

Character	Juncaceae	Restionaceae	Cyperaceae	Poaceae
	(rushes)	(rushes)	(rushes & sedges)	(grasses)
Leaves	At base of stems, terete to flat or reduced to a sheath	Reduced to open sheaths on stems, overlapping on lower stem, distant on upper	3-ranked, basal or on lower stem, terete or with grass-like blade or reduced to sheathing scales	2-ranked, alternate, at nodes; consisting of sheath, ligule and blade
Leaf sheaths	Open or closed	Open	Closed, tubular	Open, with overlapping margins
Stems	Terete, solid	Solid or hollow, unbranched to many branched	Triangular or terete, solid, without nodes	Terete, hollow at internodes, solid at nodes
Basic unit of inflorescence	Cyme	Usually a spikelet	Spikelet	Spikelet
Spikelets	Absent	1 to many flowered, solitary or numerous, subtended by bracts; male and female spikelets often different	Glumes in 2 ranks or imbricate and spirally arranged, most glumes bearing flowers, one to several lower glumes empty	Of 1 or more florets subtended by 2 lower empty glumes; florets consisting of 2 bracts (palea, lemma) and 1 reduced flower; glumes and bracts often awned
Flowers	Mostly bisexual	Mostly unisexual (dioecious)	Bisexual or unisexual (mostly monoecious)	Mostly bisexual
Perianth segments	6, in 2 whorls of 3, well developed	6 or less, or absent, dry, glumaceous	Bristles, hairs, scales, or absent	Usually 2, reduced (lodicules)
Stamens	Usually 6, sometimes 3	3 (male), 0 to 3 staminodes	3, sometimes less	3
Styles/stigmas	Styles 1 or 3, stigmas 3	Styles 1 to 3, stigmas 1 or 3 (female)	Style 1, stigmas 2 or 3 (female)	Stigmas 2, occasionally 1 or 3
Bracts per flower	1, or absent	1 (glume)	1 (glume)	2 (palea and lemma)
Fruit	Capsule with 1 to many seeds	3-sided capsule or nutlet	Nutlet, flat or 3-angled	Caryopsis (grain)
Habitat	In water and water-logged ground	Infertile soils periodically wet	Mostly damp, wet or marshy areas	Mostly dry land in a variety of soils