic aquarium fishes: a work of general reference. Ref SF457.I582 1994 STRI.
- Large-scale ecology and conservation biology / edited by PJ Edwards et al. QH540.B75 1993X STRI.
- Manglares y hombres del Pacífico colombiano / H.von Prah et al. QH121.P74 1990X STRI.
- Marine planktonic ostracods / MV Angel. QL444.O8A58 1993 STRI.
- Migratory shore and upland game bird management in North America / edited by TC Tacha & CE Braun. SK361.M63 1994 STRI.
- Native Colombian orchids, v.1-5. Ref qQK495.O64N29 1990X STRI.
- PCR technology: current innovations / HG Griffin & AM Griffin. QP606.D46P362 1994X STRI.
- The Palaeobiology of trace fossils / edited by SK Donovan. QE720.5.P15 1994 STRI.
- Plant succession: theory and prediction / edited by DC Glenn-Lewin et al. QK910.F58 1992X STRI.
- Plants and animals of medical importance in Panama. QK100.P2P712 1994 STRI.
- Proceedings of the Regional Workshop on Tree Breeding and Propagation, pt.I: Workshop proceedings and technical papers. SD399.5.R33 1992 STRI.
- The Quetzal and the Macaw: the story of Costa Rica's national parks / DR Wallace. SB484.C3W35 1992X STRI.
- Spectroscopic methods and analyses: NMR, mass spectrometry, and metalloprotein techniques. QP519.9.N83S74 1993X STRI.
- Systematics and the fossil record: documenting evolutionary patterns / AB Smith. QE721.2.E85S65 1994X STRI.
- Trends '93: a compendium of data on global change / edited by TA Boden et al. Ref QC981.8.C5T79 1994 STRI.
- Tropical alpine environments: plant form and function / edited by PW Rundel, Alan P. Smith & FC Meinzer. QK474.5.T75 1994X STRI.

Periodicals

Evolutionary Biology, v.28, 1995.

MISCELLANEOUS**For Sale**

1990 Geo Tracker, 5 spd, 4WD, air conditioning, excellent condition. \$8250, or best offer. Interested please call Connie Kolman at 27-1486.