



ABSTRACTS OF THE 23rd MEETING OF THE GROUP OF EUROPEAN CHAROPHYTOLOGISTS (GEC)

16–19 August 2022
Riga, Latvia

Demirci E., Sanjuan J., Tunoglu C. Early Pleistocene charophyte flora from Dursunlu (Ilgin Basin, Central Anatolia, Turkey): Palaeoecological implications	129
Demirci E., Tunoḡlu C., Tuncer A., Bilen C. Charophytes and other subrecent microfossils of Lake Liman (Kızılırmak Delta, Samsun, Northern Turkey)	130
Jasiunas N., Stivrins N. Anthropogenic driven occurrence and disappearance of <i>Chara</i> spp. over the last 2000 years in Trikātas lake, northern Latvia	131
Kamaitytė-Bukelskiénė L., Sinkevičienė Z. Comparison of <i>Chara filiformis</i> and <i>Chara contraria</i> oospore morphological parameters	132
Marković A., Trbojević I. Preliminary Red List of charophytes in Serbia	133
Marković A., Vidaković D., Gavrilović B., Dojčinović B., Ćirić M. Diversity and ecology of charophytes in Vojvodina (Serbia) along the gradient of salinity	134
Martín-Closas C., Sanjuan J., Vicente A., Pérez-Cano J., Trabelsi K. Charophyte island-biogeography in the Cretaceous Tethyan Archipelago	135
Pérez-Cano J., Martín-Closas C., Bover-Arnal T. Double triplostichous cortication, a new type of cortication found in fossil charophytes	136
Pérez Cano J., Martín-Closas C., Bover-Arnal T. Early Cretaceous charophyte-rich wetlands from Iberia	137
Pérez-Cano J., Mujal E., de Jaime-Soguero C., Bolet A., Romain Garrouste R., Groenewald D., Steyer J.-S., Fortuny J. Charophytes in the Permian of the Pyrenees	138
Phipps S., Bisson M.A. Evolution of a novel mechanism for high rates of Na ⁺ export from cells in salt-tolerant <i>Chara</i>	139
Pronin E., Banaś K., Chmara R., Ronowski R., Merdalski M., Santoni A.-L., Mathieu O. Are the values of stable carbon and nitrogen isotope composition of <i>Nitella flexilis</i> C. Agardh, 1824 differ in softwater and hardwater lakes?	140
Pukacz A., Strzałek M., Kufel L., Biardzka E., Pełechaty M. Seasonal and regional variability of carbonate precipitation in charophytes and vascular plants	142
Sanjuan J., Matamoros D., Casanova-Vilar I., Vicente A., Moreno-Bedmar J.A., Holmes J., Carles Martín-Closas C. Charophyte palaeoecology of the Middle Miocene Vallès-Penedès and Vilanova basins (Catalonia, Spain)	143
Schneider S.C., Langangen A., Ballot A., Nowak P. Charophytes in warm springs on Svalbard (Spitsbergen): DNA barcoding identifies <i>Chara aspera</i> and <i>Chara canescens</i> with unusual morphological traits	144

Schubert H.		
Species concepts for charophytes – still a battlefield or some hope for agreements?		145
Schubert H.		
Status report "European charophytes"		146
Stipniece A., Fox A.D.		
Interactions between Charales (Stoneworts) and waterbirds in Europe		147
Trabelsi K., Benjamin Sames B., Martín-Closas C.		
Middle Jurassic charophytes. New data for a poorly known period in charophyte evolution		148
Trabelsi K., Sames B., Ouarhache D., Boumir K., Ech-Charay K., Oussou A., Ouaskou M., Martín-Closas C.		
Charophytes across the Jurassic–Cretaceous boundary from the Middle Atlas, Morocco (North Africa)		149
Troia A., Ilardi V.		
New findings for the charophyte flora of Sicily (Italy)		151
Vicente A., Sanjuan J., Espinosa-Chávez B., Ponce V.H.P., Villanueva-Amadoz U.		
Upper Cretaceous charophytes from the Parras Basin (Southeastern Coahuila, Mexico)		152
Zviedre E., Stipniece A., Sinn B.T.		
The impact of waterbird colonies on the charophytes vegetation in Lake Engure		153



New findings for the charophyte flora of Sicily (Italy)

Angelo Troia*, Vincenzo Ilardi

Università degli Studi di Palermo, Dipartimento STEBICEF, via Archirafi 20, 90123 Palermo, Italy

*Corresponding author, E-mail: angelo.troia@unipa.it

Key words: *Chara connivens*, *Chara intermedia*, charophytes, flora, Sicily.

The charophyte flora of Sicily is surely understudied and not well known. After some occasional studies made between the end of XIX and the beginning of XX century (Ross 1905; Formiggini 1908), new investigations were reprised in the XXI century. A first contribution was made by Damino (2004), which unfortunately did not result in publications and had no continuation. However it has been used for the updated charophyte flora of Italy (Bazzichelli, Abdellahad 2009).

In 2017 the first author reprised the investigations of the Characean flora of the island. In a first contribution (Romanov et al. 2019) new findings were reported, including new species for the island and for the whole Italy, and a synthesis of the knowledge, resulting in 25 species reported (even if during a long period) for the island. In the frame of current investigations, we report here a couple of new findings; the names of the reported species follow Mouronval et al. (2015).

Chara connivens A. Braun – new for Sicily. Found in a single site in central Sicily, in a temporary pond with long hydroperiod, shallow waters and low salinity ($EC = 3.6 \text{ mS cm}^{-1}$, $TDS = 1.8 \text{ g L}^{-1}$). Not reported in the rest of Italy, but recently found in few sites in Sardinia (Becker 2019).

Chara intermedia A. Braun – new for Sicily. Found in two different sites in inland Sicily, in different habitats with permanent waters, this taxon (already reported for Italy and Sardinia) is considered “critical” because part of a “species complex” including *Chara baltica* Bruzelius.

The new findings are illustrated with photographs of the main morphological diagnostic characters and the habitats.

Further taxonomic investigations on these Sicilian populations are underway.

Acknowledgements

This work was supported by “Fondo Finalizzato alla Ricerca” (FFR-D15-180267) from the University of Palermo.

References

- Bazzichelli G., Abdellahad N. 2009. Alghe d’acqua dolce d’Italia. Flora analitica delle Caroficee. Roma: Ministero dell’Ambiente e della tutela del territorio e del mare, Sapienza Università di Roma, Roma.
- Becker R. 2019. The Characeae (Charales, Charophyceae) of Sardinia (Italy): habitats, distribution and conservation. *Webbia* 74: 83–101.
- Damino R. 2004. Le Charales siciliane. Tesi di dottorato di ricerca in Biologia delle Alghe XVII ciclo. Università degli Studi di Messina.
- Formiggini L. 1908. Contributo alla conoscenza delle Caracee della Sicilia. *Bull. Soc. Bot. Ital.* 1908: 81–86.
- Mouronval J.B., Baudouin S., Borel N., Soulié-Märsche I., Klesczewski M., Grillas P. 2015. Guide des Characées de France méditerranéenne. Office National de la Chasse et Faune Sauvage, Paris.
- Romanov R., Napolitano T., Van De Weyer K., Troia A. 2019. New records and observations to the Characean flora (Charales, Charophyceae) of Sicily (Italy). *Webbia* 74: 111–119.
- Ross H. 1905. Contribuzioni alla conoscenza della Flora Sicula. I. Characeae. *Bull. Soc. Bot. Ital.* 1905: 254–258.