Estudios de cianobacterias de la península Ibérica: ecología, toxicidad y métodos

Antonio Quesada
Editor invitado

Preface

Some years ago in one of the Asociación Española de Limnología (AEL) Congresses, a colleague was introducing his talk about cyanobacteria, some other prestigious scientist sitting close to me said whispering: 'we all know what cyanobacteria are, but, what about in the field?'. I think, this issue is the first answer from the cyanobacteriologists to that scientist. In only some years, Iberian scientists have taken into consideration cyanobacteria as important organisms in the aquatic ecosystems investigating them from many different points of view. At every AEL congress more contributions are presented related to cyanobacteria, even, as in the two last congresses (Valencia and Madrid), especial sessions on cyanobacteria were included with great audience and extremely high scientific quality.

Cyanobacteria are well known in the literature as problems-causing organisms, when the status of the waterbodies becomes meso or eutrophic. Nevertheless, up to now not much interest has been given by the Spanish authorities, water management units, or distribution companies. Even for the Spanish limnologists, cyanobacteria were marginal organisms, representing only waters under bad conditions. Nowadays, most scientists related with freshwater are aware of cyanobacterial blooms are typically related with severe problems, starting with ecological impairment processes and finishing in dangerous toxicity events which can risk the health of the population using that water resource. Unfortunately, the presence and abundance of cyanobacteria or their toxins in Spain is appearing only recently in international publications and though almost unknown by the international scientific community. We hope that this special issue will show to the international community that in Iberian Peninsula there are very good field cyanobacteriologists and that the problems related with their massive abundance exist and are being investigated.

The aim of this issue was to publish together some of the interesting presentations given at the Madrid AEL Congress in format of LIMNETICA papers. We believe this effort is worth because of the variety of working fields and the high scientific quality of most of the presentations. The papers chosen for this issue are mainly dedicated to the cyanobacterial toxin problem in the Iberian Peninsula, although some other topics as cyanobacterial distribution in reservoirs, rice fields and in rivers are also addressed. Finally, a methodological paper dedicated to microscopical techniques to investigate cyanobacterial assemblages is also included. Not all the Iberian cyanobacteriologists are represented in this especial issue, even not all the communications presented at the Madrid AEL meeting can be found in here. This, in fact, is not due to the reduced quality of the other communications, but to the lack of interest or time of the other authors to publish their results in LIMNETICA. Nevertheless, all the papers accepted for publication in this especial issue have followed a rigorous peer-reviewed system, which is always used for publication in LIMNETICA, leading to a high quality issue, that we expect will be the reference for the cyanobacterial ecological related work in the Iberian Peninsula.

The main conclusion of this issue is the expected one, but for the first time published together, cyanobacteria are very abundant in most freshwater ecosystems, and despite of the lack of global data, most probably represent a real problem. The first step in any process aimed to solve a problem is to acquire the knowledge about the present situation, and this issue sits basis to start acting to solve the problems related with cyanobacteria. This task is a challenge for all the participants in questions related to inland waters, policy makers, distribution companies, waterbasin authorities and also scientists, and only the open collaboration

Limnetica 23(1-2): 81-82 (2004)

amongst all the sectors will allow to solve or minimize the problem.

Finally, I would like to throw a positive message to encourage all the interested sectors to work together. Portugal is an example that many European countries, included Spain, should follow. The Portuguese realised the magnitude of the cyanobacterial problem in their inland waters, most of them shared with Spain, and decided to monitor the problem and to give solutions. At this moment Portugal has a continuous monitoring system of the drinking waters, and assesses the water companies when the problem is serious and how to deal with it. Thus, it can be done with only a deep will of solving or minimizing the problem.

Guest editor
Antonio Quesada