



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.

NOVEL BLOOM OF THE MARINE DIAZOTROPHIC CYANOBACTERIUM *TRICHODESMIUM ERYTHRAEUM* EHRENBERG IN THE NORTHWEST AFRICAN UPWELLING

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A bloom of the diazotrophic cyanobacterium *Trichodesmium erythraeum* Ehrenberg is reported in the Canary Islands Archipelago during August of 2004, the warmest period of the whole series recorded by the National Institute of Meteorology (Spain) since 1912. Samples showed massive occurrences of *Trichodesmium erythraeum* (1000 filaments ml⁻¹) at different points of northern and southern waters off the central Canary Islands. Water analyses also showed a low presence of dinoflagellates and diatoms. Satellite images of quasi-true colour, sea surface temperature, chlorophyll *a* and current geostrophic current fields showed satellite-derived optical positives of *Trichodesmium* in an African Upwelling advective, jet-drifting westward off the south Canary Islands. Analyses for cyanotoxins found microcystins according to HPLC, with confirmation by immunoassay, at concentrations from 0.1 to 1.0 µg microcystin-LR equivalents g⁻¹ dry wet of bloom material.