

# COMMUNICATIONS

## III Congreso Latinoamericano de Equinodermos, Costa Rica

by Juan José Alvarado<sup>1,2,\*</sup> and Chantal Conand

The third Latin American Echinoderm Congress was organized in San José, Costa Rica, from 18 to 22 July, at the University of Costa Rica, by the Centro de Investigación en Ciencias del Mar y Limnología, and by the Biology School, with the coordination of Juan José Alvarado Barrientos, with the help of a local team and a scientific committee from several countries (México, Spain, Brazil, Ecuador and Argentina). Financial support was offered by Institut Français Amérique centrale and Vicerrectoría de Investigación from the University of Costa Rica which are sincerely thanked.

The congress was attended by 74 participants from 13 countries (Spain, USA, Mexico, El Salvador, Costa Rica, Colombia, Ecuador, Chile, Venezuela, Brazil, Uruguay, Argentina and France). There were a total of 93 presentations, 53 oral and 40 posters, with a participation of 37 students (undergraduate and graduate). Four plenary lectures were given: 1) "Recent trends in world sea cucumber fisheries: Captures, markets, management and the problem of the illegal" by Dr Chantal Conand, La Réunion University, France; 2) "Human influence on the population fluctuations of sea urchins: Implications for management of marine ecosystems" by Dr Jose Carlos Hernandez, University of La Laguna, Tenerife, Spain; 3) "Ethical reflections on the use of echinoderms in scientific studies" by Dr Tamara Rubilar, Patagonian National Center, Argentina; and 4) "Molecular studies of echinoderms across the Atlantic-Mediterranean area: From population genetics to gene expression", by Dr Rocío Pérez Pórtela, University of Miami, United States. The proceeding from this congress will be published in a special issue of the Journal of Tropical Biology in 2017. A week before the congress, three courses were developed and held at the Biology School: 1) "Echinodermata physiology" by Dr Tamara Rubilar; 2) "Experimental design in marine ecology" by Dr Jose Carlos Hernandez; and 3) "Application of molecular markers to ecological and evolutionary studies" by Dr Rocío Pérez Portela.



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**The following presentations focused on sea cucumbers:**

- Effects of different diet types on the growth, survival and regeneration of the sea cucumber *Isostichopus fuscus* induced by a transverse cutting experiment.  
*Sonnenholzner J.I., Searcy-Bernal R. and Panchana-Orrala M.*
- The genus *Synallactes* (Echinodermata: Holothuroidea: Synallactidae) revisited.  
*Solís-Marín F.A. and Laguarda-Figuera A.*
- Caracterización del ciclo gonádico del pepino de mar café (*Isostichopus fuscus*, Ludwig 1875) en la costa oriental de Baja California.  
*Pañola-Madrigal A. and Calderón-Aguilera L.E.*
- Phylogeny of echinoderms. including *Xylopax*.  
*Janies D.A.*
- Hermafroditismo en *Isostichopus fuscus* (Holothuroidea) en el norte del Golfo de California, México.  
*Herrero-Pérezrul M.D., Pañola-Madrigal A., Calderón-Aguilera L.E. and Reyes-Bonilla H.*
- Marsupial brooding in the sea cucumber *Cladodactyla crocea* (Lesson, 1830) (Holothuroidea: Cucumariidae) from southwestern Atlantic Ocean.  
*Martinez M.I., Alba-Posse J.E. and Penchazadeh P.E.*
- Revisión de los ejemplares de las especies de la familia Cucumariidae Ludwig, 1894 (Holothuroidea: Dendrochirotida) depositados en la Colección Nacional de Equinodermos "Dra. Ma. E. Caso M" del ICML, UNAM.  
*Sánchez-Alonso D.M., Solís-Marín F.A. and Laguarda-Figuera A.*
- Revisión taxonómica del género *Paroriza* Hérouard, 1902 (Echinodermata: Holothuroidea: Synallactidae).  
*Laguarda-Figuera A., Solís-Marín F.A., Cervantes-Aguilar I.P. and Méndez-Loyola K.*
- Morphological phylogeny of the phyllophorid dendrochirotids.  
*Martins L., Souto C. and Tavares M.*
- Avances sobre la acuicultura del pepino de mar *Isostichopus fuscus* en Ecuador con visión hacia la prepopulación.  
*Sonnenholzer J.*

**Posters on holothurians were exhibited throughout the congress:**

- Inventory of the Echinodermata from Reunion Island, Western Indian Ocean.  
*Conand C., Boissin E., Mulochau T., Trentin F. and Ribes S.*
- Densidad de equinodermos des littoral rocoso de Punta Amapala y el arrecife de coral de Los Cabanos, El Salvador.  
*Segovia J., Ramos F., Guerra G., Lopez G. and Solorzano S.*
- Invertebrados asociados a equinodermos en costa des estato Sucre, Venezuela.  
*Gomez-Maduro M., Diaz-Diaz O. and Lira C.*
- The genus *Synallactes* revisited.  
*Solís-Marín F.A. and Laguarda-Figuera A.*
- Revision de los ejemplares de las especies de la familia Cucumariidae Ludwig, 1894 depositados en la Colección Nacional de Equinodermos "Dra Ma. E. Caso" del ICML, UNAM  
*Sánchez-Alonso D.M., Solís-Marín F.A. and Laguarda-Figuera A.*
- Holothuroideos de Mar Profundo des Caribe y Golfo de Mexico.  
*Duran-Gonzalez A., Laguarda-Figuera A., Cervantees-Aguilar P. and Solís-Marín F.A.*
- La colección de Equinodermos des Museo de Zoología de la Universidad de Costa Rica.  
*Alvarado J.J., Chacon I. and Solano-Rivera S.*
- First record of Ypsilothuriidae in the south Atlantic.  
*Martins L. and Tavares M.*
- Caracterizacion des ciclo gonadico del pepino de mar café (*Isostichopus fuscus*, Ludwig 1875) en la costa oriental de Baja California.  
*Panola-Madrigal A. and Calderón-Aguilera L.E.*
- Hermafroditismo en *Isostichopus fuscus* en el norte del Golfo de California, Mexico.  
*Herero-Pérezrul D., Panola-Madrigal A., Calderón-Aguilera L.E. and Reyes-Bonilla H.*
- Marsupial brooding in the sea cucumber *Cladodactyla crocea* (Lesson, 1830) from the southwestern Atlantic Ocean.  
*Martinez M., Alba-Posse J.E. and Penchazadeh P.E.*
- Comparison of the reproductive cycle of the sea cucumber *Holothuria arguinensis* at three different habitats in the Algarve coast (southern Portugal).  
*Marquet N., Conand C., Power D.M., Canario A.V. and Gonzalez-Wanguemert M.*

- Distribucion de tallas y reproduccion de *Hemicentrotus spectabilis* en el Noroeste del Golfo San Matias, Patagonia, Argentina.  
*Lazari C., Carignano A., Morsan E., Kroek M. and Rubilar T.*
- Morphological phylogeny of the phyllophotid dendrochirotids.  
*Martins L., Souto C. and Tavares M.*
- Pruebas de marcaje en los pepinos de mar *Isostichopus fuscus* y *Holothuria theeli* en condiciones de laboratorio.  
*Sonnenholzer J., Herrera M.A., Arriega-Ochoa J. and Panchana M.*
- Digestive enzymes in gut and respiratory tree of adult sea cucumber *Isostichopus badionotus*.  
*Martinez-Milian G. and Olvera-Novoa M.A.*

**Note:**

The national newspaper *La Nacion* published a long article on sea cucumber exploitation “Expertos alertan sobre explotación de pepino de mar”, (Experts warn about exploitation of sea cucumbers) following the plenary session.

## Communications on holothurians at the Ninth European Echinoderm Conference – Sopot, Poland 2016

*Compiled by Thomasz Borszcz (tomaszborszcz@gmail.com)*

- The variety of interactions between symbiotic gastropods and echinoderms [talk]  
*Dgebuadze and Kantor*
- “Cool” sea cucumbers! Biodiversity of Bransfield Strait in Antarctica [poster]  
*Cánovas et al.*
- Does space matter? Optimizing stocking density of the sea cucumber *Holothuria arguinensis* in tanks [poster]  
*Domínguez-Godino and González-Wangüemert*
- Sea cucumbers: New marine resource for fisheries and aquaculture in the Mediterranean and the Atlantic [talk]  
*González-Wangüemert et al.*
- New target species of sea cucumber for aquaculture development in Angola [poster]  
*González-Wangüemert et al.*



Photo of participants (image: Kajetan Deja).

## Conference “Protection and Sustainable Utilization of Sea cucumbers”, organized by the Chinese Society of Echinoderm, under the 2016 Annual Conference of Chinese Society for Oceanology and Limnology

*Communication by Francisco Solís-Marin*

*Instituto de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de México – November 2016*

Conference date and location: 6–9 November 2016, Haikou, Hainan Province, China

Principal organizer: Dr Hongsheng Yang, Professor/Deputy Director of Oceanology, Chinese Academy of Sciences.

The conference “Protection and Sustainable Utilization of Sea cucumbers” featured technical sessions and workshops covering nearly all aspects of biology, ecology, physiology, aquaculture and stock enhancement of sea cucumbers, especially *Apostichopus japonicus*, around the world.