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## Taxonomic and phytogeographical analysis of flora of Crni Lug and its surroundings (southern Srem)

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Crni lug area is located in the southern Srem belonging to Pontian biogeographic region and Pannonian province. Based on the vertical zoning of vegetation, it is situated in alluvial hydrophilic forest zone. Based on floristic studies, 258 plant species were recorded, representing 8.03% of the total flora of Serbia. Species are classified into 70 families, among which the largest are *Asteraceae* (40), *Poaceae* (31), *Fabaceae* (18), *Lamiaceae* (16), *Polygonaceae* (15), *Brassicaceae* (13) and *Rosaceae* (13). The large number of genera (197), of which the richest are *Rumex*, *Polygonum*, *Euphorbia*, *Carex*, *Poa* and *Galium*, indicating the significant diversity of flora of this area. Flora of this region includes seven tertiary relicts: *Hedera helix*, *Juglans regia*, *Vitis sylvestris*, *Butomus umbellatus*, *Humulus lupulus*, *Hydrocharis morsus-ranae* and *Trapa natans*.

The biological spectrum of the flora of the study region consists of: hemicryptophytes (34.2%) with a significant share of therophytes (18.3%), geophytes (16.2%), thermo-hemicryptophytes (14.1%) and phanerophytes (6.3%). Scandentophytes, nanophanerophytes, aquatic helo-hydrophytes and herbaceous chamaephytes are significantly underrepresented. However, scandentophyta life form are especially stands out by quantitative representation of species such as *Vitis sylvestris*, *Echinocystis echinata* and *Humulus lupulus*, that often overgrown his hosts (most species of the genus *Morus*) making full shade, which cause the absence of ground-floor plants. This phenomenon is common in the flooded part of the study area. The phytogeographic analysis of the study area shows the presence of 26 floral elements within eight areal types. Floral elements of wide distribution are dominant: Eurasian, sub-Eurasian, submiddle European, adventitious and cosmopolitan. Water has the greatest influence on the high prevalence of these geoelements (proximity to the river Sava and the high ground water), leveling the impact of all other factors. Heterogeneous taxonomic structure, diversity of life forms and floral elements indicate significant floristic richness of the study area, but also considering the geographical position of Crni Lug and its surroundings, points to the great influence of anthropogenic factors.

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## The effect of sucrose on tansy pollen germination

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Aromatic *Tanacetum vulgare* L. (*Asteraceae*, common name tansy) is native to temperate Europe, Asia, and North Africa. It has many horticultural and pharmacological qualities. Tansy can be cultivated, and it also grows spontaneously. It has been introduced to other parts of the world and in some areas has become invasive. Also, tansy is used in companion planting and for biological pest control and sustainable agriculture. The effect of sucrose (1%, 5%, 10%, 20%, and 30%, w/v) on pollen germination and tube growth was evaluated. The length of pollen tubes on sucrose media was measured after 15, 18, 21, and 24 h under a light micro-