



On behalf of the Scientific and Organizing Committee, we cordially welcome you to the first Tropical and Subtropical Cyanoprokaryota Workshop organized by the National Bank of Algae (Centre of Marine Biotechnology) of the University of Las Palmas de GC.

The TSCW2005 is intended to provide a place for presentation and discussion of current research and recent advances on the field of tropical and subtropical cyanoprokaryota. The Workshop will provide a broad forum for basic and applied research on this issue including taxonomy, molecular identification, ecophysiology, biodiversity assessment, species distribution and sustainable management, harmful and toxic blooms and biotechnology.

The TSCW2005 is aligned in balance with plenary lectures, demonstrations, oral presentations, poster sessions and social events that will offer you great opportunities to meet other colleagues in formal and informal way.

We expect that the frame of the TSCW2005 will improve the exchange of knowledge and future necessities among the participants come from Asia, Africa, America and Europe.

We would like to thanks all the collaboration of public and private organisms sponsoring the organization and the colleagues that believe in the necessity and the significance of dealing with this issue in the Canaries as the host of the first Tropical and Subtropical Cyanoprokaryota Workshop.

We wish you will find plenty of rewarding, scientifically and socially, during your attendance to the TSCW2005 and stay in Gran Canaria.

COULD CYANOPROKARYOTA HELP WITH ANIMAL MYCOPLASMOSIS?

RAMÍREZ, A.S.¹; SOLER-ONIS,E.²; MARTEL, A.²; SUÁREZ, S ²; REAL, F.³; GONZÁLEZ, J.⁴; DE LA FE, C.¹ AND POVEDA, J.B. ¹.

¹ Unit of Epidemiology and Preventive Medicine, ³Unit of Infectious Diseases and Ictiopathology,

⁴Unit of Parasitology, Veterinary Faculty, ULPGC, Spain

² National Bank of Algae. Centro de Biotecnología marina. Muelle de Taliarte s/n 35214-Telde (Gran Canaria). Canary Islands, Spain

aramirez@dpat.ulpgc.es

Mycoplasmas, bacteria included in the class *Mollicutes*, are characterized by the **absence of a cell wall** and are known to be the smallest prokaryotes with **autonomous replication**. They are widely distributed as pathogens or commensal organisms of a **wide range of plant and animal hosts**. Among the known mycoplasma species, a relatively small number **have been isolated from animals** and only few of them, highly host specific, have been established as **pathogenic**.

The control of animal mycoplasmoses is an important objective of **veterinary medicine**. These bacteria are resistant to β -lactam antibiotic, but sensitive to macrolides, **tetracycline, quinolones** and chloramphenicol. In herd infections, systematic treatment of all animals **can eliminate the infection** under certain conditions, but mostly, is effective only for a short term. Numerous vaccines have been developed to prevent mycoplasmoses, but their efficacy is often doubtful. This is due to the immunogenic property of the vaccine and to the type of immunity induced by the vaccine. It is difficult to eradicate these illnesses, as mycoplasmoses are chronic, very contagious, and clinically not often apparent.

Cyanoprokaryota have known biocidal properties. The toxins exhibit a wide spectrum of antimicrobial action. We tested *in vitro* the effect from different cyanobacteria and other microalgae provided by the Banco Nacional de Algas (Spain) against the most economically important mycoplasmas.