

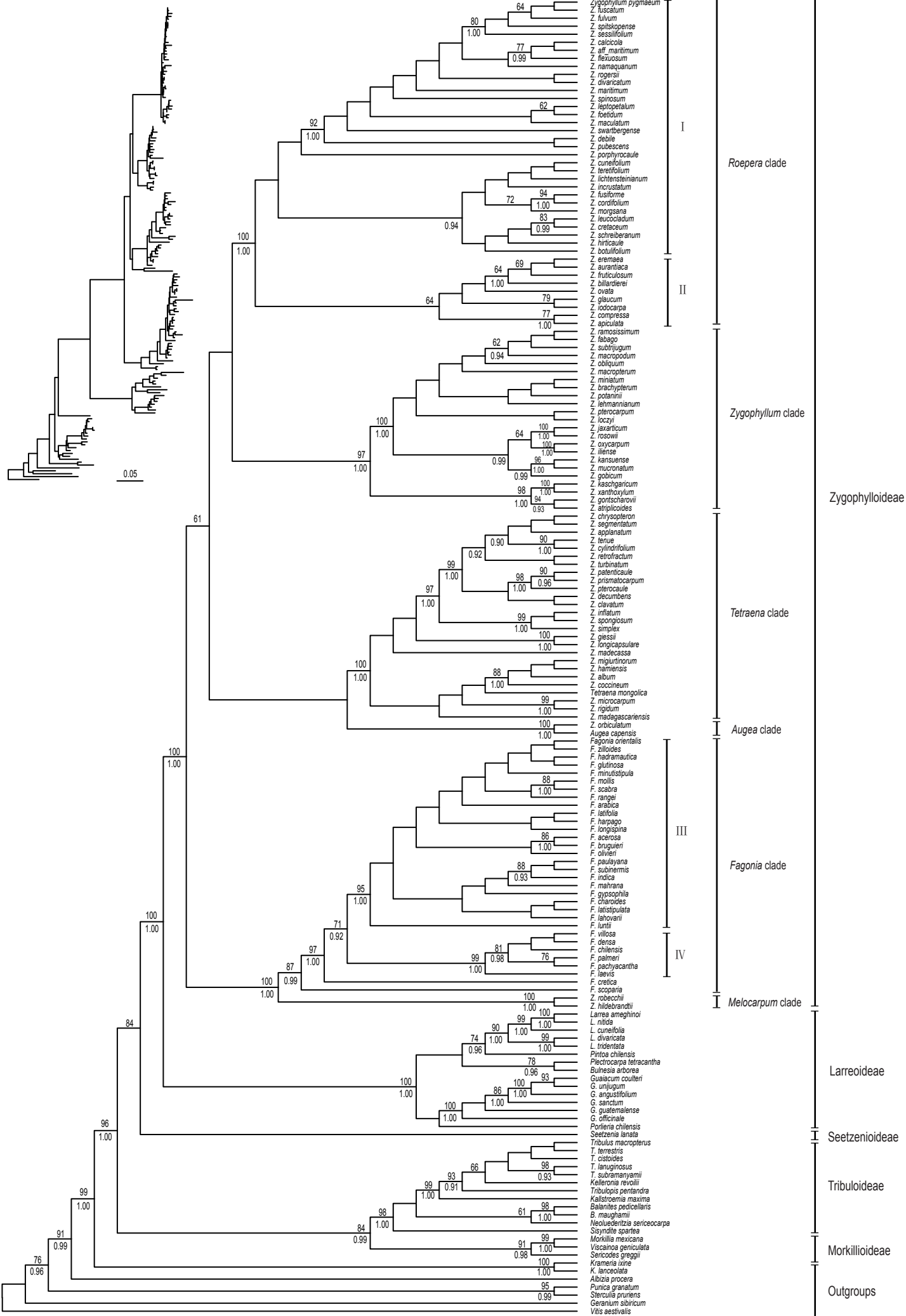
Additional file 2

Figure S1 Phylogenetic relationships of Zygophyllaceae based on the 4-marker dataset with 164 taxa. The bootstrap values ($> 50\%$) are shown above the branches, and the Bayesian posterior probabilities (> 0.90) are indicated below the branches. ML phylogram is presented in the upper left.

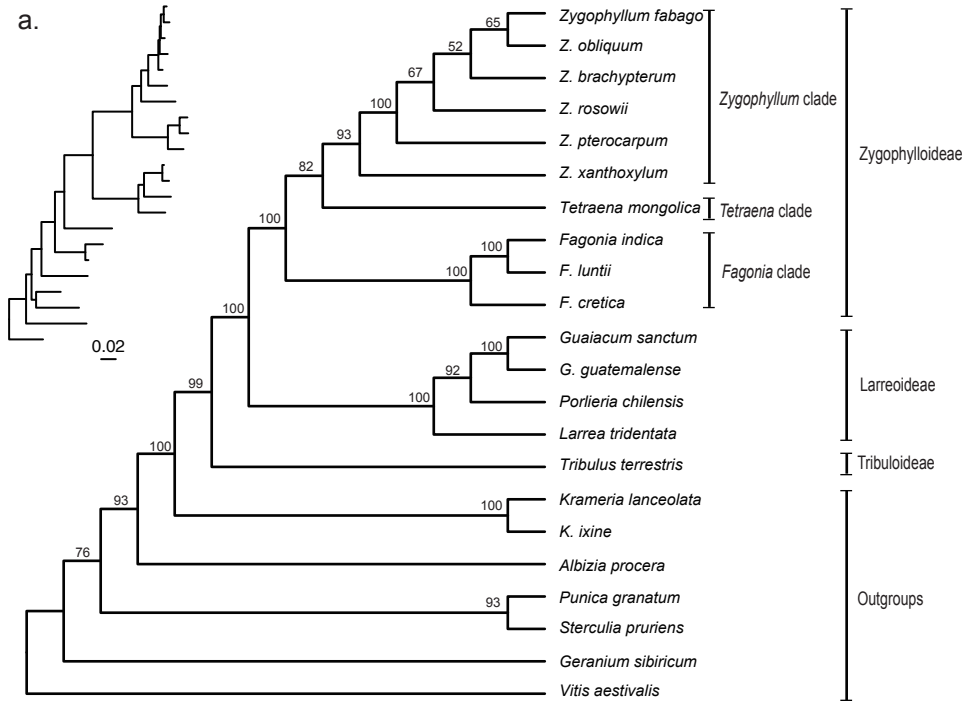
Figure S2 Phylogenetic relationships of Zygophyllaceae based on three matrices (see Methods for details). The bootstrap values ($> 50\%$) are shown above the branches. (a) matrix 1 with 22 taxa, each taxa with four sequences; (b) matrix 2 with 76 taxa, each taxa with three to four sequences; (c) matrix 3 with 142 taxa, each taxa with two to four sequences.

Figure S3 Chronogram of Zygophyllaceae obtained from the BEAST analysis of the 4-marker dataset. Bars around the node ages indicate the 95% highest posterior density (HPD) intervals.

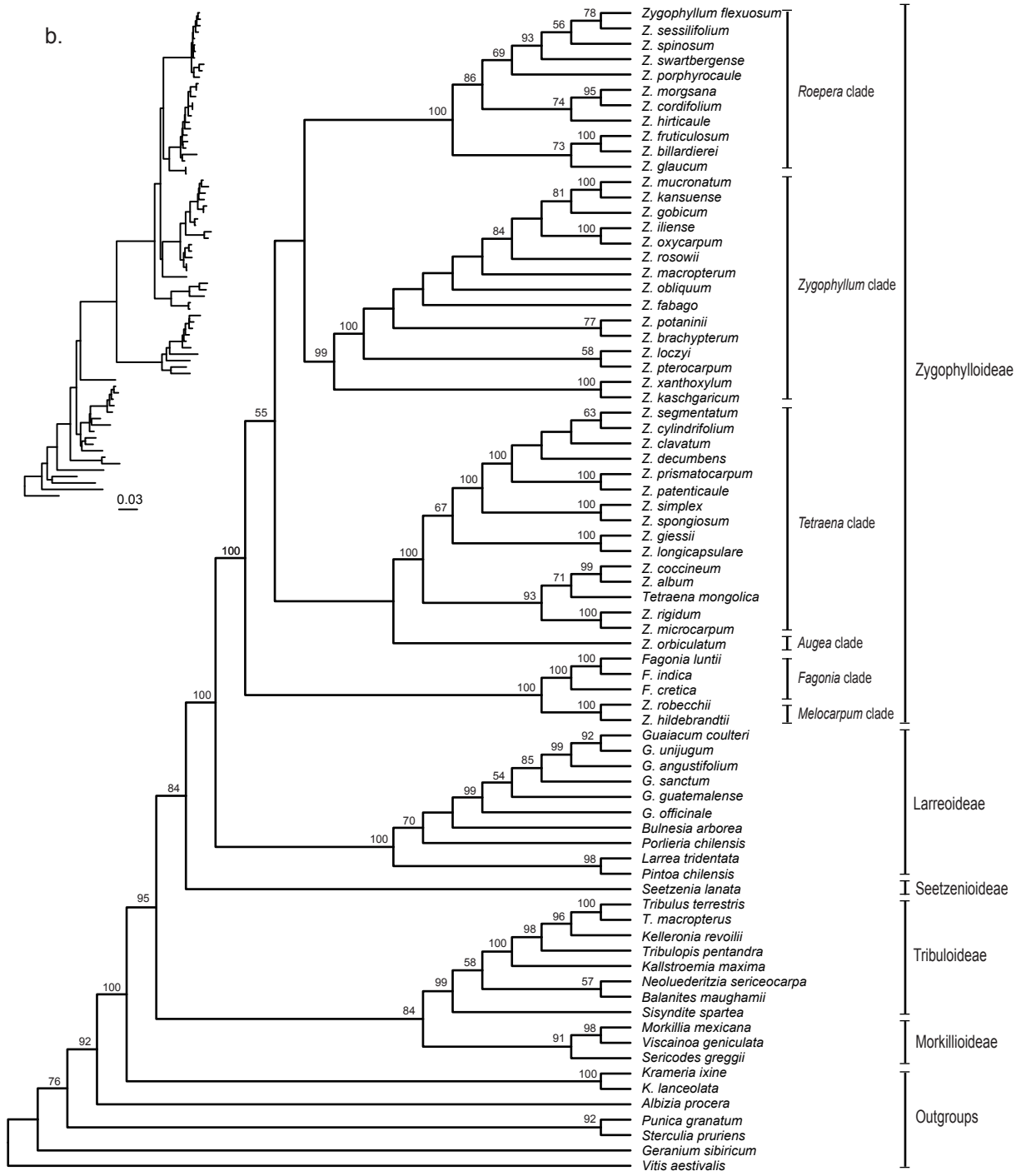
Figure S4 Ancestral habitat reconstructions for five representative plant groups inhabiting in both dryland and non-dryland floras. (a) Afrian *Vachellia* (Fabaceae); (b) Sect. *Euphorbia* (Euphorbiaceae); (c) *Consolida* (Ranunculaceae); (d) *Austrostipa* (Poaceae); and (e) Subsect. *Hypericifoliae* (Euphorbiaceae).



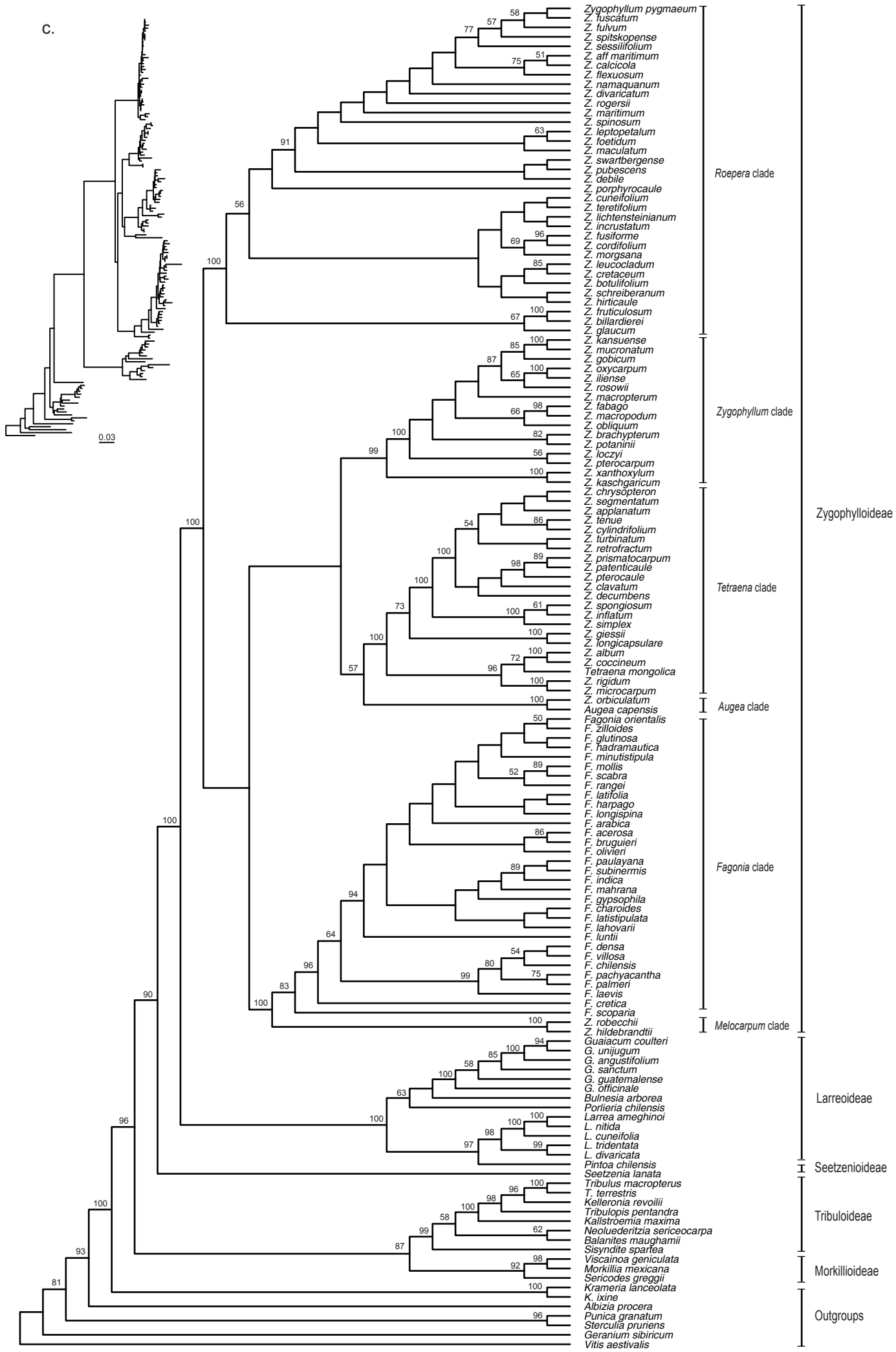
a.

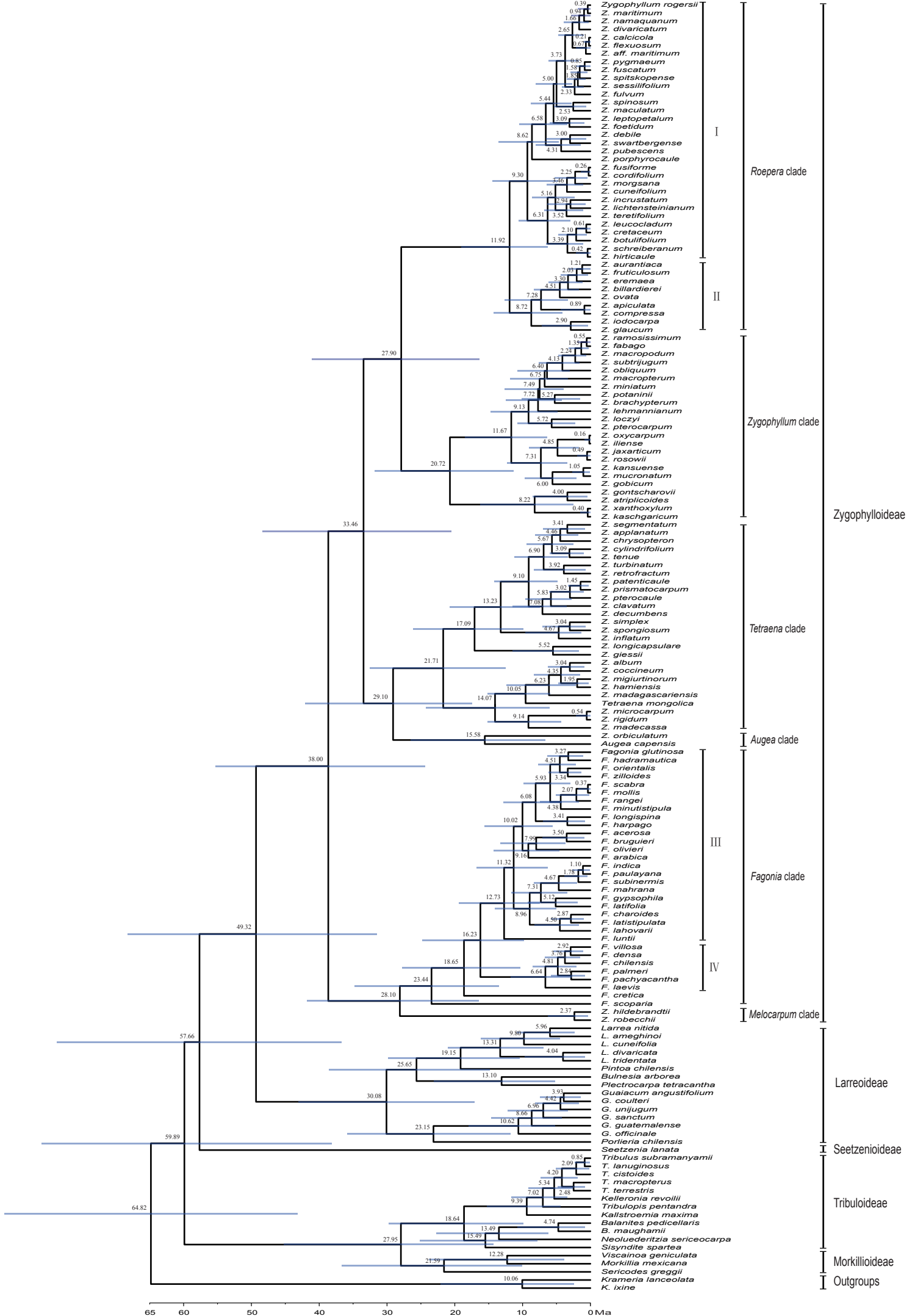


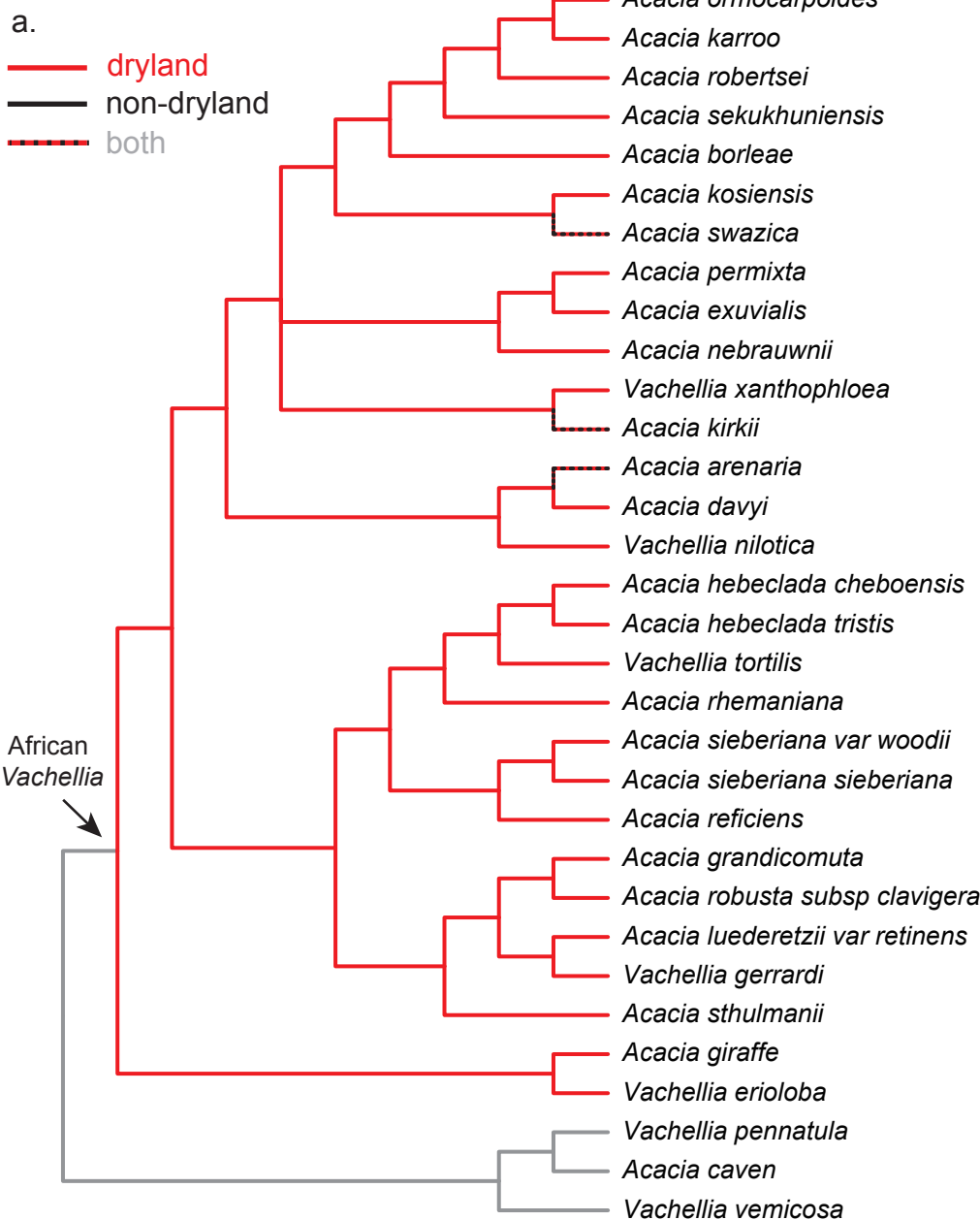
b.



C.

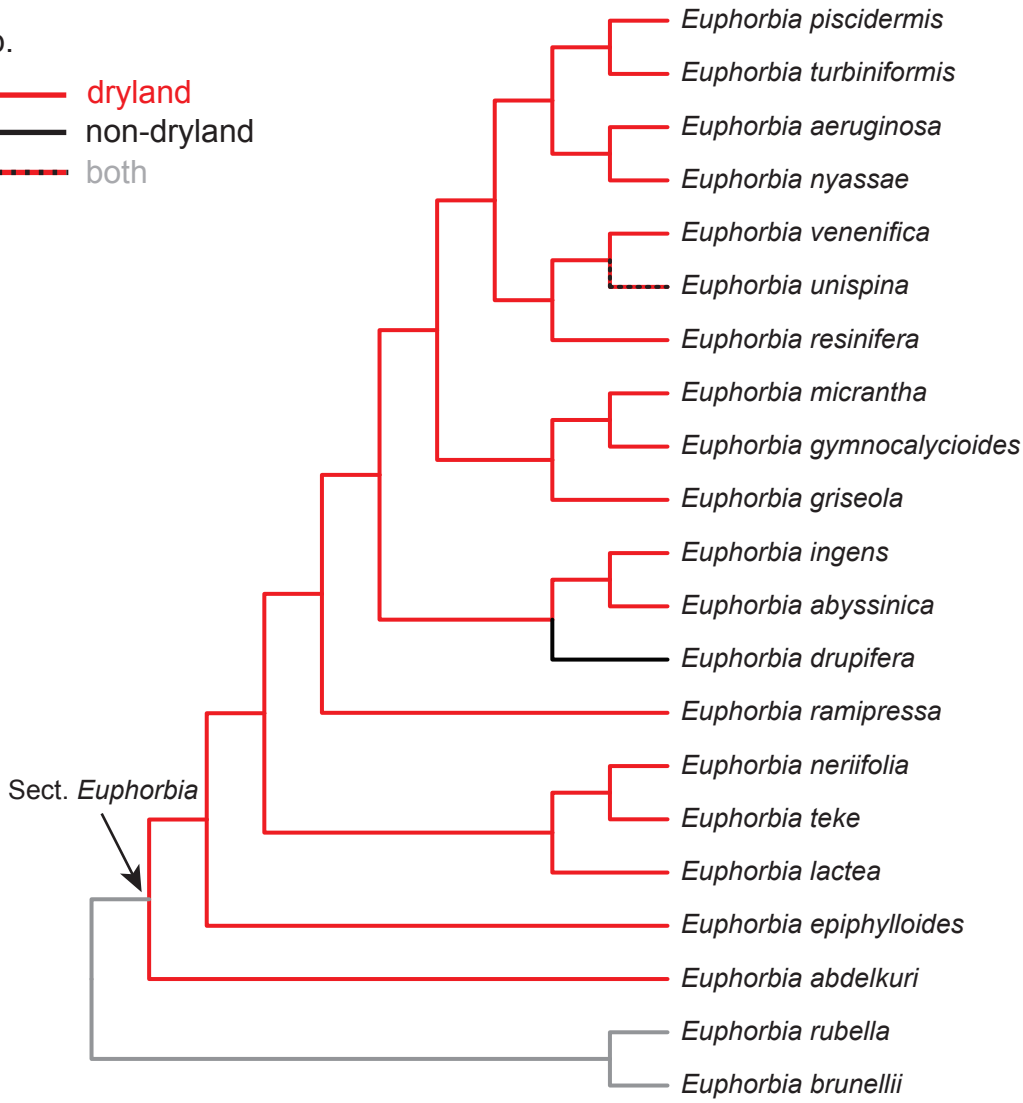






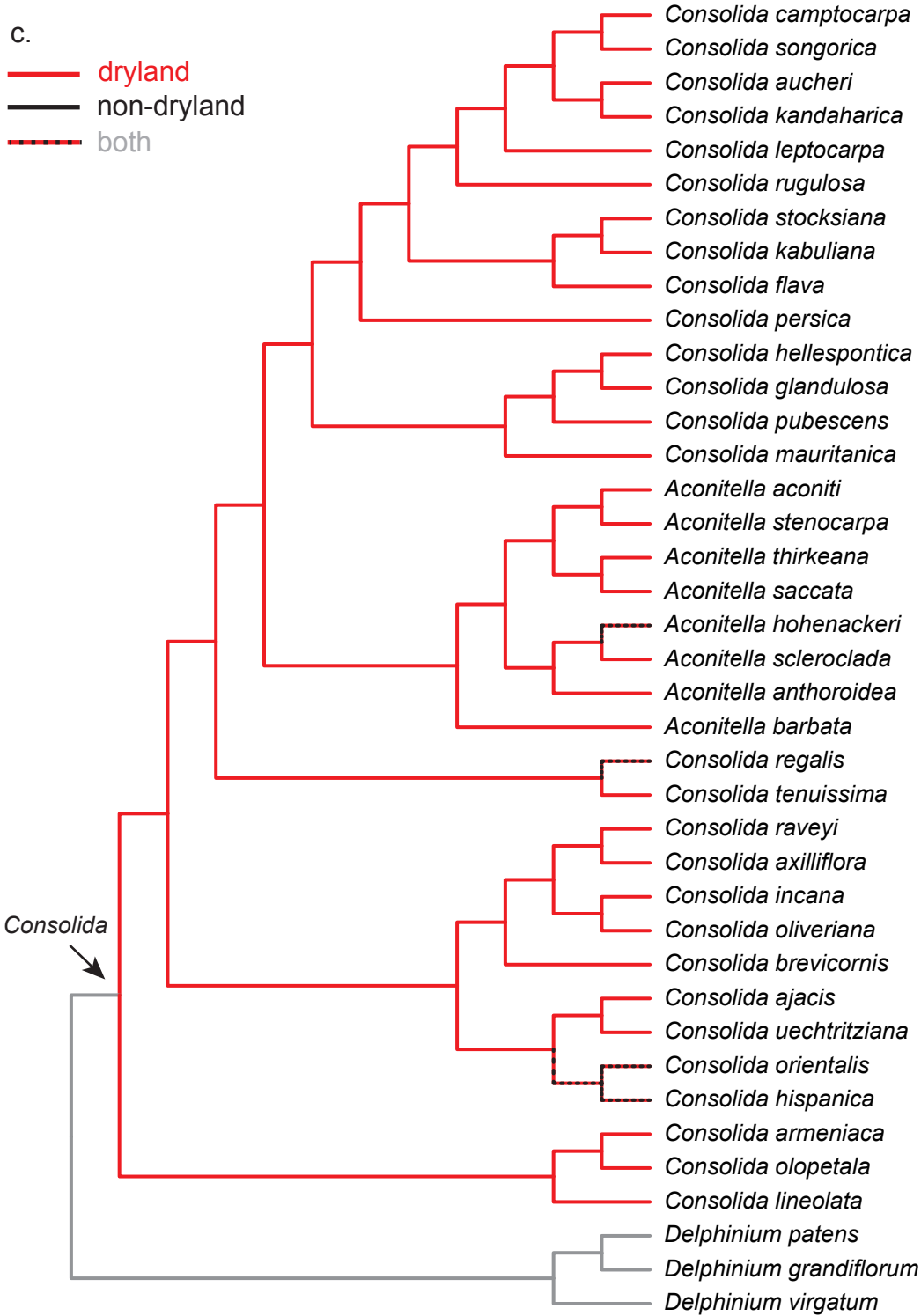
b.

— dryland
— non-dryland
- - both



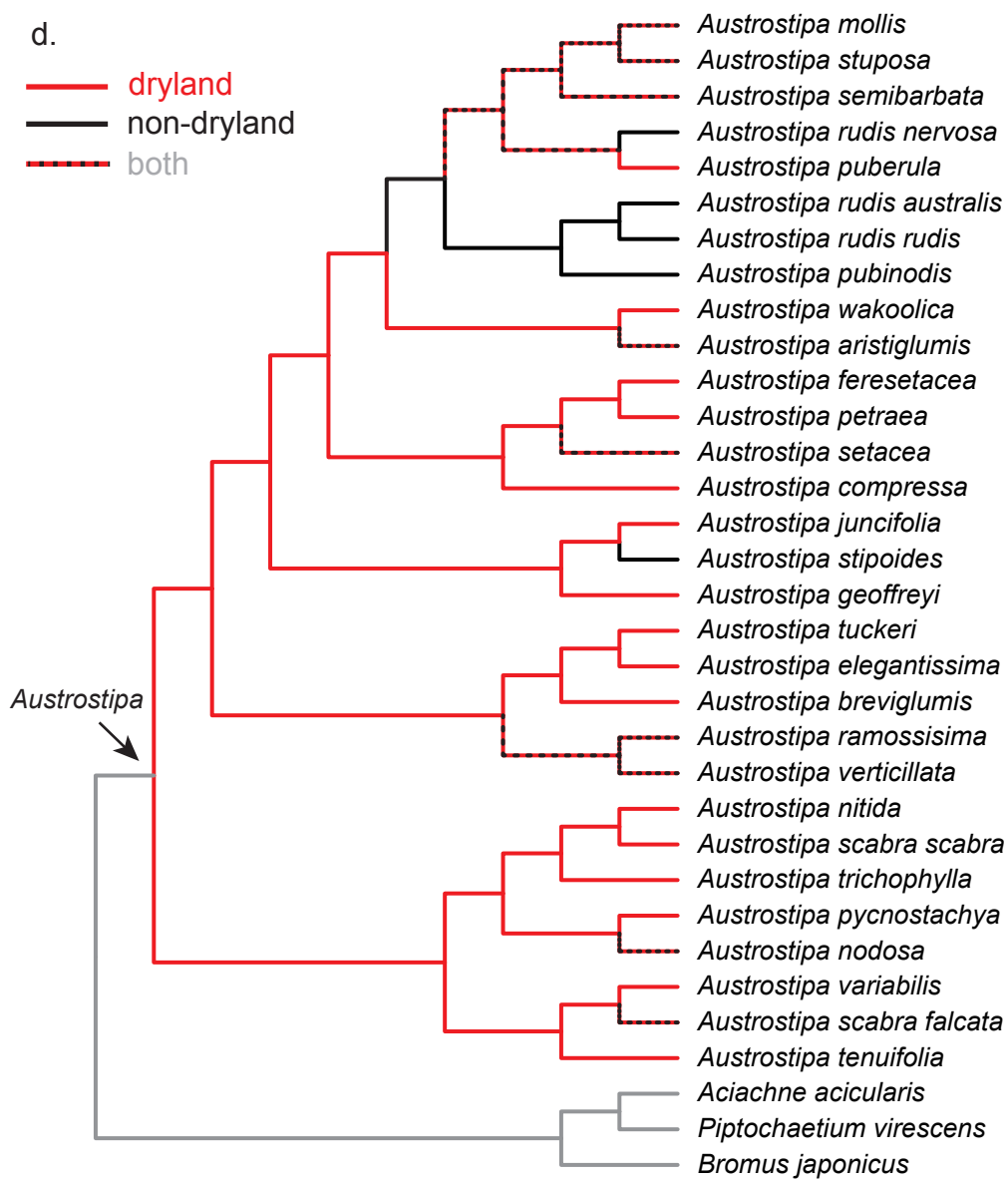
C.

— dryland
— non-dryland
- - both



d.

— dryland
— non-dryland
- - both



e.

— dryland

— non-dryland

- - both

Subsect. *Hypericifoliae* →

