

**ANTIOXIDANT ACTIVITY OF POLLEN EXTRACTS
CORYLUS AVELLANA L.**

N. Nikolaieva^{1*}, K. Garkava¹, J. Brindza²

¹⁾ National aviation university, Institute of Ecological Safety,
Kyiv, Ukraine

²⁾ Slovak University of Agriculture in Nitra, Institute of Biodiversity
and Biological Safety, Slovak Republic

The aim of this study was to determine the in vitro antioxidant activity of pollen extracts *Corylus avellana* L. in water, methanol and ethanol. Pollen, as well as other apicultural products, has gained increased attention for its therapeutic properties, as antibacterial, antifungicidal, anti-caryogenic and immunomodulatory effects. In the experiment we investigated three samples of pollen *Corylus avellana* L. collected from different habitats in Slovakia. We prepared pollen extracts: 0.5 g of pollen and 12.5 mL of water, methanol and ethanol. The solutions were stirred on a shaker for 2 hours. The total antioxidant activity was determined by the DPPH method. The antioxidant activity of pollen extracts in water was determined in the range from 75.59% to 78.88%, pollen extracts in methanol – in the range from 82.09% to 82.92%, pollen extracts in ethanol – from 39.08% to 57.86%. In the researches we observed high levels of antioxidant activity in methanolic extracts, and smaller – in etanolic extracts. An elevated level of antioxidant potential in the pollen determines their biological properties, which conditioned of the biological active substances.

Keywords: *Corylus avellana* L., pollen, antioxidant activity

* Corresponding author: n.nikolaeva703@gmail.com