Supp. file 4.

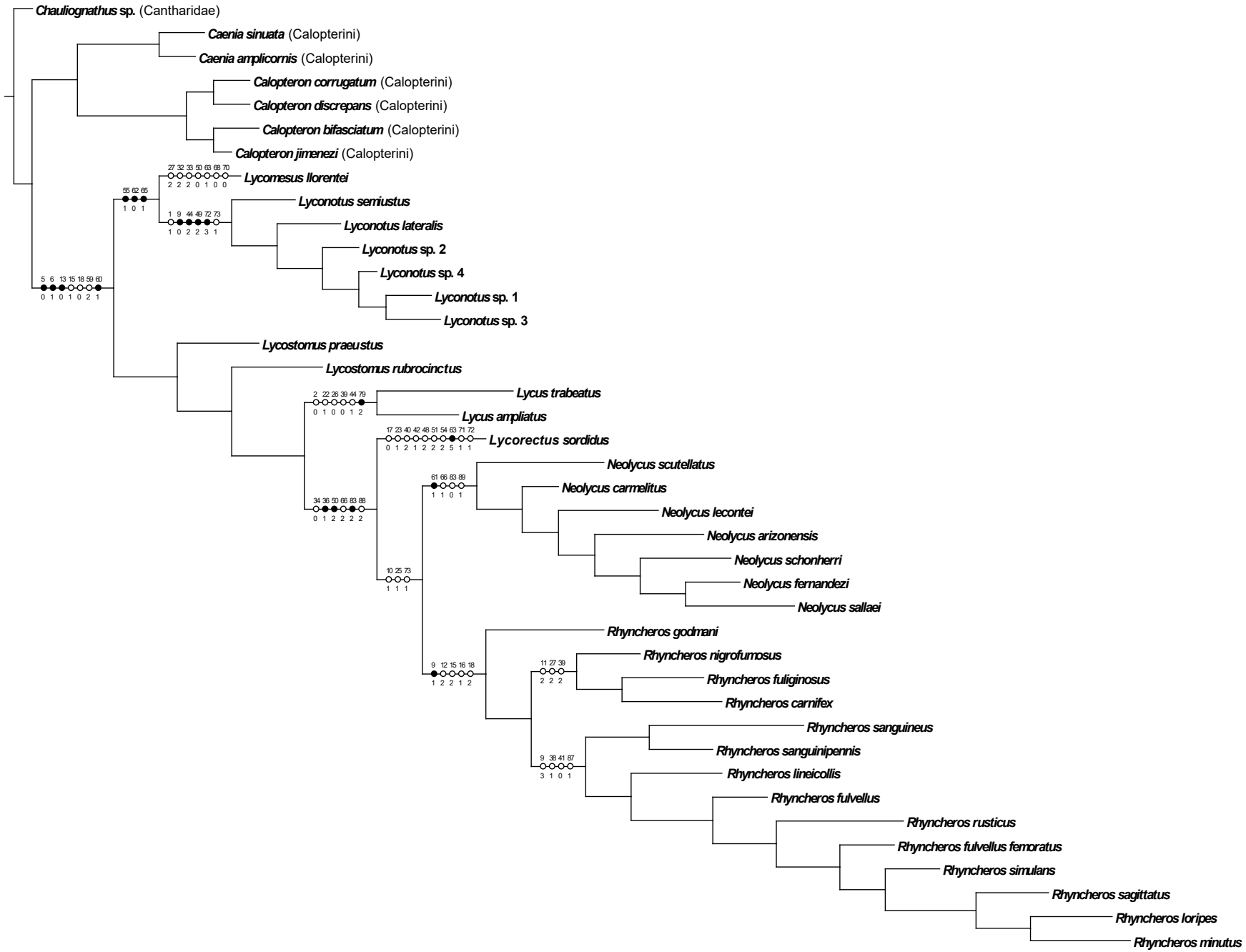

Fig. S1. The single implied weighted parsimony tree using a constant of *k* = 7.187500 (L = 583; CI = 0.31; RI = 0.63). Unambiguous character changes mapped on branches in WinClada. Black circles indicated non-homoplastic character state transformations, and white circles indicate parallelism or reversals. The numbers above each circle represent the character and the number below each circle represents the character state.

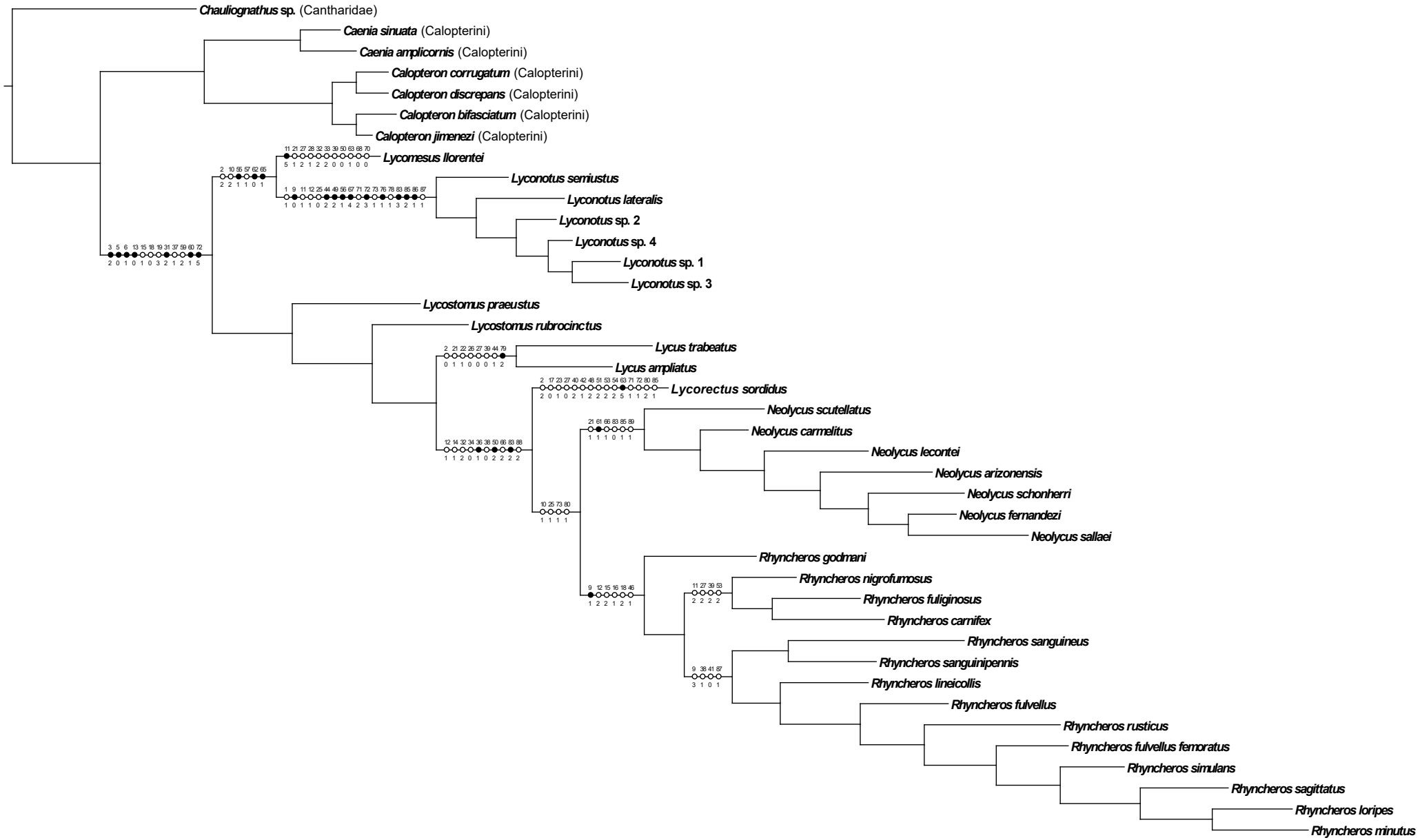

Fig. S2. The single implied weighted parsimony tree using a constant of *k* = 7.187500 (L = 583; CI = 0.31; RI = 0.63). Slow optimization using delayed (DELTRAN) transformations mapped mapped on branches in WinClada. Black circles indicated non-homoplastic character state transformations, and white circles indicate parallelism or reversals. The numbers above each circle represent the character and the number below each circle represents the character state.

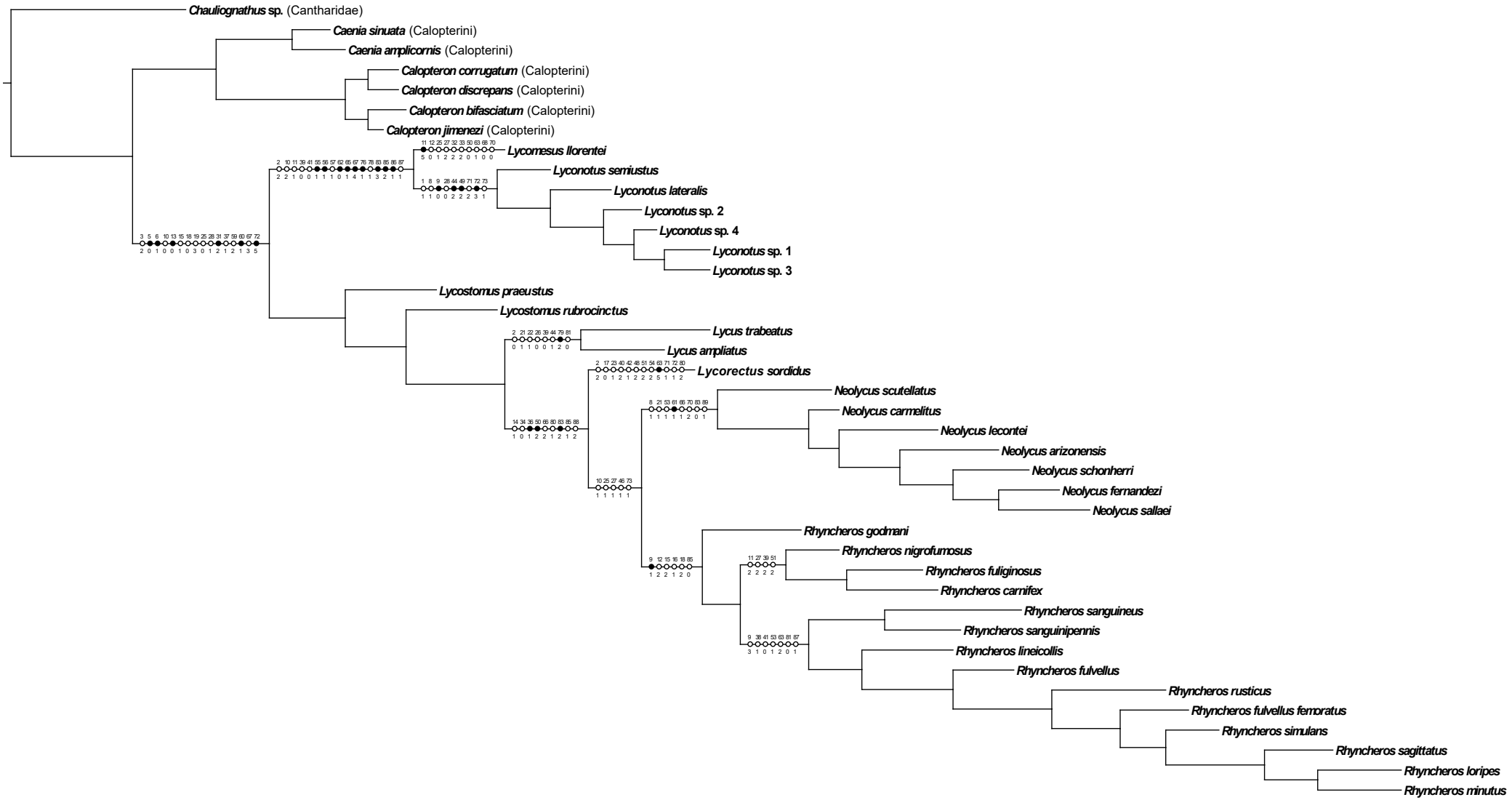

Fig. S3. The single implied weighted parsimony tree using a constant of *k* = 7.187500 (L = 583; CI = 0.31; RI = 0.63). Fast optimization using accelerated (ACCTRAN) transformations mapped mapped on branches in WinClada. Black circles indicated non-homoplastic character state transformations, and white circles indicate parallelism or reversals. The numbers above each circle represent the character and the number below each circle represents the character state.