

# Poaceae

## The Grass Family

668 genera  
11,000 species



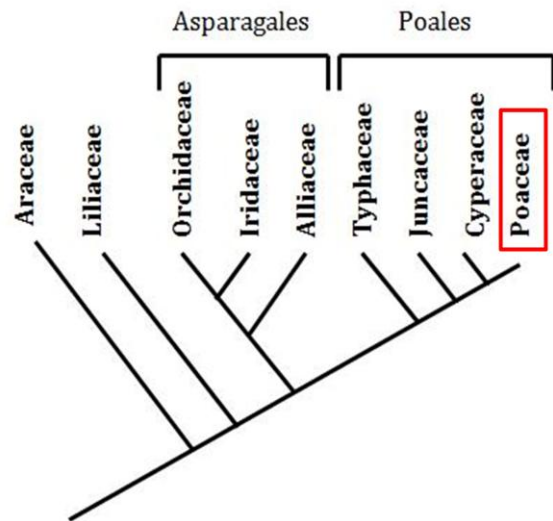
### Distribution:

A truly cosmopolitan family, ranging from polar circles to the Equator, and from mountain tops to the sea. Often ecologically dominant, it is estimated to comprise 25% of Earth's vegetation.

### Economic Uses:

- Economically, this is the most important family of flowering plants.
- It includes many cultivated plants (wheat, rice, maize, etc.) and the domestication of these plants was a huge step forward in the history of human civilization.
- Some species are used for structural purposes (bamboo).
- Many species are also considered weeds.

### Reduced Monocot Phylogeny of Required Families



### Characteristic features:

- Primarily herbs, often rhizomatous; "trees" in most bamboos; stems are called culms, hollow or solid
- Flowers: small petals reduced to lodicules; typically 3 stamens, 3 carpels, but appearing as 2.
- Each flower enclosed by two bracts (palea and lemma) = floret.
- One to many florets are aggregated into spikelets, each with usually 2 empty bracts (glumes) at the base.
- Leaves with a ligule.
- Fruit: a caryopsis.

### References for further inquiry:

- Soreng, R.J. & Davis, J. I. Phylogenetic and character evolution in the grass family (Poaceae); simultaneous analysis of morphological and chloroplast restriction site character sets. *Bot. Rev.* 64:1-85 (1998).
- Heywood, V.H., Brummitt, R.K., Culham, A., & Seberg, O. Poaceae. Pp. 390-395. In: *Flowering Plant Families of the World*. New York, Firefly Books (2007).