

Supplementary Table S3. The raw values of variable importance and associated P-values for initial models with all candidates' explanatory variables.

variable	native		archaeophytes		neophytes		red-list	
	importance	p	importance	p	importance	p	importance	p
agricultural tractors density	202.6	0.069	5.988	0.020	3.733	0.624	8.950	0.465
average farm size	2202.7	0.010	38.697	0.010	54.204	0.010	58.480	0.010
broadleaved and mixed forests	587.9	0.010	3.542	0.772	4.773	0.822	13.733	0.257
communication routes length	268.1	0.059	20.003	0.010	28.990	0.010	19.335	0.049
fertilizer amount	304.5	0.060	5.400	0.070	8.476	0.218	16.791	0.267
human population density	1021.4	0.010	45.754	0.010	84.476	0.010	54.482	0.010
human population density CV	165.0	0.079	4.025	0.060	6.116	0.050	8.434	0.188
income	121.8	0.297	3.863	0.109	6.114	0.079	6.999	0.594
income cv	62.8	0.614	1.366	0.624	3.960	0.099	3.503	0.752
income max	119.3	0.554	2.911	0.505	5.165	0.347	8.136	0.693
landscape diversity	1464.7	0.010	8.219	0.049	14.389	0.020	55.650	0.010
length of roads	179.8	0.188	3.437	0.395	7.769	0.803	17.752	0.278
annual sum of precipitation	856.4	0.010	14.982	0.010	13.245	0.052	35.956	0.030
annual sum of precipitation CV	521.6	0.010	6.719	0.010	9.070	0.042	19.068	0.040
mean annual temperature	977.0	0.010	67.624	0.010	45.510	0.010	17.352	0.208
temperature seasonality	839.4	0.010	17.515	0.010	13.370	0.010	35.253	0.010
last glaciation maximum	476.3	0.010	9.982	0.010	10.703	0.060	9.299	0.040
bulk density	181.8	0.198	8.459	0.010	6.230	0.048	7.036	0.911
calcium carbonate	354.8	0.010	8.964	0.010	8.417	0.042	38.519	0.010
calcium carbonate CV	119.5	0.297	2.708	0.743	11.204	0.369	13.555	0.772
clay content	1605.3	0.010	28.759	0.010	23.086	0.040	64.716	0.010
clay content CV	88.8	0.673	0.945	0.203	10.204	0.396	0.338	0.792
coars grained fraction	316.8	0.060	8.839	0.010	9.216	0.045	13.775	0.495
coars grained fraction CV	214.6	0.060	6.612	0.060	5.933	0.060	6.800	0.426
loess sediments	1092.7	0.010	25.433	0.010	23.372	0.010	57.447	0.010
nitrogen content	286.1	0.070	8.084	0.030	5.030	0.980	10.333	0.960
nitrogen content CV	341.3	0.030	7.177	0.020	6.812	0.047	17.891	0.030
pH	378.3	0.079	15.454	0.010	9.364	0.802	25.515	0.208
pH CV	457.1	0.020	4.820	0.396	3.884	1.000	15.005	0.277
phosphorus content	736.7	0.010	14.240	0.010	9.623	0.048	31.980	0.020
potassium content	1475.7	0.010	69.746	0.010	48.341	0.010	43.729	0.010
potassium content CV	175.3	0.069	9.954	0.010	7.150	0.020	9.846	0.045
slope	26.7	0.109	0.296	0.426	0.389	0.475	0.328	0.792
slope CV	48.7	0.059	0.936	0.208	1.180	0.178	1.969	0.218
sum of rivers length	140.4	0.089	3.781	0.060	2.535	0.653	17.992	0.020
terrain roughness index	1513.5	0.010	11.439	0.010	10.459	0.307	59.672	0.010
topographic position index	86.0	0.624	1.795	0.743	1.965	0.931	6.226	0.644
topographic position index CV	5.0	0.851	0.374	0.673	0.353	0.762	0.967	0.782
topographic wetness index CV	344.6	0.010	4.477	0.079	7.027	0.089	19.046	0.010
water bodies percentage	610.4	0.010	3.622	0.060	6.483	0.010	30.656	0.010