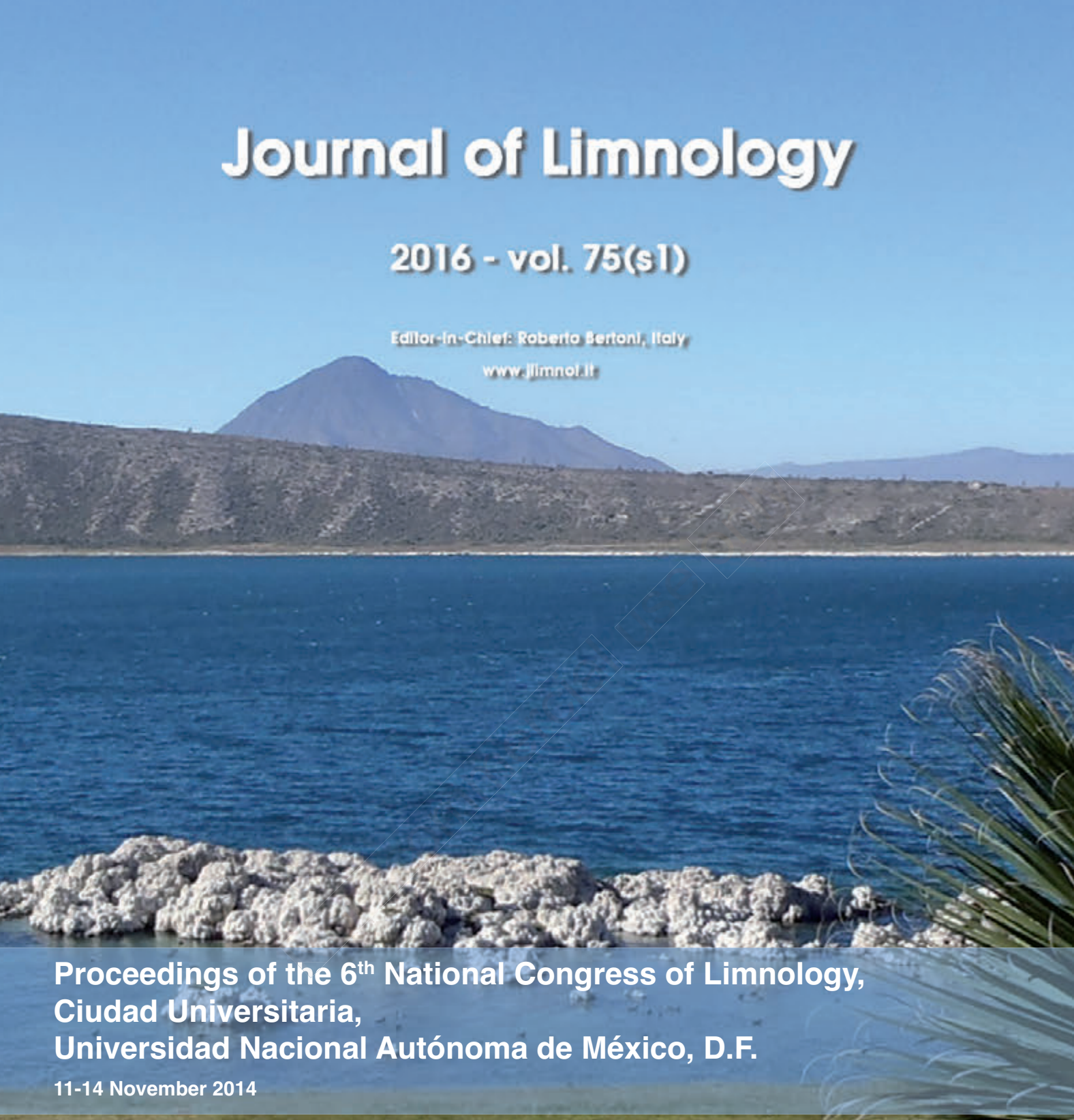

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November 11-14, 2014

Instituto de Ciencias del Mar y Limnología, Ciudad Universitaria,
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Proceedings Guest Editors

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INTRODUCTION TO THE PROCEEDINGS

The sustainable use of water and its resources requires a better understanding and management than has been so far achieved. However, the accurate integration of updated scientific knowledge and information on water distribution, drainage, and supply is not an easy task due to the poorly integrated information gathered and the agencies levels dealing at the federal, state and local levels responsible of the planning and management of water. Updated information is seldom available, and when accessible, it has not been collected, validated or analyzed by the capable scientific community specialized in inland waters and it often shows some inconsistencies.

This situation is particularly relevant in the tropical region where most developing countries are located. This region shows severe quality and supply problems in the water resources. Limnology has not developed in the tropics at the same level achieved in the temperate region, where most developed countries are located and where limnology evolved since the end of the 19th century. However, tropical limnology cannot be fully understood through applying directly the same principles that rule in the tempered aquatic bodies. A baggage of knowledge related to the particular function and structure of tropical aquatic ecosystems needs to be generated. Tropical Limnology scientific records have only been generated since the second half of the 20th century and therefore new scientific paradigms related to the understanding of both kinds of inland waters require to be generated.

The first limnological records from the tropical American region originated from the 'Peruvian-Amazon Limnological Expedition' and the 'Cambridge Expedition to British Guiana'. The Brazilian Amazonia was studied by H. Sioli, a former director of the Max Planck Institute of Limnology, during almost 20 years. Limnologists like C. Juday, C.S Carter and L.C. Beadle also carried out regional studies. The 'Limnological studies in Middle America, including a Chapter on Aztec Limnology' (1957) were summarized by E.S. Deevey Jr.

Despite a considerable amount of literature on American tropical limnology has been generated, most of it remains fragmented and requires to be updated. Aiming to contribute to the Mexican and Latin American limnological knowledge, the Asociacion Mexicana de Limnología A.C. and the Instituto de Ciencias del Mar y Limnología (ICML), Universidad Nacional Autónoma de México (UNAM), with the support of the Facultad de Estudios Superiores Iztacala and the Facultad de Ciencias, held the VI Congreso Nacional de Limnología at Ciudad Universitaria in Mexico City on November 11 to 14, 2014.

This special issue of the Journal of Limnology gathers a selection of the talks presented during the congress as well as invited contributions from distinguished key speakers with the objective to reach the interest of limnologist from the international community. It comprehends diverse ecosystems such as rivers and streams, lakes and reservoirs, as well as wetlands. Both field and laboratory (experimental) studies are included covering a great variety of approaches (*e.g.*, morphometric, physical, chemical, biological). This issue provides a glimpse of the diversity of limnological studies being developed nowadays in tropical Latin America.

Peer reviewing is an essential and poorly recognized assignment indispensable to guarantee the high standards that scientific contributions must fulfill to be included in outstanding scientific journals. We want to express our most deep gratitude and recognition to the excellent work carried out by the numerous referees that contributed to safeguard the high level and quality of the papers included in the current volume.

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Finally, we want to express our most sincere gratitude to the authors and to all the people who directly or indirectly contributed to this effort, particularly to Drs. Fernando González Farías, Martín López Hernández and Javier Carmona Jiménez, who, together with the editors of the present special number, were part of the Organizing Committee of the VI Congreso Nacional de Limnología. We are widely grateful for the interest and sponsorship of the CIC-UNAM, CONACYT and the FEMSA foundation that allowed the publication of this special issue.

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