


ABSTRACTS BOOK

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**P0062 CHLOROGENIC ACID CONTENT AND REDUCING CAPACITY IN EGGPLANT WILD RELATIVES AND INTERSPECIFIC HYBRIDS**

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1 Full text

Eggplant (*Solanum melongena*) has a high content in phenolic acids, among which chlorogenic acid is the predominant one. Given the beneficial properties for human health of chlorogenic acid, developing new varieties with increased content is a current breeding objective. Exploring the diversity of wild related species for chlorogenic acid content and evaluating the performance of interspecific hybrids may provide relevant information for breeding eggplants with improved bioactive properties. We evaluated 22 accessions from 12 wild eggplant relatives and 42 interspecific hybrids with six cultivated eggplant varieties for chlorogenic acid content and total reducing capacity. A large variation was found among wild species for chlorogenic acid content, with some accessions having up to 60% higher content in chlorogenic acid content than the best *S. melongena* accession. Although chlorogenic acid was the predominant phenolic acid in cultivated eggplant (average of almost 80%), in wild species on average represented less than 50%, indicating that other phenolic acids are also relevant in the wild species. Accordingly, the wild species had a much higher total reducing capacity, on average almost twice as high as that of cultivated eggplant. The interspecific hybrids were intermediate for the characteristics measured, although some of them, like those with *S. insanum*, were closer in the phenolic profile and reducing capacity to the cultivated parent, while those with other species resembled the wild parent. Overall, the results reveal that wild species can contribute to increase the content in chlorogenic acid, as well as other phenolic acids, and reducing capacity in eggplant.