

**Table S1.** Data on European beech (*Fagus sylvatica* L.) provenances in the study.

Code	Provenance	Country	Alt	Lat	Long	T	P	EQ
HR24	Sjeverni Dilj Čaglinski	Croatia	398	45°17′	18°01′	11.9	753	29.2
HR25	Vrani Kamen	Croatia	432	45°37′	17°19′	11.1	840	25.2
BA30	Tajan	Bosnia and Herzegovina	706	44°23′	18°03′	9.6	972	20.1
HU42	Valkonya	Hungary	217	46°30′	16°45′	11.3	784	27.4
DE47	Schelkingen	Germany	675	47°59′	09°59′	9.3	952	19.6
DE48	Höllerbach	Germany	597	49°01′	13°14′	7.4	816	20.7
DE49	Hasbruch	Germany	30	53°08′	08°26′	9.6	772	22.9
AT56	Scharnstein, Mitterndorf	Austria	536	47°54′	13°58′	6.4	1473	10.4
BA60	Tešanj, Crni Vrh	Bosnia and Herzegovina	507	44°33′	17°59′	10.9	957	21.9
BA61	Bosanska Krupa	Bosnia and Herzegovina	537	44°46′	16°16′	9.8	1254	15.6
RS68	Fruška Gora	Serbia	370	45°10′	19°55′	11.0	782	27.4

**Legend:** Alt – altitude (m a.s.l.); Lat – latitude (N); Long – longitude (E); T – mean annual temperature (°C); P – annual sum of precipitation (mm); EQ – Ellenberg's climate quotient.

**Supplementary material S2.** General information and physical properties of the soil are presented for the soil depth of 30 cm.

## SOIL PROPERTIES

### General information\*

Soil type: Cambisol

Organic carbon density: to 236 hg/m<sup>3</sup>

Soil organic carbon stock: 52 t/ha

### Physical properties\*

Bulk density: 126 cg/cm<sup>3</sup>

Clay content: 214 g/kg

Coarse fragment: 148 cm<sup>3</sup>/dm<sup>3</sup>

Sand content: 461 g/kg

Silt content: 325 g/kg

Volume water content at -10 kPa: 367 10<sup>-2</sup> cm<sup>3</sup>/cm<sup>3</sup>

Volume water content at -33 kPa: 270 10<sup>-2</sup> cm<sup>3</sup>/cm<sup>3</sup>

Volume water content at -1500 kPa: 139 10<sup>-2</sup> cm<sup>3</sup>/cm<sup>3</sup>

### Chemical properties:

Cation exchange capacity (at Ph 7): 164 mmol(c)/kg

Nitrogen content: 178 cg/kg

Soil organic carbon content: 194 dg/kg

pH value: 5.2