**SPECIES DELIMITATION IN SELECTED *Loxospora* SPECIES**

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The lichen genus *Loxospora* A. Massal. belongs to the Ascomycota and its species associate with unicellular chlorococcoid photobionts. In this study we focused on four species of *Loxospora*: *L. cismonica* (Beltr.) Hafellner, the recently described *L. cristinae* Guzow-Krzemińska, Łubek, Kubiak & Kukwa, *L. elatina* (Ach.) A. Massal., and *L. ochrophaea* (Tuck.) R.C. Harris. The aim of this work was to examine species delimitation and associations of symbionts of these lichens. The study was based on specimens deposited in the New York Botanical Garden Herbarium (NY) and Herbarium of University of Gdańsk (UGDA). ITS rDNA, mtSSU rDNA and *rbc*L markers were chosen to perform phylogenetic analyses. Based on the sequences obtained in this work and the sequences available in the GenBank, haplotype networks and phylogenetic trees were created. Phylogenetic analyses showed that *L. elatina* and *L. ochrophaea* are intermingled within the same clade therefore species boundaries need to be reassessed.