

ΤΑ ΠΑΝΤΑ ΡΕΙ (EVERYTHING CHANGES)



7th
international
Phycological
congress
Thessaloniki
HELLAS
2001
18-25 August

Programme

SEVENTH INTERNATIONAL PHYCOLOGICAL CONGRESS

18 - 25 August 2001

Thessaloniki

International Phycological Society



ARISTOTLE UNIVERSITY OF THESSALONIKI

THE 7th Phycological Congress

437

LIFE HISTORY AND PHENOLOGY OF *COLPOMENIA SINUOSA*
(SCYTOSIPHONACEAE, PHAEOPHYCOTA) IN THE AZORES

F. M. Toste¹, M. I. Parente¹, A. I. Neto¹ & R. L. Fletcher²

¹Secção de Biologia Marinha, Departamento de Biologia, Universidade dos Açores, Rua Da Mãe de Deus, 9500 Ponta Delgada, Azores, Portugal

²University of Portsmouth, Institute of Marine Science, Ferry Road, Eastney, Portsmouth, Hampshire, PO4 9LY, United Kingdom

Colpomenia sinuosa (Merens ex Roth) Derbès & Solier (Scytosiphonaceae, Phaeophycota) is a common species in the rocky intertidal shores of São Miguel, Azores, mainly in spring and summer. Fertile gametophytes appeared during all year. Life-history studies of this species were carried out in culture. The species showed a heteromorphic life-history pattern with an alternation between erect thalli and filamentous prostrate thalli. Sexual reproduction was reported and zigotos gave rise to filamentous prostrate sporophyte generation bearing unilocular and plurilocular sporangia. Unispores developed into saccate gametophytes and plurispores gave rise to filamentous sporophytes. Unfused gametes developed into filamentous prostrate sporophytes producing unilocular sporangia in both short-day and long-day conditions at 15-22 °C. Zoospores released from unilocular sporangia gave rise to saccate gametophytes. Zooids from field gametophytes developed directly into new gametophytes.

438

EFFECTS OF UVR ON ULTRASTRUCTURE, PHOTOSYNTHESIS AND
PIGMENTS OF THE ANTARCTIC RED ALGA *PALMARIA DECIPIENS*

Frank Poppe, Hanelt, D. & Wiencke, Chris.

Alfred Wegener Institute for Polar and Marine Research, Bremerhaven, Germany

The effect of ultraviolet radiation (UVR) on ultrastructure, variable fluorescence of photosystem II and concentrations of photosynthetic pigments in the endemic Antarctic Rhodophyta *Palmaria decipiens* was studied. The transmission electron micrographs showed UV-induced vesiculation of the chloroplast thylakoids and changes in the membrane