

ANTIOXIDANT ACTIVITY AND TOTAL PHENOLIC CONTENT OF *STERNBERGIA LUTEA* ETHANOL EXTRACT

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Our country is very rich in of plant species, tubers, onions, rhizome collected under the name geophyt. One of the most important features if used for purpose of treatment of geophyt the with the active substances they contain onions, tuber, and rhizomes. These the active substances have antioxidant properties which to the neutralizing harmful free radicals in body which cause many of the disease. *Sternbergia* Waldst & Kit. which a genus the important of between geophyta is creates a group of natural antioxidants. *Sternbergia* Waldst & Kit. is a genus of bulbous monocotyledons belonging to the family Amaryllidaceae. *Sternbergia* L. is a genus of seven to nine species of geophytes that are mainly distributed around the Mediterranean basin. *Sternbergia* species are known to possess *Amaryllidaceae* alkaloids, some of which have already been shown to possess antibacterial and antifungal properties.

In this study, we examined the antioxidant and phenolic content of ethanol extracts from the bulbs and leaves from *Sternbergia lutea* species. Total antioxidant activity of the ethanol extracts was evaluated by β -carotene-linoleic acid method and DPPH- free radical scavenging activity test. The total phenolic content of the ethanol extracts was determined using to the Folin-Ciocalteu method. The total phenolic content of extracts was determined as gallic acid equivalent (mg GAE/g dried sample). The highest phenolic content was found in leaves-ethanol extract 18.9(mg GAE/g dried sample).

The phenolic contents of the leaves extracts higher than the bulbs extracts. The phenolic contents of the extracts as follows: leaves-ethanol (18,9) > bulbs-ethanol (10,5). Leaves-ethanolic extracts showed the highest antioxidant activity with 72% and bulbs ethanolic extracts showed the lowest antioxidant activity with 56% respectively. Result show that the highest free radical scavenging activity was determined in extract on leaves-ethanol (64,29%) and the least efficiency in extract bulbs-ethanol (30,97%).