ANTIOXIDANT ACTIVITY AND CITRAL CONTENT OF DIFFERENT TEA PREPARATIONS OF THE ABOVE-GROUND PARTS OF

LEMONGRASS (Cymbopogon citratus Stapf.)

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ABSTRACT

Lemongrass (Cymbopogon citratus Stapf.) is a common herb used in cooking and recognized for its many health benefits. This study measured the antioxidant activity and citral content in lemongrass extracts made from air-dried and fresh plants by decoction and infusion. The plants were collected from one area each from three different municipalities in Iloilo (Pavia, Jaro and Lapaz) and two baranggays in Buenavista, Guimaras (Brgy. Daragan and Brgy. San Isidro). All plant extracts have antioxidant activity against the DPPH radical. Antioxidant activity was found to be significantly higher in decoctions of fresh plants than in dried plants. Fresh plants when prepared by decoction gave higher antioxidant activity than when prepared by infusion. On the other hand, antioxidant activity remained the same in dried plants, whether prepared by decoction or infusion. Citral was also found to be present in the plant extracts. The kind of plant tissues used, whether fresh or dried, does not affect the citral content found in the extracts, that is, dried plant samples, whether decocted or infused, have the same citral content as that of the fresh samples. However, the method of extraction affected citral content in the extracts. Extraction by decoction gave a higher citral content than infusion. Thus, if one wants to get the most of antioxidants and citral from lemongrass tea, fresh plants must be used and prepared by decoction.