

HPLC analysis of polyphenols and antioxidant capacity determination of *Scirpus holoschoenus* L. rhizome

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Abstract The aim of the study was to analyse polyphenols compounds from vegetal product *Holoschoeni rhizome* and its antioxidant capacity in order to justify traditional therapeutic using (lively protect effect). The separation, identification and quantification of polyphenols compounds were made through High performance of liquid chromatography (HPLC), standardized method according USP30-NF25 Monograph.

Total antioxidant activity was determined through photochemiluminescence method as ACL (Antioxidant capacity of lipid soluble substances). In vegetal product *Holoschoeni rhizome* we identified the follows: E and Z resveratrol, vanillin and phenol carboxylic acids (chlorogenic, caffeic, cinnamic and gallic). From all of this we measured E – resveratrol, vanillin, and chlorogenic, caffeic and gallic acids. Antioxidant activity of alcoholic extract from *Scirpus holoschoenus* L rhizome is 23.402 mmols equivalent TROLOX/100 g vegetal product.

Keywords: *Scirpus holoschoenus* L., polyphenols, resveratrol, caffeic acid, antioxidant capacity
