

Table S1. Principal component analysis of 19 Bioclim and altitude variable associated with occurrence points of species from *Merodon ruficornis* group. Significant factor loadings are printed in bold.

	Cluster 1					Cluster 2				Cluster 3				Cluster 4			
	PC1	PC2	PC3	PC4	PC5	PC1	PC2	PC3	PC4	PC1	PC2	PC3	PC4	PC1	PC2	PC3	PC4
alt = Altitude data	-0.82	-0.23	-0.11	-0.47	-0.08	0.08	0.20	0.81	0.46	-0.28	0.63	0.56	0.34	-0.93	0.20	0.20	0.15
bio1 = Annual Mean Temperature	0.89	0.25	0.30	0.05	0.20	0.02	0.67	-0.73	0.06	0.32	-0.21	-0.92	0.01	0.97	-0.08	0.21	0.04
bio2 = Mean Diurnal Range (Mean of monthly)	0.15	0.88	0.18	0.05	0.39	-0.17	0.68	-0.06	0.17	0.66	-0.45	-0.17	0.29	-0.64	-0.38	0.34	0.36
bio3 = Isothermality (bio2/bio7) (* 100)	0.28	0.84	0.11	-0.29	-0.18	0.24	0.89	0.11	0.22	0.68	0.29	-0.26	0.24	0.06	0.19	0.28	0.84
bio4 = Temperature Seasonality (standard deviation *100)	0.02	0.35	0.15	0.54	0.69	-0.43	-0.82	-0.22	-0.23	0.17	-0.94	0.14	0.02	-0.57	-0.58	0.03	-0.51
bio5 = Max Temperature of Warmest Month	0.69	0.46	0.31	0.12	0.43	-0.37	0.20	-0.87	0.00	0.33	-0.53	-0.77	0.08	0.78	-0.32	0.41	0.02
bio6 = Min Temperature of Coldest Month	0.91	-0.14	0.26	-0.21	-0.19	0.31	0.85	-0.32	0.15	0.06	0.31	-0.93	-0.06	0.97	0.16	0.11	0.12
bio7 = Temperature Annual Range (bio5-bio6)	0.04	0.65	0.14	0.32	0.66	-0.53	-0.72	-0.21	-0.15	0.31	-0.88	0.01	0.15	-0.74	-0.52	0.20	-0.16
bio8 = Mean Temperature of Wettest Quarter	0.40	0.14	0.07	0.81	0.22	-0.13	-0.28	-0.31	-0.86	0.61	-0.57	-0.08	0.09	0.36	-0.54	-0.31	-0.54
bio9 = Mean Temperature of Driest Quarter	0.26	0.27	0.02	-0.84	0.11	-0.10	0.38	-0.08	0.87	-0.65	0.45	-0.36	0.15	0.23	0.11	0.66	0.56
bio10 = Mean Temperature of Warmest Quarter	0.80	0.29	0.30	0.17	0.37	-0.35	-0.01	-0.91	-0.08	0.32	-0.46	-0.83	0.03	0.92	-0.21	0.26	-0.07
bio11 = Mean Temperature of Coldest Quarter	0.93	0.08	0.27	-0.20	-0.05	0.24	0.87	-0.33	0.21	0.22	0.22	-0.93	0.05	0.96	0.11	0.19	0.17
bio12 = Annual Precipitation	-0.27	-0.12	-0.89	0.00	-0.30	0.83	0.27	0.33	0.28	-0.86	0.35	0.30	0.05	-0.09	0.91	-0.31	0.13
bio13 = Precipitation of Wettest Month	-0.25	-0.17	-0.94	-0.04	0.01	0.68	0.50	0.39	0.19	-0.85	0.33	0.28	0.23	-0.07	0.97	0.07	-0.01
bio14 = Precipitation of Driest Month	-0.31	-0.09	-0.67	0.03	-0.63	0.97	0.09	0.12	-0.04	-0.84	0.04	0.41	-0.33	-0.10	0.09	-0.96	-0.14
bio15 = Precipitation Seasonality (Coefficient of Variation)	0.00	0.02	0.18	-0.11	0.94	-0.51	0.67	0.35	0.08	0.07	-0.07	-0.01	0.93	0.10	0.48	0.84	-0.04
bio16 = Precipitation of Wettest Quarter	-0.25	-0.15	-0.95	-0.03	-0.01	0.66	0.48	0.43	0.24	-0.88	0.25	0.33	0.17	-0.07	0.98	0.04	0.05
bio17 = Precipitation of Driest Quarter	-0.25	-0.07	-0.71	-0.05	-0.63	0.98	0.02	0.12	0.08	-0.88	0.12	0.34	-0.27	-0.14	0.15	-0.96	-0.06
bio18 = Precipitation of Warmest Quarter	-0.18	-0.08	-0.75	0.56	-0.20	0.76	0.11	0.11	-0.59	-0.35	-0.45	0.58	-0.12	0.02	-0.02	-0.90	-0.36
bio19 = Precipitation of Coldest Quarter	-0.18	0.04	-0.74	-0.47	-0.39	0.51	0.21	0.27	0.69	-0.76	0.60	0.15	0.15	0.16	0.91	0.20	0.26
Expl.Var	5.04	2.64	5.22	2.75	3.55	5.57	5.76	3.88	2.94	6.66	4.43	5.33	1.49	6.67	5.13	4.62	2.06
Prp.Totl	0.25	0.13	0.26	0.14	0.18	0.28	0.29	0.19	0.15	0.33	0.22	0.27	0.07	0.33	0.26	0.23	0.10