

## Supplementary Information

### **Molecular thresholds of ITS2 and their implications for molecular evolution and species identification in seed plants**

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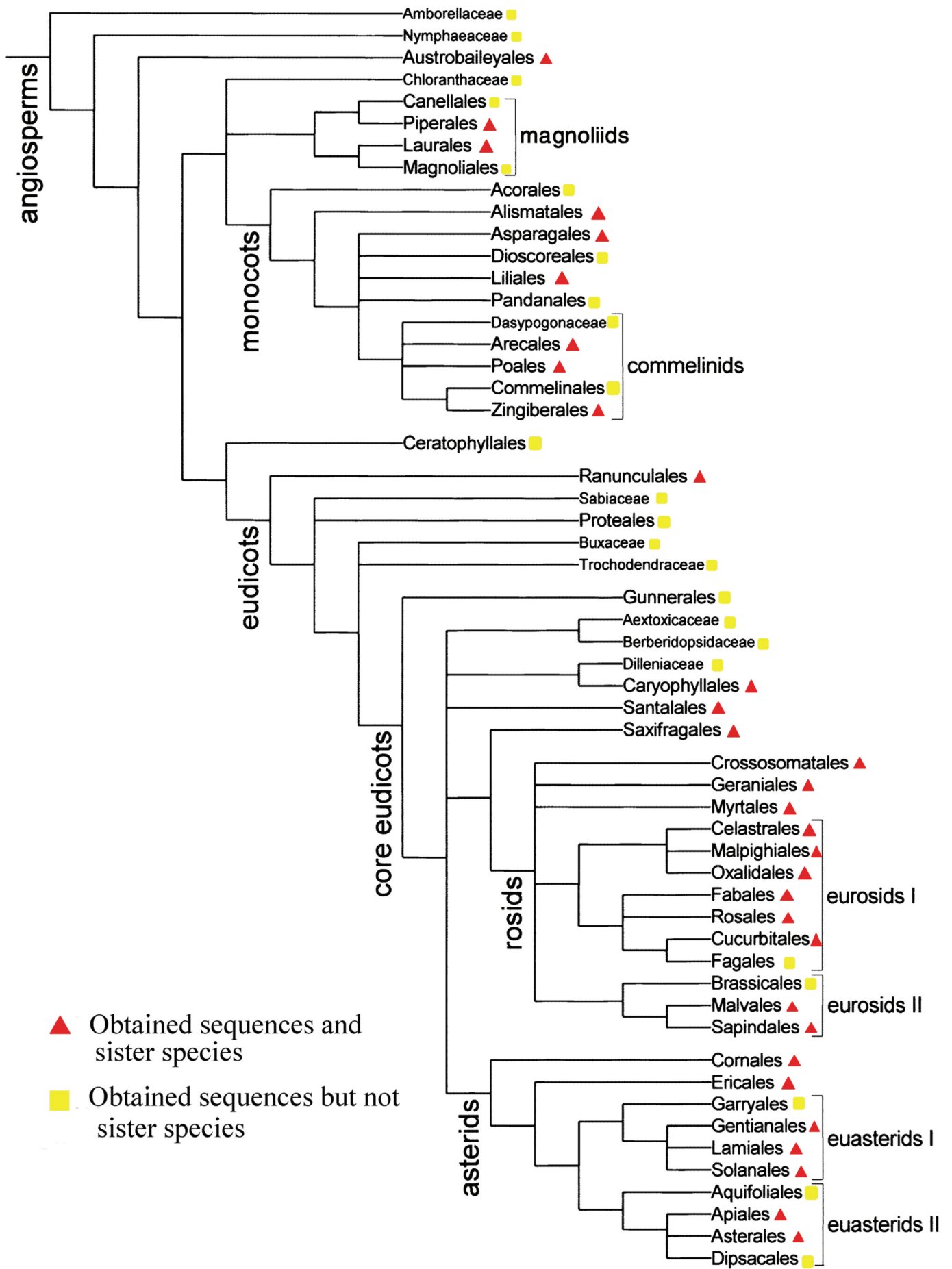
#### **This file includes**

Supplementary Figure 1

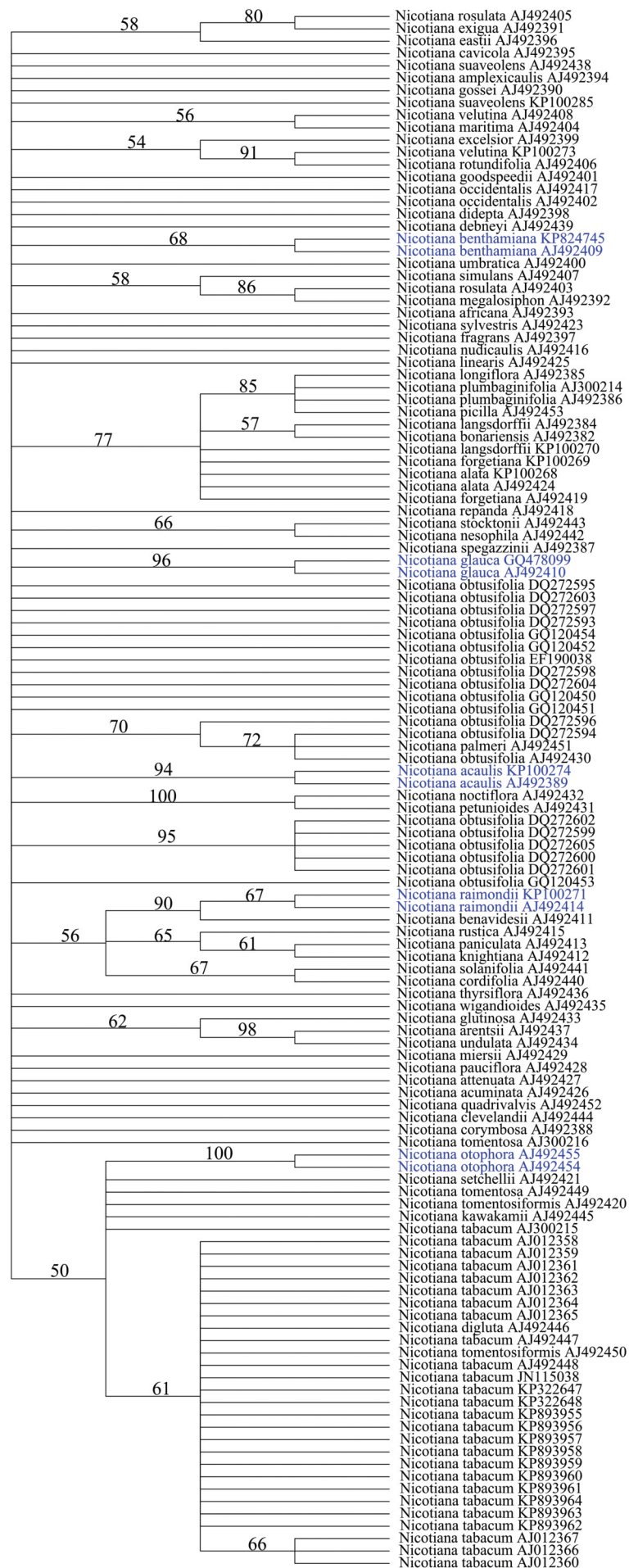
Supplementary Figure 2

Supplementary Table 7

(Supplementary Tables 1-6 and Dataset 1 are large datasets and included as separate Excel documents)



Supplementary Figure S1. The phylogenetic position of investigated taxa in the APG framework



**Figure S2. A neighbor joining tree of *Nicotiana* plants based on ITS2 sequence.** Bootstrap values (>50%) are shown above the branches. Numbers followed taxon names are GenBank accession numbers. Successfully identified species are highlighted in blue.

**Supplementary Table S7. Comparison of ITS2 genetic distance for the selected groups of species-rich orders**

Taxon	Average value	95% Confidence interval	Variation	N
Asparagales	3.28%	[2.02%,4.54%]	[0.37%,13.49%]	31
Fabales	5.08%	[2.59%,7.57%]	[0.09%,43.45%]	37
Apiales	2.52%	[1.55%,3.49%]	[0.60%,6.10%]	15
Pinales	1.65%	[0.96%,2.33%]	[0.40%,3.23%]	9
All	3.13%	[2.63%,4.82%]	[0.09%,43.45%]	92