English-Chinese glossary: Cereal & grass terminology

英汉术语表:谷物、禾草术语

By Dorian Q Fuller & Qin Ling April 2008

You should be familiar with these terms and the distinctions between them.

Grass family = Poaceae (older name: Graminae) 禾本科

Culm 杆 Leaf or blade 叶片

Leaf sheath 叶鞘

Ligule 舌片

Roots 根 Rhizome 根状茎 Stolon 匍匐茎

Infloresence 花序

Panicle (e.g. rice, oats, millets, especially Panicum)

圆锥花序 (如稻、燕麦、小米、特别是黍属)

Spike or Ear (e.g. pearl millet, wheat/barley/rye)

穗 (如珍珠粟,小麦/大麦/黑麦)

Pedicels or rachis 花梗 / 轴

Spikelet 小穗

Rachilla 小穗轴

Rachilla may have bristles, e.g. in Setaria 小穗轴有的有刚毛如狗尾草属

Bract 苞片

Glumes (outer bracts) 颖片 (外苞片)

 G_1 = lower glume, G_2 = upper glume G_1 = 内颖 G_2 =外颖

Lemma (upper or dorsal surface of grain) 外稃

Palea (lower or ventral surface of grain) 内稃

Awn.芒

Awns are not always present. In wheat, "bearded" wheat has awns.

(spiklets may sometimes be joined in an involucre, e.g. in job's tears/ *Coix* or pearl millet/ *Pennisetum*; in *Pennisetum* the involcre has a pedicel with many bristles at its apex: a similar structure is found in related wild grasses such as *Cenchrus*)

(有时穗集中在一个总苞内,如薏苡/Coix、珍珠粟/Pennisetum、狼尾草属的总苞有一个花梗,顶端有许多刚毛;另一个类似结构的相关野生禾草属是蒺藜草

Spikelet contains flower (with anthers and pistils)穗包含花(花粉囊和雌蕊)

Or when mature, contains grain. 成熟后,为颖果(种子)

Grain: dorsal surface with scutellum/ embryo 颖果 背部有盾片/ 胚

Ventral surface with hilum, sometimes with furrow 腹部有种脐,有时有沟

Hilum and scutellum are considered the grain base; the other end is the apex 底部/顶部的区分 In wild grasses, spikelet should disarticulate (shatter) 野生禾草的穗应该自动落粒。

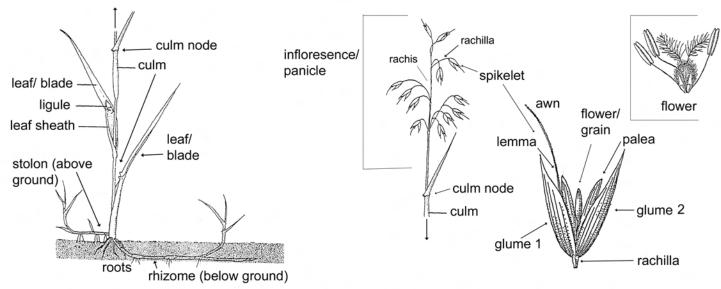


Diagram of oat (Avena sp.) plant, indicating the plant parts of a typical grass (after Hubbard 1960)

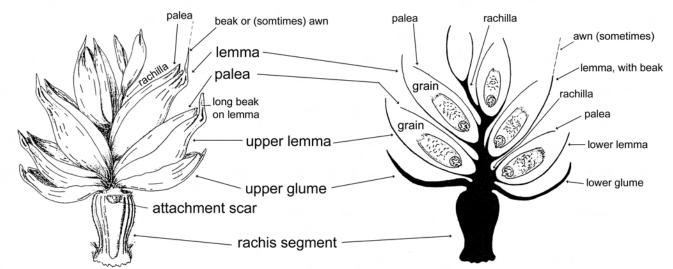
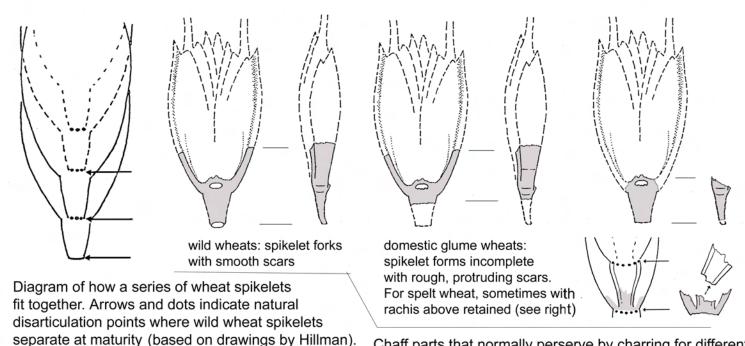


Diagram of a single wheat spikelet, with cross-section at right (after Hervey-Murray 1980)



Chaff parts that normally perserve by charring for different wheat categories (wild, glume, free-threshing)

