Glossary of botanical terms used in the Poaceae

Adapted from the glossary in Flora of Ethiopia and Eritrea, vol. 7 (1995).

aristate - with an awn

aristulate - diminutive of aristate

auricle – an earlike lobe or appendage at the junction of leaf sheath and blade

auriculate - with an auricle

awn – a bristle arising from a spikelet part

callus – a hard projection at the base of a floret, spikelet, or inflorescence segment, indicating a disarticulation point

caryopsis – a specialized dry fruit characteristic of grasses, in which the seed and ovary wall have become united

collar – pale or purplish zone at the junction of leaf sheath and blade

column – the lower twisted portion of a geniculate awn, or the part below the awn branching-point in *Aristideae*

compound – referring to inflorescences made up of a number of small constituent inflorescences (as in some Andropogoneae), or a raceme with some secondary branching

culm - the flowering stem of a grass plant

culm sheath (bamboos) – modified, often non-photosynthetic, culm leaf with an expanded sheath and much reduced blade, usually deciduous as the culm matures

diffuse (bamboos) - culms arising singly from long slender rhizomes.

extravaginal – branching in which the young shoot breaks through the base of the leaf sheath

floret – the individual unit of a spikelet, comprising a lemma and palea with enclosed reproductive organs

glume – one of a pair of empty scales at the base of a grass spikelet

heterogamous spikelets – the paired spikelets found in most Andropogoneae, where one spikelet of the pair is sessile and produces a caryopsis, and the other spikelet is pedicelled, of different form, and staminate or sterile

hilum – the scar on the caryopsis marking the site of the attachment of the pericarp and testa, found on the opposite side from the embryo

homogamous spikelets – in Andropogoneae the paired spikelets sometimes present at the base of the raceme, of similar appearance and not producing any caryopses, often resembling the pedicelled spikelets or assuming a protective involucral function

intravaginal — branching in which the young shoot grows up inside the leaf sheath, emerging at the sheath mouth

iterauctant (bamboos)—inflorescence with pseudospikelets with glumes subtending axillary buds capable of partial or extensive spikelet ramification

leaf blade – the distal expanded part of a grass leaf

leaf sheath - the basal part of the grass leaf which normally encloses a culm internode

lemma – the lower of the two bracts enclosing the grass flower and together with the palea comprising a floret

leptomorph (bamboos) – rhizome monopodial, elongated, more slender than culms

ligule – a membrane or line of hairs on the inner (adaxial) side of the junction of the leaf sheath and leaf blade; bamboos sometimes have an external ligule on the abaxial side of the junction lodicule – a small scale-like or fleshy structure at the base of the stamens in a grass floret, usually 2 in each floret (often 3 or more in bamboos); they swell at anthesis, causing the floret to gape open

oral setae – marginal setae inserted at junction of leaf sheath and blade, on the auricles when these are present

pachymorph (bamboos) - rhizome sympodial, thicker than culms

palea – the upper and inner scale of the grass floret which encloses the grass flower, usually 2-keeled

panicle – in grasses, an inflorescence in which the primary axis bears branched secondary axes with pedicellate spikelets

pedicel – in grasses, the stalk of a single spikelet within an inflorescence

peduncle - the stalk of a raceme or cluster of spikelets

pluricaespitose (bamboos) – culms arising in a series of clusters along a long slender rhizome

prophyll – in grasses, a 2-keeled, hyaline, modified leaf, placed within a leaf sheath on the adaxial side of a branch

pseudopetiole – the narrow basal portion of some leaf blades, resembling a petiole

pseudospikelet (bamboos) – spikelet in which the outer glumes or bracts subtend axillary buds which can develop to form lateral spikelets or branches

raceme – in grasses, an unbranched axis bearing spikelets; racemes may be solitary, digitate, or scattered

raceme base – short stalk beneath the individual racemes of a pair in some Andropogoneae

raceme pair – pairs of racemes supported by spatheoles in the compound panicles of some *Andropogoneae*

rachilla - the central axis of the spikelet which bears the florets

rachilla extension – a prolongation of the rachilla beyond the uppermost (or single) floret

rachis - the axis of a raceme

secondary spathe – spathe supporting a second tier of branching within the compound panicle of some *Andropogoneae*

semelauctant (bamboos) – inflorescence with glumes not subtending viable buds or branches

sinus - the space between two projecting lobes or teeth

spathate - with spathes

spathe – a bract or modified bladeless leaf subtending the inflorescence or part of it

spatheole – the uppermost spathe supporting the racemes within the compound inflorescence of some *Andropogoneae*

spikelet – the basic unit of a grass inflorescence; usually composed of two glumes and one or more florets on a rachilla

spikelet pair – the arrangement of one sessile and one pedicelled spikelet arising from the same node characteristic of the Andropogoneae

tiller – a leafy non-flowering shoot

triad - a group of three spikelets borne together

unicaespitose (bamboos) – culms all arising in a single clump from pachymorph rhizomes

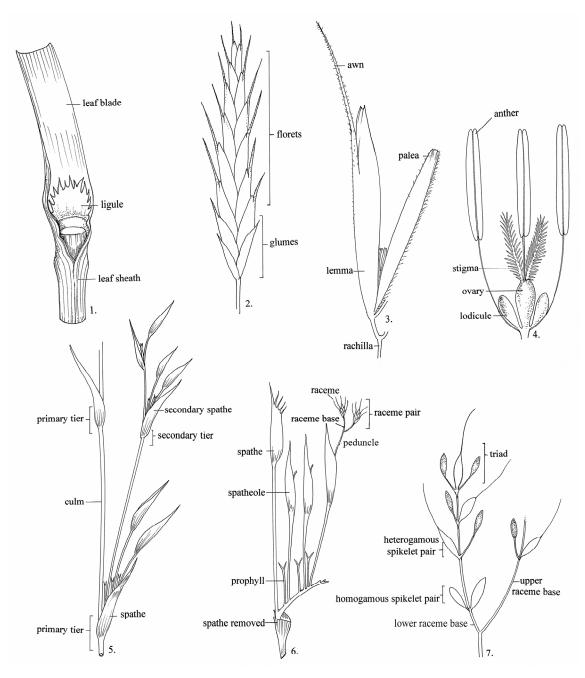


Figure 1. 1–4. Parts of a typical grass (based on *Bromus*). —1. Portion of leaf. —2. Spikelet. —3. Floret. —4. Flower. 5–7. Compound panicle and raceme pair structure in *Andropogoneae* (based on *Hyparrhenia*). —5. Compound panicle with primary and secondary tiers. —6. Compound panicle with primary tier showing raceme pair. —7. Diagram of raceme pair structure. Drawn by Yevonn Wilson-Ramsey.