



SUPPLEMENTARY MATERIAL TO

**The influence of geological setting and land use on the physical and chemical properties of the soil at the Fruška Gora Mountain**

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SAMPLING DETAILS

The Fruška Gora Mt. is located in the south of the Pannonian Plain and stretches between the Danube and the Sava River. On the south and west, it is framed by the loess plains of Srem. This mountain range has a length of 75 km, and a maximum width of about 15 km. With the highest peak (Crveni Čot) of 539 m, Fruška Gora belongs to low mountains. The geological diversity, together with the specific microclimate, contributed to the development of a large number of different species of plants and animals that live there, so in 1960 Fruška Gora Mt. was declared a national park.

Geological composition of the Fruška Gora Mt. is heterogeneous and consists of various types of rocks of different ages. The central part of the mountain has peaks with an average height of 440 to 460 m above sea level and mainly consists of serpentinites, while the western part is flat with an average height of about 200 m above sea level built of limestone. The eastern part is at a lower altitude and consists of sedimentary rocks, mainly loess.

Total of 47 soil samples from the Fruška Gora Mt. (Fig. S-1) were analyzed for determining the difference between land use and geological settings. Twenty-three samples of forest soil and 24 samples of meadow land were analyzed. The soils used in this study were developed on five bedrock types: serpentinite (Se), marl (M), trachyte (T), shale (Sh), loess (L) and two land use types forest (F) and meadow (M). Fig. 1 shows sampling locations with the indicated bedrock type and land use: MM – marl meadow (9 samples), MF – marl forest (6 samples), SeF – serpentinite forest (6 samples), SeM – serpentinite meadow (9 samples), ShF – shale forest (6 samples), TF – trachyte forest (5 samples), LM – loess meadow (6 samples).

All samples were taken from the depth of 0–20 cm. Samples cleaned of plant residues were dried for seven days in laboratory conditions at room temperature, and then representative samples were selected using the chessboard method.

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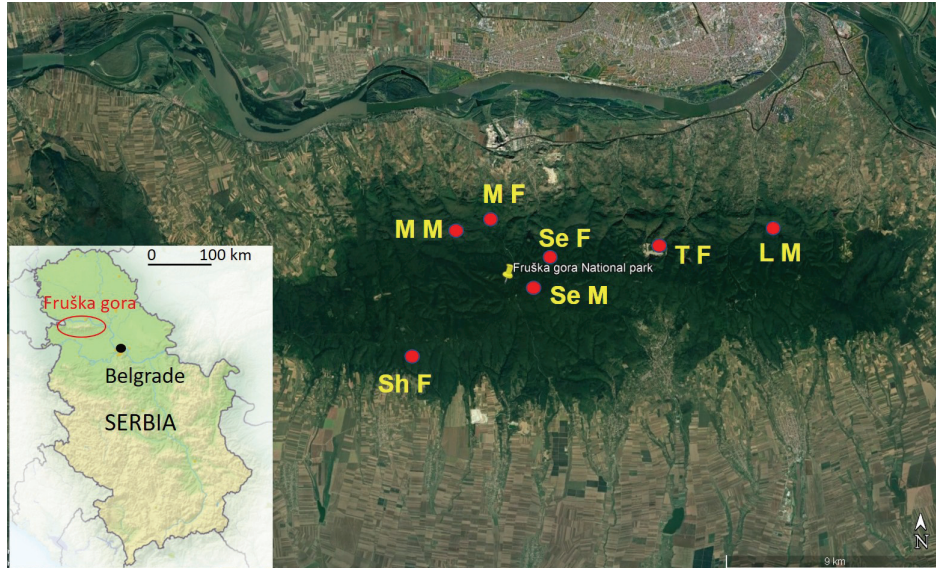


Fig. S-1. Map of Serbia and Fruška GoraMt. with marked sampling locations. MM – marl meadow, MF – marl forest, SeF – serpentinite forest, SeM – serpentinite meadow, ShF – shale forest, TF – trachyte forest, LM – loess meadow.