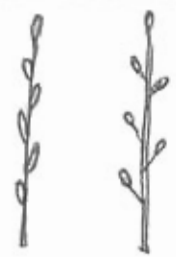


Alien grasses in Norfolk - a quick visual key of the likely species. 1

- Use Cope & Gray (BSBI) &/or Stace key until familiar; Ryves et al. (BSBI) illustrations occasionally useful.
- If an unusual or rare species found may have to start with the Stace Poaceae generic key; press some material immediately (? for NWH herbarium and as voucher).



SPIKE / RACEME



Lolium:- One glume only.

L. temulentum



Glume ± longer than spikelet

Youngest leaf convolute



L. multiflorum

Vulpia

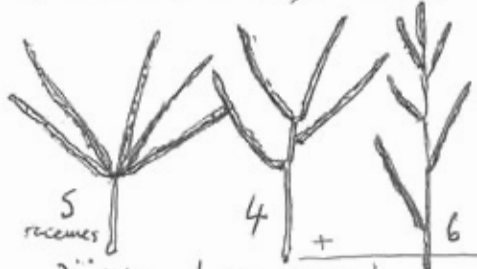
2 glumes



Hainardia Cylindrica

Look alike for Parapholis strigosus * See Cope

MULTIPLE RACEMES (digitate)



Digitate

Subdigitate

Conjugate raceme

Digitaria sanguinalis (4-12)
Cynodon dactylon (3-6)

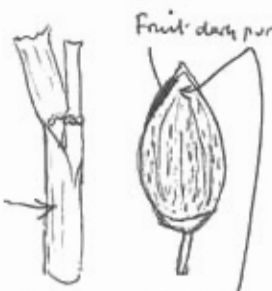
Digitaria ischaemum (2-6)
Eleusine

Bracharia
Urochloa
some *Paspalum* (See Cope & Gray) Are rare

Digitaria

* NB Diagnostic upper glume is dorsal (ie against rachis & not readily visible in situ.)
Spikelets flattened dorsiventrally

D. ischaemum

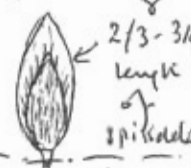


Glabrous sheaths
Upper glume nearly as long as spikelet

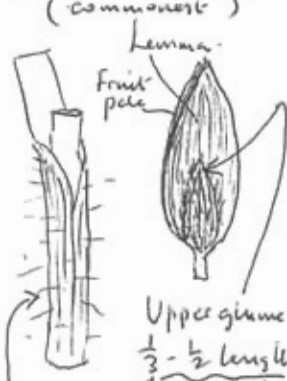
Spikelet broader & often purpleish.

D. ciliaris (rare):

like *D. sanguinalis* but upper glume longer



D. sanguinalis (commonest)



Upper glume 1/3 - 1/2 length of spikelet.
Sheaths very long hairy - sometimes sparse, occasionally glabrous

Lobed dense panicle

Polygogon vitidis

Annual or perennial (perennial in Norfolk)

- Only narrowest *Polygogon*.
- V. characteristic pale silvery grey colour to panicle (brighter green when young)



Pale silvery grey

Eleusine

Usually racemes arranged in subdigitate whorls

E. africana

Racemes broader with Festuca-like spikelets



E. indica (v. rare)



Longer spikelets

(perennial) Normally laterally flattened



Cynodon

(annual) Dorsiventrally flattened



Digitaria

Cynodon

(often mistaken for *Digitaria*) *

Distinguished from *Digitaria* by:
• Perennial habit - prostrate branching stems (lawgrass in tropics) & tillers.
• More normal relationship of glumes to spikelets (see above)

C. dactylon

Perennial habit



Ligule membranous v. short ciliate (0.2-0.3 mm)

C. incompletus

(Very rare) Distinguished by ligule



No. 0.4

CONTRACTED SPIKE-LIKE PANICLE

lobose / cylindrical / clubbed / fusiform / ± lobed



With Bristles or Awns

Without bristles/awns

Setaria

Groups of 5-8 spikelets

S. viridis
- Moderately bristly
- Bristles silky pale green
- 2-4 bristles per spikelet

S. pumila
- Very bristly
- Bristles always orange red
- 5-10 bristles per spikelet

S. verticillata
- V. sparsely bristly
- Bristles pale green
- Fusiform shape - gappy at base
- 1-2 bristles
- Bristle barbs retrorse (Stalk is doling)

"*S. x verticilliformis* / *S. ambiguus* some but with barbs retrorse is worth check!"

Polypogon

Awns from glumes *

V. hairy looking
(V. long whiteish hairs)
Slightly lobed when large

V. variable in height
NB 7 other spp
illd. in Ryves (BSBE)
Native or alien (bird feed etc)

Apera

Annuals
V. delicate
A. spica ventris: V. open panicle

Cynosurus

± one sided panicle
Spikelets in pairs *

C. echinatus
stolon sp.
Panicle 6 mm
1 stolon (1 flower spikelet in each pair (1/2))

Hordeum

Spikelets in 3's *
Awns

H. murinum
Central awns long hairy

H. jubatum

V. long awns

V. fine lateral flowers
Lign. v. strong hairy
Lign. salt - 1000000

H. vulgare

Auricles large & glaucous *

2 rowed
6 rowed

Triticum

Awned or unawned
Fine & hairy auricles

Phalaris

1 flower spikelets
Flower enclosed
Annual
P. canariensis

P. aquatica

Rhizomatous perennial

Blunt ligule (3-10 mm)

P. minor

Annual

Ligule pointed (3-8 mm)

P. paradoxa

Annual
Panicle club shaped

6-7 spikelets in clusters
Folicle sp. or
Two forms
Clubbed

Secale

S. cereale

Usually very tall, long awns
- Blueish
- Panicle ± nodding @ maturity
Spikelets in 2's

X Triticosecale

Often very tall & nodding
V. long ears
Plant like Secale, spikelets like Triticum

OPEN / DIFFUSE PANICLE

Briza



Spikelets 3-5.5 mm
B. minor
(Spikelets 7.5-13 mm)
B. media - native
Spikelets 13-20
B. maxima

Poa



? + P.b.l (inland)
P. chaixii
Strongly lvs. decay; v. wild
Flattened culms
P. pratensis usually v. to wetland & recent panicle

Festuca



F. ovina agg:
Sheaths open, & glaucous (microscopic)
F. brevipila
usually purple grey green
Large spikelets *
Flowers April-May

F. rubra

agg:
Sheaths fused, often hairy basal leaves

F. rubra megastichys
usually v. tall
Long lower panicle branches
- Basal leaves usually flat

F. heterophylla

Densely tufted
often in woodland
Tall, tiller leaves v. fine compared with culm leaves

Ceratocloa

= KEELLED
(short hard) Perennials

C. carinata

v. long awned
- Lemmas 4-12 mm

C. callarctica

- Short awned
- Lemmas (10) - 12-18 mm

(+ brevis / marginata (v. rare))

Avena

Annual
A. sativa
A. fatua
A. sterilis
Callus out
A. strigosa
A. barbatula 23 bristles

Echinochloa

E. crus-galli + 3 other spp

Bromus (Cope)

Bromus/Brom
Anisantha/Beats (5 spec)

Bromus

Annuals
B. caryensis
B. horstii
B. laetivirens (An v. diff. or 13)

B. secalinus

* cf *B. comm* (see below)
Fls. debaricate

Bromopsis

Perennial
B. inermis
Lossy tufted, rhizome
Unawned (or ± awned)

Anisantha

Ann
A. sterilis > 2.0 cm
Panicle branches v. long all drooping
upper pedicel > 2.0 cm
Spikelet + awn < 60/65

A. diandra

panicle branches shorter & ascending
upper pedicel < 1.0
Spikelet + awn > 70

(var rigida v short branches stiffly erect = "rigida" - v. rare)

Bromus tectorum

Similar to a small A. but one sided, small sp. (Spikelet + awn 23-)

Anisantha madida

Spikelets similar to A. sterilis but erect < 60

Tribe Stipeae (5 spec)

Garden escapes (corn) see R