

The total phenolic and flavonoid contents and antioxidant effect of *Silene gallica*

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The aim of this work is to estimate the Total phenolic and flavonoid content and determine the antioxidant activities of *Silene gallica*. The total phenolic and flavonoid contents were investigated using Folin-Ciocalteu reagent assay (FCR) and the aluminium nitrate. The antioxidant activity was evaluated through different methods: DPPH, ABTS and CUPRAC. The EtOAc extract of *S. gallica* presented the higher content of polyphenols ($204.441 \pm 3.95 \mu\text{g GAE/ml}$) and flavonoids ($102.998 \pm 1.35 \mu\text{g QE/ml}$) followed by the BuOH extract ($110.247 \pm 2.50 \mu\text{g GAE/ml}$), ($84.37 \pm 2.36 \mu\text{g QE/ml}$). For DPPH test, the maximum scavenging activity was found in EtOAc extract (IC₅₀ value: $42.36 \pm 0.14 \mu\text{g/mL}$), at variance in the ABTS method the BuOH extract exhibited highest activity (IC₅₀ value: $23.92 \pm 1.86 \mu\text{g/mL}$). In the CUPRAC method, the EtOAc extract indicated higher activity (A_{0.50} value: $28.27 \pm 0.91 \mu\text{g/mL}$).

Key-words: *Silene gallica*, phenolic, flavonoid, antioxidant activity.