Phenolic composition and antioxidant capacity of Ugni molinae Turcz. leaves of different genotypes

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© 2016 Elsevier Ltd Ugni molinae Turcz. is a native shrub of Chile, known for its edible berries and its leaves, which have been the focus of recent attention, as a good source of phenolic compounds to be used in cosmetics and food products. The aim of this study was to assess the differences in the phenolic composition and antioxidant capacity of the ethanolic extracts from the leaves of 10 genotypes of U. molinae, that were cultivated under the same soil, climate and agronomical management. Antioxidant activity was assessed by complementary methods (ORAC-FI, FRAP and DPPH assay), phenolic composition of each extract was analyzed by LC?MS. Phenolic and flavonoid total contents were determined by Folin-Ciocalteu and AlCl3 methods. Significative differences were found by these methods, and ellagitannins, gallic acid derivatives and flavonols were identified as responsible for these differences, showing the influence of the genotype on the phenolic composition of U. molinae leaves.