

**INTERNATIONAL RESEARCH GROUP
ON CHAROPHYTES**

**8TH CONGRESS
ON EXTANT AND
FOSSIL
CHAROPHYTES**



**MUELLER HALL, ROYAL BOTANIC GARDENS
MELBOURNE, AUSTRALIA**

8 - 11 OCTOBER 2024

CONFERENCE PROGRAM

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11:30	RODRIGO, M.A.	EVALUATION OF THE SEDIMENT PROPAGULE BANKS OF <i>CHARA CANESCENS</i> ALONG EUROPE Rodrigo M.A. , Arnal A., Pérez-Márquez A., Giraldo C.A., García-Murillo P., Bernhardt K.-G., Guarino R., Salemi D., Troia A., Turner B., Weitzel J., Schubert, H.	15
12:00	ARNAL, A	BISEXUAL POPULATIONS OF <i>CHARA CANESCENS</i> IN EUROPE: OOSPORE CHARACTERIZATION Arnal A. , Rodrigo M.A., Giraldo C.A., Pérez-Márquez A., García-Murillo P., Bernhardt K.-G., Guarino R., Salemi D., Troia A., Turner B., Weitzel J., Schubert, H.	31
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6:30	CONFERENCE DINNER	THE BOTANICAL HOTEL, 169 Domain Rd, SOUTH YARRA	

TREASURES IN MURKY WATERS? – THE SEARCH FOR *CHARA*-eDNA IN WATER SAMPLES

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Charophytes (Charales) inhabit a wide range of habitats, from oligotrophic, crystal-clear lakes to shallow turbid ponds. They can even be found in small pools within agricultural landscapes, provided the water persists after heavy rainfall. However, locating charophytes in turbid waters presents a challenge when relying on conventional field methods such as snorkeling, SCUBA diving or using a bathyscope from a boat. This is because the limited visibility makes it difficult to observe the lake bottom in such murky conditions. It is, therefore, possible that charophytes in turbid waters are frequently overlooked. In addition, conventional fieldwork and species determination often are time-consuming and expensive, even when the lake water is clear. In the BIOLAWEB project, our objective is to make the detection of charophytes easier and more reliable, by developing methods for detecting *Chara*-DNA in water samples, so-called eDNA. Here, we present preliminary results from four lakes in Serbia - two freshwater and two saline lakes. In addition to traditional charophyte sampling, water samples were analyzed for eDNA. The work is currently ongoing, and we will present a first comparison between the results from traditional sampling and those based on eDNA analysis.

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