ANTIOXIDANT POTENTIAL AND POLYPHENOLS CONTENT OF NATIVE CHILEAN FRUITS

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Many native plant species are in vulnerable condition due to their habitat loss. One of the conservation strategies for native plants is their sustainable use in healthy food industry. Nevertheless, few studies about the healthy food property of these plants, traditionally used as natural medicine in Southern Chile, however, preliminary studies have shown the great potential of the Chilean Native Fruits, due to its high content in polyphenols, associated with health benefits. These may contribute to cells with protective effect against the oxidative damage caused by free radicals due their antioxidant properties. The objective of this work was evaluate the potential beneficial properties concerning to total antioxidant capacity (TEAC and FRAPP assay) and total polyphenol content (TPC) on leaves and edible fruit of three native species of Chile: Peumo(Cryptocarya alba), Arrayan(Luma apiculata) and Lleuque(Prumnopitys andina). Plant tissues were collected from Biobio and Araucania Region. Characterization the main chemical parameters, TPC and TEAC were made comparing the results with blackberry fruit. Results related to FRAP assay showed high antioxidants capacity in all evaluated species. TEAC results indicated that was 20% higher in leaves than that observed in fruit due to an association with great TPC. Peumo fruit showed the highest antioxidant capacity, with a similar value showed by blackberry fruit. Further studies are underway to elucidate the presence of other antioxidant molecules in native fruit that may be new sources of foods rich in antioxidants.

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