

Additional file 1. *cox1* absolute substitution rates

Branch	Time (Myr)	d_S (sub./site x 100)	R_S (SSB)	d_N (sub./site x 100)	R_N (SSB)	R_N / R_S
A to B	6 ± 2	0.00 ± 0.01	0	0.00 ± 0.00	0	–
B to C	33 ± 4	0.44 ± 0.13	0.14 ± 0.04	0.98 ± 0.30	0.30 ± 0.10	2.23
C to Malp	72 ± 4	4.54 ± 1.15	0.63 ± 0.16	0.10 ± 0.02	0.01 ± 0.00	0.02
C to Popu	72 ± 4	4.01 ± 0.77	0.56 ± 0.11	1.39 ± 0.27	0.19 ± 0.04	0.35
B to D	7 ± 3	0.00 ± 0.00	0	0.20 ± 0.14	0.29 ± 0.23	–
D to E	3 ± 4	0.00 ± 0.01	0	0.00 ± 0.00	0	–
E to Betu	94 ± 3	1.62 ± 0.49	0.17 ± 0.05	0.49 ± 0.15	0.05 ± 0.02	0.30
E to Rham	94 ± 3	2.29 ± 0.69	0.24 ± 0.07	0.31 ± 0.09	0.03 ± 0.01	0.14
D to F	6 ± 4	0.00 ± 0.00	0	0.09 ± 0.10	0.14 ± 0.18	–
F to Cucu	91 ± 3	6.22 ± 1.15	0.69 ± 0.13	0.93 ± 0.17	0.10 ± 0.02	0.15
F to G	39 ± 4	2.39 ± 0.57	0.61 ± 0.16	0.91 ± 0.22	0.23 ± 0.06	0.38
G to Glyc	51 ± 3	1.35 ± 0.52	0.26 ± 0.10	0.19 ± 0.07	0.04 ± 0.01	0.14
G to Pisu	51 ± 3	1.64 ± 0.55	0.32 ± 0.11	0.29 ± 0.10	0.06 ± 0.02	0.18
A to H	4 ± 2	0.00 ± 0.01	0	0.00 ± 0.00	0	–
H to I	2 ± 3	0.00 ± 0.01	0	0.00 ± 0.00	0	–
I to Oeno	104 ± 2	3.59 ± 0.66	0.35 ± 0.06	1.67 ± 0.31	0.16 ± 0.03	0.47
I to J	9 ± 4	0.00 ± 0.00	0	0.09 ± 0.10	0.10 ± 0.12	–
J to Burs	95 ± 4	3.18 ± 0.93	0.34 ± 0.10	0.10 ± 0.03	0.01 ± 0.00	0.03
J to K	76 ± 4	5.56 ± 0.90	0.73 ± 0.12	1.89 ± 0.31	0.25 ± 0.04	0.34
K to Arab	19 ± 2	0.28 ± 0.29	0.15 ± 0.15	0.00 ± 0.00	0	0.00
K to Bras	19 ± 2	1.39 ± 0.58	0.74 ± 0.31	0.10 ± 0.04	0.05 ± 0.02	0.07
H to L	8 ± 4	0.23 ± 0.27	0.31 ± 0.40	0.00 ± 0.00	0	0.00
L to Cros	99 ± 3	1.95 ± 0.45	0.20 ± 0.05	1.18 ± 0.27	0.12 ± 0.03	0.61
L to M	36 ± 6	8.75 ± 1.29	2.43 ± 0.53	2.05 ± 0.30	0.57 ± 0.12	0.23
M to Hyps	62 ± 5	6.86 ± 1.28	1.10 ± 0.22	0.95 ± 0.18	0.15 ± 0.03	0.14
M to N	16 ± 6	6.74 ± 1.90	4.09 ± 1.87	0.35 ± 0.10	0.21 ± 0.10	0.05
N to O	11 ± 5	1.06 ± 1.32	0.96 ± 1.27	0.10 ± 0.12	0.09 ± 0.12	0.09
O to P	26 ± 4	1.09 ± 0.55	0.42 ± 0.22	0.00 ± 0.00	0	0.00
P to Mons	9 ± 2	0.81 ± 0.33	0.91 ± 0.46	0.29 ± 0.12	0.33 ± 0.16	0.36
P to Sarc	9 ± 2	0.54 ± 0.27	0.61 ± 0.35	0.19 ± 0.10	0.21 ± 0.13	0.35
O to Q	6 ± 4	0.00 ± 0.01	0	0.00 ± 0.00	0	–
Q to R	11 ± 4	0.00 ± 0.01	0	0.00 ± 0.00	0	–
R to Ggra	18 ± 3	1.08 ± 0.44	0.59 ± 0.26	0.19 ± 0.08	0.10 ± 0.05	0.18
R to Gmac	18 ± 3	0.81 ± 0.31	0.44 ± 0.18	0.39 ± 0.15	0.21 ± 0.09	0.48
Q to S	5 ± 4	0.81 ± 0.47	1.63 ± 1.59	0.00 ± 0.00	0	0.00
S to Etri	24 ± 3	0.27 ± 0.16	0.11 ± 0.07	0.19 ± 0.11	0.08 ± 0.05	0.70
S to T	18 ± 3	0.27 ± 0.27	0.15 ± 0.16	0.00 ± 0.00	0	0.00
T to Echr	7 ± 1	0.00 ± 0.00	0	0.10 ± 0.10	0.15 ± 0.15	–
T to Epel	7 ± 1	0.00 ± 0.02	0	0.00 ± 0.00	0	–
N to U	23 ± 5	68.89 ± 7.53	30.25 ± 7.54	1.57 ± 0.17	0.69 ± 0.17	0.02
U to V	10 ± 4	7.28 ± 3.47	7.17 ± 4.55	0.65 ± 0.31	0.64 ± 0.41	0.09
V to Pcap	13 ± 2	1.38 ± 0.54	1.06 ± 0.46	0.29 ± 0.11	0.22 ± 0.10	0.21
V to W	8 ± 3	0.78 ± 0.48	0.96 ± 0.69	0.10 ± 0.06	0.12 ± 0.09	0.13
W to Pcot	5 ± 2	0.00 ± 0.00	0	0.49 ± 0.22	0.98 ± 0.54	–
W to Pren	5 ± 2	1.86 ± 0.59	3.74 ± 1.69	0.29 ± 0.09	0.58 ± 0.27	0.16
U to X	8 ± 5	31.33 ± 5.10	37.68 ± 23.17	0.92 ± 0.15	1.11 ± 0.68	0.03
X to Pcan	15 ± 3	16.96 ± 2.65	11.38 ± 3.15	0.98 ± 0.15	0.66 ± 0.18	0.06
X to Y	5 ± 4	6.73 ± 2.11	13.41 ± 12.61	0.22 ± 0.07	0.44 ± 0.41	0.03
Y to Pque	10 ± 3	4.72 ± 1.25	4.77 ± 1.87	0.21 ± 0.06	0.21 ± 0.08	0.04
Y to Z	8 ± 3	5.70 ± 1.39	7.25 ± 3.39	0.00 ± 0.00	0	0.00
Z to Palc	2 ± 1	0.24 ± 0.11	1.18 ± 0.95	0.38 ± 0.18	1.88 ± 1.49	1.58
Z to Phor	2 ± 1	1.03 ± 0.39	5.08 ± 3.78	0.33 ± 0.13	1.63 ± 1.21	0.32