

# ANGIOSPERM PHYLOGENY GROUP

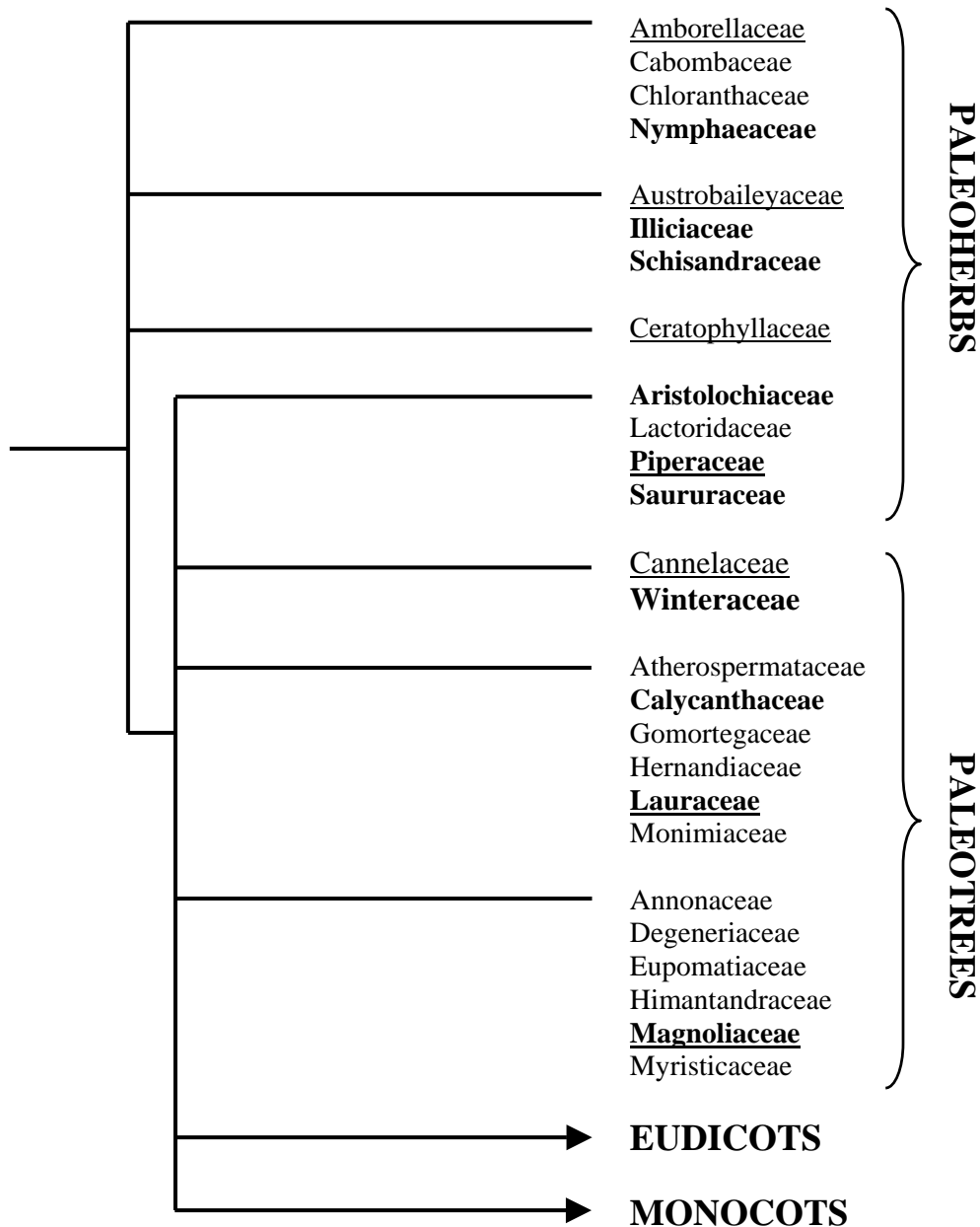
## AN APPROXIMATE EVOLUTIONARY TREE

The branching lines demonstrate how closely related different families are. Each group of families are arranged alphabetically, those **families in bold are grown at Glasnevin**, those underlined represent order names (which end in -ales). Arrows indicate continuations to other pages.

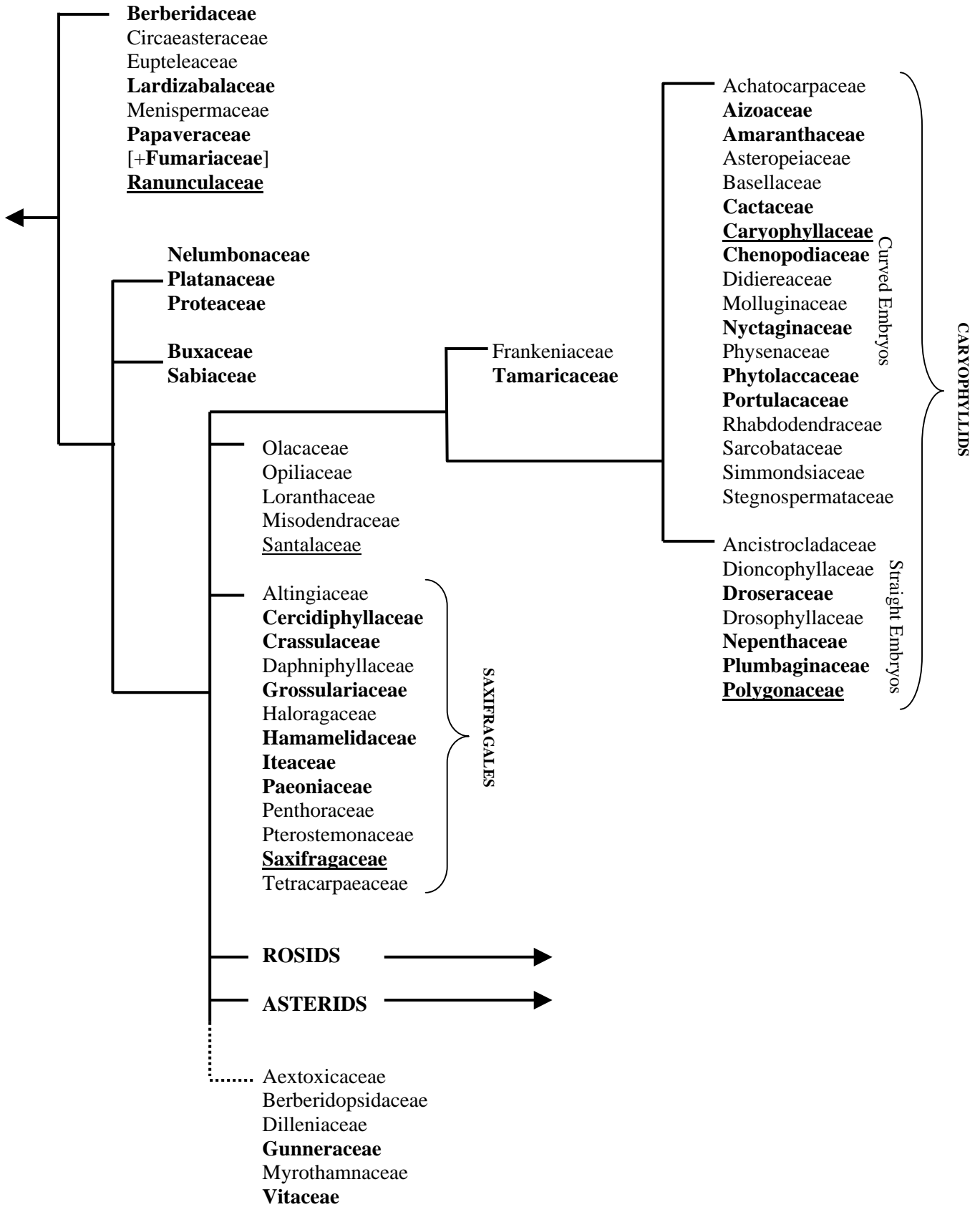
One important revelation of the new synthesis is that there are not just Monocots and Dicots as two classes of Angiosperms, rather the earliest evolution of flowering plants led to four basic lineages:–

- PALEOHERBS, represented by Waterlilies, Aristolochiaceae, Piperaceae, Schisandra.
- PALEOTREES, represented by Magnoliaceae, Winteraceae, Lauraceae.
- MONOCOTS, the traditional Monocots.
- EUDICOTS, so called because they are ‘proper’ or ‘true’ dicots without the paleo-s above.

A pattern of groupings is discernible within the Eudicots: The most ancient grouping in this lineage are indeed the Ranunculaceae, which have always been traditionally viewed as the progenitors of all other flowering plants, then a number of distinct basal groups such as the Caryophyllids and Saxifragales can be distinguished, followed by two very distinctive groups, the Rosids and Asterids. Within these latter two groups we can recognise a similar pattern of evolutionary ‘left-overs’ – basal groups – and distinguished more clearly from these, clusters of closely-related families, which are termed Eu-Rosids and Eu-Asterids respectively.

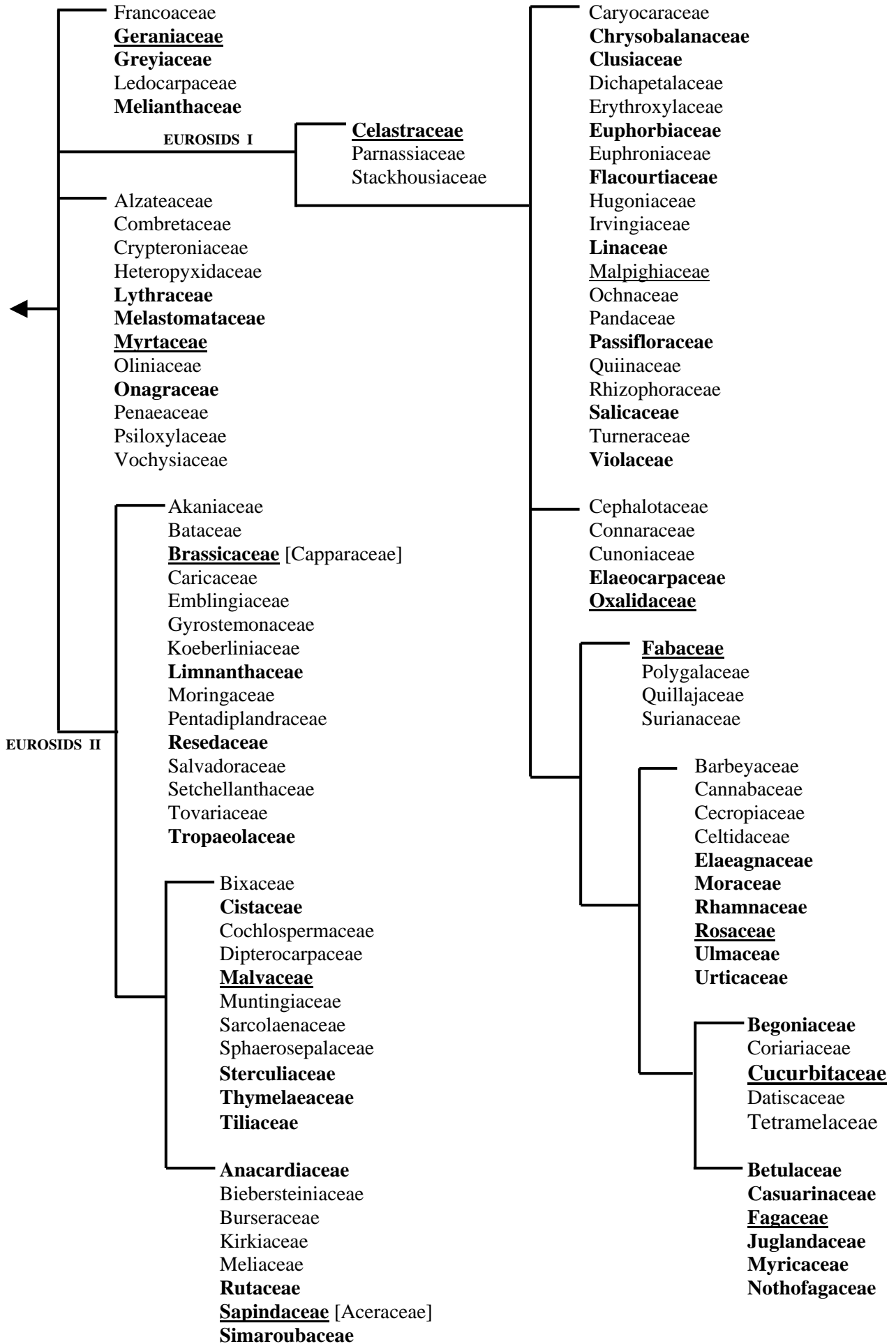


# EUDICOTS (Tricolpate Pollen)

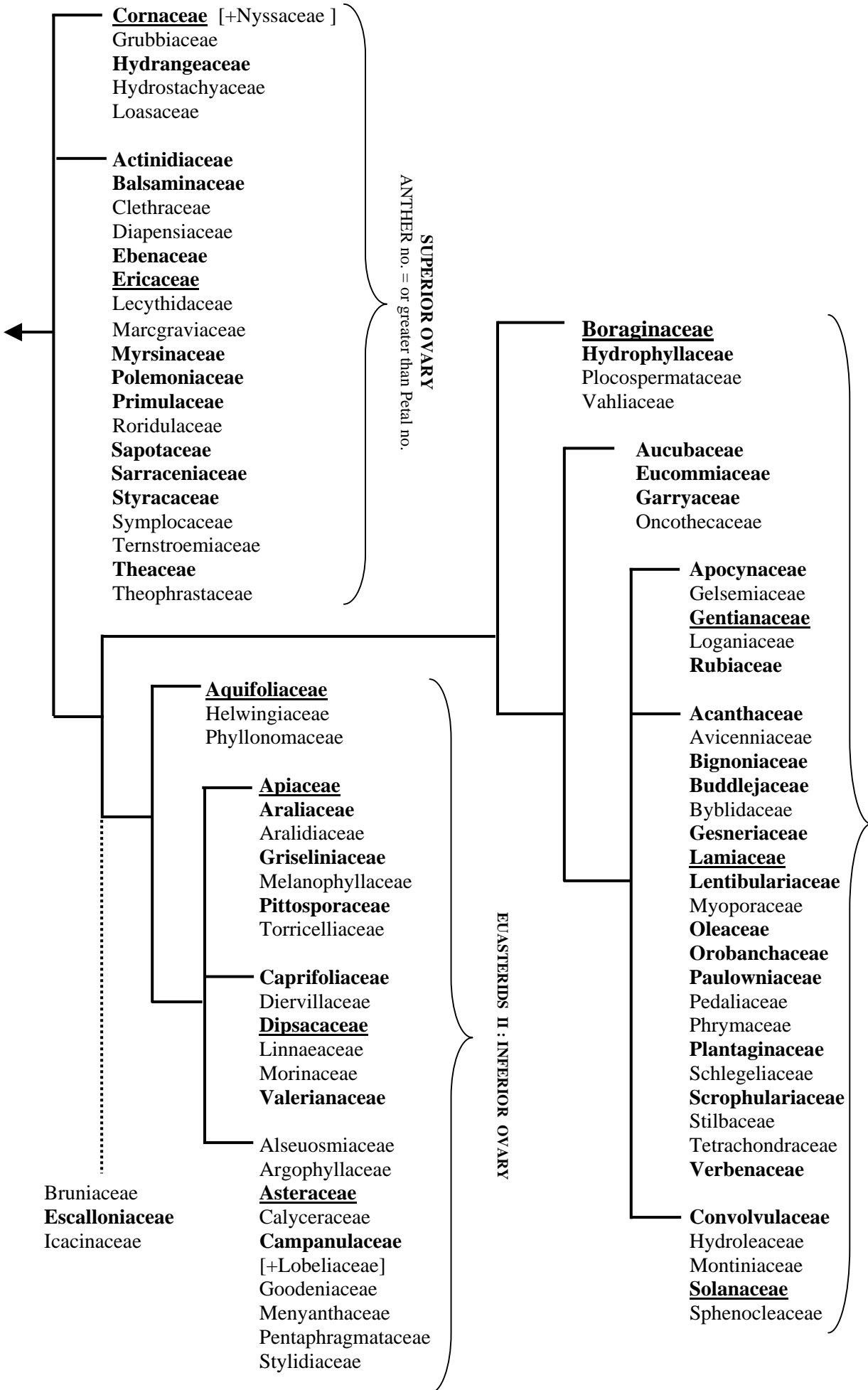


Note: Underlined family names represent Order names for the groups. i.e. Caryophyllales, Saxifragales etc.

# ROSIDS



# ASTERIDS



# MONOCOTS

