



40th

Annual Meeting

Western Society of Malacologists

25 to 28 of July La Paz Baja California Sur, México

PROGRAM

Wednesday, July 25th

Salon Madre Perla, Hotel Perla

16:00-20:00 **Registration**

18:30-20:00 **Executive Board Meeting**

20:00-22:00 **Reception**

Thursday, July 26th

Centro de Convenciones, UABCS. Planta Alta

9:00-9:30 **Opening Ceremony**

Historical Malacology Session

9:30-9:40 **Introductory Remarks by ArqIga. Harumi Fujita.**

9:40-10:00 **Late Oligocene (Chattian) Molluscan Fauna of the San Juan Member (El Cien Formation) from Baja California Sur, Mexico. Diego Vera-Dimas & Gerardo González Barba.**

10:00-10:20 **Evidence for an early Holocene/late Pleistocene shoreline north of the present ice margin of the Bering Glacier, Alaska.**
Ann D. Pasch & Nora R. Foster.

10:20-10:40 **John Steinbeck, Edward F. Ricketts, Molluscs and the Sea of Cortez.** Hans Bertsch.

10:40-11:00 **Molluscan Faunas of the Tepetate Formation (Late Paleocene-Late Eocene) In Baja California Sur, Mexico.** Morales-Ortega, Priscila & González-Barba, Gerardo.

11:00-11:20 **Shellfish Remains from the Mink Island XMK 030 Site, Katmai National Park, Alaska.** Nora R. Foster.

11:20-11:40 **Meaning of the presence of shell in Archaeological Sites in the Cape Region, Baja California Sur, Mexico.** Arqлга. Harumi Fujita.

11:40-11:55 **Break**

Malacology and Ecology Session

11:55-12:15 **Introductory Remarks by Dr. Esteban Félix Pico.**

12:15-12:35 **Improvised, improved close-up imaging of mollusca and microhabitats in the lab and field, as high-resolution non-destructive sampling through time, in memory of David Mulliner.** Christopher L. Kitting

12:35-12:55 **Chitons collected by David and Margaret Mulliner in the northern Gulf of California.** Douglas J. Eernisse & Anthony Draeger.

13:15-13:35 **Biodiversity of Mollusks associated to nontropical carbonate Shelf In San José Island, Gulf Of California.** Arturo Tripp-Quezada, Jochen Halfar, Lucio Godínez O. & José Borges Souza.

13:35-14:50 **Lunch Break**

15:00-15:20 **Chiton phylogeography and new species discovery along the Baja California Peninsula.** Douglas J. Eernisse.

15:20-15:40 **Tools and Perspectives of Environmental Education for the Sea of Cortez: A conservation ethic.** Hans Bertsch & Rosa del Carmen Campay.

15:40-16:00 **Handcrafts from pearl oyster shells for the families of fishermen's in the Gulf of California, Mexico, as an alternative for extra incomes to make a contribution to alleviate the poverty.** Cáceres-Martínez, Carlos, Alfredo Torres-Benítez & Hernán Ramírez-Aguirre.

16:00-16:20 **Islas del Golfo de California. Generalidades Para visitar las Áreas Naturales Protegidas/Generalities to Visit Natural Protected Areas.** Roberto López.

Pasillo del Laboratorio de Paleontología. UABCS.

16:20-18:00 **Collective Exhibition: Shells from the Sea of Cortez.** Dr. Luis Segura.

Friday, July 27th.

Centro de Convenciones, UABCS. Planta Alta

General Session

- 9:00-9:10 **Introductory Remarks by Hans Bertsch.**
- 9-10-9:30 **Paralytic shellfish toxin in marine mollusks from the Southwestern region of the Mexican coasts (1992-2006).** Ismael Gárate-Lizárraga, Jesús Díaz-Ortiz, Mario Alarcón-Tacuba, Beatriz Pérez Cruz, Alejandro Torres-Jaramillo, Mario Alberto Alarcón-Romero & Saúl López-Silva.
- 9:30-9:50 **Opisthobranchia (Gastropoda) Collected by Steinbeck & Ricketts During the Western Flyer Expedition to the Sea of Cortez, March—April 1940.** Hans Bertsch & Rebecca Johnson.
- 9:50-10:10 **Biogeography of Northeast Pacific Opisthobranchs from Point Conception, California, USA, to the Galápagos Islands, Ecuador: Comparative faunal province studies of the Sea of Cortez.** Hans Bertsch.
- 10:10-10:30 **Brominated compounds in egg capsules of the intertidal purple snail *Plicopurpura pansa* (Gould, 1853) (Prosobranchia: Muricidae).** Naegel, L.C.A.1; C.D. Murphy & J.I. Murillo-Alvarez
- 10:30-10:50 **Egg masses production of the milk conch *Strombus costatus* (Gmelin) using enclosures areas in the National Park Contoy Island, Isla Mujeres, Q. Roo, Mexico.** Daniel Blanqueto Cordova, Luis Alfonso Rodríguez Gil, Carlos Francisco Reyes Sosa, Ramiro Alpizar Carrillo & Iván Rene Rivas Ruiz.
- 10:50-11:10 **Gene Flow of Queen Conch *Strombus gigas* in the Mexican Caribbean.** R. Perez-Enriquez, G. Mendoza, F.J. Garcia-Rodriguez, & T. Gutierrez.

11:10-11:25 **Break**

11:25-11:45 **Brominated compounds in the secretion of the hypobranchial gland of *Plicopurpura pansa* (Gould, 1853) (Prosobranchia: Muricidae).** Jesús I. Murillo-Alvarez, Ludwig C.A. Naegel & Cormac D. Murphy.

11:45-12:05 **Identification of *Vibrio harveyi* using PCR amplification method in cryopreserved samples of sperm of red abalone *Haliotis rufescens*.** Alberto M. Velasco, John T. Buchanan & Carmen G. Paniagua-Chávez.

12:05-12:25 **Mortality rate of the intertidal purple snail *Plicopurpura pansa* after being removed from the rocks.** Jorge A. López-Rocha & Ludwig Naegel.

12:25-12:45 **Paralytic shellfish toxins in the Lions-paw scallop *Nodipecten subnodosus* in Bahía de Los Angeles in the Gulf of California.** Ismael Gárate-Lizárraga, Marcial Arellano-Martínez, Bertha Patricia Ceballos-Vázquez, José Bustillos-Guzmán, David Javier López-Cortés & Francisco Hernández-Sandoval.

12:45-13:05 **In Memoriam: Some Personal Thoughts in Honor of David K. Mulliner.** Mike Miller.

13:05-14:50 **Lunch Break**

15:00-15:20 **Estimation of relative fecundity in *Atrina maura*, (Mollusca; Pinnidae).** Cáceres-Martínez, Carlos & Daniela Barrios-Ruiz.

15:20-15:40 **Species differentiation in the Venerid bivalve genus *Transennella*.** Lillian E. Bloch, Michael P. Russell & Todd R. Jackman.

15:40-16:00 **Are toxic dinoflagellates harmful to bivalves?** Norma A. Estrada, Felipe Ascencio & Rubén G. Contreras.

16:00-16:20 **Parasites of the renal sacs from *Octopus hubbsorum* Berry, 1953 in Bahia de La Paz, B.C.S., Mexico.** S. Castellanos-Martínez, Ma. C. Gómez- del Prado Rosas & F. G. Hochberg.

16:20-16:40 **Biochemical Biomarkers as a Tool to Assess Aquatic Heavy Metals Contamination using Catarina Scallops (*Argopecten ventricosus* Sowerby, 1842).** Sobrino-Figueroa A. & Caceres-Martinez C.

Pasillo del Laboratorio de Paleontología. UABCS.

16.40-18:00 **Collective Exhibition: Shells from the Sea of Cortez.** Dr. Luis Segura.

Saturday, July 28th.

Centro de Convenciones, UABCS. Planta Alta

Mollusk Aquaculture and Fisheries Session

9:00-9:10 **Introductory Remarks by Dr. Carlos Cáceres Martínez.**

9:10-9:30 **Effect of temperature on growth and survival of *Crassostrea corteziensis* spat during late-nursery culturing at the**

- hatchery.** Cáceres-Puig, J. I., P. E. Saucedo, & F. Abasolo-Pacheco.
- 9:30-9:50 **Biological control of fouling in mollusk aquaculture.** Yadira Trejo Hernández, Volker Koch, Francisco Sínsel & Cesar Ruiz Verdugo.
- 9:50-10:10 **Environmental Management Unit for the culture of Calafia mother of pearl *Pinctada mazatlanica* in La Paz Bay for the production of pearls.** Leopoldo López-Contreras, Jorge Iván Cáceres-Puig, Javier Cortés-Salazar & Carlos Cáceres Martínez.
- 10:10-10:30 **Growth of abalone Postlarvae of *Haliotis corrugata* fed in different densities of the diatom *Navicula incerta* in two different light conditions (constant illumination or darkness).** Gorrostieta Hurtado Erendira., Searcy-Bernal Ricardo & Anguiano-Beltran Casandra.
- 10:30-10:50 **Socioeconomic aspects of the commercial utilization of clam mano de león (*Lyropecten subnodosus*), in Mulegé's Municipality in Baja California Sur, Mexico.** Martha Claudia de la Garza Montaña.
- 10:50-11:10 **Towards development of large-scale hatchery cultivation of larvae and spat of the pearl oyster *Pinctada mazatlanica* in Mexico.** Pedro E. Saucedo Lastra.
- 11:10-11:30 **Genetic certification of mollusk species and hybrids using molecular markers (allozymes, microsatellites and lysin-SSCP): The case of abalone species (*Haliotis spp*) in Mexico.** Cruz-Hernández P., Ibarra-Humphries A.M., Pérez-Enríquez R., Hernández-Ibarra N.K., Ávila-Álvarez S., Aranceta-Garza F., Morelos-Castro R. M., Galindo-Sánchez C. E., Rámirez-Arce J.L. & Ponce-Díaz G.

11:30-11:45 **Break**

11:45-12:05 **Species identification of canned “abalone” using FINS (forensically informative nucleotide sequencing).** Alberto Miranda Velasco, Cristian Gallardo Escárate & Miguel Ángel del Rio Portilla.

12:05-12:25 **Mollusks of Comercial Importante in Michoacán Beaches.** Trujillo-Toledo José Luís & Gorrostieta-Hurtado Eréndira.

12:25-12:45 **Scallop Fisheries and Aquaculture of the West Coast of America.** Esteban F. Felix-Pico, Oscar E. Holguín-Quiñones & Mauricio Ramírez-Rodríguez.

12:45-14:30 **Lunch Break**

Centro de Convenciones UABCS. Planta Baja

Poster Session

14:45-14:55 **Introductory Remarks by Dr. Cesar Ruiz Verdugo.**

14:55-17:00 **Poster Session**

1. **Reproductive Cycle of the flat clam *Isognomon Alatus* (Gmelin; 1971) In Veracruz.** Montaña Palacios M. & Lango Reynoso F.
2. **Reproductive aspects of *Octopus hubbsorum* (Berry, 1953) in the Bahía de Loreto National Park, Gulf of California México.** Myrna L. Bravo-Olivas, Marcial Villalejo-Fuerte, Marcial Arellano-Martínez, Dinorah Herrero-Perezrul & Agustín Hernández-Herrera

3. **Embryonic development description of *Pteria sterna* (Bivalvia:Pteriidae) until trocophore apparition.** De las Heras-Saldaña S., González-Rivera L., Loeza-Quintana T., Sánchez Tapia I., Zaleta-Pinet D., J. I. Cáceres Puig & Carlos Cáceres Martínez
4. **Tissue and cellular components of the pearl oyster *Pinctada mazatlanica* (Hanley, 1856) associated with reproduction: A study of digital image analysis.** María Eliana Gómez Robles & Pedro E. Saucedo.
5. **Biology of the reproduction of the American oyster *Crassostrea virginica* (Gmelin, 1971) in natural and experimental conditions.** Robles-Hernández Rubén & Lango-Reynoso Fabiola.
6. **Microsatellites as genetic markers for pink abalone *Haliotis corrugata*.** Noé Díaz-Viloria, Pedro Cruz Hernández, Giovanni Fiore Amaral, Ronald Burton & Ricardo Pérez-Enríquez.
7. **Registration of geographical distribution of *Astraea turbanica* (Dall 1910) (Gastropoda:Turbinidae) in the western coast of Baja California.** José Remedios Turrubiates Morales & María Georgina Gluyas Millán
8. **Individual and Joint Toxicity of Cadmium, Chromium and Lead on Physiological And Biomarker Responses of the Catarina Scallops (*Argopecten ventricosus* Sowerby, 1842).** Sobrino-Figueroa A. & Caceres-Martinez C.
9. **Cadmium, Chromium and Lead bioaccumulation in Catarina Scallops (*Argopecten ventricosus* Sowerby, 1842) in Ensenada de La Paz, B.C.S.** Sobrino-Figueroa A. & Caceres-Martinez C.
10. **Depuración de ostión (*Crassostrea virginica*) de talla comercial del sistema lagunar Boca del Río-Mandinga, Ver. México.** Maria del

Refugio Castañeda Chávez, Fabiola Lango Reynoso, Violeta Pardío Sedas & Saraid del Carmen Nogueira Montiel.

11. **Study of the response of the mother-of-pearl oyster *Pinctada mazatlanica* (Hanley, 1856) larvae cultivated under different seawater sources.** Fernando Abasolo Pacheco & Pedro E. Saucedo Lastra.
12. **Bivalve Mollusks polluted by Brevitoxines in Alvarado Municipality.** M. R. Méndez Quintana. , O. I. Barroso Aragón, R. Velasco Barragán, R., Hernández García & J.M. Escobar-Ramirez.
13. **Ancient Gulf of California and its faunal affinities.** Judith Terry Smith.
14. **Historical mollusc catch trends in Bahia Magdalena, Baja California Sur, Mexico.** Mauricio Ramírez-Rodríguez, Agustín Hernández & Esteban F. Felix-Pico
15. **Mexican gastronomy and bivalve mollusks.** José Manuel Green Olachea.
16. **Sexual Maturity and age of the snail *Astraea undosa* (Wood 1828) from Punta Eugenia, BCS, México.** Maria Georgina Gluyas Millán. Pedro Sierra Rodríguez & Margarita Muciño Díaz.
17. **Abalone fishery and culture in Baja California, a historic perspective.** Jorge Cáceres Martínez, José Guadalupe González Avilés & Rebeca Vázquez Yeomans.
18. **Diagnostic tools for molluscs diseases.** Jorge Cáceres Martínez, Rebeca Vázquez Yeomans & Adrián Mauricio García Ortega.
19. **General analysis of the Pacific oyster mortalities in NW México.** Jorge Cáceres Martínez & Rebeca Vázquez Yeomans.

20. **Trophic ecology of *Octopus bimaculatus* Verril, 1883 in the Bahía de Los Ángeles, B.C. Preliminary results.** Armendáriz Villegas Elisa Jeanneht, Arellano-Martínez Marcial, Ceballos-Vázquez Bertha Patricia & Abitia-Cárdenas Andrés.
21. **Scope for Growth of the Green Mussel *Perna Viridis* at Constant and Variable Temperatures.** D. Arrieche, A. N. Maeda-Martínez, V. Acosta & L. Freites, C. Lodeiros.
22. **Influence of Physical, Chemical, and Ecological Parameters on Distributions of Common San Diego Mollusks.** Wendy E. Storms, Kelvin Barwick & R. Nick Haring.
23. **Variation of the mollusks assemblage in Banderas Bay, Nayarit, Mexico.** Mario A. González-Suárez & Adrian Maldonado-Gasca.
24. **Stereological Study of the Rainbowlip Pearl Oyster *Pteria sterna* at commercial Farm During a Year.** Jorge Iván Cáceres-Puig, Carlos Cáceres-Martínez & Pedro Saucedo-Lastra

The posters can be placed since Thursday 26th.

Centro de Convenciones, UABCS. Planta Alta

17:00-17:45 **Annual Business Meeting of the Western Society of Malacologists.**

17:45-17:55 **Closing of the 40th Annual Meeting of the Western Society of Malacologists**

17:55-18:00 **Group Photo: Main Entrance of Centro de Convenciones UABCS.**

Playa “El Caimancito”

19:30 **Sunset at “El Caimancito” Beach**
20:00 **Banquet**

Sunday, July 29th

8:30-18:00 **Trip to Espiritu Santo Island**