Supplementary material

Table S1. List of all used samples. Given are: country and locality of origin, species, used code for individual and coordinates.

Sample ID	Country	Locality	Species	Latitude	Longitude
434	Germany	Bavorsko, Mnichov	*E. europaeus*	48.16000	11.59000
438	Germany	Bavorsko, Mnichov	*E. europaeus*	48.16000	11.59000
2014429	Germany	Simbach am Inn	*E. europaeus*	48.27000	13.03000
2014430	Germany	Simbach am Inn	*E. europaeus*	48.27000	13.03000
M5676	Germany	Zittau	*E. europaeus*	50.88833	14.80750
M13479	Germany	Pfaffendorf b. Görlitz, Am Geudeberg	*E. europaeus*	51.11917	14.91722
M13482	Germany	Görlitz, Landhausstr. 4	*E. europaeus*	51.13194	14.93778
M11659	Germany	Görlitz	*E. europaeus*	51.16222	14.97667
M11658	Germany	Königshain	*E. europaeus*	51.19417	14.83556
M11660	Germany	Niesky, Birkenweg 6	*E. europaeus*	51.28861	14.83111
M5677	Germany	Baruth	*E. europaeus*	52.04778	13.50667
A	Germany	Berlin, Treptower park	*E. europaeus*	52.49000	13.46000
D	Germany	Berlin, Treptower park	*E. europaeus*	52.49000	13.46000
371162	Germany	Berlin	*E. europaeus*	52.51000	13.35000
372161	Germany	Berlin	*E. europaeus*	52.51000	13.35000
374161	Germany	Berlin	*E. europaeus*	52.51000	13.35000
J	Germany	Berlin, Volkspark	*E. europaeus*	52.53000	13.46000
G	Germany	Berlin, Bürgerpark Pankow	*E. europaeus*	52.57000	13.40000
2014454	Austria	Viechtwang	*E. europaeus*	47.90000	13.95000
20121572	Austria	Gmunden	*E. europaeus*	47.91000	13.80000
2014664	Austria	Bundesstraße 138, westlich Schlierbach	*E. europaeus*	47.93000	14.10000
28INF	Austria	Regau, Parkplatz Hornbach	*E. europaeus*	47.95000	13.73000
2014432	Austria	Scheibbs	*E. europaeus*	48.01000	15.17000
2012160	Austria	Ungenach, Obereinwald	*E. europaeus*	48.04000	13.64000
2014428	Austria	Eberstalzell	*E. europaeus*	48.04000	13.98000
12INF1	Austria	Wolfshütte, OÖ	*E. europaeus*	48.05000	13.68000
2007103	Austria	Hehenberg	*E. europaeus*	48.06000	14.20000
200697	Austria	St. Radegund, Hadermarkt	*E. europaeus*	48.09000	12.77000
2014434	Austria	St. Radegund, Hadermarkt 88	*E. europaeus*	48.09000	12.77000

2016173	Austria	Lambach	*E. europaeus*	48.09000	13.87000
2007102	Austria	Dorf an der Enns	*E. europaeus*	48.09000	14.48000
2014821	Austria	Neuhofen an der Krems, B 139, Höhe Fischen	*E. europaeus*	48.11000	14.20000
2016170	Austria	Wolfern, Hainbach	*E. europaeus*	48.11000	14.33000
200793	Austria	Stadlkirchen	*E. europaeus*	48.11000	14.44000
2014445	Austria	Haindorf, 2,5 km nordöstlich Haag	*E. europaeus*	48.11000	14.58000
2015734	Austria	Meggenhofen, Hirm 7	*E. europaeus*	48.13000	13.78000
2015371	Austria	Helpfau, Uttendorf, Sonnleiten	*E. europaeus*	48.15000	13.15000
2006605	Austria	Straß, Naarn im Machland	*E. europaeus*	48.21000	14.62000
2014433	Austria	Saxen, Hofkirchen	*E. europaeus*	48.21000	14.79000
200794	Austria	Rohrbach	*E. europaeus*	48.22000	14.35000
200664	Austria	Deiming	*E. europaeus*	48.22000	14.73000
200693	Austria	Baumgartenberg, Klam	*E. europaeus*	48.22000	14.76000
2005615	Austria	Grein, Hahnwirt	*E. europaeus*	48.24000	14.85000
2006922	Austria	Bundesstr. 3, Höhe Schwertberg	*E. europaeus*	48.25000	14.58000
2007199	Austria	Durchham	*E. europaeus*	48.26000	13.28000
2014438	Austria	Luftenberg an der Donau	*E. europaeus*	48.26000	14.40000
2014435	Austria	Schwertberg, Aisting	*E. europaeus*	48.26000	14.58000
2007101	Austria	Perg, Parkplatz Hallenbad	*E. europaeus*	48.27000	14.53000
2014443	Austria	Eberstalzell	*E. europaeus*	48.30000	13.96000
20056162	Austria	Steyr, Volksstraße	*E. europaeus*	48.30000	14.40000
2006180	Austria	Standorf	*E. europaeus*	48.30000	14.49000
2014440	Austria	Prambachkirchen, Gschnarret	*E. europaeus*	48.31000	13.94000
2014683	Austria	Wilhering, südwestl. Höf, Bundesstraße 129	*E. europaeus*	48.31000	14.16000
2014684	Austria	Steyregg, Plesching, Bundesstraße 3	*E. europaeus*	48.31000	14.33000
2014455	Austria	Linz, Urfahr, Nißlstraße 12	*E. europaeus*	48.30000	14.26000
2014665	Austria	Linz, Urfahr, Abfahrt A7	*E. europaeus*	48.31000	14.28000
2014453	Austria	Linz, St. Magdalena, Jägerstätterstraße 50	*E. europaeus*	48.33000	14.28000
2014441	Austria	Linz, Urfahr, Leonfeldner Straße	*E. europaeus*	48.33000	14.29000
2014456	Austria	Linz, Dornach, J. W. Klein Straße 73	*E. europaeus*	48.33000	14.30000
2014839	Austria	Linz, Dornach, J. W. Klein Straße	*E. europaeus*	48.33000	14.30000
2015786	Austria	Linz, Dornach, J. W. Klein Straße	*E. europaeus*	48.33000	14.30000
2007626	Austria	Linz, Dornacher Straße	*E. europaeus*	48.33000	14.31000
200695	Austria	Linz, Dornach	*E. europaeus*	48.33000	14.32000
2005614	Austria	Linz, Leonfeldnerstraße	*E. europaeus*	48.34000	14.29000
2014431	Austria	Linz, Jägerstätterstraße 48	*E. europaeus*	48.34000	14.30000
2014439	Austria	Linz, Biologiezentrum	*E. europaeus*	48.34000	14.31000

2002243	Austria	Linz, Wolfauer Straße	*E. europaeus*	48.34000	14.32000
2007596	Austria	Linz, Haselgraben	*E. europaeus*	48.37000	14.29000
2014823	Austria	Engerwitzdorf, A7, südöstlich Schweinbach	*E. europaeus*	48.33000	14.41000
2016172	Austria	Engerwitzdorf, A7, Höhe Schweinbach	*E. europaeus*	48.33000	14.41000
2016171	Austria	Wartberg ob der Aist, B124	*E. europaeus*	48.35000	14.48000
2004247	Austria	Bad Zell	*E. europaeus*	48.35000	14.68000
20157872	Austria	Lichtenberg, Kaiserberg	*E. europaeus*	48.36000	14.25000
200663	Austria	Obervisnitz	*E. europaeus*	48.36000	14.49000
2006606	Austria	Friensdorf	*E. europaeus*	48.36000	14.51000
200797	Austria	Altenberg bei Linz	*E. europaeus*	48.37000	14.35000
200789	Austria	Kirchschlag bei Linz, Hochbuchedt	*E. europaeus*	48.39000	14.29000
2016551	Austria	Kirchschlag bei Linz	*E. europaeus*	48.40000	14.26000
20111166	Austria	Kirchschlag bei Linz, Haselgraben	*E. europaeus*	48.41000	14.30000
2015370	Austria	Waldkirchen am Wesen, Vornwald	*E. europaeus*	48.43000	13.83000
200791	Austria	Zwettl an der Rodl	*E. europaeus*	48.46000	14.27000
2014442	Austria	Lasberg, Umfahrung	*E. europaeus*	48.46000	14.53000
2014437	Austria	Lasberg, Siegelsdorf	*E. europaeus*	48.47000	14.52000
2014436	Austria	Unternberg, Neufelden	*E. europaeus*	48.48000	14.00000
2014444	Austria	Rainbach im Mühlkreis	*E. europaeus*	48.55000	14.46000
2006603	Czech Rep.	Kaplice	*E. europaeus*	48.74000	14.50000
20111186	Czech Rep.	Netrebice	*E. europaeus*	48.79000	14.46000
2008188	Czech Rep.	Kajov	*E. europaeus*	48.81000	14.26000
20111185	Czech Rep.	Velešín	*E. europaeus*	48.83000	14.46000
109	Czech Rep.	Hustopeče (Břeclav)	*E. europaeus*	48.93333	16.73333
97	Czech Rep.	Pavlice	*E. europaeus*	48.96667	15.90000
13	Czech Rep.	Framelž (CHKO Třeboňsko)	*E. europaeus*	49.00000	14.75000
145	Czech Rep.	Hluboká nad Vltavou	*E. europaeus*	49.05000	14.41667
55A	Czech Rep.	Bílé Karpaty	*E. europaeus*	49.05000	17.90000
140	Czech Rep.	Staré město (Uherské Hradiště)	*E. europaeus*	49.06667	17.43333
93	Czech Rep.	Počátky	*E. europaeus*	49.25000	15.23000
198	Czech Rep.	Kolinec	*E. europaeus*	49.28333	13.43333
199	Czech Rep.	Kolinec	*E. europaeus*	49.28333	13.43333
200	Czech Rep.	Kolinec	*E. europaeus*	49.28333	13.43333
202	Czech Rep.	Kolinec	*E. europaeus*	49.28333	13.43333
33B	Czech Rep.	Vsetín	*E. europaeus*	49.31667	17.98333
146	Czech Rep.	Velké Meziříčí	*E. europaeus*	49.35000	15.93333
195	Czech Rep.	Klatovy	*E. europaeus*	49.38333	13.28333

77	Czech Rep.	Tábor	*E. europaeus*	49.41000	14.68333
208	Czech Rep.	Valašské Meziříčí	*E. europaeus*	49.45000	17.96667
69	Czech Rep.	Rožnov pod Radhoštěm	*E. europaeus*	49.45000	18.13333
176	Czech Rep.	Polná u Jihlavy	*E. europaeus*	49.48553	15.71441
104	Czech Rep.	Plačkov u Humpolce	*E. europaeus*	49.51667	15.38333
191	Czech Rep.	Přeštice	*E. europaeus*	49.56667	13.31667
190	Czech Rep.	Blovice	*E. europaeus*	49.56667	13.53333
134	Czech Rep.	Olomouc	*E. europaeus*	49.58333	17.25000
137	Czech Rep.	Olomouc	*E. europaeus*	49.58333	17.25000
203	Czech Rep.	Olomouc	*E. europaeus*	49.58333	17.25000
205	Czech Rep.	Olomouc	*E. europaeus*	49.58333	17.25000
217	Czech Rep.	Olomouc	*E. europaeus*	49.58333	17.25000
73	Czech Rep.	Kopřivnice	*E. europaeus*	49.58333	18.15000
192	Czech Rep.	Spálené Poříčí	*E. europaeus*	49.60000	13.60000
196	Czech Rep.	Spálené Poříčí	*E. europaeus*	49.60000	13.60000
172	Czech Rep.	Havlíčkův Brod	*E. europaeus*	49.60000	15.56000
148	Czech Rep.	Havlíčkův Brod	*E. europaeus*	49.60000	15.56667
171	Czech Rep.	Havlíčkův Brod	*E. europaeus*	49.60000	15.56667
194	Czech Rep.	Stod	*E. europaeus*	49.63333	13.15000
210	Czech Rep.	Sedlnice	*E. europaeus*	49.65000	18.08000
12	Czech Rep.	Příbram	*E. europaeus*	49.68333	14.00000
170	Czech Rep.	Ledeč nad Sázavou	*E. europaeus*	49.68333	15.26667
175	Czech Rep.	Ledeč nad Sázavou	*E. europaeus*	49.68333	15.26667
173	Czech Rep.	Ždírec nad Doubravou	*E. europaeus*	49.68333	15.76667
174	Czech Rep.	Ždírec nad Doubravou	*E. europaeus*	49.68333	15.76667
68	Czech Rep.	Frýdek Místek	*E. europaeus*	49.68333	18.33333
34	Czech Rep.	Paskov	*E. europaeus*	49.71667	18.26667
35B	Czech Rep.	Paskov	*E. europaeus*	49.71667	18.26667
100	Czech Rep.	Pičín	*E. europaeus*	49.73333	14.05000
160	Czech Rep.	Český Těšín	*E. europaeus*	49.73333	18.60000
215	Czech Rep.	Český Těšín	*E. europaeus*	49.73333	18.60000
B11	Czech Rep.	Benešov	*E. europaeus*	49.78264	14.68395
78	Czech Rep.	Benešov	*E. europaeus*	49.90000	14.20000
150	Czech Rep.	Golčův Jeníkov	*E. europaeus*	49.80000	15.46667
151	Czech Rep.	Golčův Jeníkov	*E. europaeus*	49.80000	15.46667
152	Czech Rep.	Golčův Jeníkov	*E. europaeus*	49.80000	15.46667
153	Czech Rep.	Golčův Jeníkov	*E. europaeus*	49.80000	15.46667

67	Czech Rep.	Ostrava, Hrabová	*E. europaeus*	49.76667	18.28333
154	Czech Rep.	Golčův Jeníkov	*E. europaeus*	49.80000	15.46667
71	Czech Rep.	Ostrava, Vítkovice	*E. europaeus*	49.80000	18.26667
95	Czech Rep.	Ostrava, Svinov	*E. europaeus*	49.81667	18.18333
72	Czech Rep.	Ostrava	*E. europaeus*	49.83333	18.30000
88	Czech Rep.	Chrást	*E. europaeus*	49.83333	14.56667
105	Czech Rep.	Miřetice u Hlinska v Čechách	*E. europaeus*	49.83333	15.88000
212	Czech Rep.	Orlová	*E. europaeus*	49.83333	18.41667
B53	Czech Rep.	Vlašim	*E. europaeus*	49.83464	14.70275
B60	Czech Rep.	Vlašim	*E. europaeus*	49.83464	14.70275
87	Czech Rep.	Chocerady	*E. europaeus*	49.86667	14.81667
90	Czech Rep.	Kamenice	*E. europaeus*	49.88333	14.56667
45	Czech Rep.	Žleby	*E. europaeus*	49.88333	15.48333
79	Czech Rep.	Zadní Třebáň	*E. europaeus*	49.90000	14.20000
4B	Czech Rep.	Kutná hora	*E. europaeus*	49.93333	14.53333
74	Czech Rep.	Opava	*E. europaeus*	49.93333	17.90000
92	Czech Rep.	Popovičky	*E. europaeus*	49.95000	14.58333
B38	Czech Rep.	Beroun	*E. europaeus*	49.96218	14.06127
3B	Czech Rep.	Jesenice, Horní Říčany	*E. europaeus*	49.96667	14.51667
177	Czech Rep.	Ústí nad Orlicí	*E. europaeus*	49.96667	16.38333
91	Czech Rep.	Říčany	*E. europaeus*	49.98333	14.65000
B2	Czech Rep.	Bruntál	*E. europaeus*	49.98789	17.46301
2	Czech Rep.	Praha, Kunratice	*E. europaeus*	50.00000	14.48333
40	Czech Rep.	Praha, Koleje Jižní Město	*E. europaeus*	50.01667	14.48333
41	Czech Rep.	Praha, Koleje Jižní Město	*E. europaeus*	50.01667	14.48333
23A	Czech Rep.	Praha, Koleje Jižní Město	*E. europaeus*	50.01667	14.48333
B26	Czech Rep.	Praha	*E. europaeus*	50.08120	14.44271
B75	Czech Rep.	Praha	*E. europaeus*	50.08120	14.44271
110	Czech Rep.	Praha, Bohnice	*E. europaeus*	50.11667	14.41667
114	Czech Rep.	Praha, Trója	*E. europaeus*	50.11667	14.41667
115	Czech Rep.	Praha, Trója	*E. europaeus*	50.11667	14.41667
118	Czech Rep.	Praha, Trója	*E. europaeus*	50.11667	14.41667
119	Czech Rep.	Praha, Trója	*E. europaeus*	50.11667	14.41667
122	Czech Rep.	Praha, Trója	*E. europaeus*	50.11667	14.41667
120	Czech Rep.	Praha, Čimice	*E. europaeus*	50.11667	14.41667
83	Czech Rep.	Praha 9	*E. europaeus*	50.11667	14.48333
178	Czech Rep.	Praha, Ďáblice	*E. europaeus*	50.13000	14.47000

102	Czech Rep.	Suchdol, Kamýcká	*E. europaeus*	50.13333	14.36667
86	Czech Rep.	Kolín	*E. europaeus*	50.01667	15.20000
57	Czech Rep.	Pardubice	*E. europaeus*	50.01667	15.76667
155	Czech Rep.	Bochov	*E. europaeus*	50.13333	13.03333
156	Czech Rep.	Bochov	*E. europaeus*	50.13333	13.03333
38	Czech Rep.	Sokolov, Michal	*E. europaeus*	50.15000	12.66667
39	Czech Rep.	Sokolov, Michal	*E. europaeus*	50.15000	12.66667
37A	Czech Rep.	Sokolov	*E. europaeus*	50.16667	12.65000
51	Czech Rep.	Karlovy Vary, Bezručova	*E. europaeus*	50.21667	12.86667
157	Czech Rep.	Karlovy Vary	*E. europaeus*	50.23333	12.86667
49	Czech Rep.	Karlovy Vary, Drahovice	*E. europaeus*	50.23333	12.88333
163	Czech Rep.	Louny	*E. europaeus*	50.35000	13.80000
B49	Czech Rep.	Jaroměř (Náchod)	*E. europaeus*	50.35245	15.92031
130	Czech Rep.	Holé vrchy (Mladá Boleslav)	*E. europaeus*	50.38333	14.96667
107	Czech Rep.	Bystřice	*E. europaeus*	50.38333	15.23333
19	Czech Rep.	Liběchov	*E. europaeus*	50.40000	14.43333
166	Czech Rep.	Roudnice nad Labem	*E. europaeus*	50.41667	14.25000
103	Czech Rep.	Jičín, Sedličky	*E. europaeus*	50.43333	15.36667
180	Czech Rep.	Chomutov	*E. europaeus*	50.45000	13.40000
181	Czech Rep.	Chomutov	*E. europaeus*	50.45000	13.40000
182	Czech Rep.	Chomutov	*E. europaeus*	50.45000	13.40000
184	Czech Rep.	Chomutov	*E. europaeus*	50.45000	13.40000
185	Czech Rep.	Chomutov	*E. europaeus*	50.45000	13.40000
187	Czech Rep.	Chomutov	*E. europaeus*	50.45000	13.40000
188	Czech Rep.	Chomutov	*E. europaeus*	50.45000	13.40000
189	Czech Rep.	Chomutov	*E. europaeus*	50.45000	13.40000
165	Czech Rep.	Štětí	*E. europaeus*	50.45000	14.36667
106	Czech Rep.	Valdice	*E. europaeus*	50.45000	15.38333
128	Czech Rep.	Most x Chomutov	*E. europaeus*	50.46667	13.56667
B48	Czech Rep.	Úpice (Trutnov)	*E. europaeus*	50.51226	16.01436
54	Czech Rep.	Blatno (Ústecký kraj)	*E. europaeus*	50.51667	13.33333
60	Czech Rep.	Litoměřice	*E. europaeus*	50.53333	14.11667
61	Czech Rep.	Litoměřice	*E. europaeus*	50.53333	14.11667
62	Czech Rep.	Litoměřice	*E. europaeus*	50.53333	14.11667
63	Czech Rep.	Litoměřice	*E. europaeus*	50.53333	14.11667
64	Czech Rep.	Litoměřice	*E. europaeus*	50.53333	14.11667
169	Czech Rep.	Doksy u České Lípy	*E. europaeus*	50.55000	14.65000

125	Czech Rep.	Česká Lípa	*E. europaeus*	50.66667	14.53333
167	Czech Rep.	Česká Lípa	*E. europaeus*	50.68333	14.53333
162	Czech Rep.	Děčín, Březiny	*E. europaeus*	50.75000	14.23333
161	Czech Rep.	Nový Bor	*E. europaeus*	50.75000	14.53333
sk18	Slovakia	Šaštín, Stráže	*E. europaeus*	48.63333	17.13333
14	Czech Rep.	Lednice	*E. roumanicus*	48.78333	16.78333
96	Czech Rep.	Znojmo	*E. roumanicus*	48.85000	16.03333
98	Czech Rep.	Vítonice	*E. roumanicus*	48.90000	16.20000
147	Czech Rep.	Velké Meziříčí	*E. roumanicus*	49.35000	15.93333
135	Czech Rep.	Olomouc	*E. roumanicus*	49.58333	17.25000
149	Czech Rep.	Světlá nad Sázavou	*E. roumanicus*	49.66667	15.40000
214	Czech Rep.	Vratimov	*E. roumanicus*	49.76667	18.30000
B24	Czech Rep.	Kostelec nad Černými lesy	*E. roumanicus*	49.97133	14.83846
24	Czech Rep.	Praha, Koleje Jižní Město	*E. roumanicus*	50.01667	14.48333
26	Czech Rep.	Praha, Koleje Jižní Město	*E. roumanicus*	50.01667	14.48333
27	Czech Rep.	Praha, Koleje Jižní Město	*E. roumanicus*	50.01667	14.48333
28	Czech Rep.	Praha, Koleje Jižní Město	*E. roumanicus*	50.01667	14.48333
29	Czech Rep.	Praha, Koleje Jižní Město	*E. roumanicus*	50.01667	14.48333
25A	Czech Rep.	Praha, Koleje Jižní Město	*E. roumanicus*	50.01667	14.48333
85	Czech Rep.	Praha 4	*E. roumanicus*	50.03333	14.43333
123	Czech Rep.	Praha, Viničná	*E. roumanicus*	50.06667	14.41667
124	Czech Rep.	Praha, Viničná	*E. roumanicus*	50.06667	14.41667
B28	Czech Rep.	Praha	*E. roumanicus*	50.08120	14.44271
B30	Czech Rep.	Praha	*E. roumanicus*	50.08120	14.44271
B33	Czech Rep.	Praha	*E. roumanicus*	50.08120	14.44271
B34	Czech Rep.	Praha	*E. roumanicus*	50.08120	14.44271
B35	Czech Rep.	Praha	*E. roumanicus*	50.08120	14.44271
B36	Czech Rep.	Praha	*E. roumanicus*	50.08120	14.44271
B37	Czech Rep.	Praha	*E. roumanicus*	50.08120	14.44271
B51	Czech Rep.	Praha	*E. roumanicus*	50.08120	14.44271
B52	Czech Rep.	Praha	*E. roumanicus*	50.08120	14.44271
B59	Czech Rep.	Praha	*E. roumanicus*	50.08120	14.44271
16	Czech Rep.	Praha, Kajetánka	*E. roumanicus*	50.08333	14.35000
21	Czech Rep.	Praha, Kajetánka	*E. roumanicus*	50.08333	14.35000
7A	Czech Rep.	Praha, Břevnov	*E. roumanicus*	50.08333	14.35000
111	Czech Rep.	Praha, Bohnice	*E. roumanicus*	50.11667	14.41667
112	Czech Rep.	Praha, Staré Bohnice	*E. roumanicus*	50.11667	14.41667

113	Czech Rep.	Praha, Bohnice, Krakov	*E. roumanicus*	50.11667	14.41667
47	Czech Rep.	Praha, Trója	*E. roumanicus*	50.11667	14.41667
116	Czech Rep.	Praha, Trója	*E. roumanicus*	50.11667	14.41667
117	Czech Rep.	Praha, Trója	*E. roumanicus*	50.11667	14.41667
58	Czech Rep.	Praha, Prosek	*E. roumanicus*	50.11667	14.48333
59	Czech Rep.	Praha, Prosek	*E. roumanicus*	50.11667	14.48333
144	Czech Rep.	Praha, Prosek	*E. roumanicus*	50.11667	14.48333
84	Czech Rep.	Praha 9	*E. roumanicus*	50.11667	14.48333
43	Czech Rep.	Horní Počernice	*E. roumanicus*	50.10000	14.60000
44	Czech Rep.	Horní Počernice	*E. roumanicus*	50.10000	14.60000
101	Czech Rep.	Čelákovice	*E. roumanicus*	50.15000	14.73333
121	Czech Rep.	Čelákovice	*E. roumanicus*	50.15000	14.73333
10	Czech Rep.	Zlonice U Slaného	*E. roumanicus*	50.28333	14.08333
126	Czech Rep.	Roudnice nad Labem	*E. roumanicus*	50.41667	14.25000
8	Czech Rep.	Předonín U Štětí	*E. roumanicus*	50.43333	14.31667
129	Czech Rep.	Litoměřice	*E. roumanicus*	50.53333	14.11667
164	Czech Rep.	Litoměřice	*E. roumanicus*	50.53333	14.11667
168	Czech Rep.	Litoměřice	*E. roumanicus*	50.53333	14.11667
P3	Poland	Oswiccim	*E. roumanicus*	50.03000	19.25000
KLF83	Austria	Ferlach	*E. roumanicus*	46.49000	14.28000
KLF571	Austria	Ferlach	*E. roumanicus*	46.49000	14.28000
2015109	Austria	Güssing	*E. roumanicus*	47.06000	16.31000
2014819	Austria	Wölting, 1,7 km nördlich Tamsweg	*E. roumanicus*	47.13000	13.80000
2013168	Austria	Pamhagen	*E. roumanicus*	47.70000	16.90000
200787	Austria	Windischgarsten, Pichl	*E. roumanicus*	47.72000	14.30000
2014421	Austria	Illmitz	*E. roumanicus*	47.77000	16.80000
2008182	Austria	Mönchhof	*E. roumanicus*	47.87000	16.95000
2006184	Austria	St.Ulrich bei Steyr, Eisenstraße	*E. roumanicus*	48.02000	14.42000
2006185	Austria	St.Ulrich bei Steyr, Eisenstraße	*E. roumanicus*	48.02000	14.42000
2008185	Austria	Feyregg, westl. Bad Hall	*E. roumanicus*	48.03000	14.19000
2006182	Austria	Sierning	*E. roumanicus*	48.04000	14.29000
2008186	Austria	Kematen, Halbarting	*E. roumanicus*	48.09000	14.19000
2016459	Austria	Bad Hall, Adlwanger Straße 6	*E. roumanicus*	48.10000	14.20000
2016168	Austria	Mitterkirchen im Machland	*E. roumanicus*	48.18000	14.68000
2014838	Austria	nördlich Marchtrenk	*E. roumanicus*	48.20000	14.10000
2010212	Austria	St. Florian, Jagdmuseum	*E. roumanicus*	48.20000	14.36000
2006187	Austria	Kühofen	*E. roumanicus*	48.20000	14.73000

20144242	Austria	Markt St. Florian, Taunleiten	*E. roumanicus*	48.21000	14.38000
2014582	Austria	westl. Enns, Bundesstraße 1 in Kristein	*E. roumanicus*	48.21000	14.43000
2014837	Austria	Pyburg, Bundesstraße 123a	*E. roumanicus*	48.21000	14.51000
2014418	Austria	Ölkam	*E. roumanicus*	48.22000	14.36000
200674	Austria	Naarn im Machlande, Aist 33	*E. roumanicus*	48.24000	14.60000
2014565	Austria	Schwertberg, Fürth	*E. roumanicus*	48.25000	14.58000
AU7	Austria	S of Vienna	*E. roumanicus*	48.26000	16.34000
200675	Austria	Steyregg	*E. roumanicus*	48.28000	14.38000
2008214	Austria	Linz, Pichling	*E. roumanicus*	48.24000	14.38000
2006613	Austria	Linz, Unionstraße	*E. roumanicus*	48.28000	14.28000
20132962	Austria	Linz, Gruberstraße, Höhe Nr. 40	*E. roumanicus*	48.30000	14.28000
200669	Austria	Linz, Europaplatz	*E. roumanicus*	48.30000	14.30000
42INF	Austria	Linz, OÖ	*E. roumanicus*	48.31000	14.30000
2014425	Austria	Linz, Freistädter Straße 414a	*E. roumanicus*	48.33000	14.33000
2008184	Austria	Linz, St. Magdalena	*E. roumanicus*	48.34000	14.30000
2009167	Austria	Bad Zell, Naarntal	*E. roumanicus*	48.33000	14.70000
2012154	Austria	Gänserndorf	*E. roumanicus*	48.34000	16.71000
2012155	Austria	Gänserndorf	*E. roumanicus*	48.34000	16.71000
sk12	Slovakia	Bratislava	*E. roumanicus*	48.15000	17.10000
sk16	Slovakia	Bratislava, Bohrova	*E. roumanicus*	48.15000	17.10000
sk30	Slovakia	Lula	*E. roumanicus*	48.65000	17.19000
sk29	Slovakia	Čierny Balog	*E. roumanicus*	48.68000	17.24000
sk17	Slovakia	Dojč	*E. roumanicus*	48.66667	17.25000
sk15	Slovakia	Senica	*E. roumanicus*	48.66667	17.35000
2008174	Slovakia	Castkovce	*E. roumanicus*	48.69000	17.78000
sk14	Slovakia	Bánská Bystrica	*E. roumanicus*	48.71667	19.13333
sk13	Slovakia	Brusno	*E. roumanicus*	48.73000	19.36667
sk25	Slovakia	Smižany, Okres Spišská Nová Ves	*E. roumanicus*	48.80000	19.37000
sk8	Slovakia	Poltár	*E. roumanicus*	48.41667	19.78333
sk11	Slovakia	Radovce	*E. roumanicus*	48.21667	19.81667
sk9	Slovakia	Radovce	*E. roumanicus*	48.21667	19.81667
sk20	Slovakia	Mokroluh, Okres Bardejov	*E. roumanicus*	49.30844	21.21383
sk21	Slovakia	Prešov, centrum	*E. roumanicus*	48.99129	21.23910
sk19	Slovakia	Bardejov, Štefánikova	*E. roumanicus*	49.29542	21.26305
sk28	Slovakia	Tulčík, Okres Prešov	*E. roumanicus*	49.09000	21.31000
sk22	Slovakia	Tulčík, Okres Prešov	*E. roumanicus*	49.08655	21.31416
sk23	Slovakia	Tulčík, Okres Prešov	*E. roumanicus*	49.08655	21.31416

2012159	Austria	Gaspoltshofen	hybrid?	48.14000	13.74000
2014427	Austria	Eberstalzell	hybrid?	48.04000	13.98000
sk26	Slovakia	Nimnica, Považská Bystrica	hybrid?	48.74000	19.18000
sk27	Slovakia	Diviaky, Turčianske Teplice	hybrid?	48.67000	17.36000

Table S2. List of primers and Illumina P5/P7 adapters used in the study.

Primername	Nr. Repeats	Forward	Reverse	Amplicon length variation	Primermix
HH1_AC	16	TCATGCTAGGCACTGCTATT	AAGTGCAATCAGACCAGTGA	454-486	HH1
HH11_AAAG	7	ACGTTCCTCTCTGGGGAATA	TTCAAGACCCTGTTCTCCAC	428-460	HH1
HH13_AAGG	11	AGGTAGAAGGCAGACAATGG	TTGAAACACTGACGTAGGCT	428-476	HH3
HH16_AAGAA	12	CACTAGGCAGAAAACACACG	ACCACAGATGCTGTAGACAG	425-480	HH2
HH2_AC	16	TGGGTAGCAGCTAAAGGAAG	GACAAAATCCTCCCTGGCTA	448-482	HH2
HH20_TATTC	11	TGGATGGATGGAAAACTGAGA	GGGTGCTGATTCATCTACCT	477-522	HH3
HH22_AG	15	ACGGAAGGAAATACTGCCAA	CCTTCCCCTTTGTGAGAACT	470-502	HH3
HH24_GCA	7	TTCTGAGGTCTCATCTGTGC	CTGTCTGTGGTCCAGGAAAG	452-452	HH3
HH26_CAA	10	TTAAGGAACTCAGGGTTGGG	GTGTCAATGGAAGCAAAGCT	487-502	HH1
HH28_TTG	8	CCTAGTGGTAGCTTCTCACA	TTGGCTCCAGTCAAGTTCTC	440-452	HH3
HH36_GAAAG	9	ACAGTGAAGACAGGGAAGC	CTTAAAATGGCTAAGGTGGT	452-517	HH1
HH8_ATT	8	CCTCCAGGAGAGATTTTGCT	CAAATGAGTGGAAGCCATGC	489-498	HH3
WHH10_AAAAC	7	ATAGCTGGATAGTGGTCTGG	ACATCTTTTCTTCCTCACAGT	398-433	WHH1
WHH11_CTTC	10	AGTCACCATTCTCCACTTTC	ACCCTGAGTGAAGAAGGATA	413-435	WHH1
WHH14_ATAG	10	AAAAGGACCTAAATGGGAGG	ACAGGGAACAAAGATGCTTA	376-408	WHH1
WHH16_TTAA	7	GTGTAAAGCAGTATGTTGCC	AATACAGTGTACAAGGACGC	407-419	WHH1
WHH19_TTCT	13	AGAGATCAGACTAACGTTTTT	GGGGAGAATTTGGTACTGTA	402-443	WHH1
WHH23_TGGA	13	TCTTCCCTTAAGCTACTGGA	TCTCAATTGTTTAGACATTGAGT	386-414	WHH1
WHH30_CT	17	TCTCATTGGATAGTGCACTG	TGCCTAATAGCAAATACACA	405-441	WHH1
WHH5_AAAAT	8	CACCAGGTTAAGCGTACATA	AAAAGTGCTACTAGGGAAGC	NA	WHH1
WHH7_TCTTT	9	TTAGCTTGGTTTTCACAGGT	GAGTGGCAGTCTTCAAGTAG	384-419	WHH1
WHH8_TTCCT	10	ATAGGAGGACTGGCGATC	AATGGAGGGAGTAGATGGG	364-424	WHH1

Amplification primers are built up by specific sequences that are elongated by Illumina P5/P7 sequences, which correspond to the Illumina adapter in the sequencing process. The forward primers were elongated with a part of the P5 motif (TCTTTCCCTACACGACGCTCTTCCGATCT) and the reverse primers with a part of the P7 motif (CTGGAGTTCAGACGTGTGCTCTTCCGATCT).

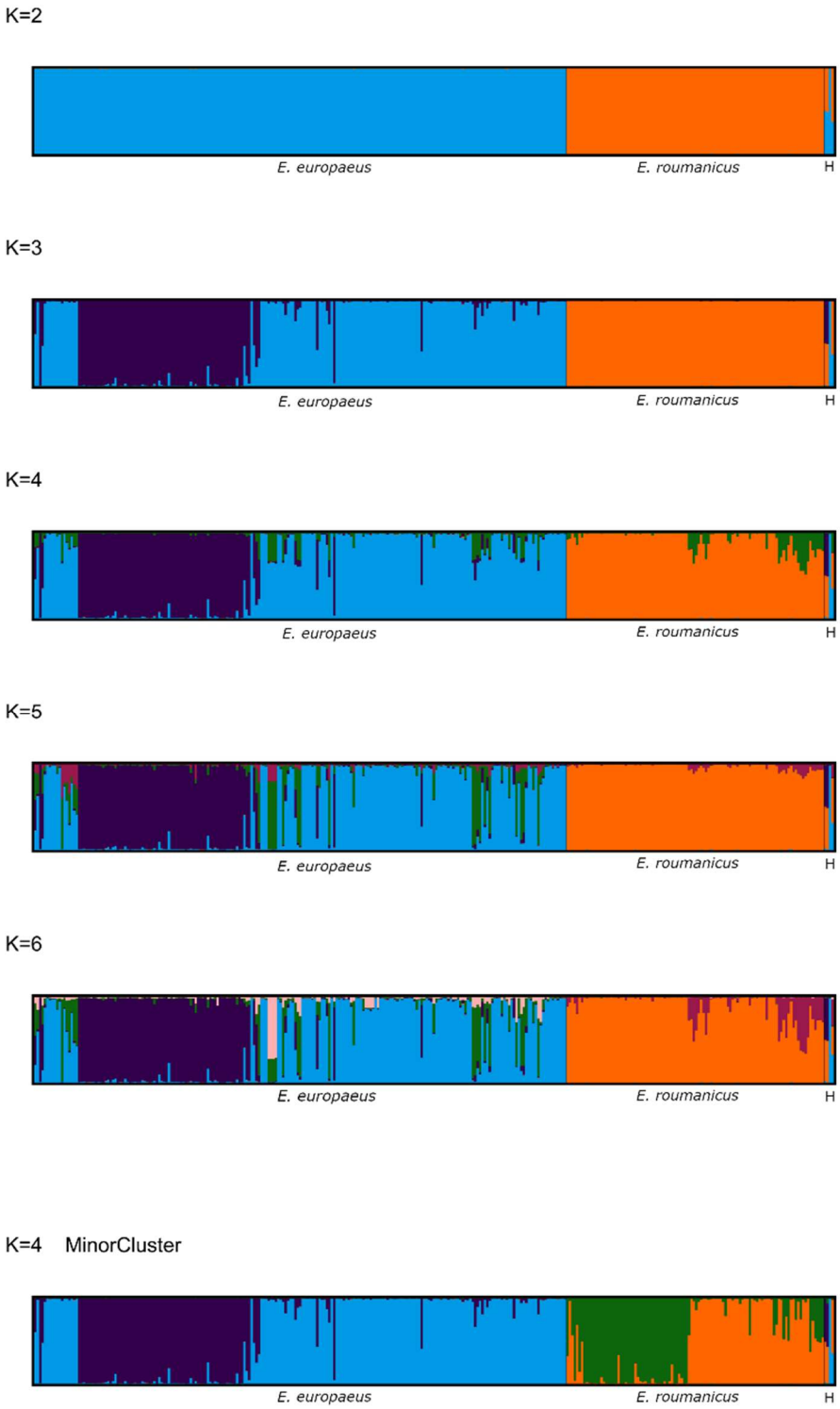
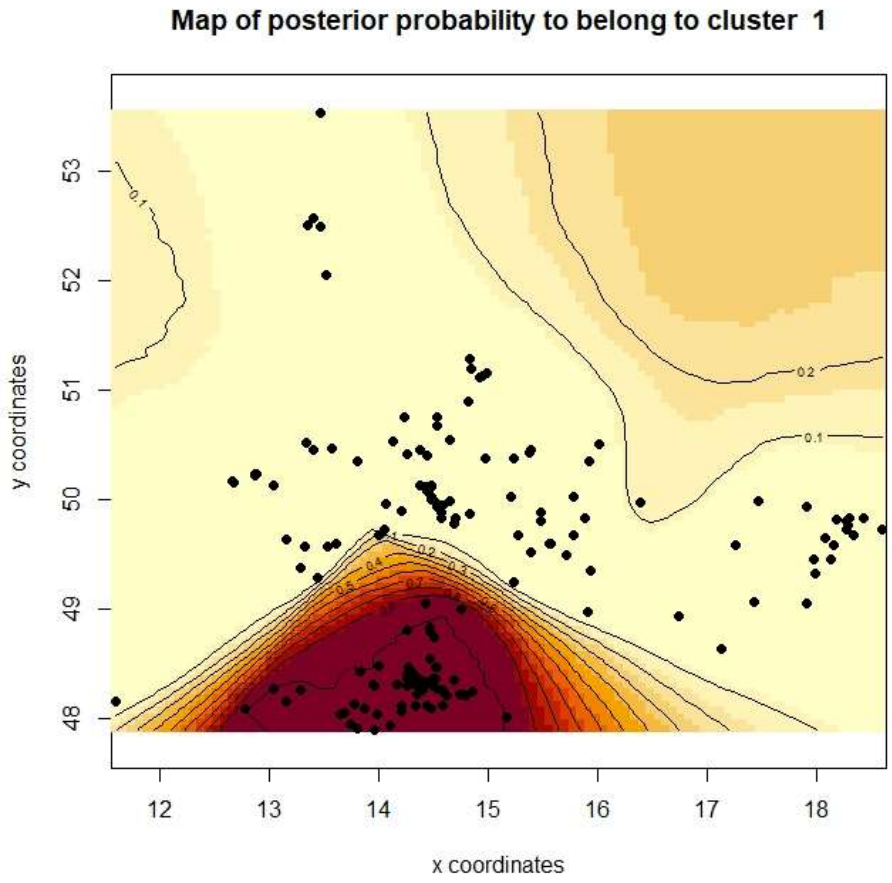
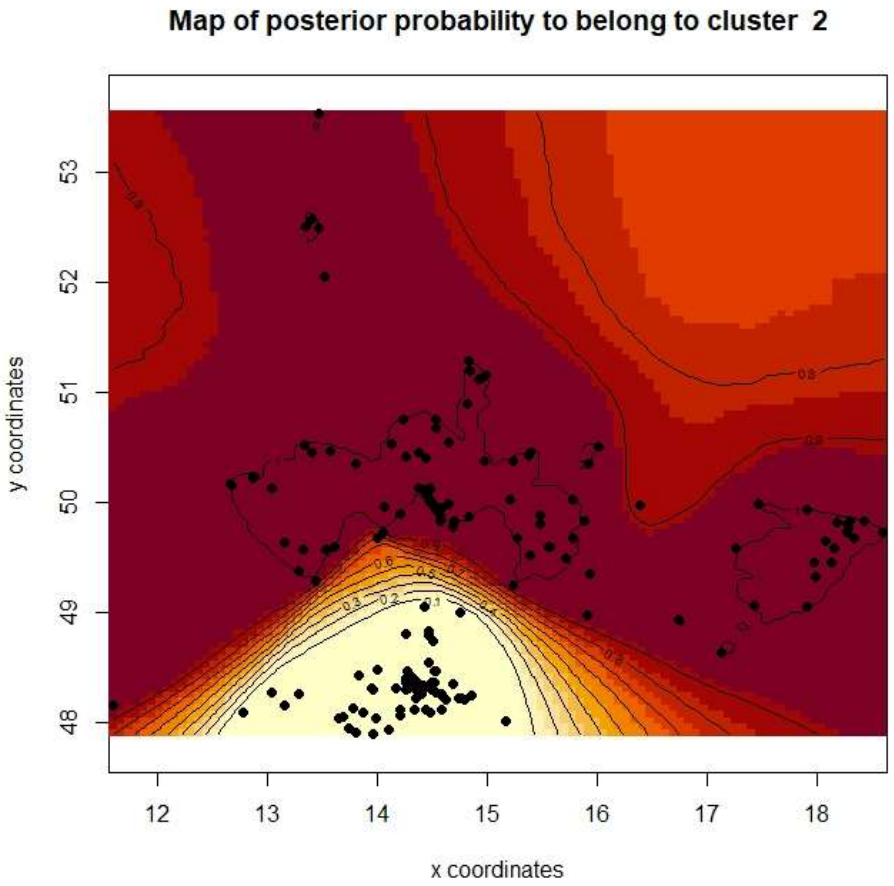


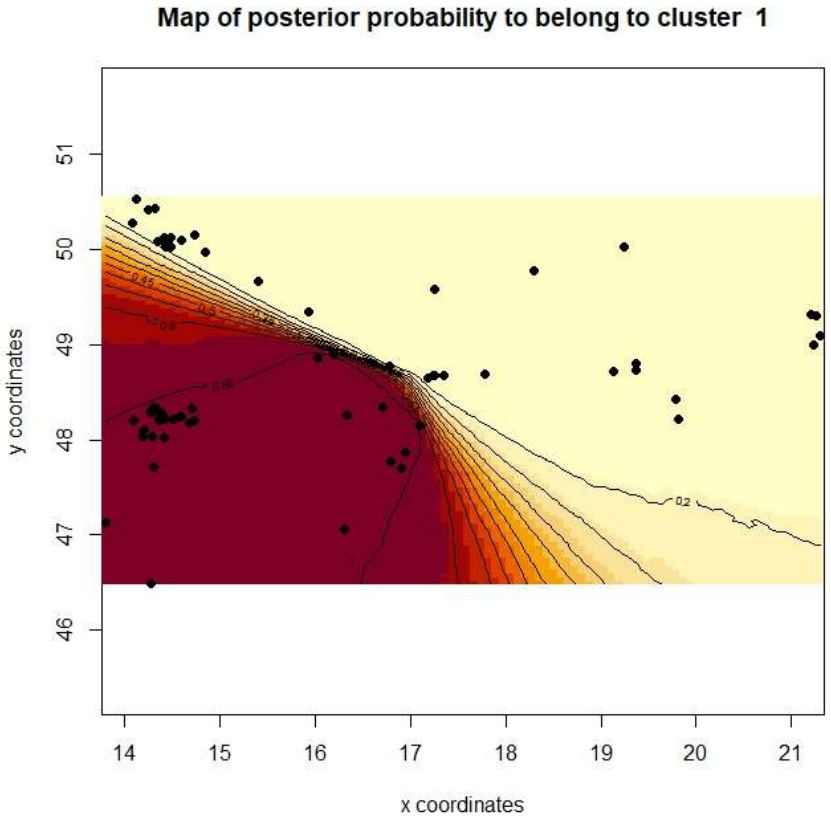
Fig. S1. Structure analysis of the whole dataset: *E. europaeus*, *E. roumanicus*, and potential hybrids (H). Each bar represents one individual. The best-supported K value, determined using StructureSelector software, was K = 2. Five replicates were performed for each K value. All five runs produced identical results (as visualized) for each K value, except for K = 4. For K = 4, two divergent runs are also visualized at the end of the figure.

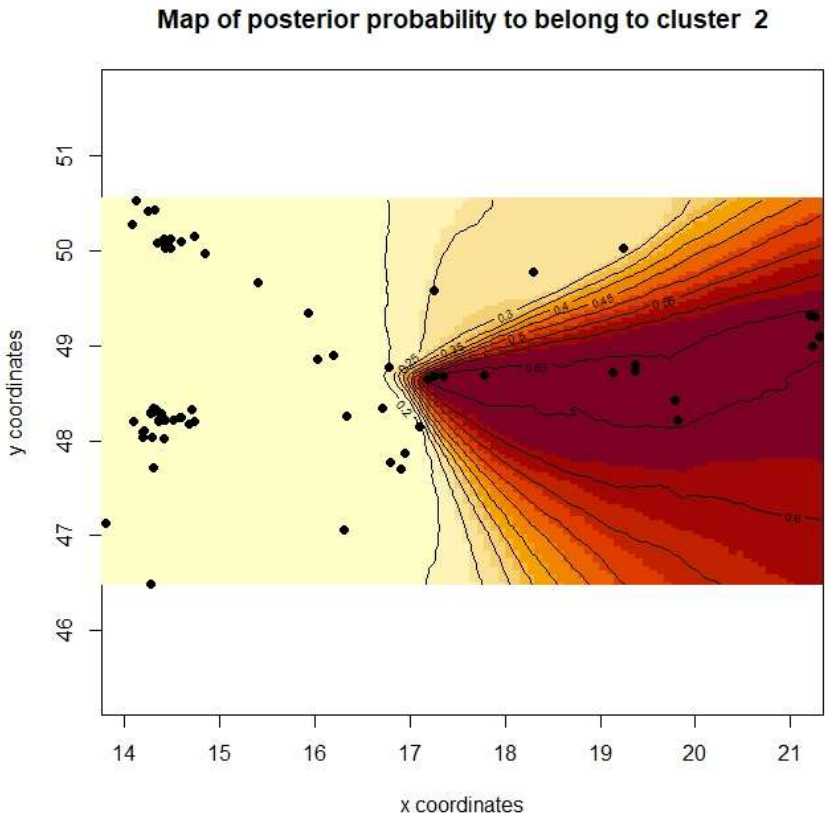
a)


Map of posterior probability to belong to cluster 1
y coordinates
x coordinates
48
49
50
51
52
53
12
13
14
15
16
17
18
0.1
0.2
0.1
0.2
0.3
0.4
0.5
0.7


Map of posterior probability to belong to cluster 2
y coordinates
x coordinates
48
49
50
51
52
53
12
13
14
15
16
17
18
0.9
0.8
0.6
0.7
0.3
0.2
0.1
0.4

b)


Map of posterior probability to belong to cluster 1
y coordinates
x coordinates
46
47
48
49
50
51
14
15
16
17
18
19
20
21


Map of posterior probability to belong to cluster 2
y coordinates
x coordinates
46
47
48
49
50
51
14
15
16
17
18
19
20
21

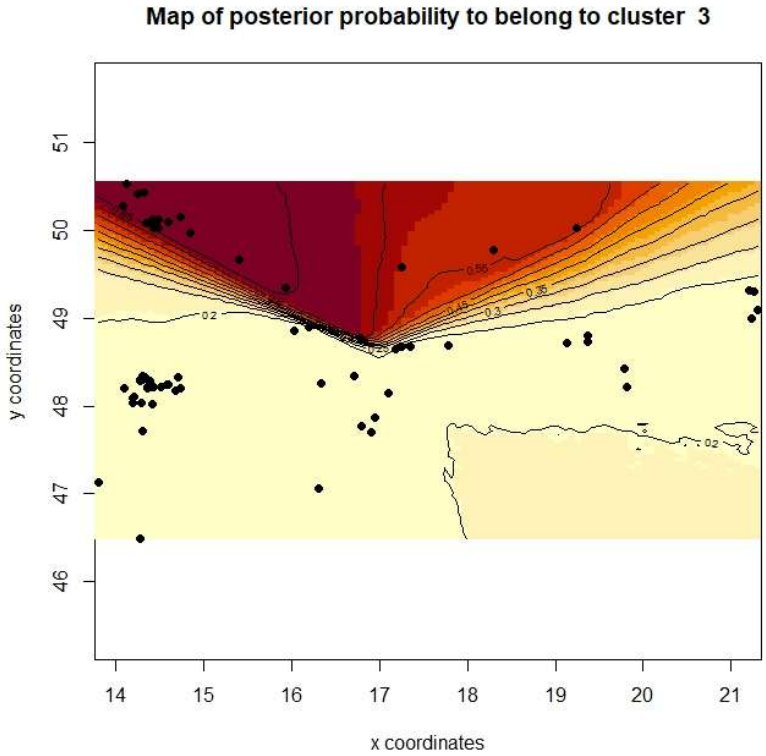


Fig. S2. Maps of posterior probabilities for cluster membership based on Geneland analyses. The maps display the study area with relative posterior probabilities of assignment to inferred populations: a) Cluster 1 and Cluster 2 for *E. europaeus*; b) Cluster 1, Cluster 2, and Cluster 3 for *E. roumanicus*, respectively.