Abstract handling (adding/editing) was possible until 10 July.

Preferred presentation type:
I only want to present a POSTER.

Topic:
Environmental, Evolutionary and Developmental Biology

Exploring physiological responses to water deficit of *Brassica rapa* and *B. oleracea* genotypes from the Mediterranean area

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The PRIMA project BrasExplor "Wide exploration of genetic diversity in Brassica species for sustainable crop production", aims to study the genetic diversity of *Brassica rapa* L. (turnips) and *B. oleracea* L. (cabbages), including cultivated varieties, local populations and wild relatives [1]. Identification of variability and adaptive traits is a valuable tool for selecting genotypes able to face climate changes in the Mediterranean area, thus contributing to an agriculture based on biodiversity. We investigated the physiological plasticity of populations of the Project core collection to assess tolerance to drought stress. We conducted greenhouse experiments on potted plants subjected to 6-8 days of water deficit followed by recovery. Responses were assessed by measuring stomatal conductance (g_s), chlorophyll content and chlorophyll fluorescence (F_v/F_m). Differences in g_s and F_v/F_m among populations allowed us to identify the most sensitive and the most resistant genotypes, contributing information for the selection of varieties for sustainable agriculture under global climate change scenarios.
[1] Falentin C. et al., *Genetic Resources*, 2024, 5: 61–71