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SUPPLEMENTARY MATERIAL TO

Atmospheric deposition of potentially toxic elements over the territory of Serbia assessed by moss biomonitoring in five-year time: 2015 *vs.* 2020

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STUDY AREA

Serbia is a country that covers a total of 88 499 km^2, situated between 41–47° N latitude and of 18–23° E longitude. Serbia's terrain ranges from agriculture plains of the northern Vojvodina region, limestone ranges and basins in the east, ancient mountains in the southeast, while in the central part it dominates chiefly of hills and low and medium-high mountains, interspersed with numerous rivers and creeks. The climate of Serbia is classified mainly as a warm-humid continental and humid subtropical.[1] Major part of Serbia has a continental precipitation regime with higher quantities in the warmer part of the year.[2] The predominantly warm-humid climate favors bryophyte richness and diversity. According to present knowledge, the bryophyte flora of Serbia includes 833 species.[3] The moss *Hypnum cupressiforme* Hedw. is a common and widespread species in all the countries of Southeast Europe.[4] It is epigeic, pleurocarpous, and fairly pollution tolerant. Due to these reasons, *H. cupressiforme* is recommended as one of four species to be used for biomonitoring of PTEs on an international scale within the ICP Vegetation Program.[5]

Sampling, sample preparation and chemical analysis

The samples of *H. cupressiforme* were collected on 212 and 185 sites in autumn of 2015 and 2020, respectively (overlapping for 177 sites), following the regular network established across the country, with the exception of the south–western Serbian province of Kosovo and Metohija that was not included in the 2020 sampling (Fig. S-1). The data regarding Kosovo and Metohija in the 2015 moss survey, were evaluated and described in a separate paper.[6]

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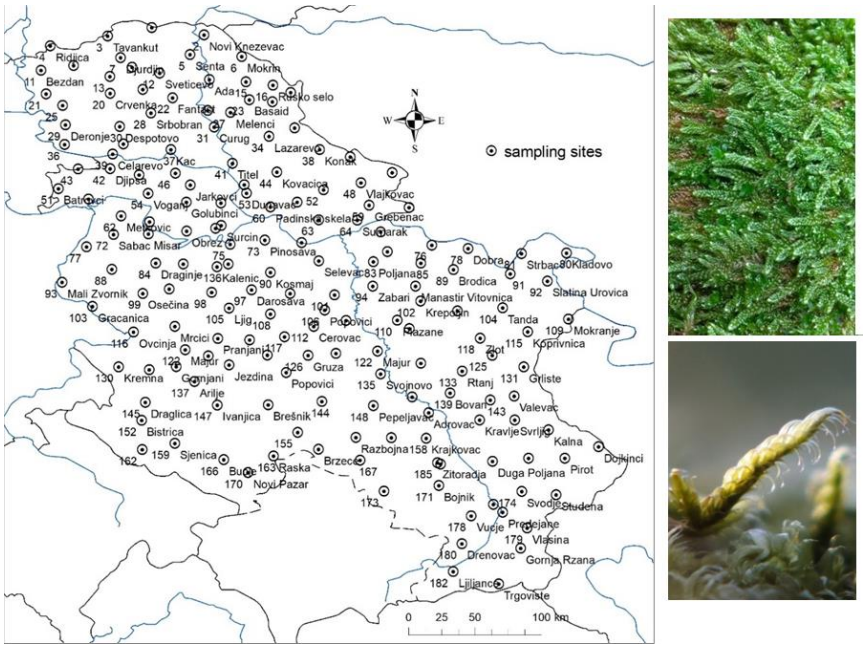

Fig. S-1. Sampling sites over Serbia in 2015 and 2020 (left); moss *Hypnum cupressiforme* Hedw. (right).

The sampling was performed according to the Moss Survey Protocol, taking care of the distance from local pollution sources, roads, and tree crowns, and wearing polyethylene gloves during manipulation with samples.[5]

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