

**Table S2.** Genetic divergence between the COI sequences estimated using the maximum composite likelihood model implemented in MEGA7.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	
1 LK0099  <i>Turanium pilosum</i>  Tajikistan																																							
2 LK0100  <i>Turanium pilosum</i>  Tajikistan	0.2																																						
3 LK0101  <i>Turanium losi</i> _sp.nov. Kyrgyzstan	2.6	2.8																																					
4 LK0114  <i>Turanium losi</i> _sp.nov. Kyrgyzstan	2.6	2.8	0.0																																				
5 LK0098  <i>Turanium scabrum</i>  Kazakhstan	12.0	12.3	11.2	11.2																																			
6 LK0102  <i>Turanium johannis</i>  Kyrgyzstan	12.4	12.2	11.5	11.5	13.6																																		
7 LK0103  <i>Ropalopus nadari</i>  Tajikistan	13.5	13.7	13.0	13.0	13.8	14.9																																	
8 LK0104  <i>Ropalopus mali</i>  Kyrgyzstan	17.2	17.4	15.6	15.6	17.2	18.4	11.6																																
9 COLAT043-08  <i>Ropalopus sanguinicollis</i>	14.8	14.6	14.6	14.6	17.7	15.5	16.0	17.2																															
10 CERLF390-08  <i>Ropalopus sanguinicollis</i>	14.8	14.6	14.6	14.6	17.7	15.5	16.0	17.2	0.0																														
11 KM446501.1  <i>Ropalopus femoratus</i>	16.4	16.7	16.7	16.7	17.7	17.0	15.4	14.4	16.2	16.2																													
12 KM286267.1  <i>Ropalopus femoratus</i>	16.2	16.4	16.4	16.4	17.7	16.8	15.2	14.2	16.0	16.0	0.6																												
13 KJ964459.1  <i>Ropalopus femoratus</i>	16.2	16.4	16.4	16.4	17.7	16.8	15.2	14.2	16.0	16.0	0.6	0.0																											
14 KM286341.1  <i>Callidium aeneum</i>	20.3	20.6	19.8	19.8	20.8	20.2	18.0	18.0	18.0	18.0	17.7	17.7	17.7																										
15 KU918865.1  <i>Calidium coriaceum</i>	17.6	17.8	17.5	17.5	21.7	15.5	19.0	19.6	18.2	18.2	18.4	18.1	18.1	13.1																									
16 KU914026.1  <i>Callidium violaceum</i>	23.4	23.7	22.4	22.4	21.3	22.8	21.1	19.7	20.4	20.4	19.7	19.7	19.7	17.5	18.6																								
17 KY683721.1  <i>Oupyrrhidium cinnabarinum</i>	23.2	23.4	23.5	23.5	22.2	20.5	22.1	22.2	20.8	20.8	21.6	20.9	20.9	21.6	21.0	19.5																							
18 KM285884.1  <i>Phymatodes pusillus</i>	22.7	22.5	21.5	21.5	26.4	26.5	23.1	24.0	23.5	23.5	23.6	23.6	23.6	26.0	24.7	26.3	26.8																						
19 HQ953905.1  <i>Phymatodes rufipes</i>	25.7	25.4	25.5	25.5	23.4	24.1	21.7	24.5	21.7	21.7	22.1	21.9	21.9	24.1	23.3	23.5	23.9	21.8																					
20 HQ954560.1  <i>Phymatodes testaceus</i>	22.6	22.4	22.9	22.9	23.6	23.6	25.0	22.8	21.4	21.4	21.3	21.6	21.6	20.4	21.5	21.4	21.5	18.5	16.7																				
21 KU918701.1  <i>Pyrrhidium sanguineum</i>	24.2	23.9	25.6	25.6	26.7	27.6	27.6	25.2	25.1	25.1	25.4	25.4	25.4	27.1	30.0	29.5	29.6	22.5	23.2	23.7																			
22 LC492880.1  <i>Semanotus japonicus</i>	19.2	19.4	18.8	18.8	19.7	17.2	20.6	19.2	15.9	15.9	18.8	18.3	18.3	18.2	18.5	17.8	19.1	23.1	22.3	20.1	24.5																		
23 JF889542.1  <i>Chlorophorus figuratus</i>	18.2	18.0	19.0	19.0	20.7	19.1	18.9	19.1	16.9	16.9	18.0	18.2	18.2	19.1	20.0	21.7	20.9	20.4	19.3	19.4	25.1	18.4																	
24 KC135923.1  <i>Chlorophorus diadema</i>	20.5	20.2	19.4	19.4	18.9	19.1	20.1	23.2	16.9	16.9	21.3	21.1	21.1	21.0	22.4	21.5	22.7	23.1	21.5	23.6	25.7	21.0	17.0																
25 MK689190.1  <i>Chlorophorus annularis</i>	20.6	20.3	21.8	21.8	23.9	22.9	20.2	21.5	20.6	20.6	18.3	18.8	18.8	22.2	24.7	24.3	22.7	21.3	22.7	22.7	24.3	21.1	16.9	20.8															
26 FJ559042.1  <i>Chlorophorus signaticollis</i>	23.3	23.0	24.6	24.6	24.6	23.7	23.2	22.5	20.2	20.2	20.7	21.0	21.0	20.1	24.0	22.3	24.1	25.0	20.3	19.9	28.8	22.4	16.6	22.9	18.6														
27 KM449257.1  <i>Chlorophorus sartor</i>	20.2	20.0	20.6	20.6	23.0	20.8	21.4	24.7	19.8	19.8	21.3	21.6	21.6	20.9	20.3	21.9	23.7	23.7	25.8	23.0	26.1	23.0	18.7	18.1	18.2	19.5													
28 KM286012.1  <i>Chlorophorus varius</i>	20.5	20.2	21.7	21.7	22.9	20.2	20.1	22.5	20.9	20.9	18.5	18.5	18.5	20.2	20.8	21.9	23.6	21.5	19.9	21.7	23.2	21.7	15.9	20.9	15.6	17.3	18.5												
29 MN182963.1  <i>Xylotrechus stebbingi</i>	23.0	22.8	21.9	21.9	21.9	22.8	20.0	21.6	17.6	17.6	19.1	18.9	18.9	22.5	21.7	20.4	24.3	23.1	19.8	22.4	26.8	20.9	21.9	20.5	18.7	20.8	22.1	20.0											
30 KM286086.1  <i>Xylotrechus rusticus</i>	23.3	23.1	22.3	22.3	21.8	21.9	19.8	21.3	19.4	19.4	21.9	21.9	21.9	20.5	21.6	22.8	24.6	23.3	17.2	24.9	22.1	18.3	19.1	19.7	20.7	21.7	20.2	21.6	12.0										
31 KU918981.1  <i>Clytus lama</i>	20.9	20.6	20.9	20.9	21.7	22.3	22.2	24.2	20.9	20.9	21.8	22.0	22.0	23.3	25.0	24.9	21.4	20.3	22.5	21.4	26.1	19.3	20.2	20.4	20.9	22.9	21.2	22.1	17.6	18.2									
32 JF889522.1  <i>Clytus arietis</i>	22.3	22.0	22.5	22.5	23.1	24.4	22.5	23.7	21.4	21.4	24.0	23.8	23.8	22.9	25.1	26.3	22.0	23.4	22.3	20.9	28.0	20.9	19.4	21.8	21.9	22.7	22.8	22.5	17.9	19.3	7.4								
33 MH020456.1  <i>Hylotrupes bajulus</i>	20.9	21.2	20.7	20.7	22.5	21.1	20.5	23.8	20.8	20.8	25.4	25.2	25.2	21.8	22.8	24.3	27.7	24.9	23.0	22.7	22.5	21.5	21.1	21.5	24.3	25.5	22.7	23.0	24.7	20.5	25.4	27.1							
34 JF889541.1  <i>Plagionotus arcuatus</i>	24.6	24.4	25.2	25.2	25.9	26.2	25.1	25.2	21.0	21.0	24.2	23.9	23.9	25.4	24.7	21.6	26.2	26.4	19.7	22.3	26.6	24.7	20.7	21.8	20.9	21.2	23.7	21.6	20.1	20.5	25.4	25.3	22.7						
35 KM442177.1  <i>Plagionotus detritus</i>	24.1	23.9	24.7	24.7	24.0	24.1	24.1	23.9	20.5	20.5	23.7	23.4	23.4	24.3	24.2	21.1	25.1	26.2	21.0	22.9	26.9	24.7	19.5	21.1	19.6	18.5	23.5	20.1	19.1	20.8	24.4	25.3	22.7	3.0					
36 KM286032.1  <i>Cerambyx miles</i>	20.3	20.1	20.1	20.1	22.5	22.2	22.2	24.1	23.0	23.0	22.5	22.5	22.5	23.5	21.4	24.4	23.9	28.7	25.9	22.8	26.7	21.3	22.2	23.1	22.4	25.5	23.0	22.1	24.5	22.5	22.5	22.8	24.3	27.4	26.5				
37 KJ962934.1  <i>Cerambyx scopoli</i>	20.8	20.6	20.6	20.6	20.9	21.8	22.4	24.6	21.1	21.1	22.8	22.6	22.6	22.9	23.0	23.2	21.5	29.8	25.3	22.8	27.4	20.5	24.2	21.9	22.7	26.7	22.2	23.2	23.2	24.0	22.8	23.7	25.7	27.7	27.1	9.9			
38 KM285966.1  <i>Cerambyx cerdo</i>	24.0	24.3	22.7	22.7	25.4	24.9	25.8	25.1	25.6	25.6	22.3	22.6	22.																										