

JUSTE, J., M. RUEDI, S. J. PUECHMAILLE, I. SALICINI, and C. IBÁÑEZ. 2018. Two new cryptic bat species within the *Myotis nattereri* species complex (Vespertilionidae, Chiroptera) from the Western Palearctic. Acta Chiropterologica, 20(2): 285–300.

SUPPLEMENTARY INFORMATION

Table S1. External and cranio-dental measurements of specimens used in the present study. Acronyms stand for: forearm length (FA); greatest length of skull, excluding incisors (GTL); condylo-basal length (CBL); condylo-canine length (CCL); maxillary tooththrow length (CM3); width across the upper molars (M3M3); width across the upper canines (C-C); zygomatic breadth (ZB); braincase width (BB); breadth of skull measured across mastoids (MAB); least postorbital constriction (POC); rostral length taken from the rostral margin of the orbits to the anterior tip of the skull, without incisors (ROL); upper molars length (M1M3); mandible length, without incisors (ml); mandibular tooththrow length (cm3), least height of the coronoid process (coh) and lower molars length (m1m3)

Collection N	Genus	Species	Country	Sex	FA	GTL	CBL	CCL	CM3	M3-M3	C-C	ZB	BB	MAB	POC	ROL	M1M3	ml	cm3	coh	m1m3	Sequenced
EBD26176	<i>Myotis</i>	<i>escalerai</i>	Spain	m	37.1	15.56	14.38	13.5	5.88	6.53	4.07	9.72	7.55	7.9	3.71	4.64	3.45	11.23	6.19	3.49	3.85	YES
EBD15631	<i>Myotis</i>	<i>escalerai</i>	Spain	m	38.6	15.33	14.33	13.42	6.05	6.26	4.18	9.7	7.78	7.6	3.66	4.55	3.51	11.13	6.38	3.39	3.91	YES
EBD9004	<i>Myotis</i>	<i>escalerai</i>	Spain	f		15.58	14.47	13.48	5.98	6.32	4.18	9.63	7.67	7.82	3.51	4.5	3.52	11.24	6.36	3.47	3.82	YES
EBD9005	<i>Myotis</i>	<i>escalerai</i>	Spain	f		15.59	14.64	13.65	6.07	6.28	4.07	9.64	7.58	7.76	3.48	4.72	3.56	11.39	6.62	3.52	3.99	YES
EBD9656	<i>Myotis</i>	<i>escalerai</i>	Spain	f	41	15.46	14.42	13.53	6.00	6.08	4.09	9.4	7.41	7.49	3.51	4.69	3.51	11.24	6.37	3.36	3.81	YES
EBD9659	<i>Myotis</i>	<i>escalerai</i>	Spain	m	40.3	15.74	14.63	13.63	5.96	6.34	4.1	9.95	7.6	7.81	3.68	4.68	3.58	11.46	6.43	3.55	3.99	YES
EBD13135	<i>Myotis</i>	<i>escalerai</i>	Spain	f	39.3	15.66	14.64	13.66	5.93	6.39	4.33	10.13	7.58	7.89	3.47	4.7	3.53	11.56	6.28	3.37	3.86	YES
EBD15627	<i>Myotis</i>	<i>escalerai</i>	Spain	m	39.2	15.74	14.63	13.74	5.91	5.93	4.07	9.6	7.69	7.71	3.7	4.61	3.46	11.28	6.28	3.51	3.85	YES
EBD15629	<i>Myotis</i>	<i>escalerai</i>	Spain	m	37.3	15.21	14.17	13.27	5.77	6.04	3.95	9.63	7.56	7.83	3.6	4.54	3.4	11.2	6.17	3.35	3.82	YES
EBD15630	<i>Myotis</i>	<i>escalerai</i>	Spain	m	37.9	15.34	14.24	13.34	5.88	6.02	4.04	9.58	7.61	7.8	3.59	4.51	3.46	11.04	6.25	3.29	3.89	YES
EBD19876	<i>Myotis</i>	<i>escalerai</i>	Spain	f	41.9	15.92	14.83	13.78	6.19	6.37	4.11	9.63	7.57	7.76	3.61	4.72	3.68	11.7	6.55	3.57	4.00	YES
EBD19877	<i>Myotis</i>	<i>escalerai</i>	Spain	f	42	15.95	14.91	13.96	6.27	6.21	3.99	9.8	7.52	7.82	3.65	4.76	3.67	11.84	6.64	3.57	4.06	YES
MHNG983.039	<i>Myotis</i>	<i>nattereri</i>	France	f		15.5	14.54	13.46	6.1	6.49	4.03	10.07	8.06	7.94	3.79	4.79	3.55	11.22	6.45	3.26	4.03	----
MHNG1807.049	<i>Myotis</i>	<i>nattereri</i>	Greece	m		15.47	14.55	13.58	6.03	6.29	4.07	9.72	8.01	8.02	3.99	4.71	3.5	11.32	6.39	3.16	3.73	----
MHNG1714.044	<i>Myotis</i>	<i>nattereri</i>	Germany	f		15.49	14.46	13.52	5.98	6.63	4.06	9.54	7.84	7.81	3.98	4.56	3.48	11.34	6.44	3.33	4.08	----
MHNG1255.040	<i>Myotis</i>	<i>nattereri</i>	France	m	38.5	15.3	14.5	13.56	6.11	6.5	4.12	10	7.82	7.97	4.09	4.9	3.57	11.03	6.13	3.35	3.99	----
HNHM2748	<i>Myotis</i>	<i>nattereri</i>	Hungary	m	38.8	15.61	14.57	13.52	6.08	6.32	3.94	9.77	7.7	7.85	3.96	4.82	3.6	11.24	6.48	3.34	3.93	----
HNHM2000.96.2.	<i>Myotis</i>	<i>nattereri</i>	Hungary	m	41.2	15.78	14.97	13.94	6.34	6.37	4.06	9.85	7.64	7.7	3.82	4.87	3.45	11.73	6.61	3.3	3.95	----
HNHM2000.95.9.	<i>Myotis</i>	<i>nattereri</i>	Hungary	m	40.4	15.97	15.04	13.95	6.17	6.51	4.14	10.1	8.23	8.31	4.16	4.92	3.62	11.7	6.56	3.38	3.95	----
HNHM2000.95.5.	<i>Myotis</i>	<i>nattereri</i>	Hungary	m	39.0	15.59	14.79	13.69	6.15	6.31	3.97	9.69	7.81	7.9	3.69	4.71	3.44	11.53	6.43	3.16	3.77	----
HNHM18421	<i>Myotis</i>	<i>nattereri</i>	Hungary	m	40.3	15.78	14.59	13.61	6.13	6.63	4.08	10.03	8.02	8.01	4.1	4.68	3.55	11.41	6.42	3.34	3.82	----
HMHN85.13.1.	<i>Myotis</i>	<i>nattereri</i>	Hungary	m		15.82	14.6	13.88	6.04	6.46	4.08	9.89	7.89	8.01	3.92	4.27	3.61	11.54	6.41	3.31	3.89	----
HMHN85.11.1.	<i>Myotis</i>	<i>nattereri</i>	Hungary	f		15.09	14	13.05	5.86	6.22	3.88	9.56	7.78	7.66	3.98	4.08	3.35	10.55	6.26	3.12	3.66	----
HMHN57.88.1.	<i>Myotis</i>	<i>nattereri</i>	Hungary	m		16.03	15.02	14.05	6.38	6.51	3.89	9.99	7.92	7.99	3.86	4.62	3.67	11.58	6.51	3.47	3.92	----
HMHN56.59.2.	<i>Myotis</i>	<i>nattereri</i>	Hungary	m		15.74	15.09	14.14	6.3	6.59	4.11	10.37	7.87	7.91	3.87	4.68	3.52	11.54	6.55	3.43	3.94	----
HMHN56.59.1.	<i>Myotis</i>	<i>nattereri</i>	Hungary	m		15.96	15.12	14.08	6.21	6.73	4.01	10.05	7.87	8.1	4.07	4.99	3.6	11.6	6.37	3.4	3.77	----

EBD29799	<i>Myotis</i>	<i>crypticus</i>	Italy	m	39.6	15.4	14.16	13.23	6.02	6.01	3.9	9.52	7.8	7.66	3.72	4.7	3.35	11	6.48	3.15	3.84	YES
EBD29798	<i>Myotis</i>	<i>crypticus</i>	Italy	m	38.7	15.54	14.27	13.39	6.08	5.99	3.57	9.26	7.54	7.56	3.62	4.59	3.57	11.07	6.4	2.98	3.98	YES
MHNG1947.079	<i>Myotis</i>	<i>crypticus</i>	France	m	39.5	15.71	14.8	13.87	6.17	6.3	3.93	10.06	7.97	7.75	3.82	4.8	3.54	11.61	6.71	3.44	3.97	----
MHNG874.057	<i>Myotis</i>	<i>crypticus</i>	France	m	38.8	15.59	14.61	13.58	6.07	6.41	3.96	9.75	8	7.94	3.8	4.85	3.6	11.3	6.37	3.35	3.97	----
MHNG1958.033	<i>Myotis</i>	<i>crypticus</i>	Switzerland	f	39.4	15.43	14.29	13.44	5.96	6.32	3.69	0	7.85	7.86	3.89	4.6	3.3	11.08	6.36	3.11	3.82	----
MHNG1714.046	<i>Myotis</i>	<i>crypticus</i>	Italy	m	38.0	15.26	13.94	13.08	6.02	6.36	3.96	9.28	7.66	7.56	3.86	4.69	3.51	11.13	6.4	3.21	3.83	----
MHNG1075.081	<i>Myotis</i>	<i>crypticus</i>	Switzerland	m	37.5	15.1	13.97	12.9	5.65	6.02	3.71	9.53	7.72	7.71	3.81	4.46	3.33	10.76	6	3.21	3.64	----
MHNG1175.092	<i>Myotis</i>	<i>crypticus</i>	Switzerland	m	39.0	16.07	14.81	13.98	6.33	6.32	3.98	9.79	7.79	7.9	3.84	4.84	3.7	11.79	6.87	3.32	3.97	----
MHNG1756.083	<i>Myotis</i>	<i>crypticus</i>	France	m	38.4	14.99	14.3	13.37	5.78	5.92	3.97	9.61	7.71	7.67	3.82	4.55	3.37	11.05	6.21	3.1	3.81	----
MHNG1996.094	<i>Myotis</i>	<i>crypticus</i>	Switzerland	f	38.7	15.46	14.37	13.49	6.12	6.31	3.86	9.44	7.56	7.54	3.73	4.91	3.37	11.44	6.44	3.16	3.83	----
MHNG1714.045	<i>Myotis</i>	<i>crypticus</i>	Switzerland	m	40.8	16.44	15.2	14.12	6.25	6.44	3.95	10.05	8.1	7.98	3.76	5.35	3.71	11.92	6.72	3.24	4.05	----
MHNG1989.013	<i>Myotis</i>	<i>crypticus</i>	France	m	39.3	15.88	14.81	13.9	6.08	6.13	3.91	9.67	7.86	7.81	3.83	4.78	3.45	11.47	6.45	3.28	3.84	----
MHNG1968.015	<i>Myotis</i>	<i>crypticus</i>	France	ind	39.3	15.08	14.31	13.27	5.86	6.16	3.84	9.49	7.75	7.73	3.82	4.56	3.48	11.04	6.22	3.25	3.8	----
MHNG857.018	<i>Myotis</i>	<i>crypticus</i>	Switzerland	ind	41.9	15.64	14.7	13.65	6.07	6.28	3.85	9.5	7.58	7.75	3.69	4.86	3.44	11.38	6.53	3.23	3.81	----
MHNG926.065	<i>Myotis</i>	<i>crypticus</i>	Switzerland	m	38.2	15.8	14.49	13.71	6.07	6.21	4.04	0	7.85	7.81	3.73	4.92	3.52	11.41	6.33	3.11	4.04	----
MHNG3003.058	<i>Myotis</i>	<i>crypticus</i>	Switzerland	f		15.3	14.34	13.28	5.64	6.01	3.75	9.43	7.69	7.6	3.8	4.56	3.34	11	6.1	3.24	3.78	----
EBD15974	<i>Myotis</i>	<i>crypticus</i>	Spain	m	36.3	15.33	14.35	13.44	5.85	6.28	4.07	9.79	7.83	7.7	3.88	4.78	3.62	11.08	6.22	3.17	3.83	YES
EBD15976	<i>Myotis</i>	<i>crypticus</i>	Spain	f	38.6	15.42	14.24	13.47	5.97	6.37	4.19	9.5	7.84	7.76	3.66	4.73	3.51	11.22	6.29	3.28	4.02	YES
EBD16005	<i>Myotis</i>	<i>crypticus</i>	Spain	m	39.1	15.43	14.69	13.71	6.02	6.19	3.89	9.43	7.47	7.54	3.69	4.83	3.42	11.32	6.43	3.14	3.95	YES
EBD17802	<i>Myotis</i>	<i>crypticus</i>	Spain	f	39.5	15.65	14.66	13.53	6.05	6.3	3.96	9.61	7.86	7.72	3.74	4.84	3.62	11.19	6.46	3.32	3.9	YES
EBD26174	<i>Myotis</i>	<i>crypticus</i>	Spain	m	40	15.56	14.43	13.47	5.9	6.27	3.86	9.84	7.74	7.79	3.79	4.71	3.38	11.13	6.39	3.17	3.91	YES
EBD26020	<i>Myotis</i>	<i>zenatius</i>	Morocco	m	39.6	15.94	14.63	13.66	5.91	6.3	3.95	9.76	7.93	7.94	3.78	4.76	3.5	11.3	6.34	3.27	3.89	YES
EBD26023	<i>Myotis</i>	<i>zenatius</i>	Morocco	m	39.4	15.26	14.19	13.3	5.72	5.94	3.75	9.6	7.66	7.64	3.73	4.42	3.35	11.23	6.07	3.31	3.75	YES
EBD29826	<i>Myotis</i>	<i>zenatius</i>	Morocco	f	38.9	15.42	14.36	13.37	5.86	6.01	3.93	9.8	7.69	7.83	3.75	4.56	3.61	11	6.16	3.21	3.97	YES
EBD29829	<i>Myotis</i>	<i>zenatius</i>	Morocco	m	38.2	15.33	14.5	13.46	5.75	6.1	3.85	9.82	7.94	7.88	3.72	4.56	3.59	11.23	6.1	3.35	3.75	YES
EBD29830	<i>Myotis</i>	<i>zenatius</i>	Morocco	f	39.6	15.06	14.24	13.26	5.74	6.15	3.78	9.61	7.81	7.82	3.73	4.25	3.42	10.97	6.08	3.34	3.86	YES
EBD29831	<i>Myotis</i>	<i>zenatius</i>	Morocco	m	40	15.21	14.12	13.21	5.75	6	3.78	9.42	7.77	7.68	3.55	4.37	3.46	10.91	6.14	3.27	3.86	YES

TABLE S2. Unstandardized coefficients and correlations of 16 craniodental variables in the discriminant functions aimed to maximize the differences in the four groups of the *M. nattereri* species complex defined by molecular characters. The discriminant functions for each axis were obtained in a discriminant function analysis (DFA) based on the 16 skull variables measured for 53 *Myotis* previously assigned to the four European lineages. Acronyms: greatest length of skull, excluding incisors (GTL); condylo-basal length (CBL); condylo-canine length (CCL); maxillary tooththrow length (CM3); width across the upper molars (M3M3W); width across the upper canines (CCW); zygomatic breadth (ZB); braincase width (BCW); breadth of skull measured across mastoids (MAB); least postorbital constriction (POC); rostral length taken from the rostral margin of the orbits to the anterior tip of the skull, without incisors (ROL); upper molars length (M1M3); mandible length, without incisors (ml); mandibular tooththrow length (cm3L), least height of the coronoid process (coh) and lower molars length (m1m3L)

Character	Unstandardized coefficients		Variable correlations	
	Disc 1	Disc2	Disc 1	Disc 2
GTL	2.008	-5.022	0.059	0.072
CBL	15.170	-5.771	0.109	0.019
CCL	-17.863	1.440	0.097	0.013
CM3	14.879	8.770	0.119	0.165
M3M3W	3.067	-2.958	0.257	-0.119
CCW	9.913	-13.449	0.188	-0.299
ZB	2.346	-0.139	0.196	-0.005
BCW	-6.072	4.747	0.121	0.058
MAB	4.876	3.499	0.232	0.093
POC	8.112	5.323	0.269	0.105
ROL	-11.233	0.696	-0.059	-0.024
M1M3	-3.629	-4.187	0.057	-0.037
ml	1.647	7.053	0.055	0.119
cm3L	-6.563	-0.199	0.005	0.147
m1m3L	6.317	-1.048	0.005	-0.130
coh	-11.510	2.994	0.133	0.039
(Constant)	-100.631	5.153		

TABLE S3. Unstandardized coefficients for the 16 craniodental variables used in discriminant functions aimed to maximize differences between the species. Acronyms: greatest length of skull, excluding incisors (GTL); condylo-basal length (CBL); condylo-canine length (CCL); maxillary tooththrow length (CM3); width across the upper molars (M3M3W); width across the upper canines (CCW); zygomatic breadth (ZB); braincase width (BCW); breadth of skull measured across mastoids (MAB); least postorbital constriction (POC); rostral length taken from the rostral margin of the orbits to the anterior tip of the skull, without incisors (ROL); upper molars length (M1M3); mandible length, without incisors (ml); mandibular tooththrow length (cm3L), least height of the coronoid process (coh) and lower molars length (m1m3L)

DISCRIMINANT FUNCTIONS		
Character	<i>M. nattereri</i>	<i>M. escaleraei</i>
	vs <i>M. crypticus</i>	vs <i>M. zenatius</i>
GTL	2.448	-13.71
CBL	15.513	-37.79
CCL	-18.36	20.364
CM3	14.071	1.574
M3M3W	2.245	-14.43
CCW	8.625	52.488
ZB	2.133	-17.83
BCW	-5.367	-1.759
MAB	3.761	23.813
POC	9.18	6.616
ROL	-11.37	17.76
M1M3	-4.54	-0.959
ml	2.709	14.728
cm3L	-7.68	0
m1m3L	-10	40.838
coh	6.891	15.645
constant	-97.3	-113.2

FIG. S1. DNA sequences alignment of partial *Cytochrome b*, partial *COI*, and nuclear markers (*ACOX2-3*, *COPS7A-4*). Only variable positions are shown to highlight differences between individuals/species

CYTB *M.nattereri* vs *Mcrypticus* sp.nov

	3333333334	5555555556	6666666667	7777777778	2222222223	4444444445	6666666667	1111111112
	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
SPAV1_Mes	ATAAAATCA	CTTTATTGAC	CTACCCACCC	CATCAAACAT	CTAGCACTGC	AGGACTATTC	ACTATACATC	CGAGACGTAA
FRBR_Mna_	..G....T.	.....	.....G.T.	.....T..	T.G...T.A.	....T....T	.....T....	.....T....
GBES_Mna_	..G....T.	.....	.....G.T.	.....T..	T.G...T.A.	....T....T	.....T....	.....T....
HRDU_Mna_	..G....T.	.....C..T	.....G.T.	.....T..	T.G...T.A.	....T....T	.....T....	.....T....
MNPD_Mna_	..G....T.	.....	.....G.T.	.....T..	T.G...T.A.	....T....T	.....T....	.....T....
SRBO_Mna_	..G....T.	.....	.....G.T.	.....T..	T.G...T.A.	....T....T	.....T....	.....T....
SRKO_Mna_	..G....T.	.....	.....G.T.	.....T..	T.G...T.A.	....T....T	.....T....	.....T....
EBD16005_MspA	.....	.....C..	.....TG..	.....	T....T.A.	....T....	.....T....	.....T....
EBD15974_MspA	.....	.....C..	.....TG..	.....	T....T.A.	....T....	.....T....	.....T....
EBD17802_MspA	.....	.....C..	.....TG..	.....	T....T.A.	....T....	.....T....	.....T....
EBD15976_MspA	.....	.....C..	.....TG..	.....	T....T.A.	....T....	.....T....	.....T....
EBD26174MspA	.....	.....C..	.....TG..	.....	T....T.A.	....T....	.....T....	.....T....
EBD26174_MspA	.....	.....C..	.....TG..	.....	T....T.A.	....T....	.....T....	.....T....
SPAV2_Mcf.na_	.....	.....C..	.....TGT.	.....	T....T.A.	....T....	.....T....	.....T....
SPLR2_Mcf.na_	.....	.....C..	.....TG..	.....	T....T.A.	....T....	.....T....	.....T....
	2222222222	2222222222	2222222222	2222222222	2222222222	2222222222	4444444444	5555555555
	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
SPAV1_Mes	ACTACGGCTG	TACTTACACG	CAAACGGGGC	TTCCATATTT	TTCATCTGCC	TATATATCCA	CCTATATCGG	CCTTAACTCG
FRBR_Mna_	....T....T.	.....T..	....T..A.	.....	....T..T	....C....	.....C....	.....C....
GBES_Mna_	....T....T.	.....T..	....T..A.	.....	....T..T	....C....	.....C....	.....C....
HRDU_Mna_	....T....T.	.....T..	....T..A.	.....	....T..T	....C....	.....C....	.....C....
MNPD_Mna_	....T....T.	.....T..	....T..A.	.....	....T..T	....C....	.....C....	.....C....
SRBO_Mna_	....T....T.	.....T..	....T..A.	.....	....T..T	....C....	.....C....	.....C....
SRKO_Mna_	....T....T.	.....T..	....T..A.	.....	....T..T	....C....	.....C....	.....C....
EBD16005_MspA	.....	.....T..	.....A..	.....C	....T..T	....CC....	.....T....	.....TC....
EBD15974_MspA	.....	.....T..	.....A..	.....C	....T..T	....CC....	.....T....	.....TC....
EBD17802_MspA	.....	.....T..	.....A..	.....C	....T..T	....CC....	.....T....	.....TC....
EBD15976_MspA	.....	.....T..	.....A..	.....C	....T..T	....CC....	.....T....	.....TC....
EBD26174MspA	.....	.....T..	.....A..	.....C	....T..T	....CC....	.....T....	.....TC....
EBD26174_MspA	.....	.....T..	.....A..	.....C	....T..T	....CC....	.....T....	.....TC....
SPAV2_Mcf.na_	.....	.....T..	.....A..	.....C	....T..T	....CC....	.....T....	.....TC....
SPLR2_Mcf.na_	.....	.....T..	.....A..	.....C	....T..T	....CC....	.....T....	.....TC....
	2222222222	3333333333	3333333333	4444444444	4444444444	4444444444	4444444444	5555555555
	9999999990	4444444445	8888888889	2222222223	3333333334	4444444445	5555555556	4444444445
	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
SPAV1_Mes	TGTAGGACGA	ACATTGGAAT	CTTTATAGGA	TGAGGTGCAA	CTGTAATTAC	TAACCTACTC	TCTGCAATTC	TTTCATTCC
FRBR_Mna_	.....G....	....C...G.	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
GBES_Mna_	.....G....	....C...G.	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
HRDU_Mna_	.....G....	....C...G.	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
MNPD_Mna_	.....G....	....C...G.	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
SRBO_Mna_	.....G....	....C...G.	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
SRKO_Mna_	.....G....	....C...G.	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
EBD16005_MspA	.....G....	.....G....	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
EBD15974_MspA	.....G....	.....G....	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
EBD17802_MspA	.....G....	.....G....	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
EBD15976_MspA	.....G....	.....G....	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
EBD26174MspA	.....G....	.....G....	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
EBD26174_MspA	.....G....	.....G....	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
SPAV2_Mcf.na_	.....G....	.....G....	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
SPLR2_Mcf.na_	.....G....	.....G....	.....G....	.....G....	.....C....	....C...C..	....C...C..	....C...C..
	5555555555	6666666666	6666666666	6666666666	6666666666	6666666666	6666666666	6666666667
	5555555556	0000000001	1111111112	2222222223	3333333334	5555555556	8888888889	9999999990
	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
SPAV1_Mes	TACTTCCATT	CATGAAACAG	GATCTAATAA	TCCAATAGGA	ATTCCATCTA	AATTCCTTTC	GGACATCCTT	GGCATACTGC
FRBR_Mna_	....C....	....C....	....C....	....C....	....C....	....C....	A.....	....T..T.AT
GBES_Mna_	....C....	....C....	....C....	....C....	....C....	....C....	A.....	....T..T.AT
HRDU_Mna_	....C....	....C....	....C....	....C....	....C....	....C....	A.....	....T..T.AT]
MNPD_Mna_	....C....	....C....	....C....	....C....	....C....	....C....	A.....	....T..T.AT
SRBO_Mna_	....C....	....C....	....C....	....C....	....C....	....C....	A.....	....T..T.AT
SRKO_Mna_	....C....	....C....	....C....	....C....	....C....	....C....	A.....	....T..T.AT
EBD16005_MspA	.....	.....C..	.....C..	.....C..	.....C..	.....C..	A..T....	....C....AT
EBD15974_MspA	.....	.....C..	.....C..	.....C..	.....C..	.....C..	A..T....	....C....AT
EBD17802_MspA	.....	.....C..	.....C..	.....C..	.....C..	.....C..	A..T....	....C....AT
EBD15976_MspA	.....	.....C..	.....C..	.....C..	.....C..	.....C..	A..T....	....C....AT
EBD26174MspA	.....	.....C..	.....C..	.....C..	.....C..	.....C..	A..T....	....C....AT
EBD26174_MspA	.....	.....C..	.....C..	.....C..	.....C..	.....C..	A..T....	....C....AT
SPAV2_Mcf.na_	.....	.....C..	.....C..	.....C..	.....C..	.....C..	A..T....	....C....AT
SPLR2_Mcf.na_	.....	.....C..	.....C..	.....C..	.....C..	.....C..	A..T....	....C....AT

CytB Myotis escaleraei vs M. zenatius sp.nov.

	222222223	444444445	555555556	888888889	999999990	000000001	333333334	555555556	666666667
GBCU_Mna	TCACCCCTA	TCAATAACTC	CTTTATTGAC	CTCTTCTCGA	TGGAATTTCCG	GATCTCTTTT	AAATCCTAAC	TTATCCATAC	ACTATACATC
SPAV1Mes	C..TT.....	.T..C.....	.....	...A.....	..A..C....	.....C....	.....T.G..	C..G.T....	.....
SPBA_Mes	C..TT.....	.T..C.....	.....	...A.....	..A..C....	.....C....	.....T.G..	C..G.T....	.....
SPCA_Mes	C..TT.....	.T..C.....	.....	...A.....	..A..C....	.....CC...	.....T.G..	C..G.T....	.T.....
SPCC_Mes	C..TT.....	.T..C.....	.....	...A.....	..A..C....	.....C....	.....T.G..	C..G.T....	.....
SPGU_Mes	C..TT.....	.T..C.....	.....	...A.....	..A..C....	.....CC...	.....T.G..	C..G.T....	.T..C....
SPMA_Mes	C..TT.....	.T..C.....	.....	...A.....	..A..C....	.....CC...	.....T.G..	C..G.T....	.T.....
SPOU_Mes	C..TT.....	.T..C.....	.....	...A.....	..A..C....	.....CC...	.....T.G..	C..G.T....	.T..C....
SPHU_Mes	C..TT.....	.T..C.....	.....	...A.....	..A..C....	.....CC...	.....T.G..	C..G.T....	.T..C....
SPSE_Mes	C..TT.....	.T..C.....	.....	...A.....	..A..C....	.....CC...	.....T.G..	C..G.T....	.T..C....
SPLR1Mes	C..TT.....	.T..C.....	.....	...A.....	..A..C....	.....CC...	.....T.G..	C..G.T....	.T..C....
SPTA_Mes	C..TT.....	.T..C.....	.....	...A.....	..A..C....	.....CC...	.....T.G..	C..G.T....	.T..C....
SPTE_Mes	C..TT.....	.T..C.....	.....	...A.....	..A..C....	.....CC...	.....T.G..	C..G.T....	.T..C....
SPZA_Mes	C..TT.....	.T..C.....	.....	...A.....	..A..C....	.....CC...	.....T.G..	C..G.T....	.T..C....
EBD26023_MspB	C..TT.T...	.T.....	.....T	T..A..T...	..A..C..T.	.G....CC.	.....T....	C..G...G.	.....
EBD26020_MspB	C..TT.T...	.T.....	.....T	T..A..T...	..A..C..T.	.G....CC.	.....T....	C..G...G.	.....
EBD29826_MspB	C..TT.T...	.T.....	.....T	T..A..T...	..A..C..T.	.G....CC.	.....T....	C..G...G.	.....
EBD29829_MspB	C..TT.T...	.T.....	.....T	T..A..T...	..A..C..T.	.G....CC.	.....T....	C..G...G.	.....
EBD29830_MspB	C..TT.T...	.T.....	.....T	T..A..T...	..A..C..T.	.G....CC.	.....T....	C..G...G.	.....
EBD29831_MspB	C..TT.T...	.T.....	.....T	T..A..T...	..A..C..T.	.G....CC.	.....T....	C..G...G.	.....
	111111112	222222222	222222222	333333333	333333333	444444444	444444444	555555555	555555555
GBCU_Mna	ACTCTGTAAC	AGTGTTGCGC	TTCCATATTT	TTTGCTGTTA	CTTTATAGGA	TGAGGTGCAA	CAATCTACTT	TCTGAGGCGG	GACAAAGCTA
SPAV1Mes	.....C..	.A.A.A...	.....AC..	.....AC..	.....AC..	.....AC..	T..CT...C	.T....T..	..T.....
SPBA_Mes	.....C..	.A.A.A...	.....AC..	.....AC..	.....AC..	.....AC..	T..CT...C	.T....T..	..T.....
SPCA_Mes	.....C..	.A.A.A...	.....AC..	.....AC..	.....AC..	.....AC..	T..CT...C	.T....T..	..T.....
SPCC_Mes	.....C..	.A.A.A...	.....AC..	.....AC..	.....AC..	.....AC..	T..CT...C	.T....T..	..T.....
SPGU_Mes	.....C..	.A.A.A...	.....AC..	.....AC..	.....AC..	.....AC..	T..CT...C	.T....T..	..T.....
SPMA_Mes	.....C..	.A.A.A...	.....AC..	.....AC..	.....AC..	.....AC..	T..CT...C	.T....T..	..T.....
SPOU_Mes	.....C..	.A.A.A...	.....AC..	.....AC..	.....AC..	.....AC..	T..CT...C	.T....T..	..T.....
SPHU_Mes	.....C..	.A.A.A...	.....AC..	.....AC..	.....AC..	.....AC..	T..CT...C	.T....T..	..T.....
SPSE_Mes	.....C..	.A.A.A...	.....AC..	.....AC..	.....AC..	.....AC..	T..CT...C	.T....T..	..T.....
SPLR1Mes	.....C..	.A.A.A...	.....AC..	.....AC..	.....AC..	.....AC..	T..CT...C	.T....T..	..T.....
SPTA_Mes	.....C..	.A.A.A...	.....AC..	.....AC..	.....AC..	.....AC..	T..CT...C	.T....T..	..T.....
SPTE_Mes	.....C..	.A.A.A...	.....AC..	.....AC..	.....AC..	.....AC..	T..CT...C	.T....T..	..T.....
SPZA_Mes	.....C..	.A.A.A...	.....AC..	.....AC..	.....AC..	.....AC..	T..CT...C	.T....T..	..T.....
EBD26023_MspB	.....A.A.	.....G...	.....A.AC.	.....C....	.....A...	T..C....C	.....T...	..T....C.	.....
EBD26020_MspB	.....A.A.	.....G...	.....A.AC.	.....C....	.....A...	T..C....C	.....T...	..T....C.	.....
EBD29826_MspB	.....A.A.	C.....G.	.....A.AC.	.....C....	.....A...	T..C....C	.....T...	..T....C.	.....
EBD29829_MspB	.....A.A.	C.....G.	.....A.AC.	.....C....	.....A...	T..C....C	.....T...	..T....C.	.....
EBD29830_MspB	.....A.A.	.....G...	.....A.AC.	.....C....	.....A...	T..C....C	.....T...	..T....C.	.....
EBD29831_MspB	.....A.A.	.....G...	.....A.AC.	.....C....	.....A...	T..C....C	.....T...	..T....C.	.....
	555555555	555555555	666666666	666666666	666666666	666666666	666666666	666666666	666666666
GBCU_Mna	CCTTAACCCG	GCTATAGTCA	TGGTACATCT	GATCCAATAA	TCCAACAGGA	ATTCCCTCTA	ATATAGATAT	CACCCCTACT	.....
SPAV1Mes	.....T..	.....T..	.A..T..C.	.....T....	.....T....	.....A....	.....C....	.....C....	.....
SPBA_Mes	.....T..	.....T..	.A..T..C.	.....T....	.....T....	.....A....	.....C....	.....C....	.....
SPCA_Mes	.....T..	.....T..	.A..T..C.	.....T....	.....T....	.....A....	.....C....	.....C....	.....
SPCC_Mes	.....T..	.....T..	.A..T..C.	.....T....	.....T....	.....A....	.....C....	.....C....	.....
SPGU_Mes	.....T..	.....T..	.A..T..C.	.....T....	.....T....	.....A....	.....C....	.....C....	.....
SPMA_Mes	.....T..	.....T..	.A..T..C.	.....T....	.....T....	.....A....	.....C....	.....C....	.....
SPOU_Mes	.....T..	.....T..	.A..T..C.	.....T....	.....T....	.....A....	.....C....	.....C....	.....
SPHU_Mes	.....T..	.....T..	.A..T..C.	.....T....	.....T....	.....A....	.....C....	.....C....	.....
SPSE_Mes	.....T..	.....T..	.A..T..C.	.....T....	.....T....	.....A....	.....C....	.....C....	.....
SPLR1Mes	.....T..	.....T..	.A..T..C.	.....T....	.....T....	.....A....	.....C....	.....C....	.....
SPTA_Mes	.....T..	.....T..	.A..T..C.	.....T....	.....T....	.....A....	.....C....	.....C....	.....
SPTE_Mes	.....T..	.....T..	.A..T..C.	.....T....	.....T....	.....A....	.....C....	.....C....	.....
SPZA_Mes	.....T..	.....T..	.A..T..C.	.....T....	.....T....	.....A....	.....C....	.....C....	.....
EBD26023_MspB	..C...T..	..C...T..	.....C..	.....C..	.....C..	..C..A...	..G.....	.....TC	.....
EBD26020_MspB	..C...T..	..C...T..	.....C..	.....C..	.....C..	..C..A...	..G.....	.....TC	.....
EBD29826_MspB	..C...T..	..C...T..	.....C..	.....C..	.....C..	..C..A...	..G.....	.....TC	.....
EBD29829_MspB	..C...T..	..C...T..	.....C..	.....C..	.....C..	..C..A...	..G.....	.....TC	.....
EBD29830_MspB	..C...T..	..C...T..	.....C..	.....C..	.....C..	..C..A...	..G.....	.....TC	.....
EBD29831_MspB	..C...T..	..C...T..	.....C..	.....C..	.....C..	..C..A...	..G.....	.....TC	.....

COI All Myotis lineages

	1	1111111111	1111111111	1111111111	1111111111	1111111111	1111111111	1111111111	
FR856732.1_Mpunn	4444444444	6666666667	8888888889	9999999990	0000000001	2222222223	7777777778	8888888889	9999999990
GU270561.1_Mna	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
JF443017.1_Mna	CTTGGTCAAC	ATTAGGAGAT	ATAATGTAA	TGTTACTGCT	CACGCTTTTG	CTTTATAGTT	CTCTGATAAT	TGGAGCTCCT	GATATAGCTT
FR856731.1_Mna	.A..G....	.C.G....	.C.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
JF443016.1_Mna	.A..G....	.C.G....	.C.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
JF443015.1_Mna	.A..G....	.C.G....	.C.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
JX008073.1_Mna	T.A..C....	.G.....	.C.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
EBD15974_MspA	T.A..G....	.C.....	.G.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
EBD15976_MspA	T.A..G....	.C.....	.G.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
EBD16005_MspA	T.A..G....	.C.....	.G.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
EBD17802_MspA	T.A..G....	.C.....	.G.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
EBD26174_MspA	T.A..G....	.C.....	.G.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
EBD15631Mes	.A..C....	.C.G....	.C.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
EBD15628Mes	.A..C....	.C.G....	.C.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
EBD26020_MspB	T.A..C....	.G.....	.C.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
EBD26023_MspB	T.A..C....	.G.....	.C.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
EBD29826_MspB	T.A..C....	.G.....	.C.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
EBD29829_MspB	T.A..C....	.G.....	.C.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
EBD29830_MspB	T.A..C....	.G.....	.C.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
EBD29831_MspB	T.A..C....	.G.....	.C.....	.T.....	.C....A	.T....A	.C....A	.C....A	.C....A
FR856732.1_Mpunn	2222222222	2222222222	2222222222	2222222222	2222222222	2222222222	3333333333	3333333333	3333333333
GU270561.1_Mna	1111111112	2222222223	3333333334	4444444445	5555555556	6666666667	0000000001	1111111112	4444444445
JF443017.1_Mna	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
FR856731.1_Mna	AAATAATATA	AGCTTTTGAC	TCCTTCCCCC	CTCTTCTTA	TACTATTAG	CTTCATCCAT	AGTCTACCCA	CCCTTAGCAG	GCTTCAGTTG
JF443016.1_Mna	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
JF443015.1_Mna	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
JX008073.1_Mna	.G.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
EBD15974_MspA	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
EBD15976_MspA	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
EBD16005_MspA	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
EBD17802_MspA	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
EBD26174_MspA	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
EBD15631Mes	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
EBD15628Mes	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
EBD26020_MspB	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
EBD26023_MspB	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
EBD29826_MspB	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
EBD29829_MspB	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
EBD29830_MspB	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
EBD29831_MspB	.C.....	.T.....	.T.....	.T.....	.C....T	.C....T	.C....T	.C....T	.C....T
FR856732.1_Mpunn	3333333333	3333333333	3333333333	3333333333	3333333334	4444444444	4444444444	4444444444	4444444444
GU270561.1_Mna	5555555556	6666666667	7777777778	8888888889	9999999990	1111111112	2222222223	3333333334	4444444445
JF443017.1_Mna	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
FR856731.1_Mna	ATCTTGCTAT	CTTTCCCTTA	CACCTAGCAG	GTGTGCTTTC	AATCTTAGGA	TTATTACCAC	CATTATTAAC	ATAAACCTTC	CTGCTCTTTC
JF443016.1_Mna	.C.A....	.T....T..	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
JF443015.1_Mna	.C.A....	.T....TT.	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
JX008073.1_Mna	.C.A....	.T....TT.	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
EBD15974_MspA	.C.....	.T....TT.	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
EBD15976_MspA	.C.....	.T....T..	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
EBD16005_MspA	.C.....	.T....T..	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
EBD17802_MspA	.C.....	.T....T..	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
EBD26174_MspA	.C.....	.T....T..	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
EBD15631Mes	.C.....	.T....T..	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
EBD15628Mes	.C.....	.T....T..	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
EBD26020_MspB	.C.....	.T....T..	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
EBD26023_MspB	.C.....	.T....T..	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
EBD29826_MspB	.C.....	.T....T..	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
EBD29829_MspB	.C.....	.T....T..	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
EBD29830_MspB	.C.....	.T....T..	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
EBD29831_MspB	.C.....	.T....T..	.T....G..	.T.....	.T.....	.T.....	.T....C.T	.C....A...	.C....A...
FR856732.1_Mpunn	4444444444	4444444444	4444444444	4444444445	5555555555	5555555555	5555555555	5555555555	5555555555
GU270561.1_Mna	6666666667	7777777778	8888888889	9999999990	0000000001	1111111112	2222222223	3333333334	8888888889
JF443017.1_Mna	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
FR856731.1_Mna	ACACCACTAT	TTGTATGATC	CGTCTGATT	ACAGCAGTAT	TACTACTCCT	TTCTCTACCA	GTTTGTAGCTG	CTGGAAATTAC	GATCCTGCTN
JF443016.1_Mna	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
JF443015.1_Mna	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
JX008073.1_Mna	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
EBD15974_MspA	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
EBD15976_MspA	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
EBD16005_MspA	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
EBD17802_MspA	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
EBD26174_MspA	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
EBD15631Mes	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
EBD15628Mes	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
EBD26020_MspB	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
EBD26023_MspB	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
EBD29826_MspB	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
EBD29829_MspB	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
EBD29830_MspB	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..
EBD29831_MspB	.C.....	.T....A..	.T....A..	.T....A..	.T....T..	.T....T..	.C....G..	.C....G..	.C....G..

ACOX THE FOUR MYOTIS LINEAGES

	2222222223	4444444445	7777777778	9999999990	0000000001	1111111112	2222222222	2222222222	2222222222
MschaubiA	2222222223	4444444445	7777777778	9999999990	0000000001	1111111112	2222222222	2222222222	2222222222
SRB0_Mna_	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
GBCU_Mna_	GGAGGGCAGC	CTGCTCACGG	AGACTGAGTA	CTCACGGCGT	GGCAAGCCGT	TCTTCCCGGA	GCCATCCTTG		
GEHD_Mna_			R.	Y.	A.	R.	A.		
FRBR_Mna_			R.	Y.	R.	R.	A.		
GBES_Mna_			A.	A.	A.	A.	A.		
SRKO_Mna_			R.	R.	A.	A.	A.		
MNPD_Mna_			R.	R.	R.	R.	R.		
ITRC_Mcf.			A.	A.	A.	R.	R.		
ITAO_Mcf.	Y.		Y.	R.		R.	R.		
HRDU_Mna_			R.	R.		A.	A.		
ITRN_Mcf.	Y.		W.			R.	R.		
EBD15976_MspA	T.		A.	A.	A.	A.	A.		
EBD15974_MspA	T.		A.	A.	A.	A.	A.		
EBD16005_MspA	T.		A.	A.	A.	A.	A.		
EBD17802_MspA	T.		A.	A.	A.	A.	A.		
EBD26174_MspA	T.		A.	A.	A.	A.	A.		
SPLR2_Mcf.na	T.		A.	A.	A.	A.	A.		
SPAV2_Mcf.na	T.		A.	A.	A.	A.	A.		
ITRA_Mcf.na	T.		A.	A.	A.	A.	A.		
ITFG_Mcf.na	Y.								
ITVB_Mcf.na	T.								
ITME_Mcf.na			R.						
EBD29829_MspB	T.		A.	A.	A.	A.	A.		
EBD26023_MspB	T.		A.	A.	A.	A.	A.		
EBD26020_MspB	T.		A.	A.	A.	A.	A.		
EBD29831_MspB	T.		A.	A.	A.	A.	A.		
EBD29830_MspB	T.		A.	A.	A.	A.	A.		
EBD29826_MspB	T.		A.	A.	A.	A.	A.		
SPCC_Mes_			A.				C.		
SPOU_Mes_			A.				C.		
SPLR1_Mes_			A.				C.		
SPGU_Mes_			A.				C.		
SPTM_Mes_			A.				C.		
SPBA_Mes_			A.				C.		
SPZA_Mes_			A.				C.		
SPAV1_Mes_			A.				C.		
SPCA_Mes_			A.				C.		
SPHU_Mes_			A.				C.		
SPMA_Mes_			A.				C.		
SPSE_Mes_			A.				C.		
SPTA_Mes_			A.				C.		

	2222222222	2222222222	2222222222	3333333333
MschaubiA	4444444445	5555555556	7777777778	1111111112
SRB0_Mna_	1234567890	1234567890	1234567890	1234567890
GBCU_Mna_	TCTTGGGCTG	GCCCTGTGTC	CCC-GGGGGG	AGGTACCCGC
GEHD_Mna_	Y.	S.	C.	C.
FRBR_Mna_	C.	G.	A.	C.
GBES_Mna_	C.	S.	M.	Y.
SRKO_Mna_	Y.	S.	C.	C.
MNPD_Mna_	Y.	G.	A.	Y.
ITRC_Mcf.	C.	G.	A.	Y.
ITAO_Mcf.	Y.			Y.
HRDU_Mna_				C.
ITRN_Mcf.				C.
EBD15976_MspA				C.
EBD15974_MspA				C.
EBD16005_MspA				C.
EBD17802_MspA				C.
EBD26174_MspA				C.
SPLR2_Mcf.na				C.
SPAV2_Mcf.na				C.
ITRA_Mcf.na				C.
ITFG_Mcf.na				C.
ITVB_Mcf.na				C.
ITME_Mcf.na		Y.		C.
EBD29829_MspB		G.	A.	C.
EBD26023_MspB		G.	A.	C.
EBD26020_MspB		G.	A.	C.
EBD29831_MspB		G.	A.	C.
EBD29830_MspB		G.	A.	C.
EBD29826_MspB		G.	A.	C.
SPCC_Mes_		G.	A.	C.
SPOU_Mes_		G.	A.	C.
SPLR1_Mes_		G.	A.	C.
SPGU_Mes_		G.	A.	C.
SPTM_Mes_		G.	A.	C.
SPBA_Mes_		G.	A.	C.
SPZA_Mes_		G.	A.	C.
SPAV1_Mes_		G.	A.	C.
SPCA_Mes_		G.	A.	C.
SPHU_Mes_		G.	A.	C.
SPMA_Mes_		G.	A.	C.
SPSE_Mes_		G.	A.	C.
SPTA_Mes_		G.	A.	C.

FIG. S2. Bivariate representation of the width of the cranium measured (mm) across the canines (CCW) and the breadth of the braincase (BBW) of *M. escaleraei* (black triangles) and of *M. zenatius* sp. nov. (white circles)

