

STRI newsletter

May 26, 1995

SMITHSONIAN TROPICAL RESEARCH INSTITUTE - Apartado 2072, Balboa, Panamá

No. 21

TUPPER CENTER SEMINARS

Tuesday, May 30, noon seminar speaker will be Nélide E. Gómez, STRI

Chemical Analysis of the Dorsal Shields of Cassidinae Larvae Feeding on the Plant Genus Cordia

Abstract

Cassidinae larvae carry an arched structure over their dorsal constructed with exuviae and feces. This structure protects them physically against desiccation and some predators. The physical stability and chemical composition of these shields has received little attention. I analyzed feces from different larvae feeding on the genus *Cordia* using organic solvents of increasing polarity. Non-polar extracts were submitted to TLC and subsequently, to GLC and GLC-MS. Extracts of the filamentous dorsal shields of *Eurypedus* sp. were found to contain high concentrations of essential oils derived from the host plant *Cordia curassavica*. A complex mixture of long-chain straight and branched hydrocarbons were also identified in dorsal shields of other species. These hydrocarbons may play a role as an adhesive agent in the dorsal shields and, in addition, may function as a fixative for the plant-derived terpenoids.

From the BDG

The behavior discussion group will meet to discuss the paper "Phylogenetic tests of the sensory exploitation model of sexual selection" by K. Shaw, 1995. *TREE* 10: 117-121, after the seminar. Copies of the paper are available at all facilities.

BAMBI SEMINARS

Thursday, June 1, Bambi seminar speaker will be Mark Moffet, Harvard Museum of Comparative Zoology, 7:30pm, on BCI.

Documenting Major Active Canopy Research Sites

Transportation and dinner reservations are essential.



On Friday, May 19, Albert Rojas, (left), general manager of ALICO, S.A. and Herman Bern (right), president of "Ventas y Proyectos, S.A.", presented Ira Rubinoff their 1995 contributions, as patrons in support of the Marine Education Center at Culebra Point ••• El viernes 19 de mayo, Albert Rojas (izquierda) Gerente General de ALICO, S.A. y Herman Bern (derecha), presidente de Ventas y Proyectos, S.A., entregaron a Ira Rubinoff sus contribuciones anuales, como padrinos que apoyan el desarrollo del Centro Marino en Punta Culebra. (Foto: M.A. Guerra)

ESPECIAL

El sábado 27 de mayo, el Grupo Ciudad de la Facultad de Arquitectura de la Universidad de Panamá presentará:

El Corredor Norte: Integración del Medio Ambiente a un Desarrollo Racional de la Ciudad

en el Salón Oropéndolas del Parque Natural Metropolitano, a las 9am. Los expositores serán Jorge Riba de la Universidad de Panamá, Stanley Heckadon de STRI, Javier Eskildsen de la Sociedad Audubon y Alvaro Uribe de la Universidad de Panamá.

PEOPLE

Arrivals

- Betsy Arnold, University of Utah, May 29-Jun 1996, to join Phyllis Coley in the project on the deterrence of fungi and herbivores in young leaves with different developmental patterns, at BCI.
- Robert Brooks, University of Kansas, May 31-28 Jun, to work with James Ashe in his work on the biodiversity and community structure of forest floor Coleoptera, in Fortuna.

- Mark Endries, University of Wisconsin, Jun 1-Jul 31, to work with Gregory Adler on an experimental study of the population limitation in a tropical fruit-eating rodent, at BCI.
- Thomas Hartman, Senior Scholar from the Institut fuer Pharmazeutische, Germany, Jun 1-15, to visit STRI facilities and present a seminar.
- Michael Ryan, STRI Research Affiliate from the University of Texas, Jun 1-30, to continue his research on the evolution of communication in the túngara toadlets, at Gamboa.
- Wiebke Thies, University of Tübingen, Germany, Jun 1-15 Dec, to work with Elisabeth Kalko in her studies of the echolocation and foraging behavior of neotropical bats, at BCI.
- David Zeh, University of Houston, Jun 1-15 Aug, to conduct field experiments on the reproductive success in the Harlequin beetle associated pseudoscorpion, with a Scholarly Studies Grant, at Gamboa.
- Jeanne Zeh, Pre-doctoral fellow from the University of Houston, Jun 1-31 Aug, to work at Gamboa on the project: Female promiscuity meets genomic anarchy in the hybrid zone.

Departures

- Ira Rubinoff, May 30-3 Jun, to Washington D.C., on official business at SI.
- Harry Barnes, May 31-6 Jun, to St. Thomas, U.S. Virgin Islands, to attend the meetings of the Association of Marine Laboratories of the Caribbean.
- Anthony Coates, May 1-17, to Washington D.C., on official business at SI.

Matrimonio

Manuel Guariguata, antiguo becario de STRI, y Giselle Arroyo contrajeron matrimonio el sábado 18 de marzo en Santafé de Bogotá. Nuestras felicitaciones.

Nuestras Condolencias

Nuestras condolencias a Mercedes Arroyo y a toda su familia, por la muerte de su madre, Avelina Guzmán de Ng, el miércoles 24 de mayo, en la ciudad de Colón.

THINGS YOU SHOULD KNOW

BCI Launch Change of Schedule

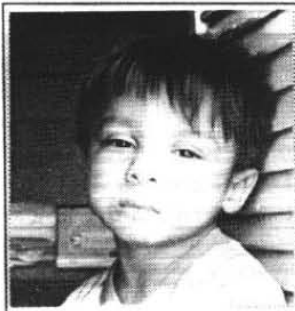
Cambio de Horario en la Lancha a Barro Colorado
Effective Sat, Jun 3, the *Las Cruces* launch will operate on a new week-end schedule: on Saturdays, leaves BCI at 5:55am and 2:30pm and Gamboa at 7:15am and 4:30pm; on Sundays, leaves BCI at 5:55am and 2:20pm and Gamboa at 7:15am and 5:30pm. On week-ends SACA buses will leave Gamboa at 7:05am. For more detailed information, please see your bulletin board or consult the Visitor Services Office at STRI ••• *A partir del sábado 3 de junio, el horario de Las Cruces tendrá un nuevo horario de fin de semana: saldrá de BCI los sábados a las 5:55am y a las 2:30pm, y de Gamboa a las 7:15am y a las 5:30pm. Los domingos, saldrá de BCI a las 5:55am y 2:20pm, y de Gamboa a las 7:15am y a las 5:30pm. Estos días SACA tendrá un bus hacia Panamá a las 7:05am. Para información más detallada consulte su cartelera o la Oficina de Visitantes de STRI.*

Flights to San Blas ••• Vuelos a San Blas

Aereo-Taxi announced flights to San Blas on Sundays on an *Islander*, leaving the Paitilla Airport at 8:00 a.m. to El Porvenir, Cartí, Río Sidra, Narganá, Tupile, Achutupu and Playón Chico. On its way back to Panama, the flight leaves Playón Chico at 2:00 p.m., with stops on Achutupu, Tupile, Narganá, Río Sidra, Cartí and El Porvenir ••• *Aereo-Taxi anunció vuelos a San Blas todos los domingos en un Islander, saliendo del Aeropuerto de Paitilla a las 8:00 a.m. con destino a El Porvenir, Cartí, Río Sidra, Narganá, Tupile, Achutupu and Playón Chico. De regreso a Panamá, el vuelo sale a las 2:00 p.m. de Playón Chico, haciendo paradas en Achutupu, Tupile, Narganá, Río Sidra, Cartí y El Porvenir.*

Reminder ••• Recorderis

Effective Saturday, June 3, all telephone numbers in Panama will change to 7 digits. A Table of Conversion is available in all STRI facilities ••• *A partir del sábado 3 de junio, todos los números de teléfono de Panamá cambiarán a 7 dígitos. Copias de la Tabla de Conversión, se encuentra a disposición en todas las instalaciones de STRI.*



Eric Amado: Update ••• Lo Ultimo sobre Eric Amado

Eric's mother, Edilma, is at the Arias Madrid Hospital, for pre-surgery exams. So is him, running around the pediatric section. We already have \$7,471.72. At this rate the \$22,000 will be raised on time. So, don't miss *Eric's Naos Party* today at 4:30pm, Shop. Choripán and drinks will be sold. Dancing. Bring your family and friends! More information in the *Panamá América* on Monday •• *Edilma, la mamá de Eric, está en el Hospital Arias Madrid para exámenes pre-operatorios. Eric también, corriendo por Pediatría. Ya hay \$7,471.72. A este paso, los \$22,000 se tendrán a tiempo. Así que no falte a la fiesta de Eric en Naos hoy a las 4:30. Baile. Choripán y tragos a la venta. Traiga a sus parientes y amigos! Más información en el Panamá América del próximo lunes 29 de mayo.*

From External Affairs

We wish to remind all visitors, fellows and interns that hold Tourist Card Extensions (Immigration I.D.) that they must contact Celideth de León at the STRI Office of External Affairs before leaving Panama at least 8 working days before departure. Failure to do so, may result in a significant delay to leave this country. Celideth will be pleased to answer any question.

At the Tupper Center

Tue, May 30 ■ Tupper scientific support staff meeting, SMR, 9am
 ■ Noon seminar by Né-lida Gómez, AUD

At the Culebra Marine Reserve

Tue, May 30 *Escuela Belisario Porras*
 Wed, May 31 *Escuela Belisario Porras*
 Thu, Jun 1 *Escuela Belisario Porras*
 Fri, Jun 2 *Escuela Rodolfo Chiari*
 Sat, Jun 3 *Forest Friends*

At Barro Colorado Island Station

Sat, May 27 *Ecologistas Penonomeños* and members of the *Iglesia Evangelista de Nazareno*
 Sun, May 28 *Colegio Primer Ciclo Panamá*
 Sat, Jun 3 ACEPE (Conservation group from Campana) and *Dirección Provincial del Ministerio de Educación*
 Sun, Jun 4 *Visitors from Panama City*



As the highlight of the STRI Community Arts and Crafts closing ceremony, the "STRI String Trio" (from the left), Emily Maduro, student of "Colegio Javier" and member of the Panamanian "Orquesta Juvenil" in replacement of Oriana Racines; Melanie Winter, first violinist at the National Orchestra, and Lizzy Leigh, the Trio's coordinator and widely recognized musician and singer, played three Beethoven country dances at the Tupper Center Exhibit Hall, on Thursday, May 11 (Foto: A. Montaner)

ANNOUNCEMENTS

STRI June Birthdays

Rodolfo Selles	1
Hely Cortez	2
Argelis Ruiz Guevara	2
Nereida Hernandez	2
Rolando Pérez	2
Bonifacio De León	5
Gabriel Abrego	7
Gloria Maggiore	7
José Carlos Espino	7
Klaus Winter	10
David West	15
Maritza Perurena	15
Aureliano Valencia	16
Shawn McCafferty	22
Leo van Valkenhoef	29
Carmen Sucre	30



Internet Workshops

Starting Tue, May 30, the IRM Department at Tivoli will offer Internet 2-day workshops to users with the necessary software already installed. The workshops will introduce participants on What is the Internet and How to Access On-Line Information.

- Tue, May 30: 1:30-4:30 pm, Spanish, Part I
- Wed, May 31: 1:30-4:30 pm, Spanish, Part II
- Thu, Jun 8: 1:30-4:30 pm, English, Part II (scientific oriented)
- Fri, Jun 9: 1:30-4:30 pm, English, Part II (scientific oriented)
- Thu, Jun 15: 1:30-4:30 pm, English, Part I (scientific oriented)
- Fri, Jun 16: 1:30-4:30 pm, English, Part II (scientific oriented)
- Tue, Jun 20: 1:30-4:30 pm, Spanish, Part I
- Wed, Jun 21: 1:30-4:30 pm, Spanish, Part II

Due to limited capacity at the Department's computer room, please call Tivoli, ext. 238 to sign up for the courses. These will continue until necessary. If you don't have an Internet connection, call the IRM Office for assistance or send an email to STRIHELP.

Electronic Imaging System Seminars

Weekly seminars will be offered on Fridays from 1:30-5pm at Tupper, room 510, for training to take advantage of the new electronic imaging system facility. For more information, call Alejandro Caballero, ext. 313.

Aunque Tarde...

Deseamos felicitar al Departamento de Contabilidad de STRI, quienes celebraron "El Día del Contador" el pasado miércoles 17 de mayo, en el marco de la semana del Contador. En la ocasión, Fernando Oglivie nos envió un editorial, que dadas nuestras limitaciones, no es posible reproducir en su totalidad. Pero entre sus pensamientos, deberíamos anotar que: "...*algunas veces se nos tilda de un mal necesario. Pero nuestro incentivo es que nuestra labor no pasa desapercibida... ya que el ejercicio de contar y darle significado a los números para que sean aplicables a las necesidades de cada usuario hacen de todos nuestros días, una misión cumplida!*"

NEW STRI BOOKLIST

Automated DNA sequencing and analysis / edited by MD Adams et al. QP625.N89A93 1994 STRI.

Bibliography of the Annonaceae / Iconography of the Annonaceae / edited by W.Morawetz. Z5356.A68M54 1993 STRI.

Biochemical mechanisms involved in plant growth regulation, ed by CJ Smith et al. QK745.B56 1994X STRI.

Biology of economic algae / edited by I.Akatsuka. QK566.B615 1994 STRI.

Costa Rica's National Parks and Preserves / J.Franke. SB484.C8F73 1993X STRI.

Ethnobotany and the search for new drugs (CIBA Foundation Symposium v.185)RS164.E84 1994X STRI.

Global Geological Record of Lake Basins, vol.1, ed. by E. Gierlowski-Kordesch & K. Kelts. QE39.5.P3G54 1994X v.1 STRI.

The Gran Chichimeca: essays on the archaeology and ethnohistory of northern Mesoamerica / edited by JE Reyman. F1219.8.C55G73 1995X STRI.

Guide to Flowering plant families / WB Zomlefer. Ref QK115.Z65 1994X STRI.

Handbook of Arabian medicinal plants / SA Ghazanfar. RS164.G484 1994X STRI.

Handbook of environmental physiology of fruit crops, v.I. Temperate crops; v.II. Sub-tropical and tropical crops / edited by B.Schaffer & PC Andersen. Ref SB357.28.H35 1994X STRI.

Index of garden plants / M.Griffiths. Ref SB403.2.G85 1994 STRI.

Lejeuneaceae: Ptychantheae, Brachiolejeuneae / SR Gradstein. QK555.L37G73 1994 STRI.

Living with the ancestors: kinship and kingship in ancient Maya society / PA McAnany.

F1435.3.K37M33 1995X STRI.

Lizard ecology: historical and experimental perspectives / ed. by LJ Vitt & ER Pianka. QL666.L2L57 1994X STRI.

Patterns & process in host-parasitoid interactions / BA Hawkins. QL496.H3 1994X STRI.

Puntos de partida y muestreo diagnóstico para la silvicultura de bosques naturales del trópico húmedo / ID Hutchinson. SD247.H97 1993 STRI.

Symbiotic interactions / AE Douglas. QH548.D68 1994X STRI.

Ultrastructure of fossil spores and pollen / edited by MH Kurmann & JA Doyle. QE993.U47 1992 STRI.

User's guide to the Beni Biosphere Reserve Biodiversity Plots Bolivia zones 03 and 04. QH541.5.R27U84 1991 STRI.

Vegetation science in forestry / edited by EO Box et al. QK938.F6V422 1994 STRI.

MISCELLANEOUS

Call for Papers ••• Invitación para Publicaciones
Guía Camptur is a new bilingual periodical published by the Panamanian Chamber of Tourism. *Camptur* has invited the STRI community to publish articles with photographs emphasizing important ecological features of Panama. Copies of the guide can be obtained from Maria Luz Calderón, Tupper Center, room 340 ••• *Guía Camptur es una nueva revista bilingüe que publica la Cámara de Turismo de Panamá. Camptur invita a la comunidad de STRI a publicar artículos con fotografías que enfatizan aspectos importantes de la ecología panameña, en dicha guía. Copias de la revista pueden obtenerse en la oficina 340 de la Oficina de Becas y Educación en Centro Tupper, con Maria Luz Calderón.*

Se Vende

Nissan Patrol de dos puertas, 1986, color verde oliva con franjas color naranja. Aire acondicionado, 4x4, power steering. Excelentes condiciones. \$9,500 negociables. Interesados favor llamar a Andrés Ramos, después de horas de trabajo de Barro Colorado, al 51-1433.

Reminder ••• Recorderis

Mon, May 29 is the commemoration of Memorial Day in the United States and a Holiday for STRI ••• *El lunes 29 de mayo se conmemora el Día del Soldado Caído en los Estados Unidos, y es un día libre para STRI.*