

Antioxidant Characteristics of Serbian Conifers

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Abstract : Many plants possess antioxidant ingredients that provides efficacy by additive or synergistic activities. Present article highlights an antioxidant capacity of Serbian conifer plants. Antioxidant activities of the crude extracts were assessed using different assays. In this study, quantities of phenolic compounds (total phenols, flavonoids, tannins and proanthocyanidins), contents of photosynthetic pigments (chlorophyll a and b and carotenoids), soluble proteins and proline were examined. MDA quantities and ability of extracts to remove reactive nitrogen and oxygen species (RNOS) were also investigated. Furthermore, antioxidant activities of extracts against DPPH•, ferric reducing antioxidant power, permanganate reducing antioxidant capacity were also determined. According to almost all used assays, antioxidant and scavenging capacities of silver fir (*Abies alba* Mill.), and Douglas fir (*Pseudotsuga menziesii*) were superior compared to spruce. Presented results implicated that leaves of Douglas fir and silver fir possessed outstanding antioxidant characteristics that could diminish damage caused by oxygen radicals which are responsible for many of the bodily changes and susceptibility to different diseases.

Keywords : conifers, antioxidant activity, reducing power, lipid peroxidation

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