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Summary

Sands in Podravina - The past and current situation, research, preservation and development perspectives

Keywords: sands, Podravina, Đurđevac sands special geographical-botanical reserve, Kalinovac sands, research, fauna, protection

Once mobile Podravina sands, which are the most prominent landscape feature around Đurđevac and Kalinovac, have today become not only completely immobile, but also covered with growth due to natural progressive successions and heterogeneous anthropogenic impact. From a scientific perspective, the most valuable remnants of the sands are located eastward from Đurđevac, 20 hectares of which have been protected since 1963 as the Đurđevac sands special geographical-botanical reserve. The distinctive characteristic of this area is the presence of a separate phytocenosis and biocoenosis of *Festuca* genus steppe grasses (*Corynephoreto-Festucetum vaginatae* Sokl. 42.), which are still preserved as a permanent stage. Psammophytes, which have adapted to life on sandy soil the best, are the most prominent plants in terms of association. Non-psammophilous, mostly shrub-like species such as the black locust, common broom, bramble and small reed currently cover over 95 % of the reserve soil. The psammophilous flora has been pushed out to only a couple of small oases. The area is not only the home of higher plants, but also a significant population of several species of mosses, lichens and characteristic small associations of rare mushrooms and slime molds. Current conditions render the revitalization of psammophytes and psammophytic vegetation in the Đurđevac sands reserve impossible, thus the preservation and protection of the remaining areas with psammophytes and corresponding fauna has become its main aim. It is possible, with expert guidance and permanent activity, to preserve those characteristic habitats, which are unique in the Republic of Croatia, in the foreseeable future. Special attention needs to be given to the remaining parts of the Kalinovac sands, where psammophytic flora and vegetation, as well as the corresponding part of the fauna, is still preserved as a permanent stage. The remaining parts of the Kalinovac sands should be protected as soon as possible as a separate botanical reserve, together with one Important Plan Area (IPA) in this tract.