**VARIOUS AND CHANGING DISTRIBUTION PATTERNS OF LICHENS IN THE CARPATHIAN BASIN**

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Distribution of lichens is still insufficiently known in the Carpathian Basin and nearby areas. Therefore further information is gathered by various ways: identification of old collections, collecting recent samples, revisions based on morphological and chemical features mostly investigated by high resolution light microscopy and HPTLC chromatography. Data originating from these studies form the basis of distribution analyses. Distribution maps are based on the possibly most precise records. The following groups were noticed among the species according to these distribution maps prepared in different periods of time: 1) species of decreasing frequency by time (e.g., *Lobaria pulmonaria*, pollution sensitive species), 2) species with increasing, then (c. from 2000) decreasing frequency (e.g., *Lecanora conizaeoides*, *Scoliciosporum chlorococcum*, pollution tolerant species), 3) former rare species with increasing frequency in the last decades (e.g., *Coenogonium pineti*, *Hyperphyscia adglutinata*, invasive species), 4) newcomer species in the last years (probably invasive species, e.g., *Flavoparmelia soredians*, *Ochrolechia arborea*, *Sarcopyrenia gibba*, cf. area expansion hypothesis by Wirth in 1997). The above trends are known for some species at a global scale or European level, other examples are rather characteristic for Central Europe or Hungary. As the distribution is strongly correlated to background environmental conditions (e.g. air pollution, global warming, etc.), the analyses of distribution patterns have a great value for bioindication. Our work was supported by the project NKFI K 124341 financed by the Hungarian National Research Development and Innovation Fund.