

Phylogeny in this study

Phylogeny by Ackerfield et al. (2020)

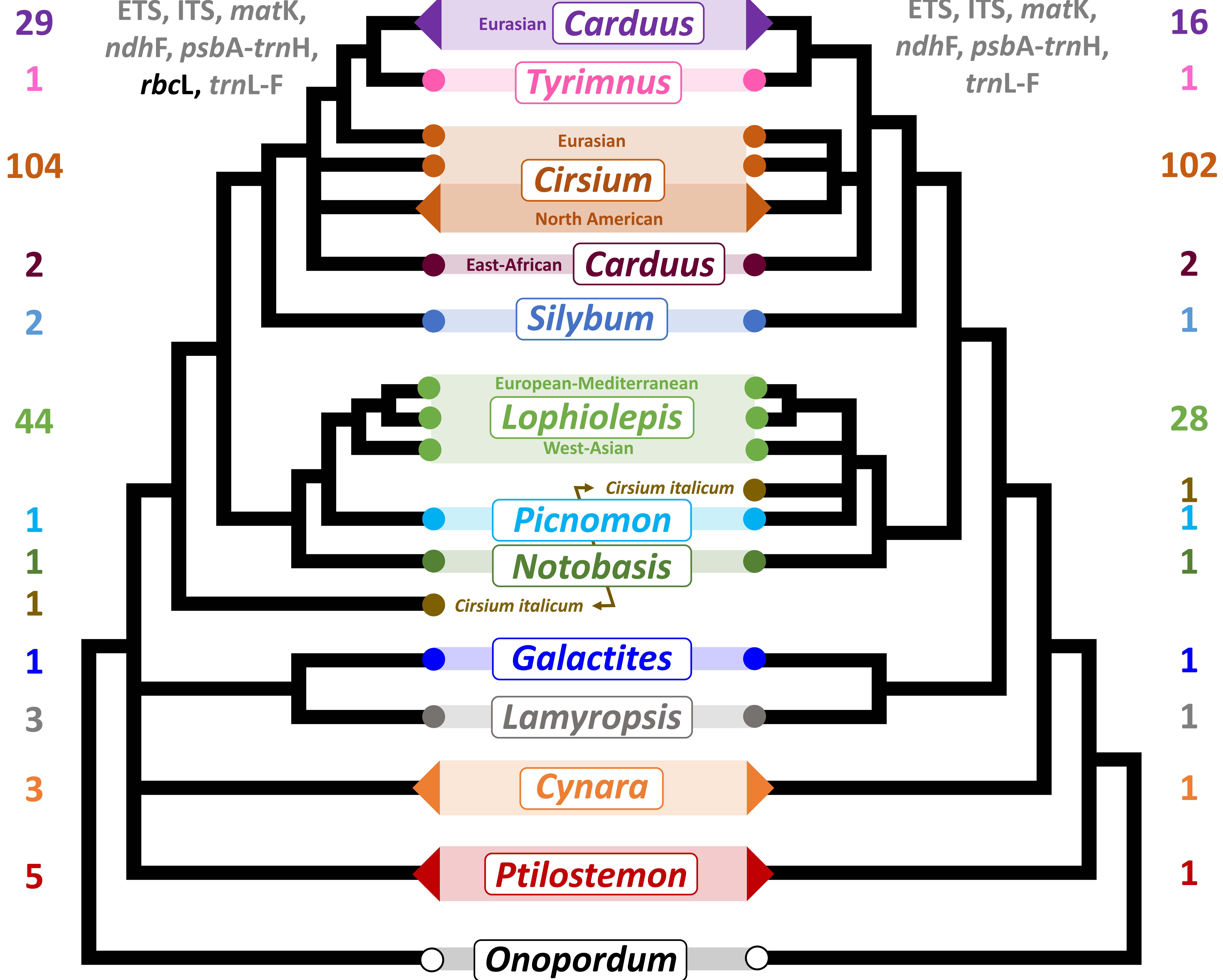
No of taxa **7 markers:**

ETS, ITS, *matK*,
ndhF, *psbA-trnH*,
rbcL, *trnL-F*

6 markers:

ETS, ITS, *matK*,
ndhF, *psbA-trnH*,
trnL-F

No of taxa



Supplementary Fig. S4: Comparison of phylogeny constructed for Carduinae having samples analyzed cytometrically in our study with the phylogeny of Carduinae by Ackerfield et al. (2020). The only differences are in the position of *Cirsium italicum* (*Italicum* clade) that diverged before the lineages of *Ptilostemon* and *Notobasis* and inside of *Cirsium* group in our phylogeny, whereas the position of all main lineages/genera is the same in both topologies. [*Cirsium cephalotes* is morphologically associated with the *Lophiolepis* clade but is embedded in the *Cirsium* group in the phylogeny of Ackerfield et al. (2020). However, this species is recovered in the *Lophiolepis* clade in our phylogeny, while *C. vulgare* is consistently embedded within the *Cirsium* group in both phylogenies, despite its morphology resembling the *Lophiolepis* clade].