

Antioxidant Characterization of Some Sicilian Edible Wild Greens

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Abstract: Epidemiological studies have demonstrated that many antioxidants and the total antioxidant capacity (TAC) of the diet may protect against cancers and cardiovascular disease. Common fruits and vegetables are good sources of antioxidants, although in some Mediterranean areas traditional wild greens are responsible for a significant percentage of total dietary antioxidant intake. In the European Prospective Investigation into Cancer and Nutrition cohort of Ragusa (Sicily), a high number of subjects were found to frequently eat wild greens, including Sinapis incana and Sinapis nigra, Diplotaxis erucoides, Cichorium intybus, Asparagus acutifolius, and Borrago officinalis. On the basis of these observations, detailed characterization of single antioxidant components (i.e., polyphenols, carotenoids, chlorophylls, and ascorbic acid) and the TAC of these edible wild traditional plants was performed. The wild plants examined were found to be very rich in antioxidants, such as flavonoids and carotenoids, with high TAC values, suggesting that the importance of these vegetables, not only in the traditional but even in the contemporary diet, needs to be emphasized.

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