

APENDIX 1

Cladograms obtained from the matrix originally published by Kury and Villarreal (2015), modified by Pinto-da-Rocha and Bragagnolo (2017) and Pinzón-Morales and Pinto-da-Rocha (2020), with the addition of *Quindina pendula* sp. Nov.

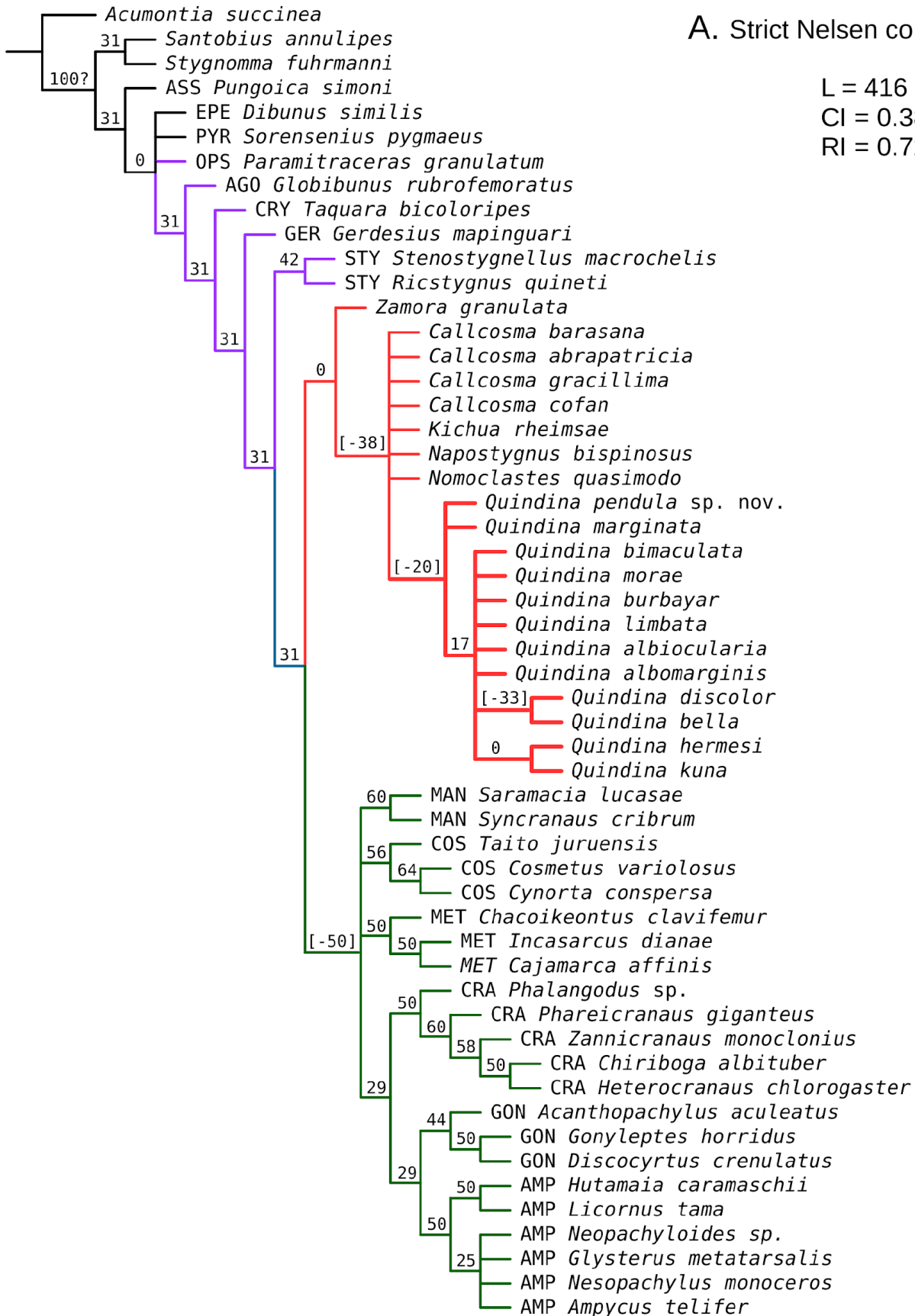
Abbreviations: ASS = Assamioidea, PYR = Pyramidopidae, EPE = Epedanidae, OPS = Stygnopsidae, AGO = Agoristenidae, CRY = Cryptogeobiidae, GER = Gerdesiidae, STY = Stygnidae, COS = Cosmetidae, MET = Metasarcidae, MAN = Manaosbiidae, CRA = Cranidae, GON = Gonyleptidae, AMP = Gonyleptidae (subfamily Ampycinae).

Red lines group the family Nomoclastidae, thicker lines represent the genus *Quindina*, green lines group species of the clade Microsetata, blue lines group members of the clade Laminata. Purple lines indicate other members of the superfamily Gonyleptoidea. Black lines indicate outgroups.

The cladograms were obtained by the following methods: A. Strict Nelsen consensus of 30 most parsimonious trees with equal weights; B. Majority consensus of 30 most parsimonious trees with equal weights; C. Implicit weighting with $k = 9.2188$; D. Successive weighting. L = Tree length (number of steps), WL = weighted tree length, CI = Consistency index, RI = Retention index.

The number above each branch indicates the relative Bremer support. In the cladogram obtained by majority consensus with equal weights, the number under each branch indicates the frequency among the input trees.

Relative Bremer supports was calculated with the option “TBR from existing trees”, with “Retain trees suboptimal by 600 steps” and “relative fit difference=1”.

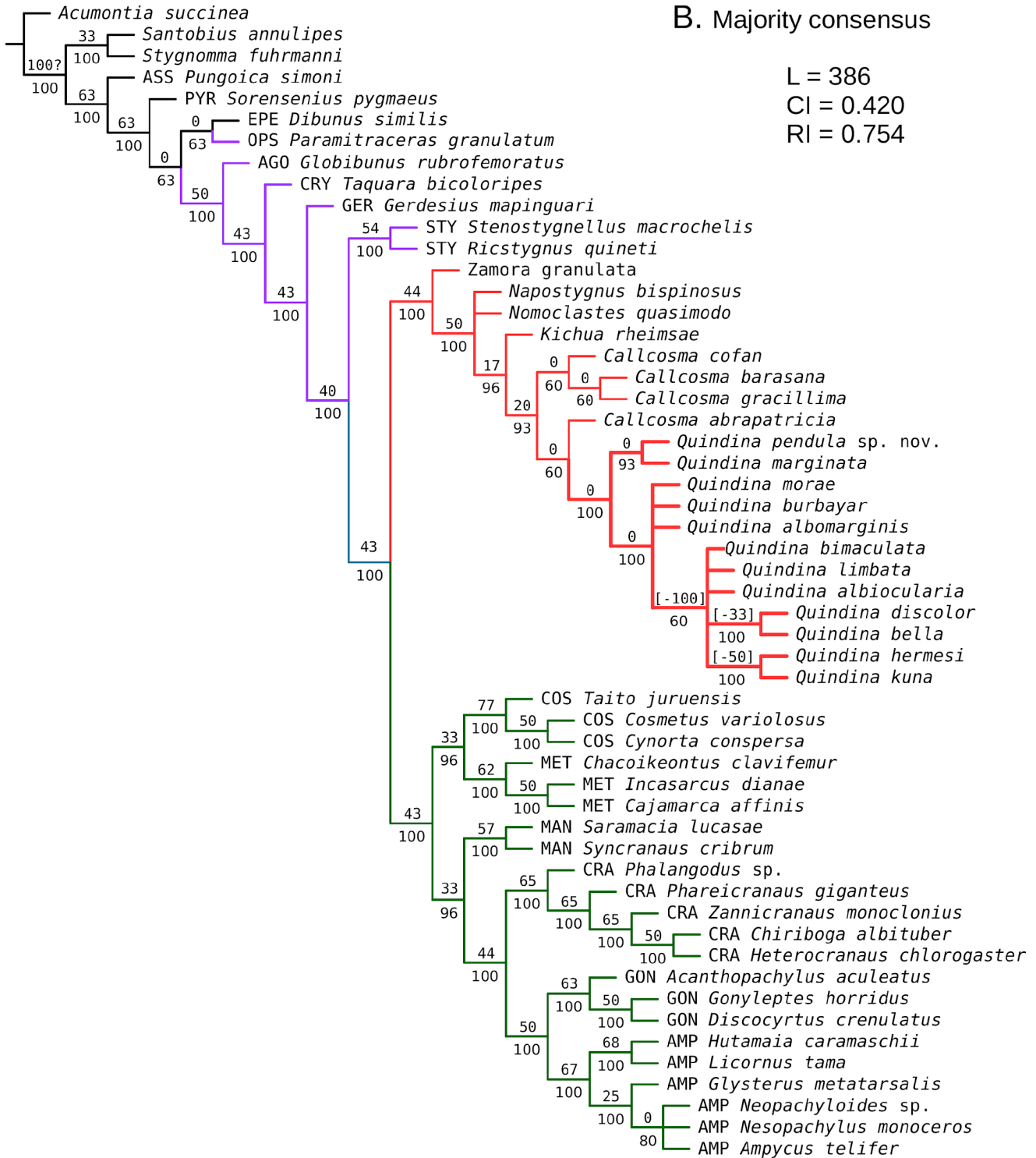


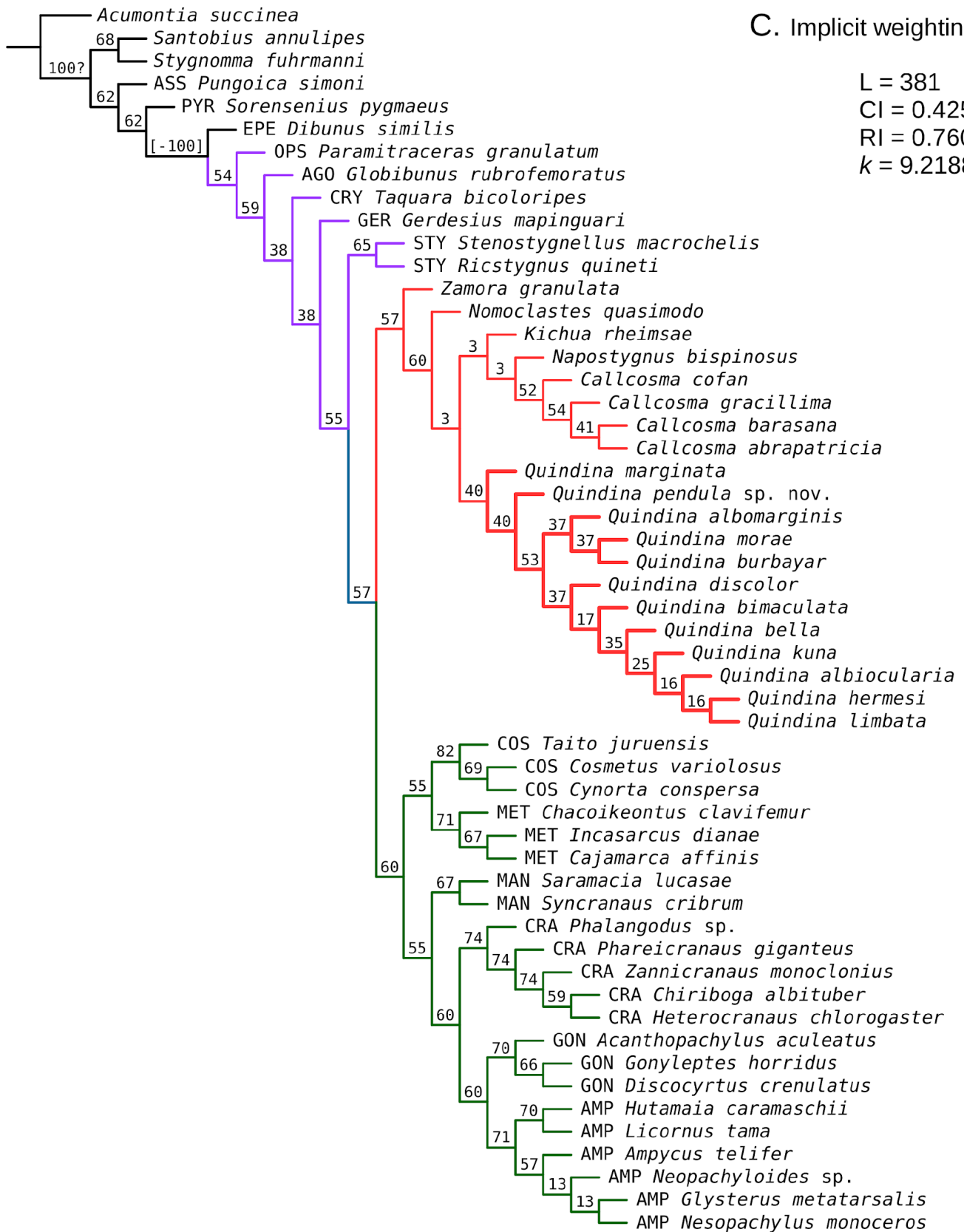
A. Strict Nelsen consensus

L = 416

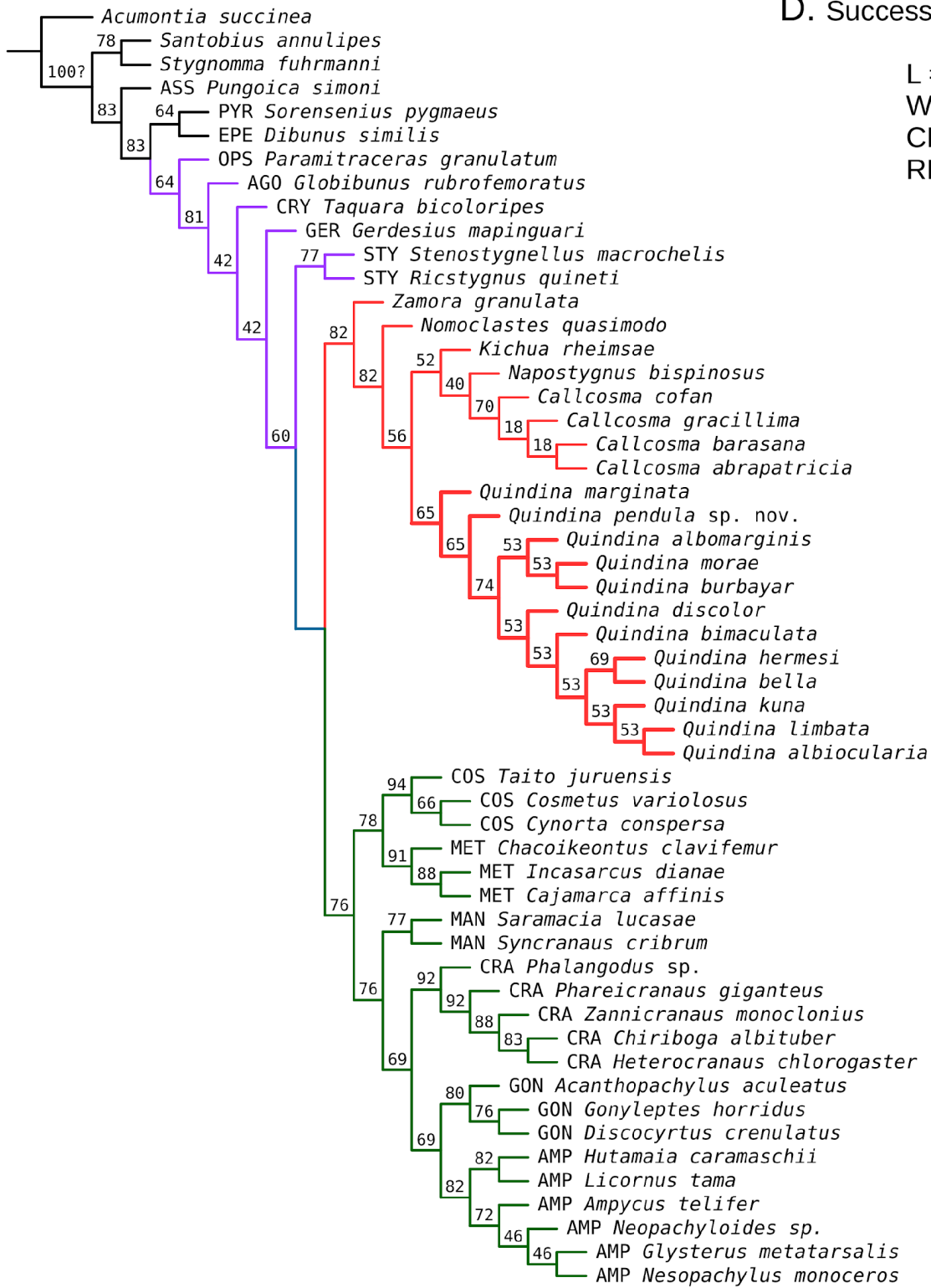
CI = 0.389

RI = 0.721





D. Successive weighting



L = 381
 WL = 11691
 CI = 0.662
 RI = 0.897