

Liste des abréviations

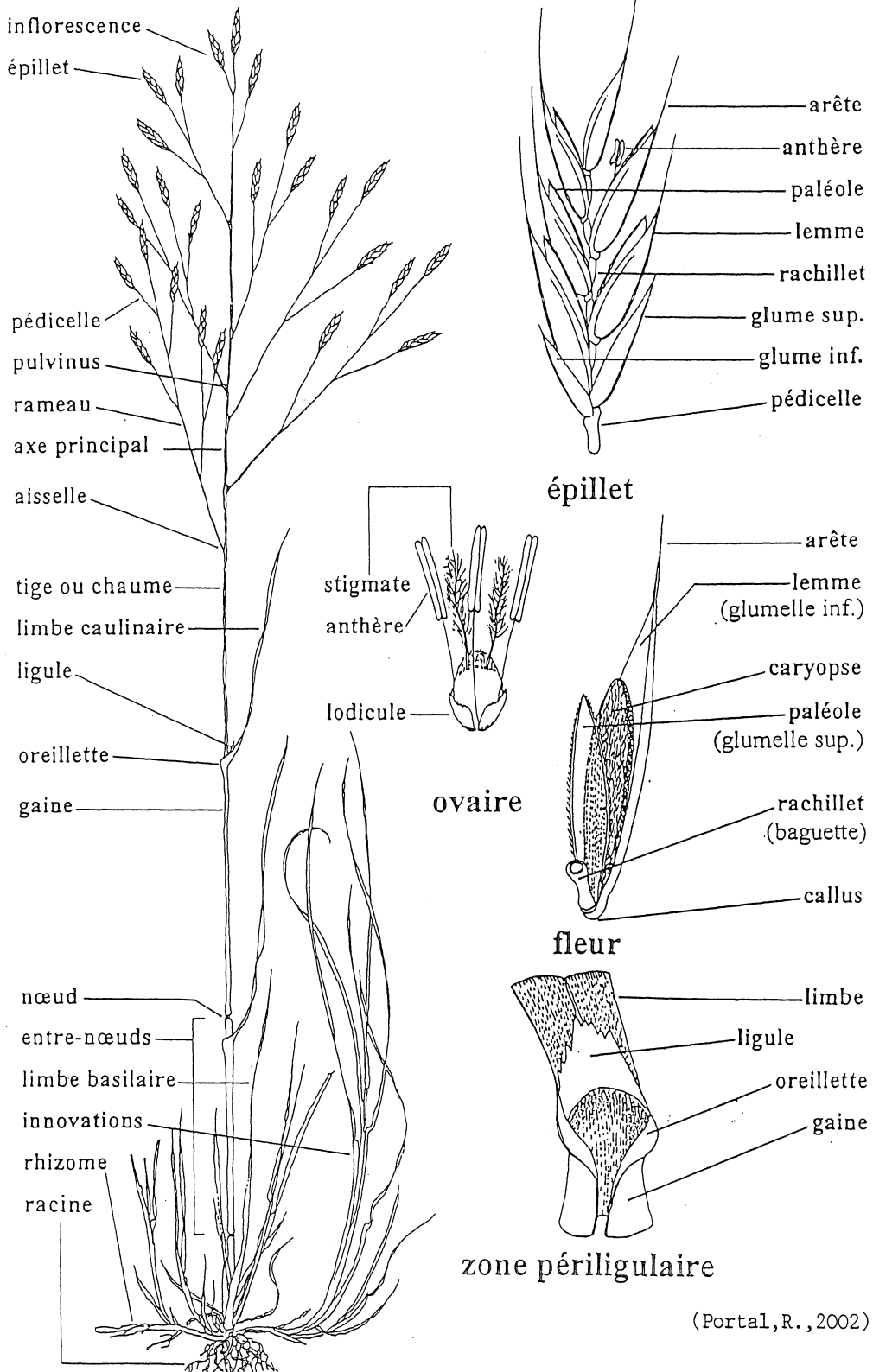
(Verklaring van de afkortingen)

<u>Nederlands</u>	<u>Engels</u>	<u>Français</u>	<u>Duits</u>
st = stengel	culm (= stem or haulm)	<i>tige ou chaume</i>	Stengel, Halm
kn = knoop	node : <i>noeud</i>		Knoten
b = blad (bladschijf)	blade, leaf : <i>feuille (limbe)</i>		Blattspreite
sch = schede (bladschede)	sheath : <i>gaine</i>		Blattscheide
li = tongetje (ligula)	ligule		Blatthäutchen
a = aartje	spikelet : <i>épillet</i>		Ährchen
sp = spil van het aartje	rhachilla : <i>rachillet</i>		Ährchenachse
k 1 = onderste kelkkafje	lower glume : <i>glume inf.</i>		untere Hüllspelze
k 2 = bovenste kelkkafje	upper glume : <i>glume sup.</i>		obere Hüllspelze
kr 1 = onderste kroonkafje	lemma : <i>lemme</i>		Deckspelze
kr 2 = bovenste kroonkafje	palea : <i>paléole</i>		Vorspelze
krs = schubjes (lodicae)	lodicules		Schwellkörper
m = meeldraad	stamen : <i>étamine</i>		Staubblatt
h = helmknop	anther : <i>anthère</i>		Staubbeutel
hd = helmdraad	filament : <i>filet</i>		Staubfade
o = vruchtbeginsel	ovary : <i>ovaire</i>		Fruchtknute
sty = stijl	style		Narbenästen
sti = stempel	stigma : <i>stigmate</i>		Narbe
vr = vrucht, zaad	grain, seed : <i>graine</i>		Früchte, Samen
D = pluim	panicle : <i>panicule</i>		Rispe
B = aarpluim	raceme spikelike : <i>racème en</i>		Scheinähre
A = aar	spike : <i>épi forme d'épi</i>		Ähre
stol = uitloper (stolon)	stolon		Überirdische Ausläufer
rhiz = ondergrondse stengel	rhizomes		Unterirdische Ausläufer
s = scheut	innovation, shoot <i>pousse</i>		Triebe

Références:

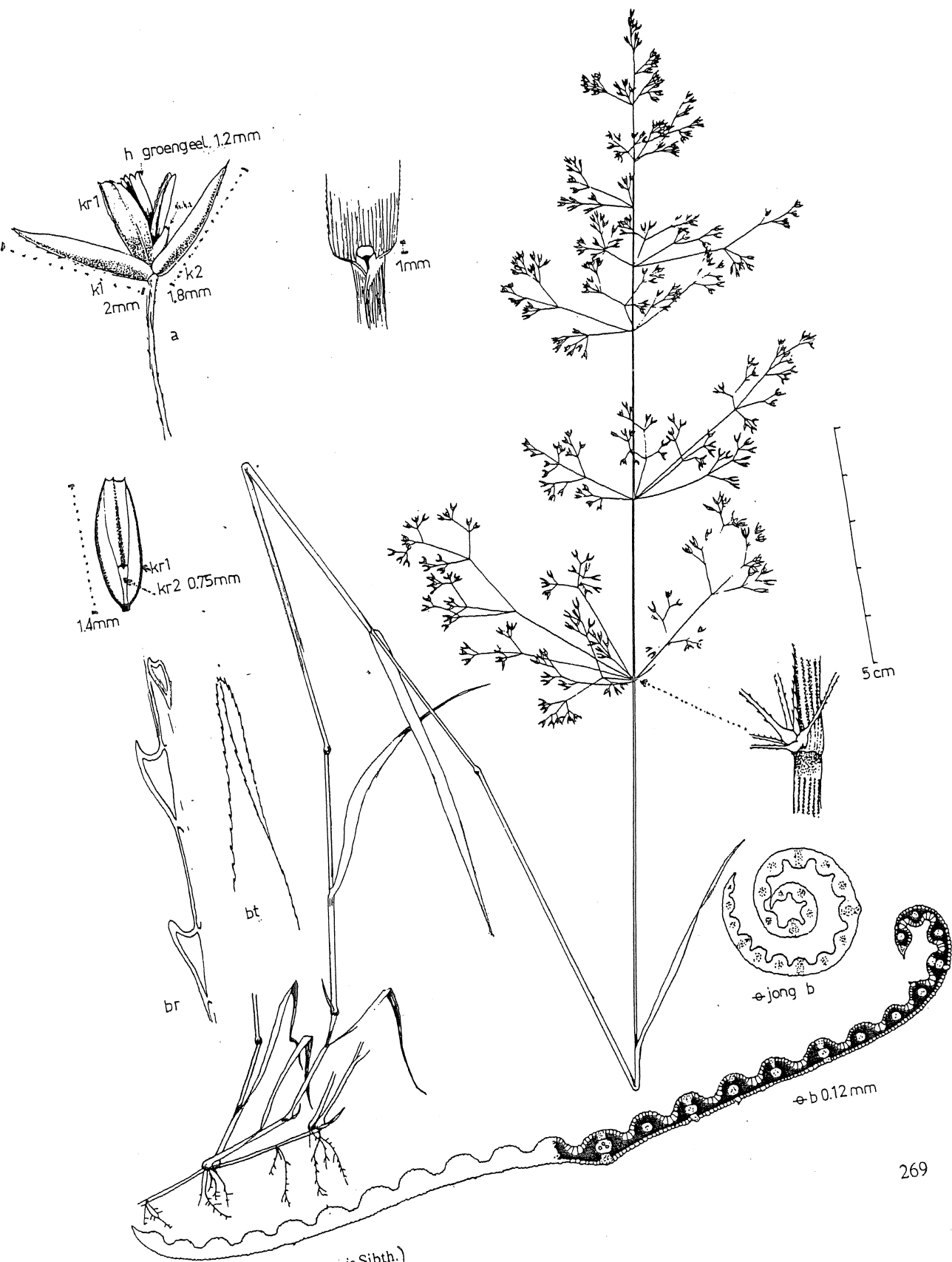
- Cope Tom et Gray Alan, 2009.- Grasses of the British Isles  
B.S.B.I Handbook n°13, Botanical Society of the British Isles, 612 p.
- Landwehr, J., 1977.- Atlas van de Nederlandse Grassen, en een aantal adventieven en gekweekte soorten, Thiem-Zutphen, 362 p.
- Portal, R., 2002.- Graminées d'Auvergne. approche pragmatique pour l'identification des genres, A compte d'auteur: 16, R.L. Brioude, Vals-près-Le Puy, F 43750, 24 p.

# Morphologie des graminées

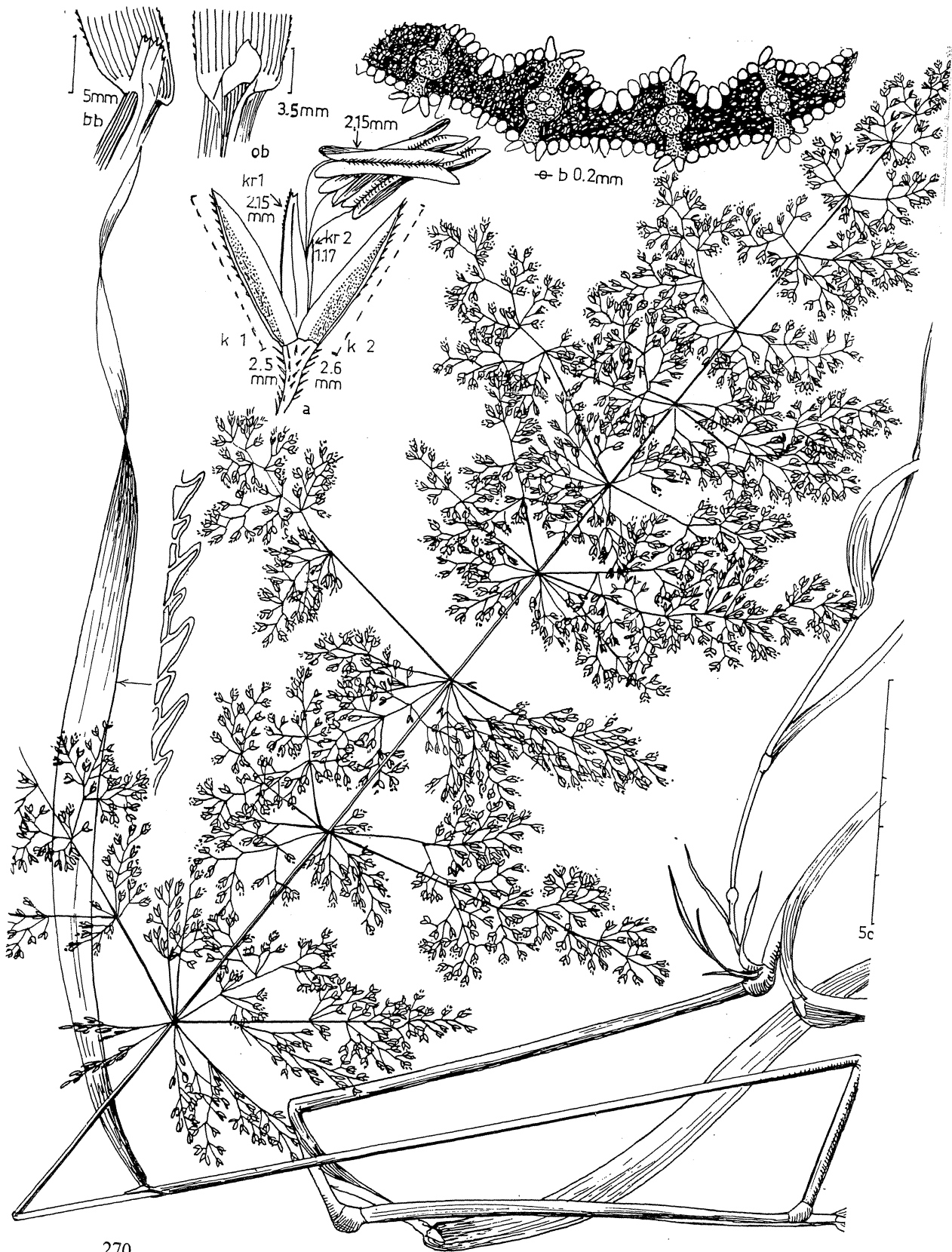


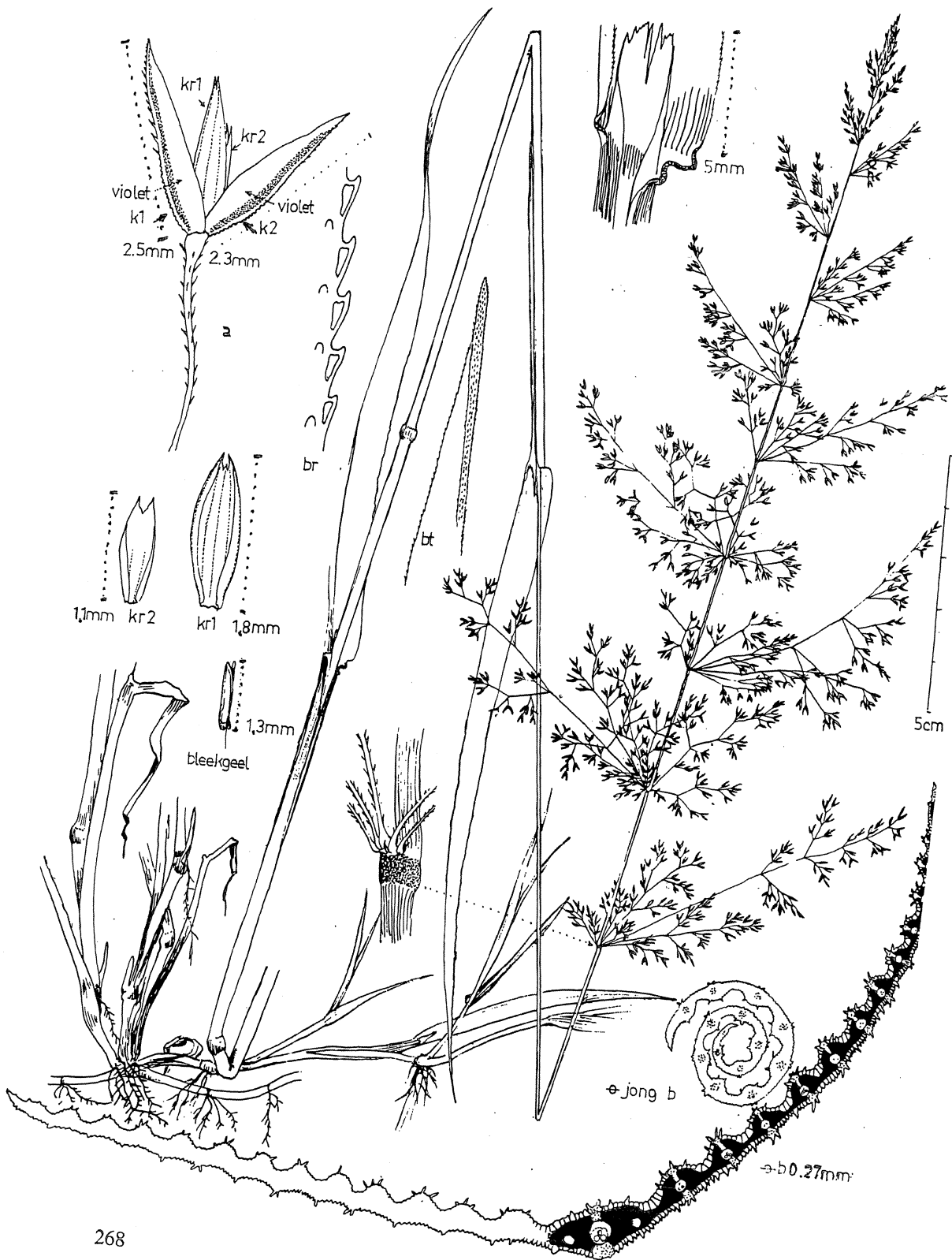


41. *Agrostis canina* L. ssp. *canina*



143. (*Agrostis tenuis* Sibth.)  
*Agrostis pallaris* L.

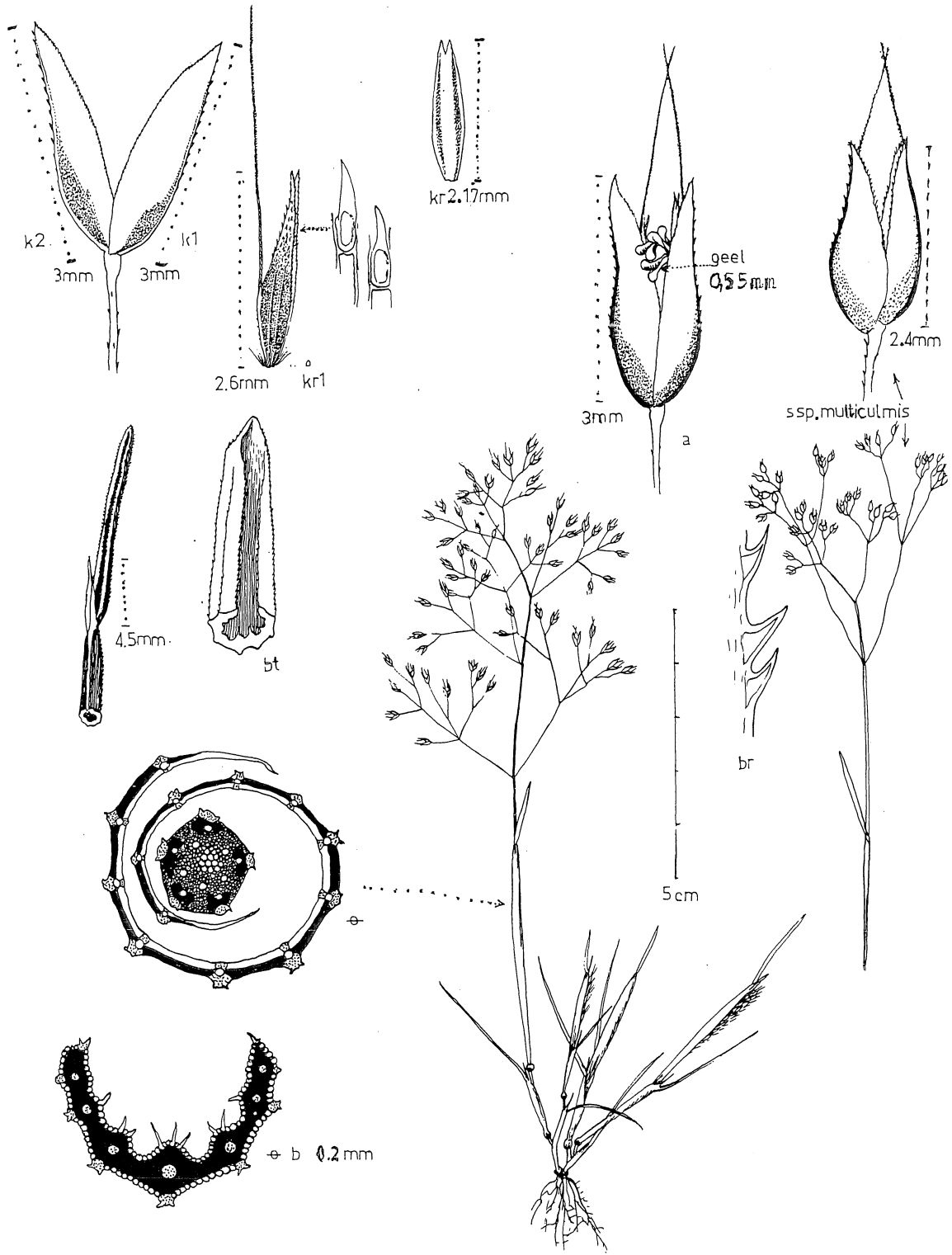




— *Agrostis vinealis* subsp. *vinealis* —

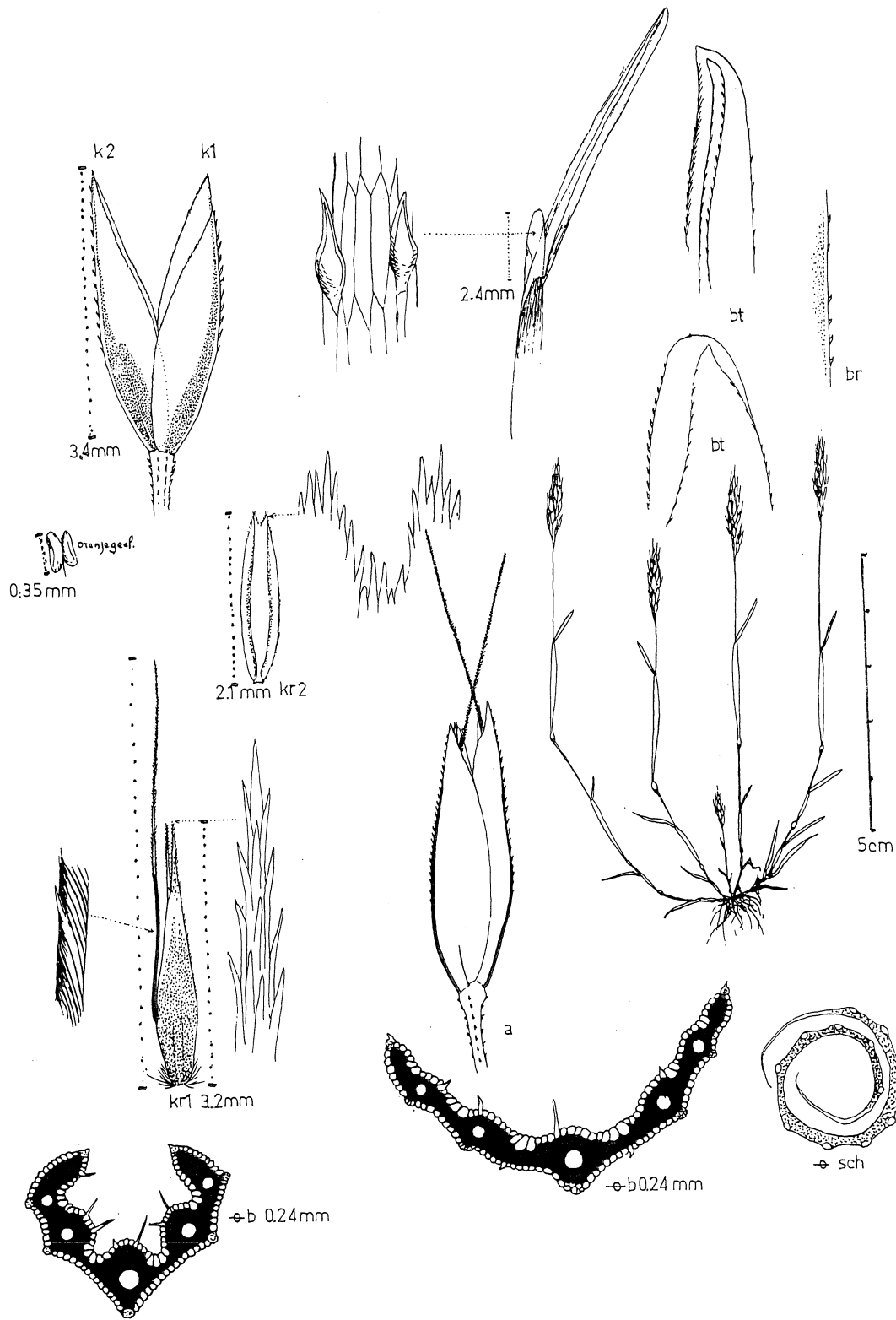


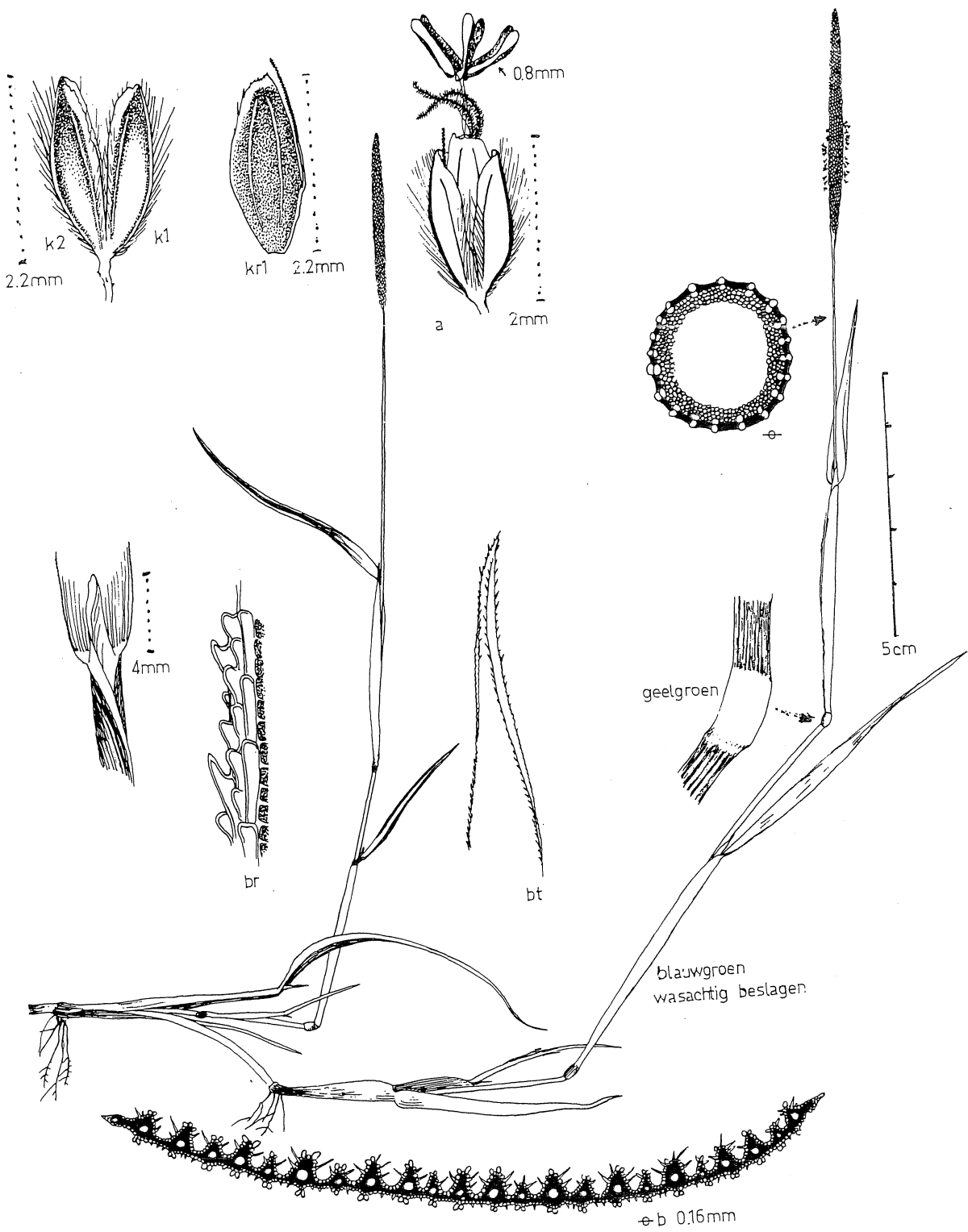
(R. Portal, 2009)



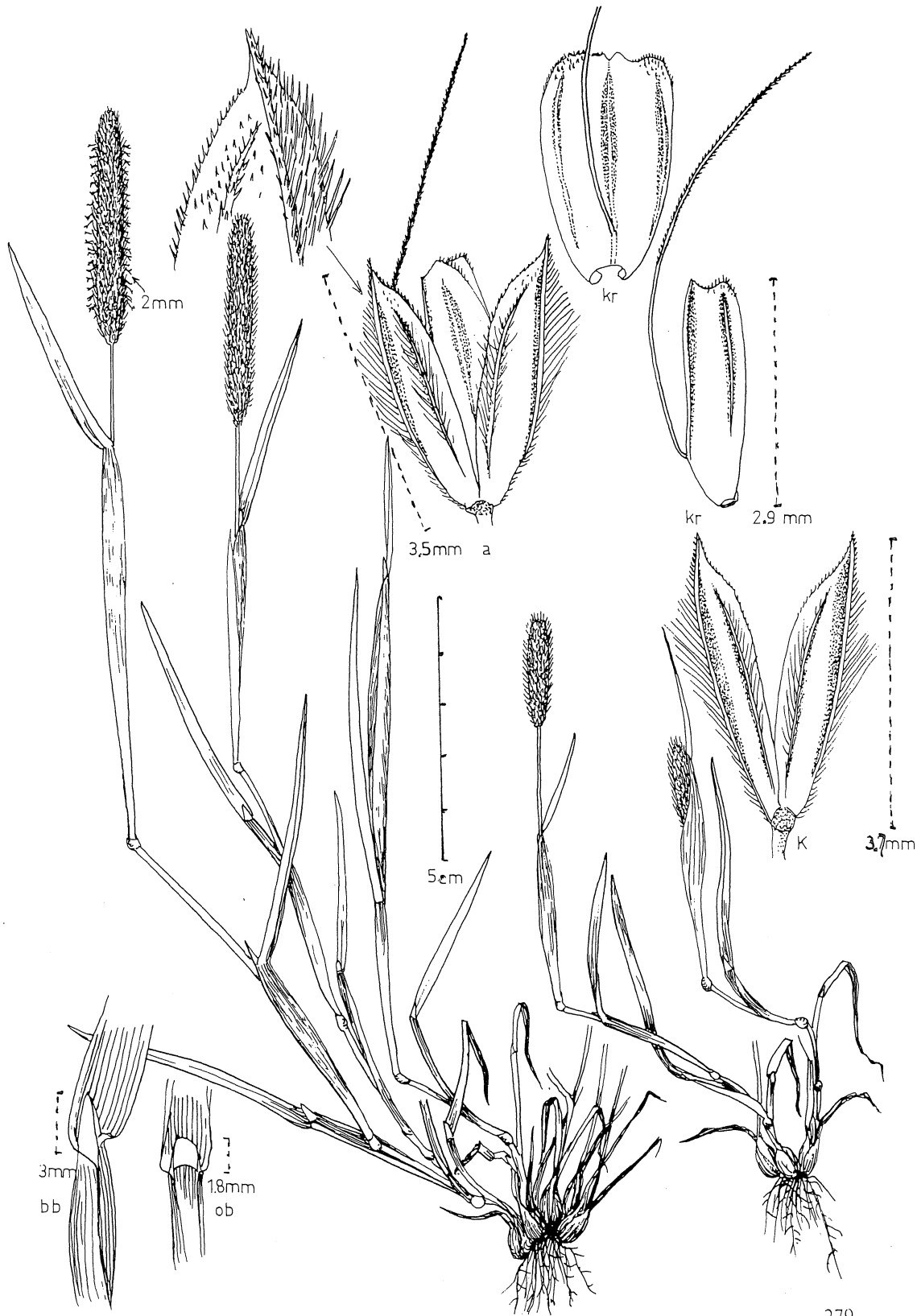
131. *Aira caryophylla* L.



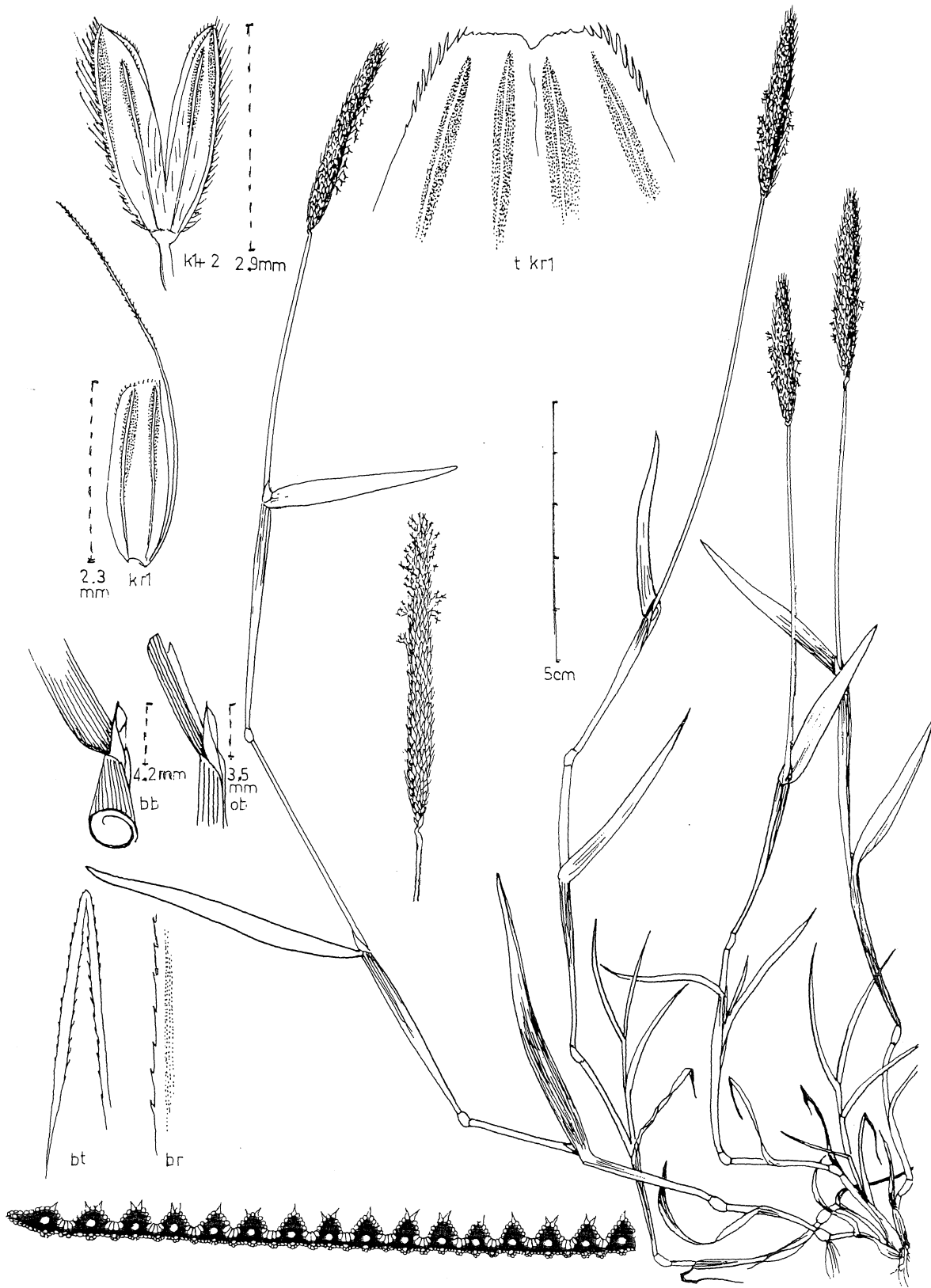


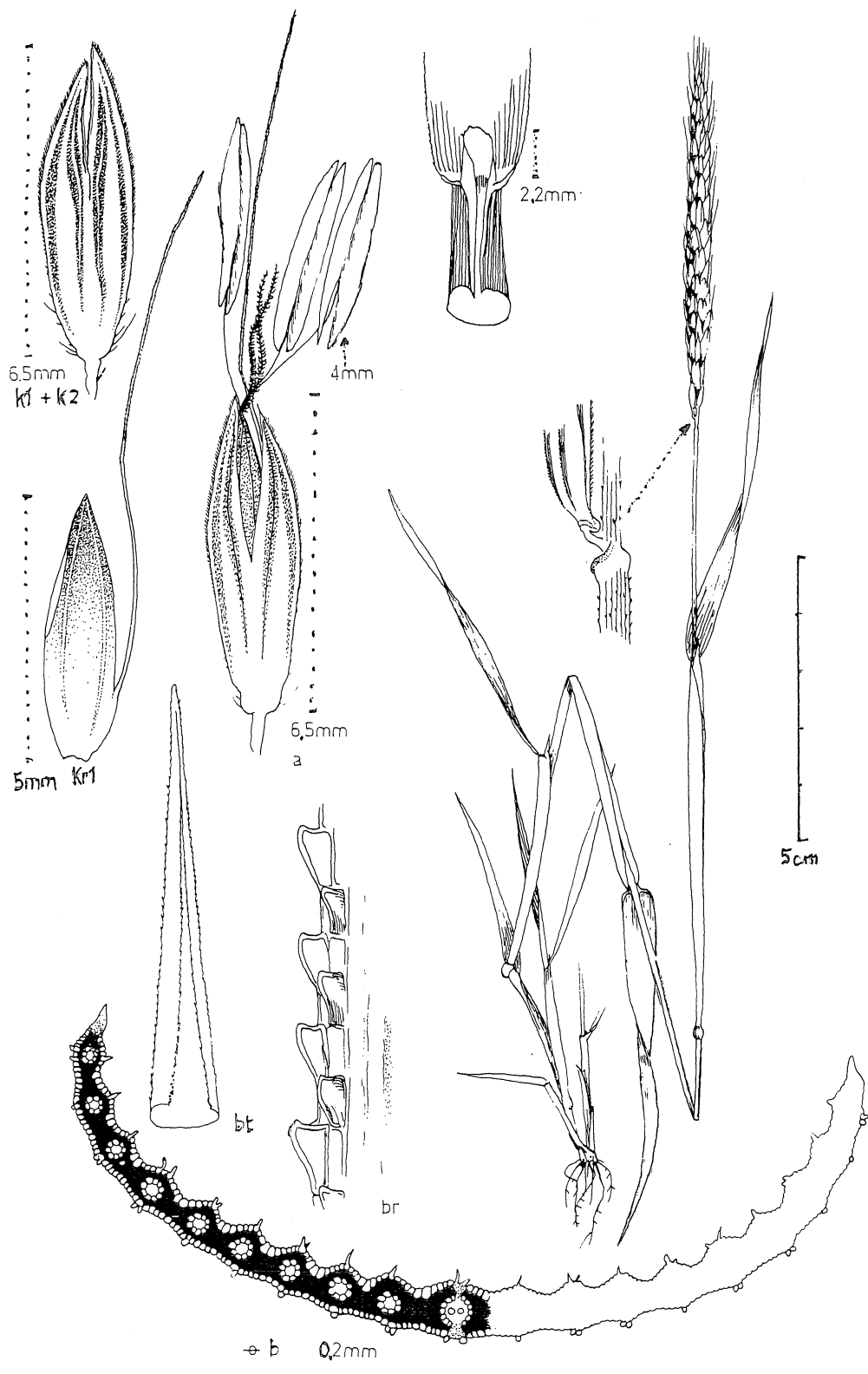


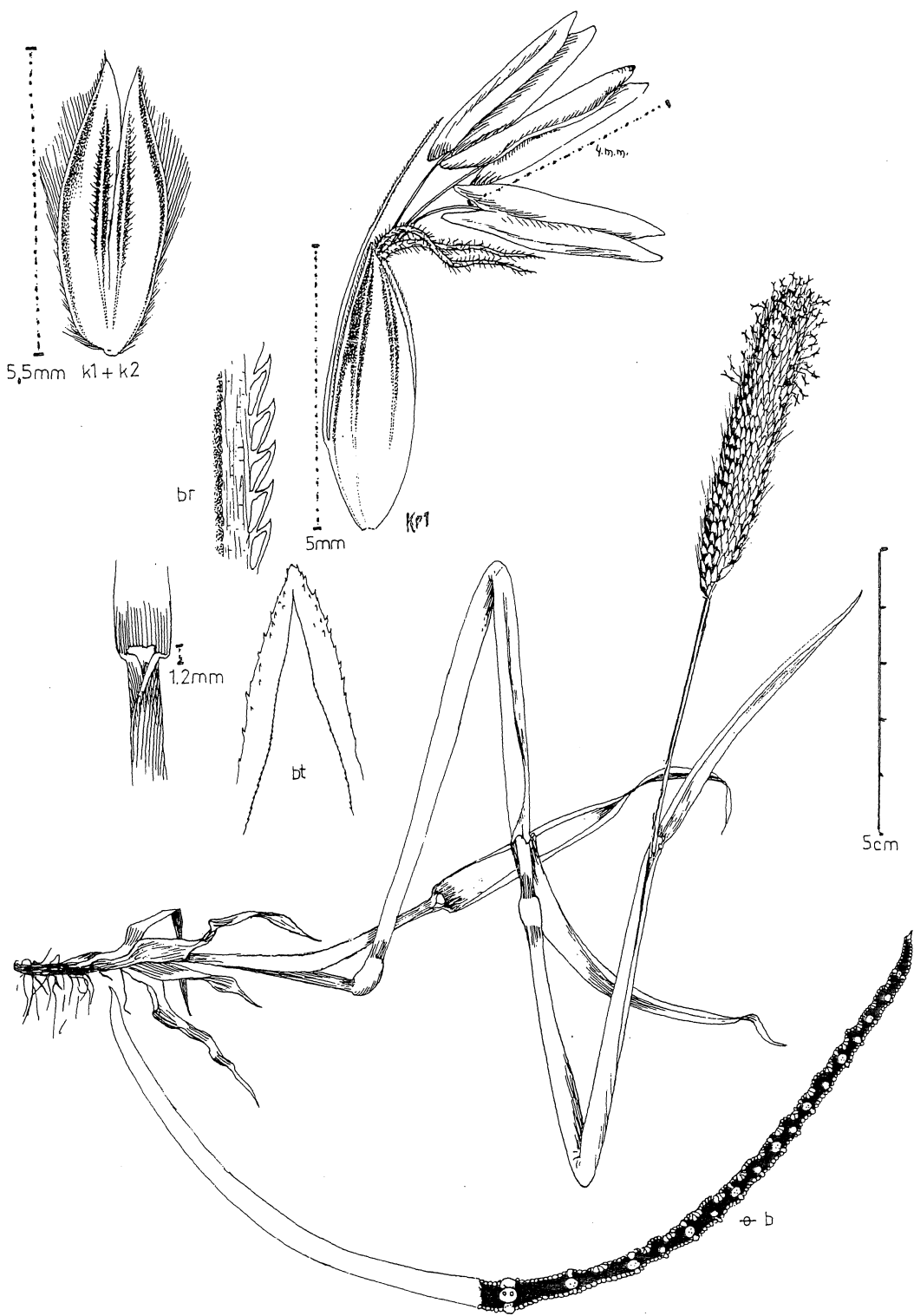
155. *Alopecurus aequalis* Sobol.

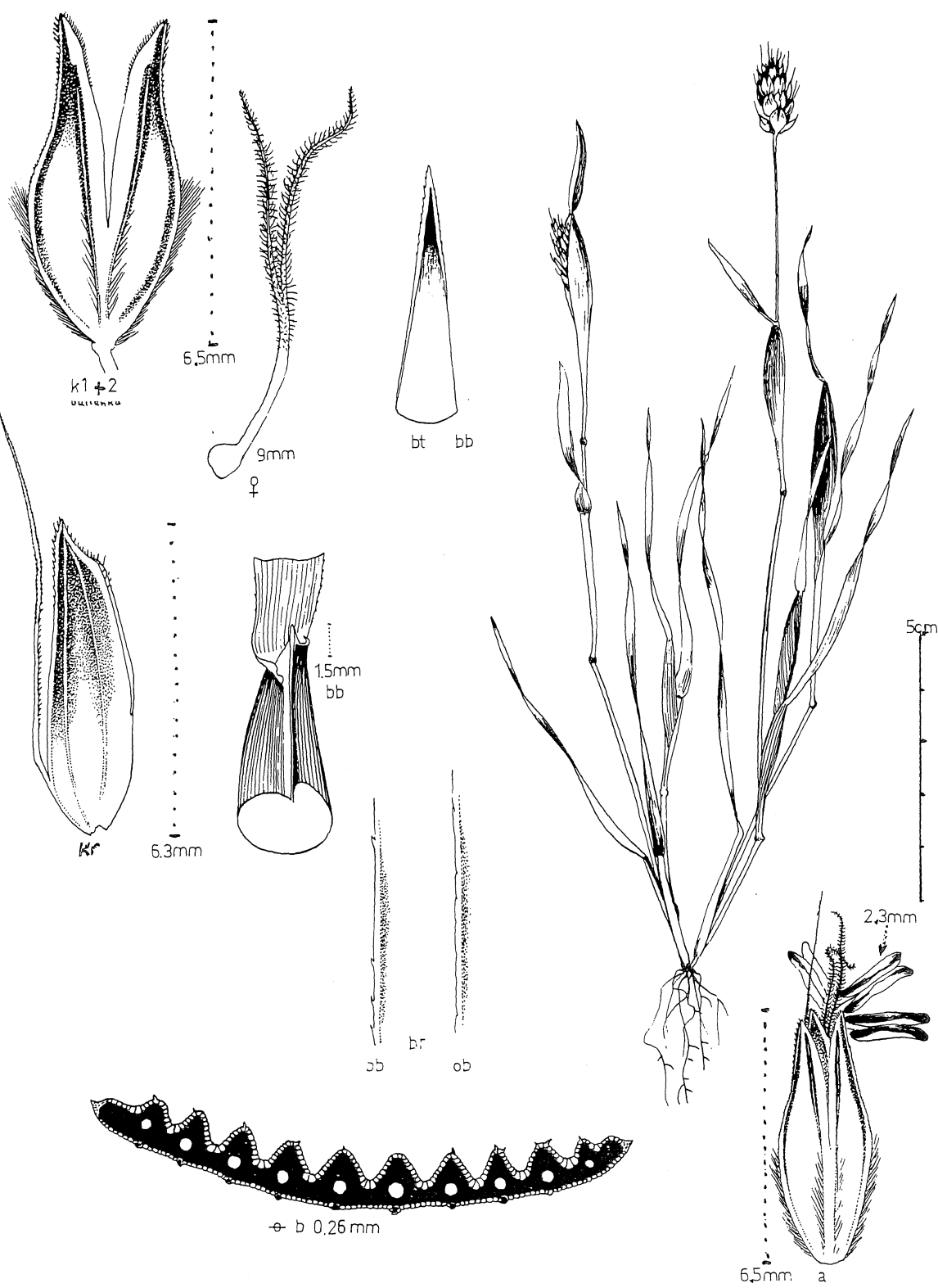


153. *Alopecurus bulbosus* Gouan

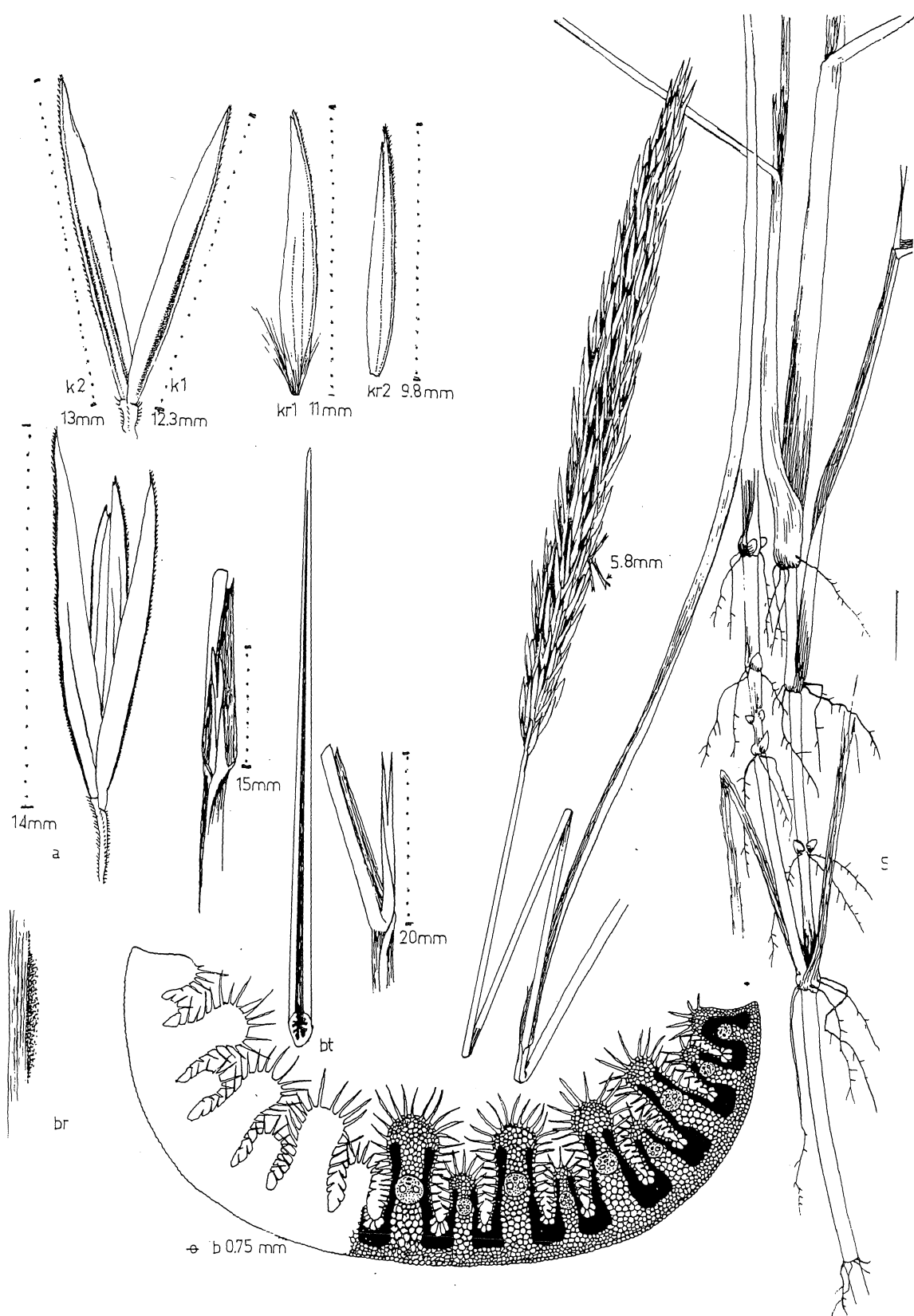




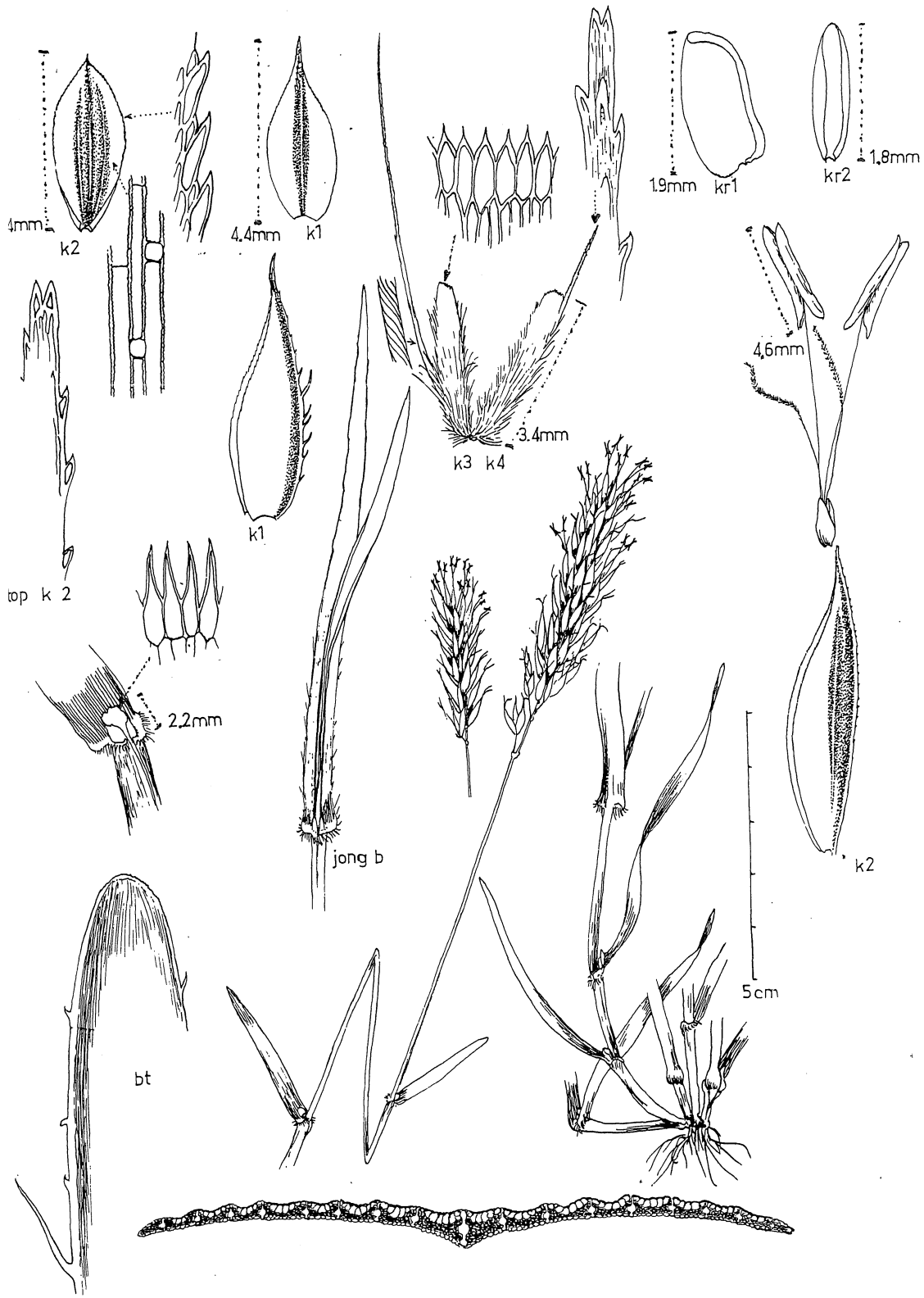




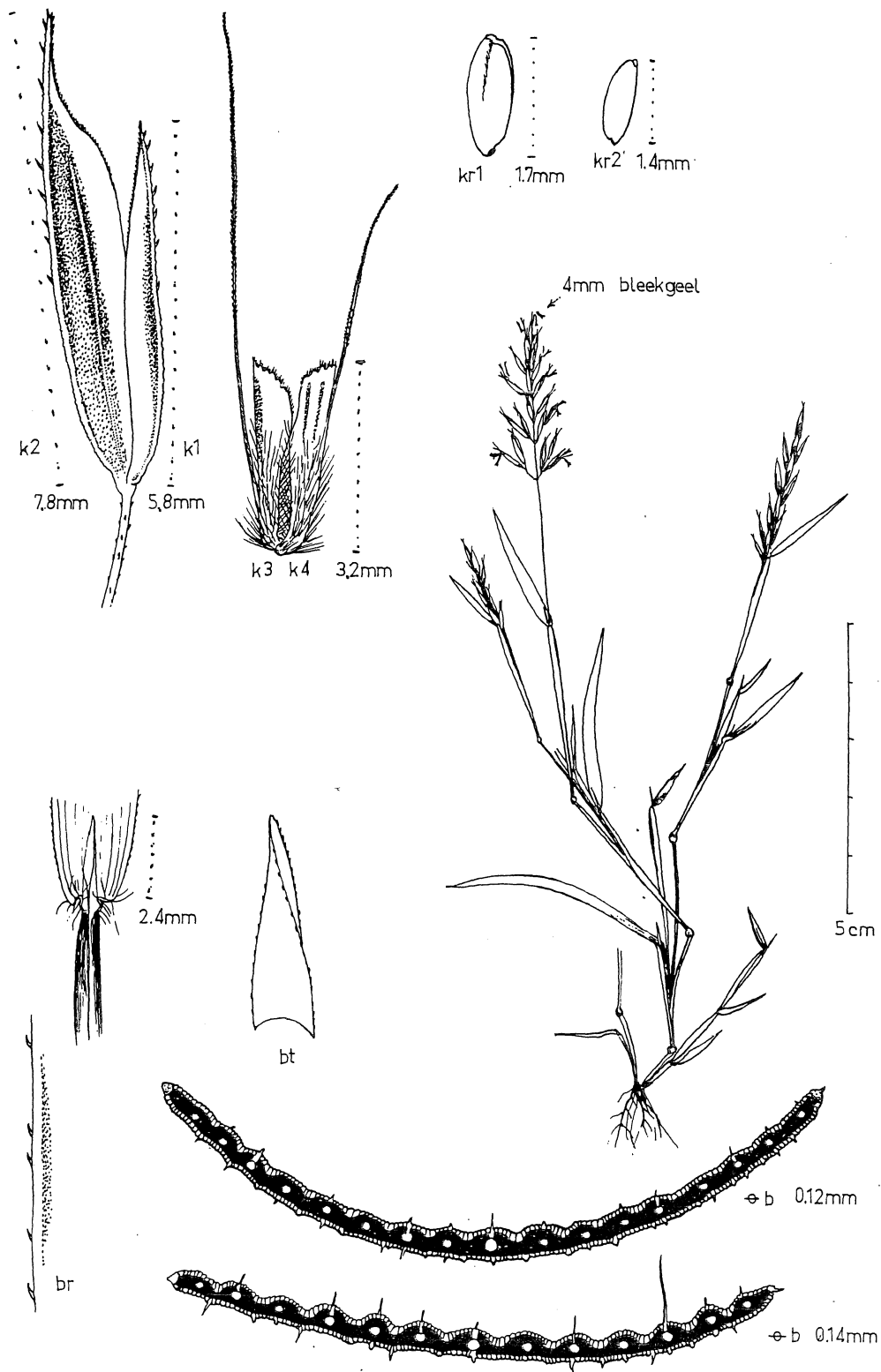
157. *Alopecurus utriculatus* (L.) Sol.



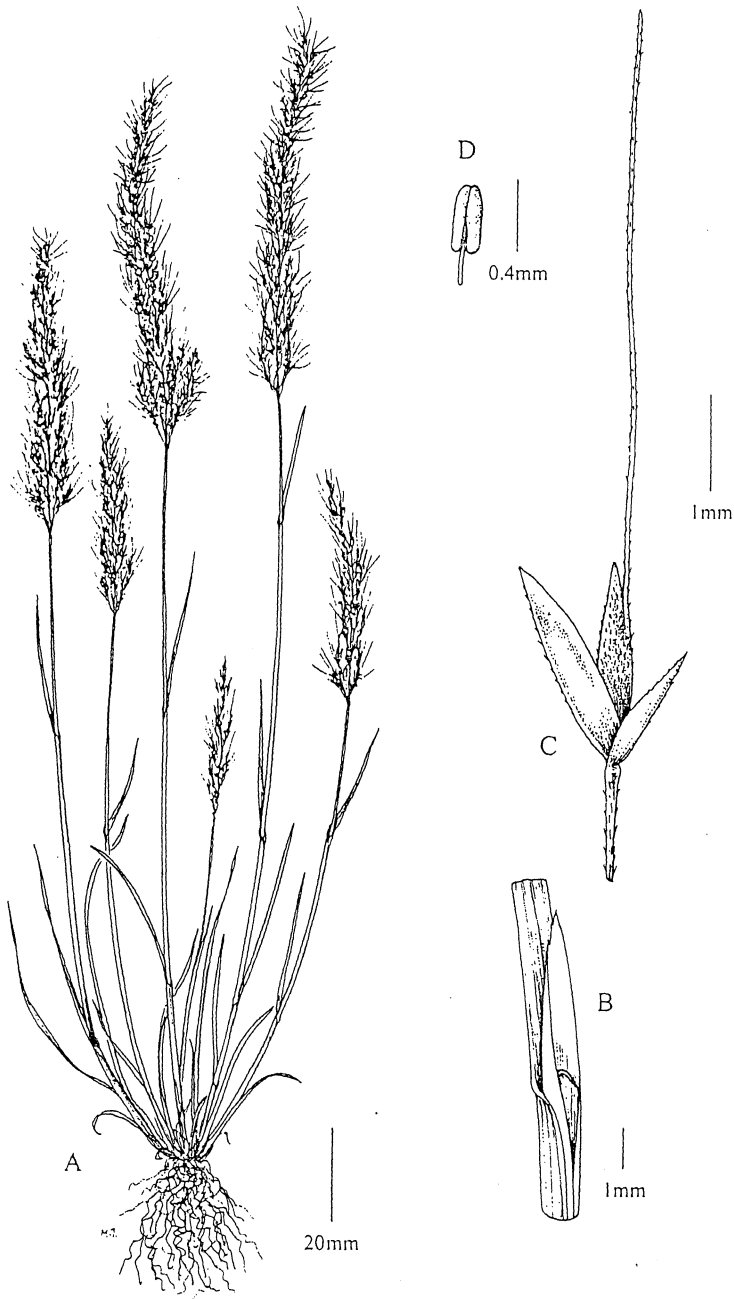




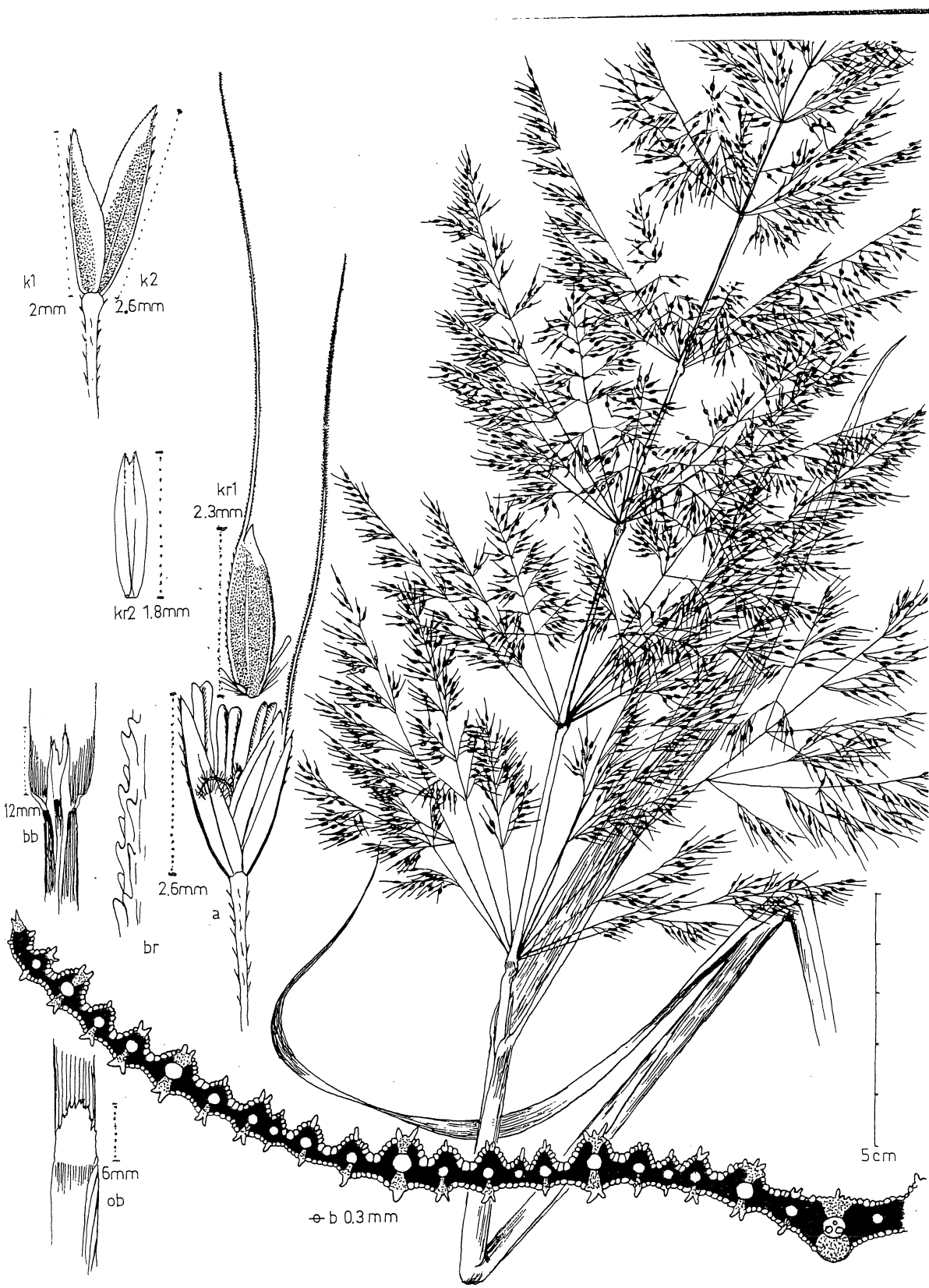
169. *Anthoxanthum odoratum* L.



*Apera interrupta* 112

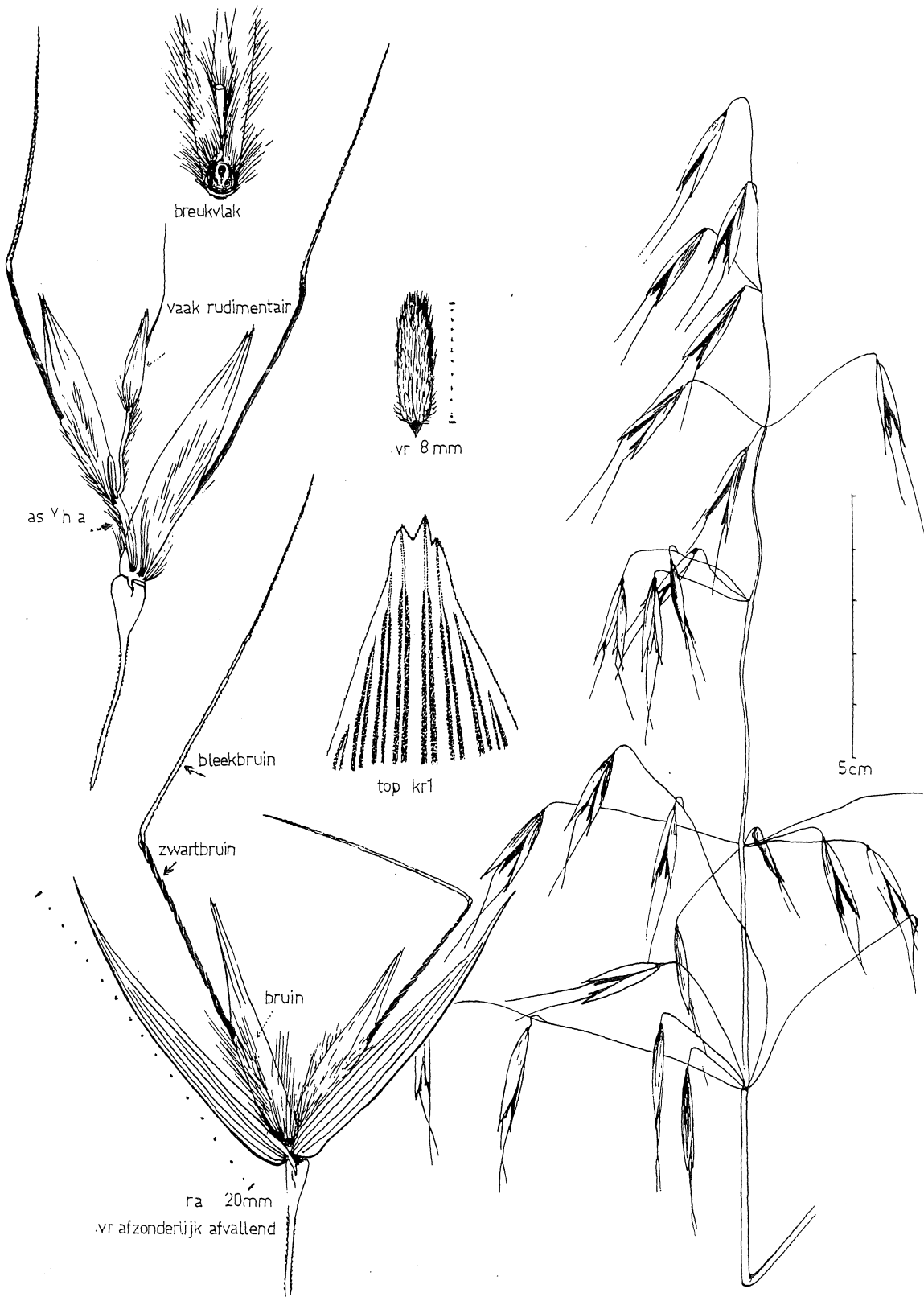


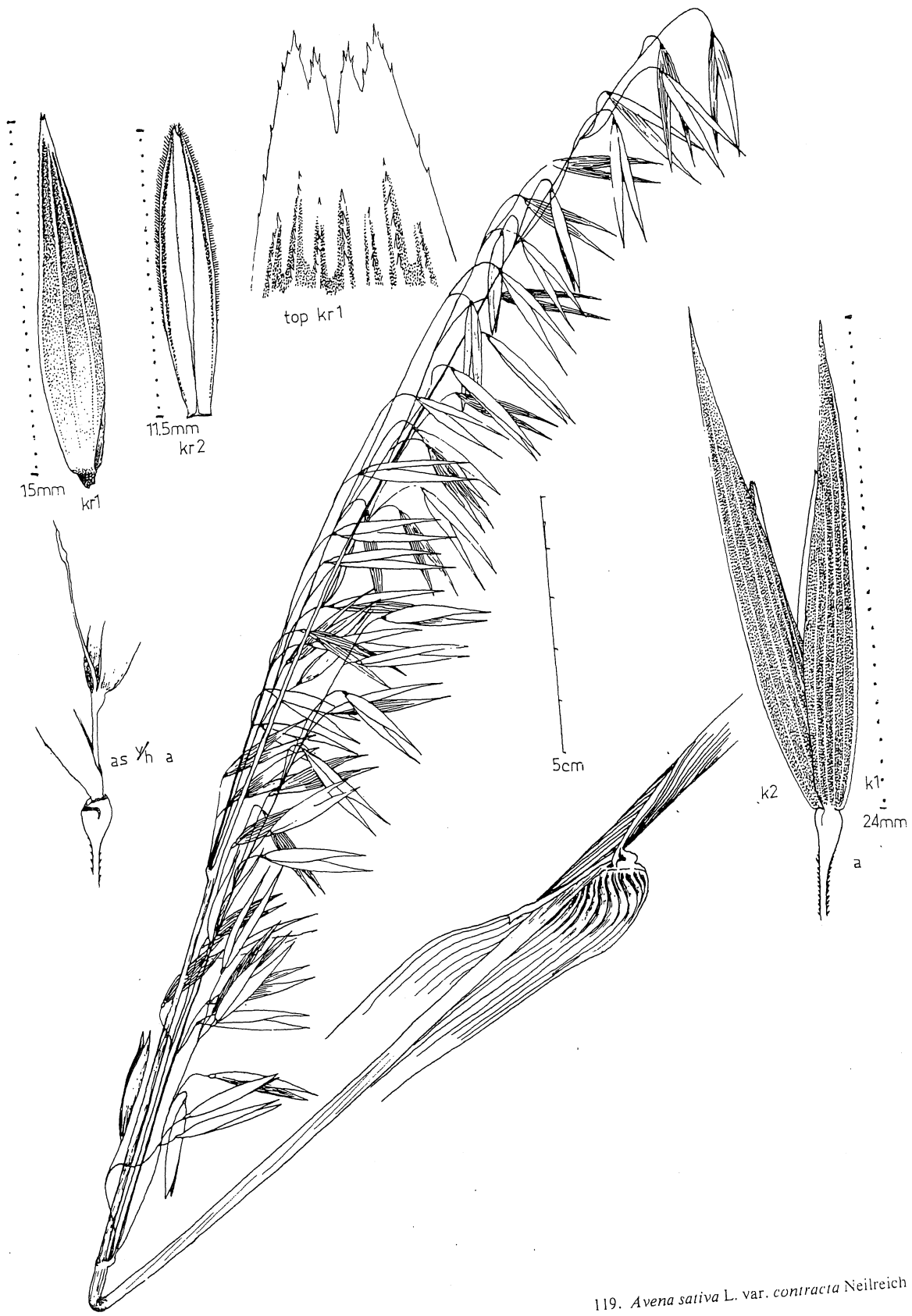
*Apera interrupta*: A, habit; B, ligule; C, spikelet; D, anther.



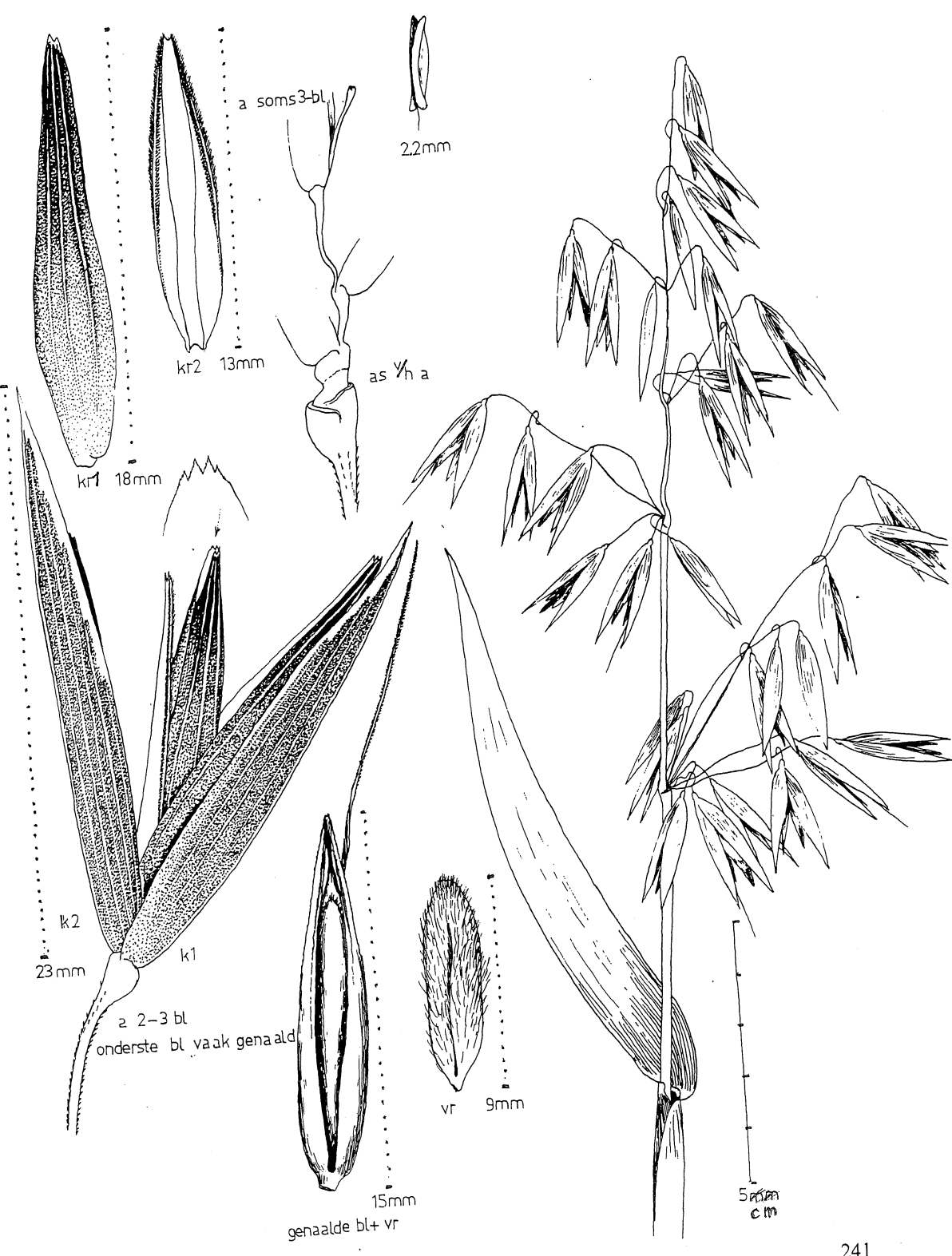


4. *Arrhenatherum elatius* (L.) P. B. ex J & ET C. Presl



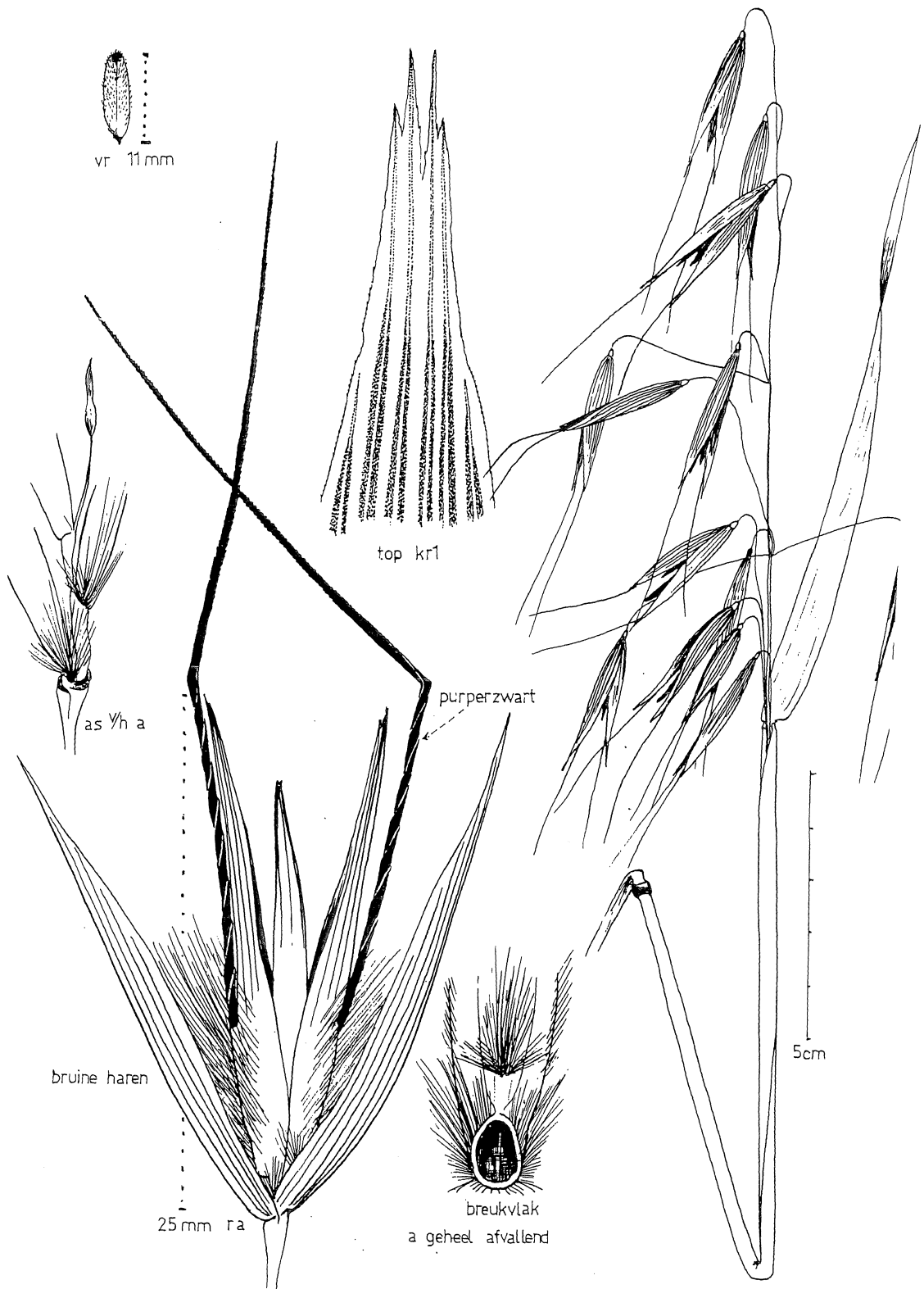


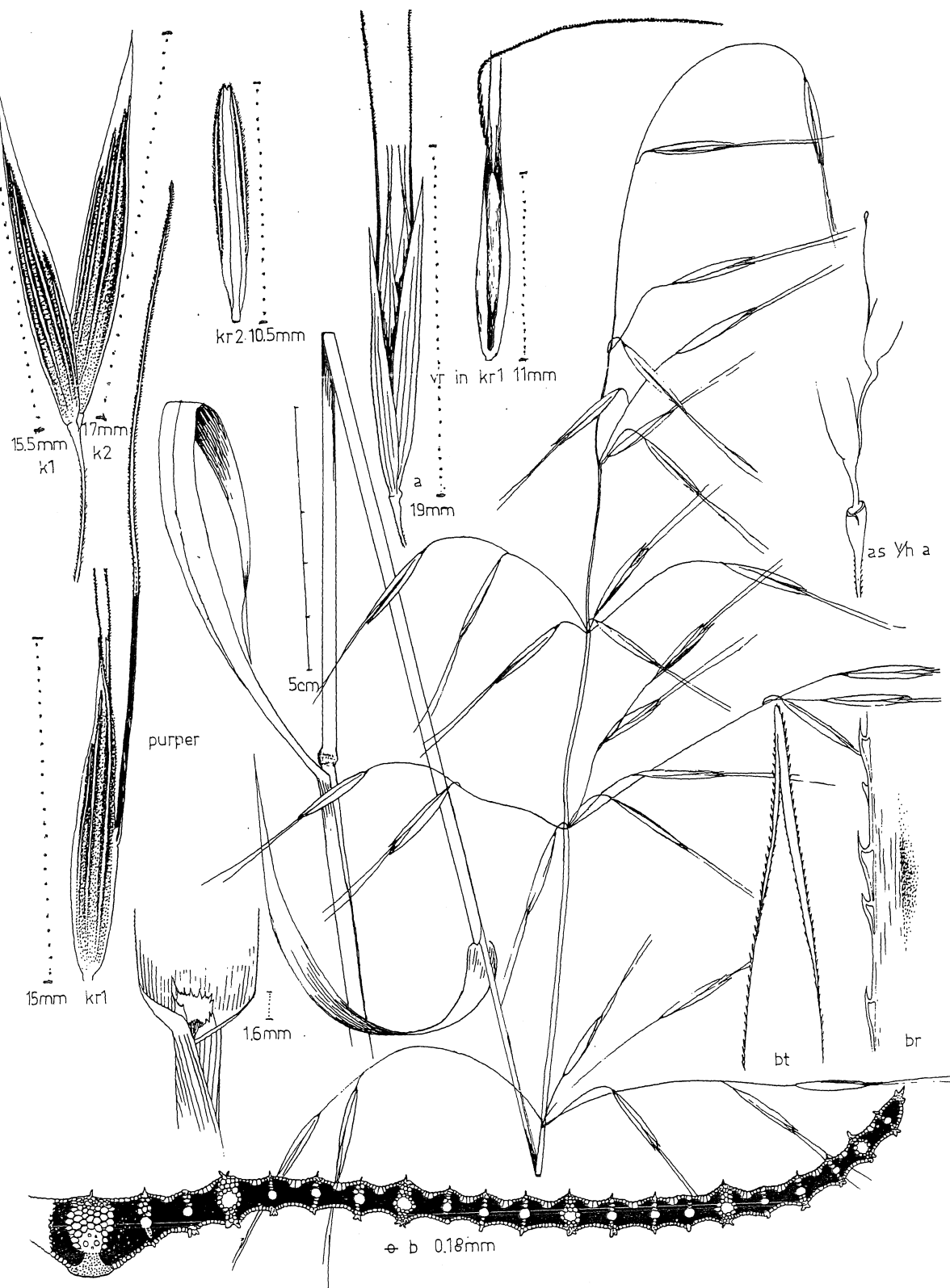
119. *Avena sativa* L. var. *contracta* Neilreich



118. *Avena sativa* L. var. *diffusa* Meilreich



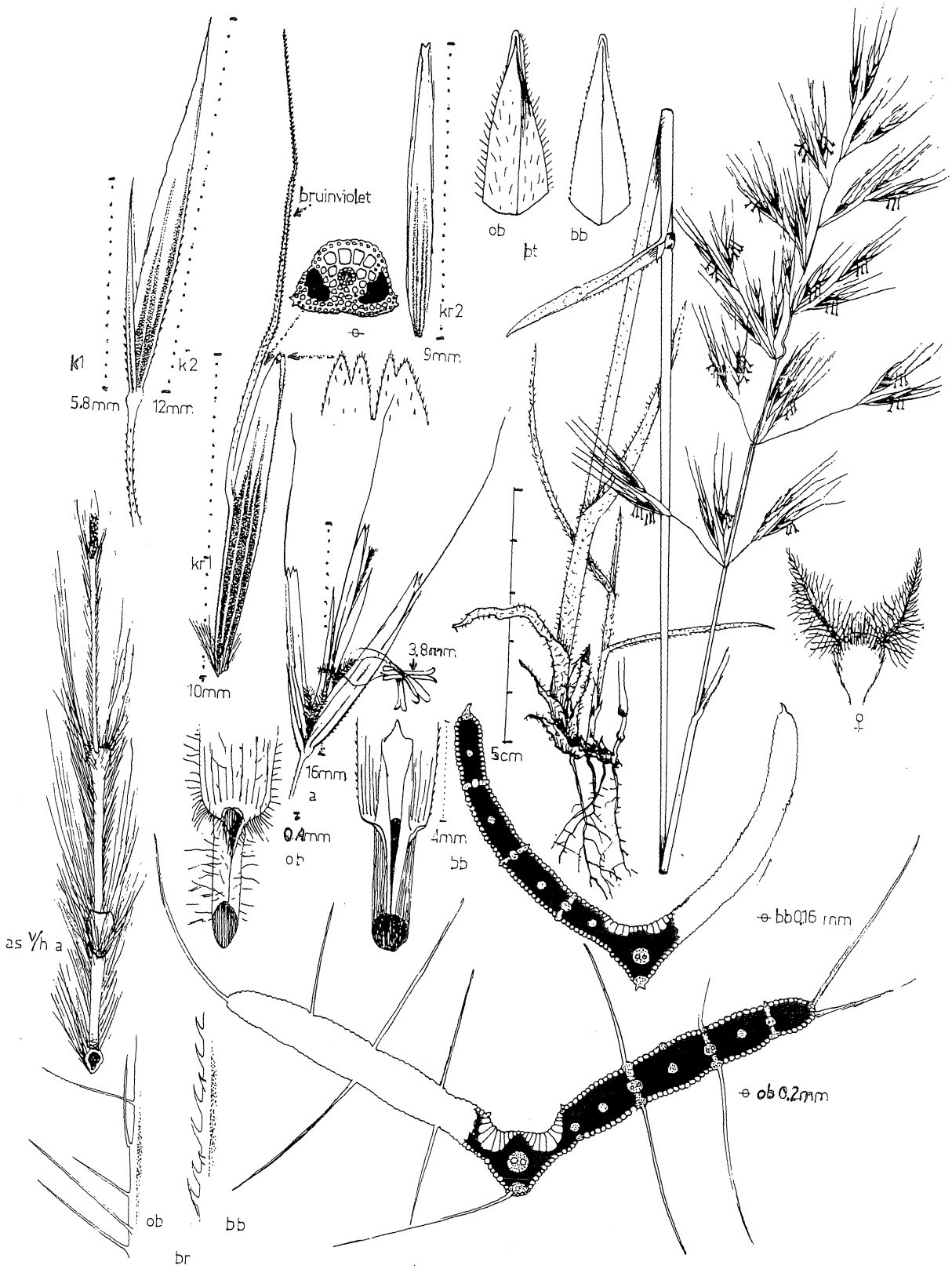




116. *Avena strigosa* Schreb.

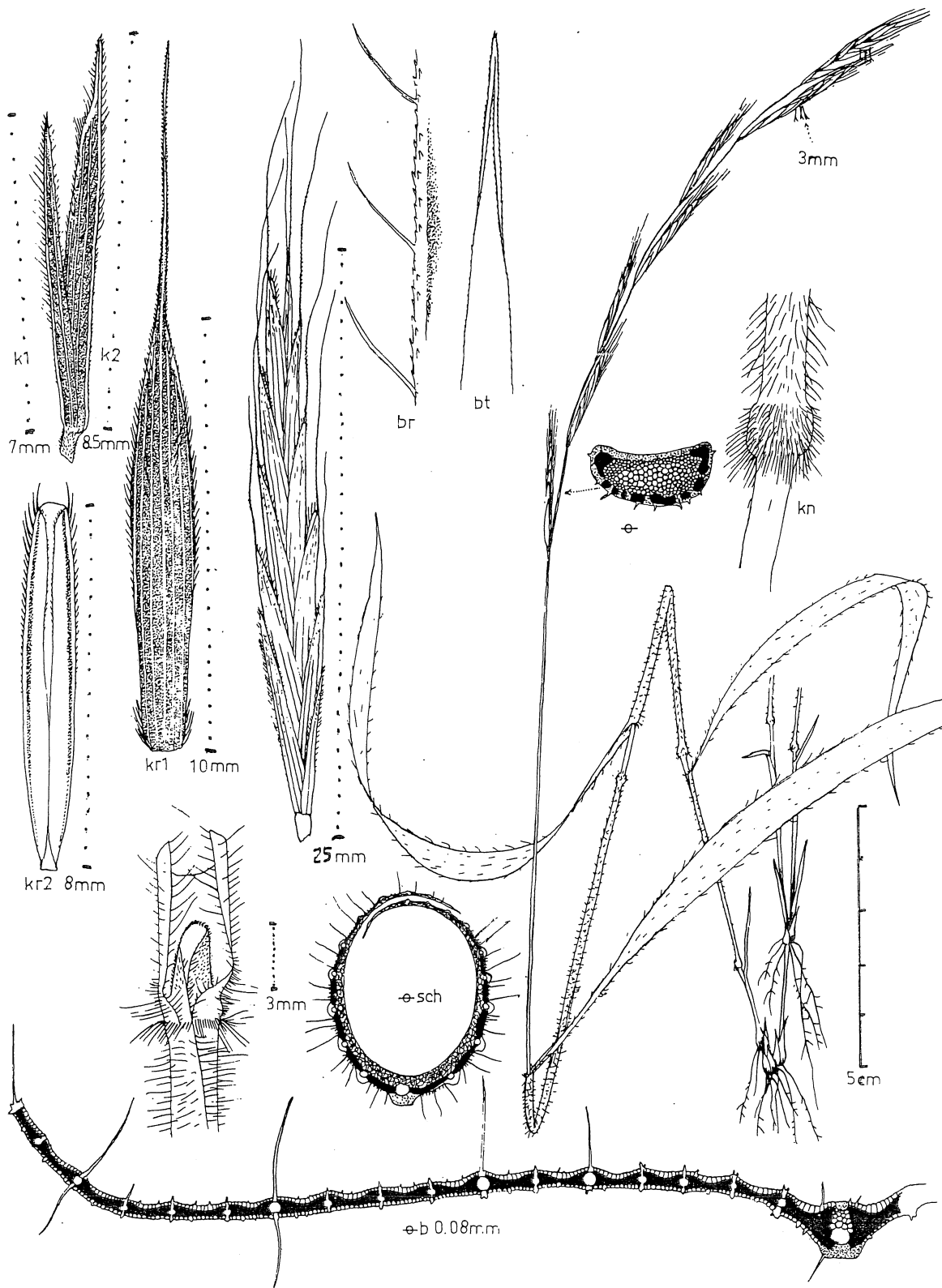


123. (*Helictotrichon pratense* (L.) Pilger)  
*Avenula pratensis* (L.) Dum.

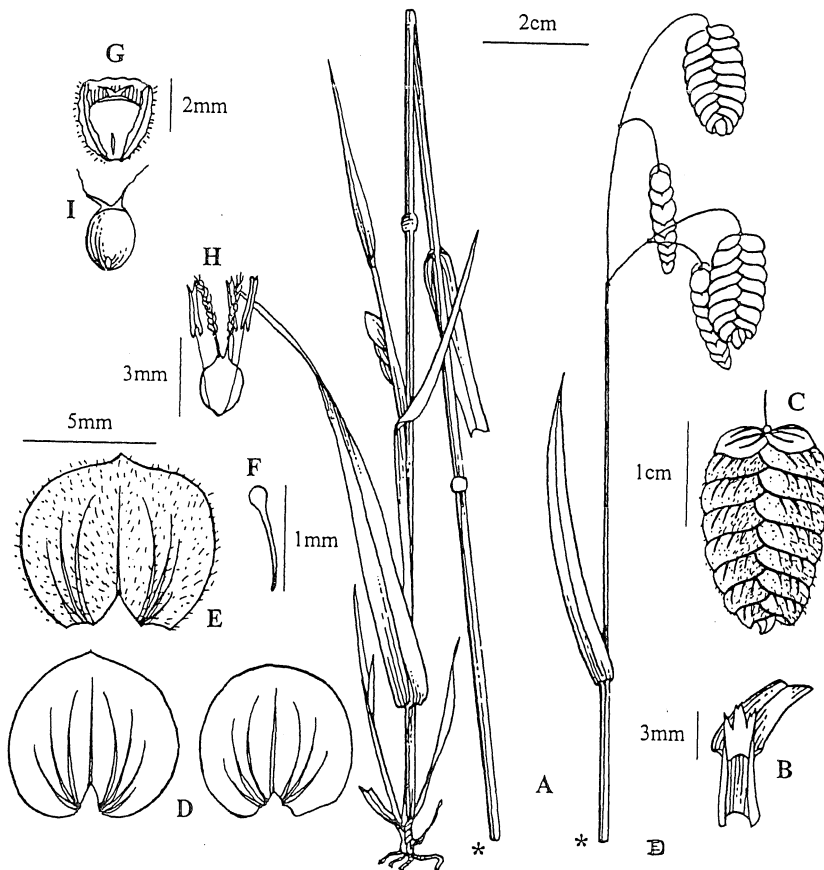


122. (*Helictotrichon pubescens* (Huds.) Pilger)  
*Avenula pubescens* (Huds.) Dum.





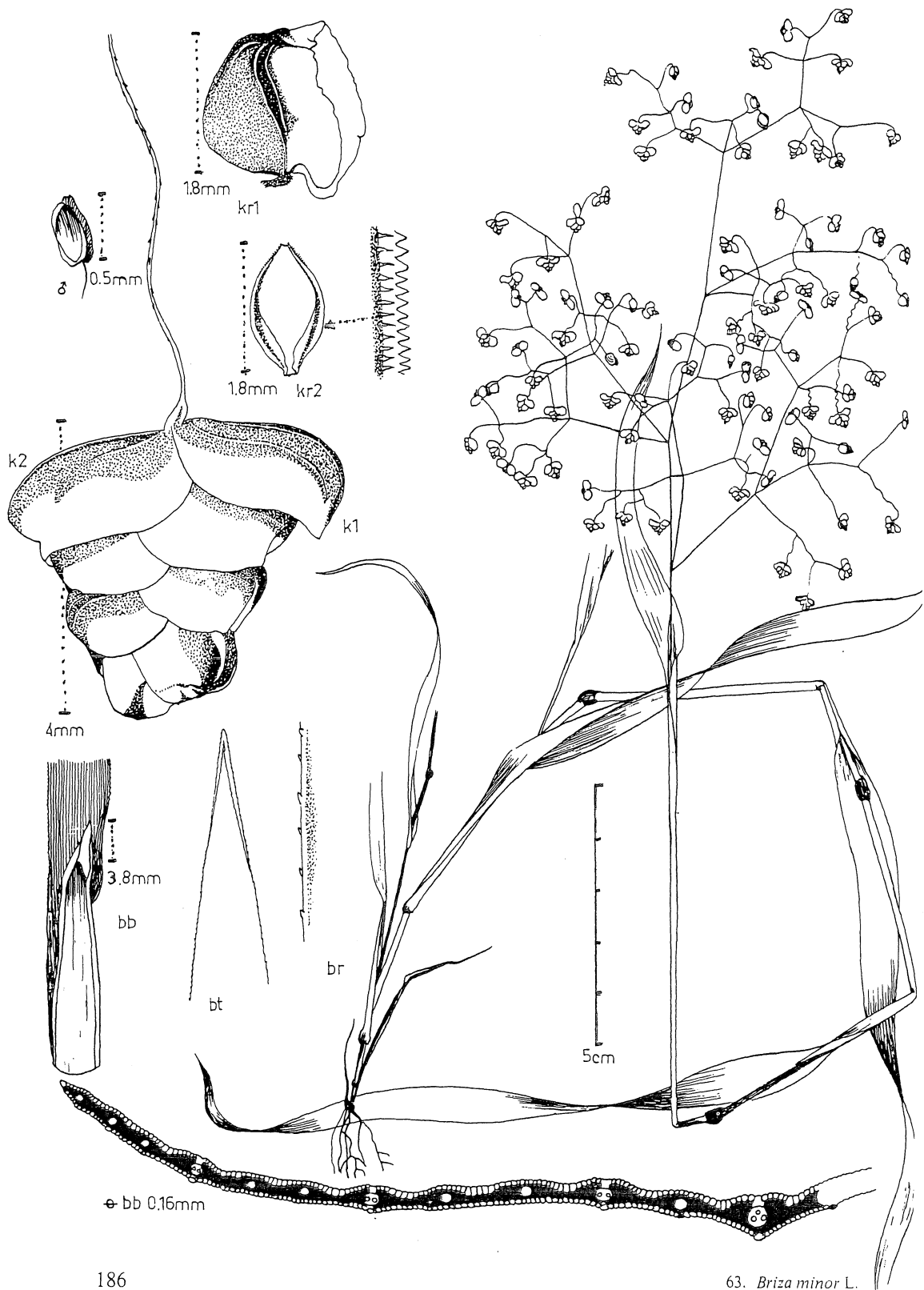
1. *Brachypodium sylvaticum* (Huds.) P. B.

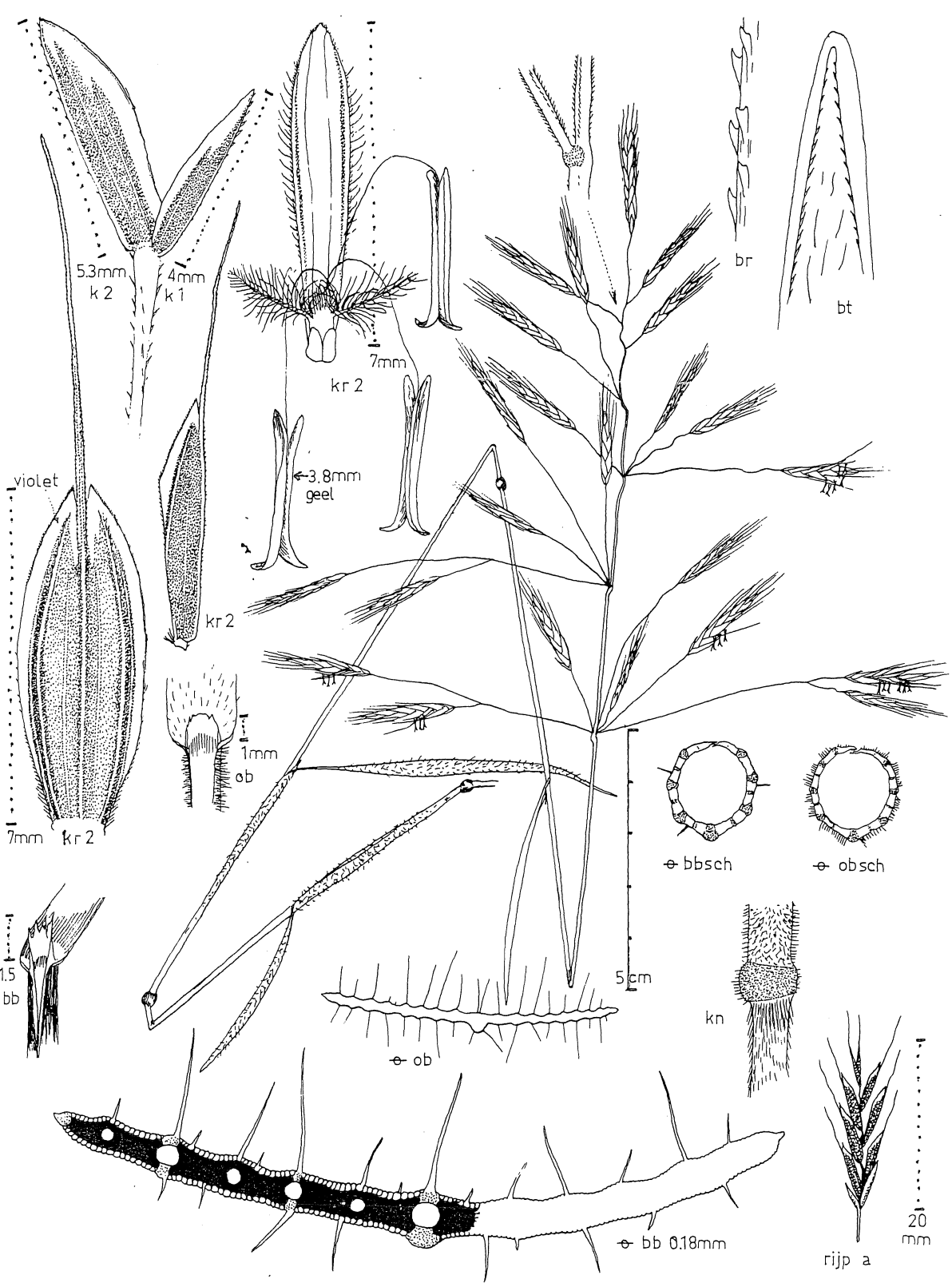


*Briza maxima* L. (Greater Quaking-grass). A habit; B ligule; C spikelet; D lower and upper glumes; E lemma; F clavate hair from back of mature lemma; G palea enclosing ovary; H flower; I caryopsis. (Hort. Ipswich, E Suffolk). STACE 1019/856.





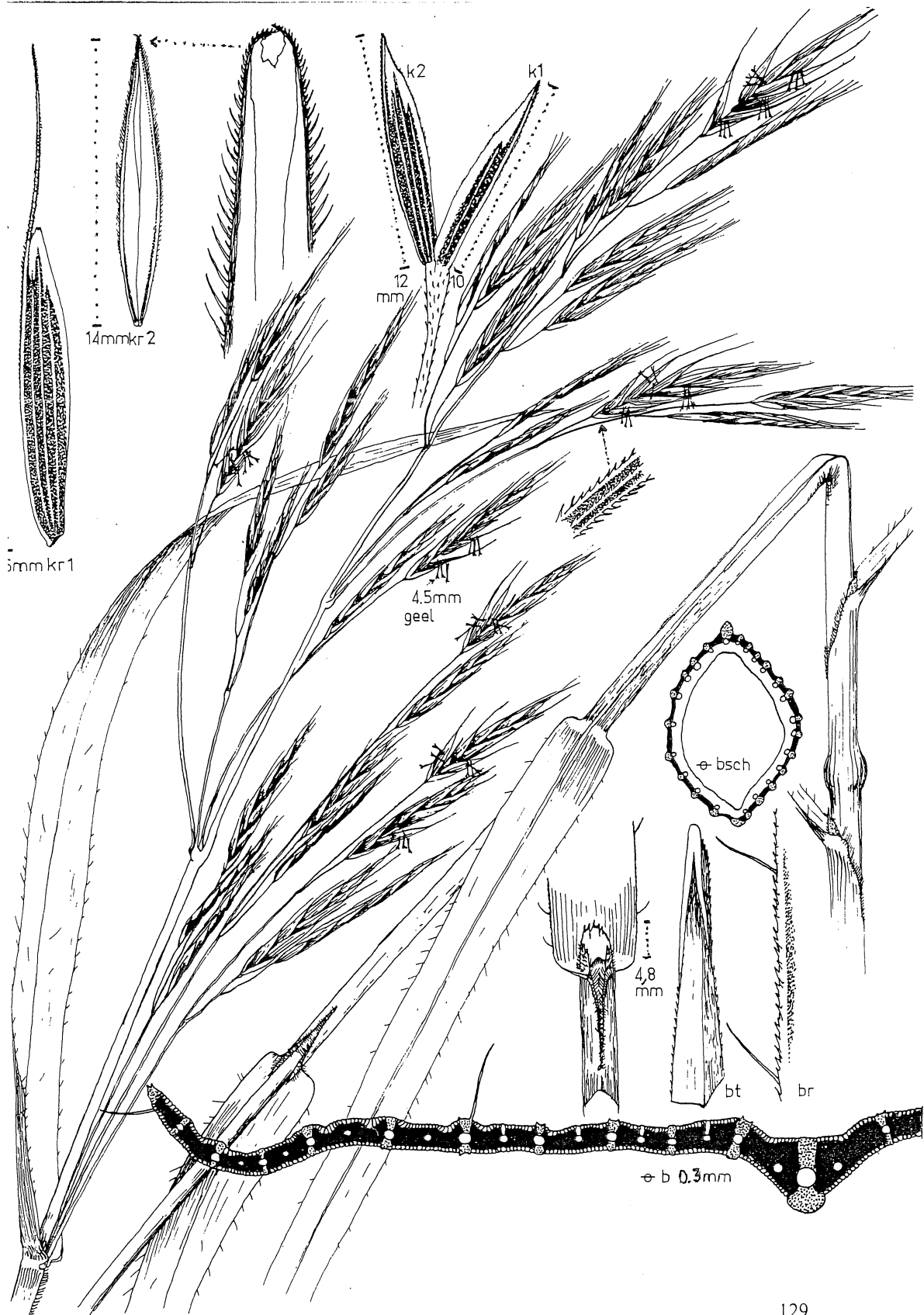




7. *Bromus arvensis* L.

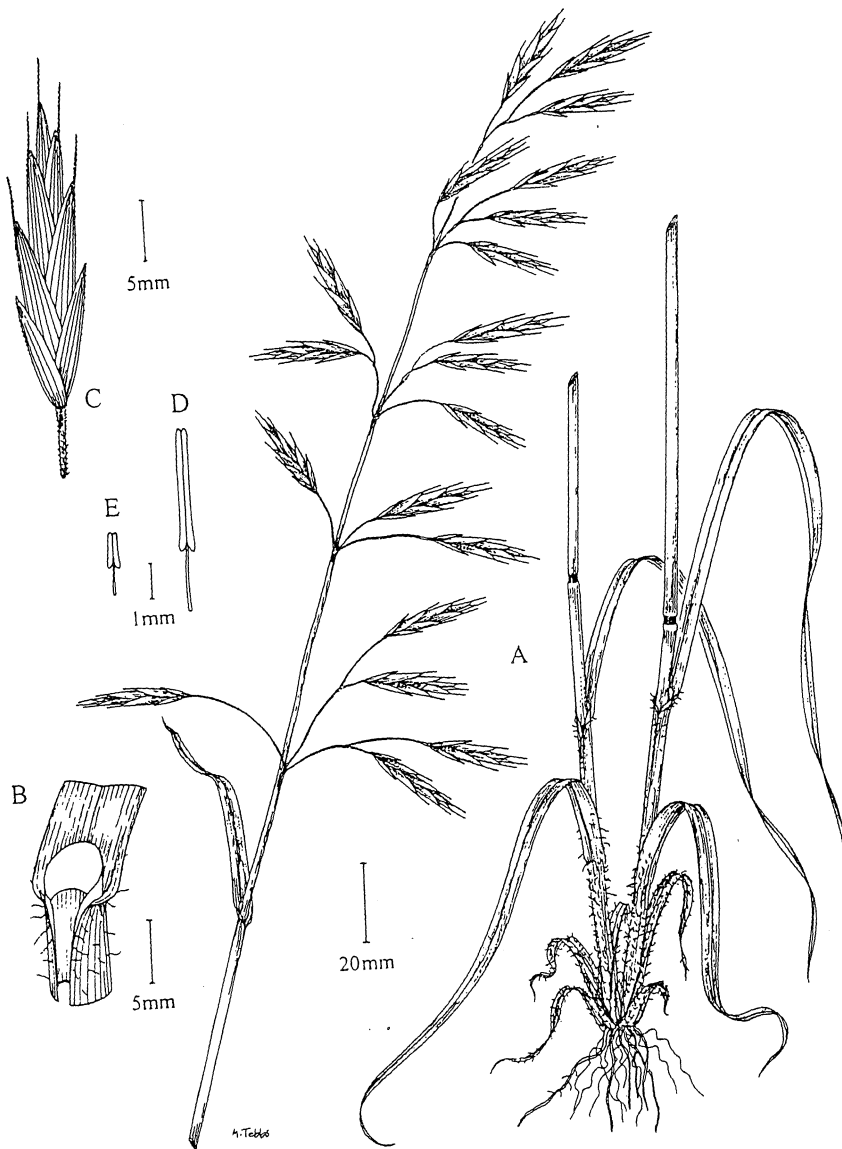


6. *Bromus bromoideus* (Lej.) Crépin

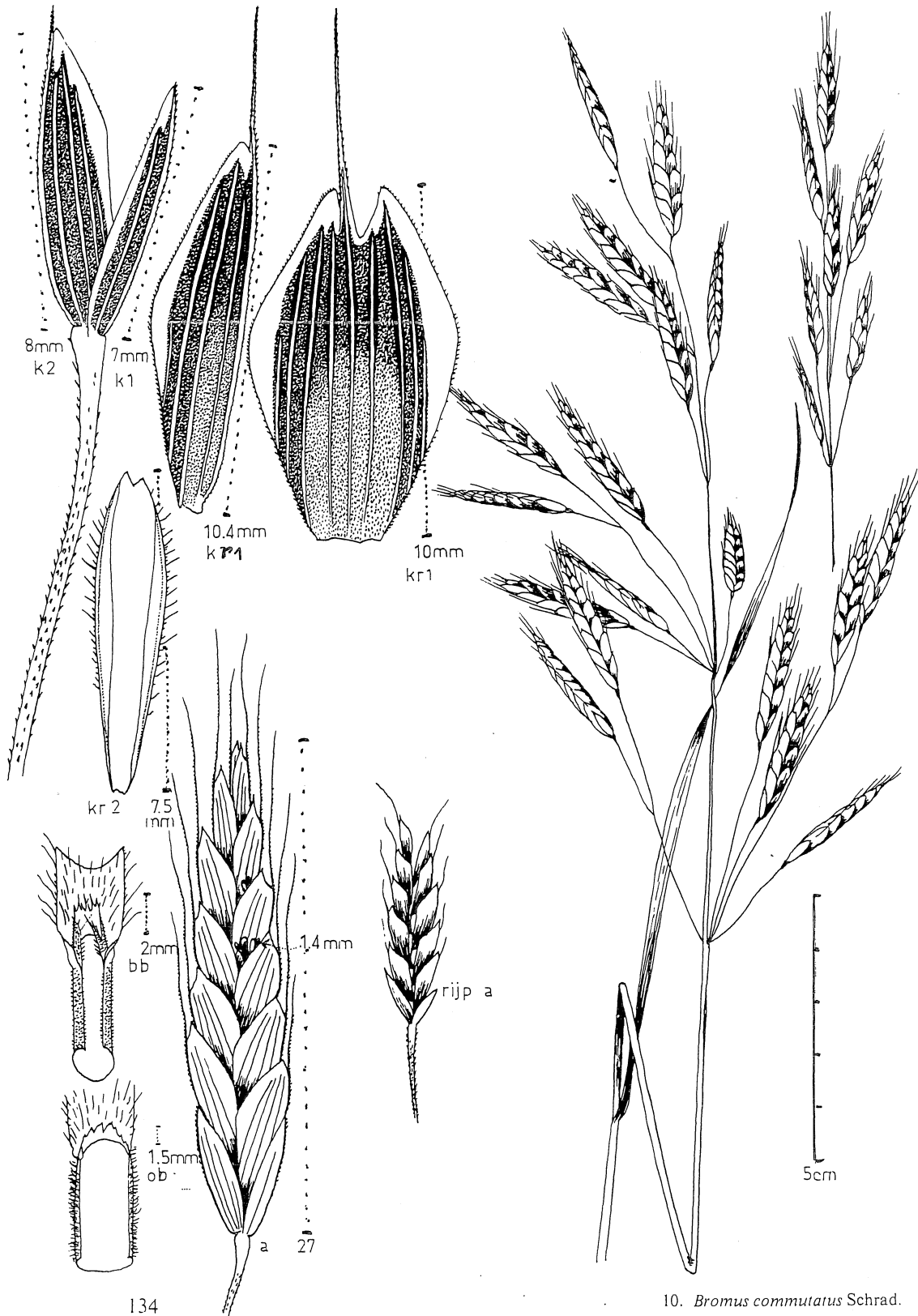


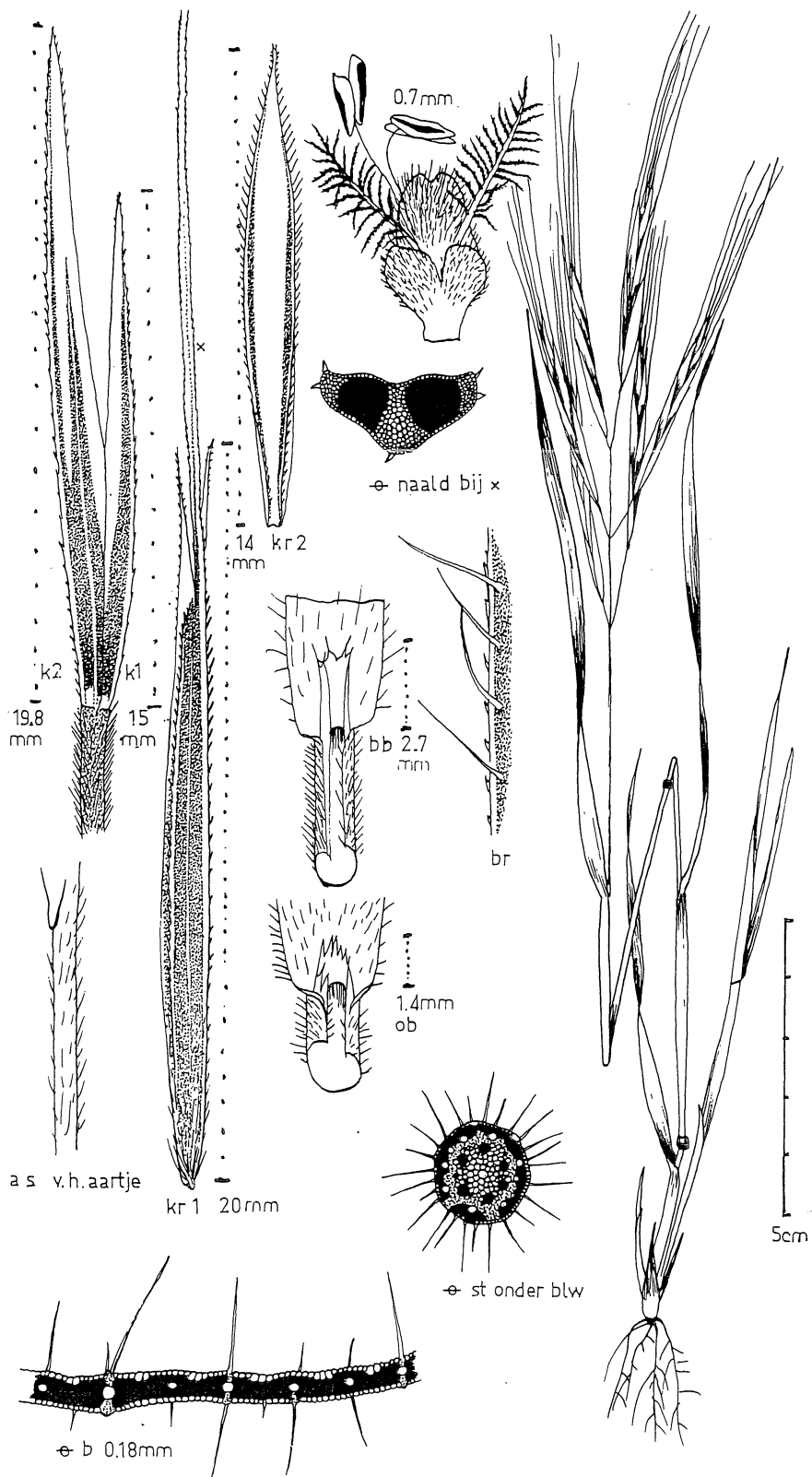
5. *Bromus carinatus* Hook. et Arn.

*Bromus catharticus* 138

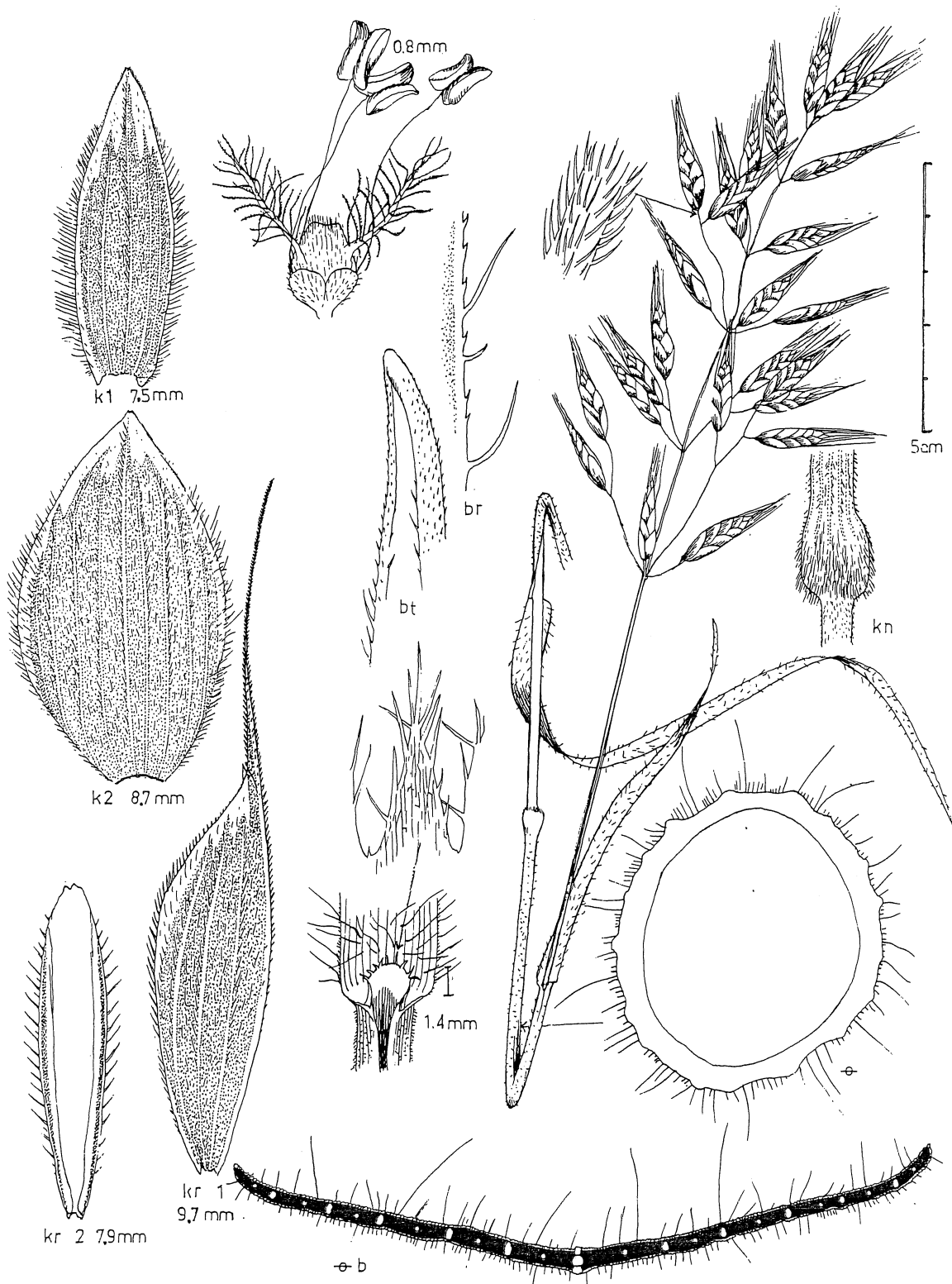


*Bromus catharticus*: A, habit; B, ligule; C, spikelet; D, anther from chasmogamous floret; E, anther from cleistogamous floret.

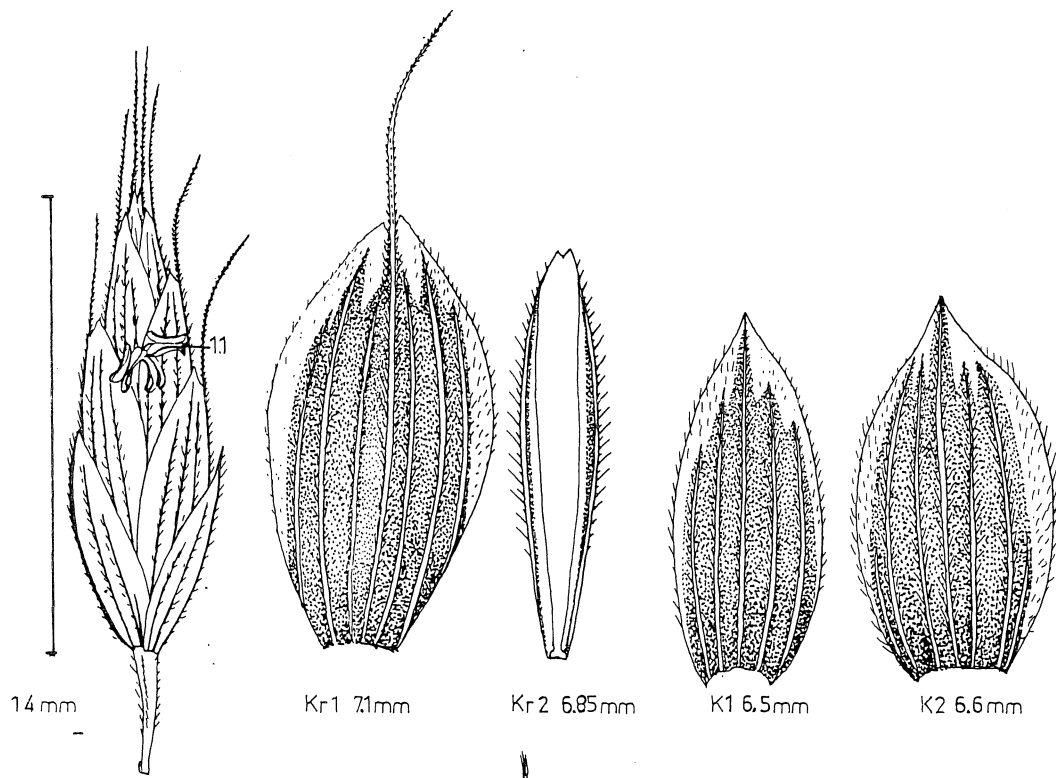


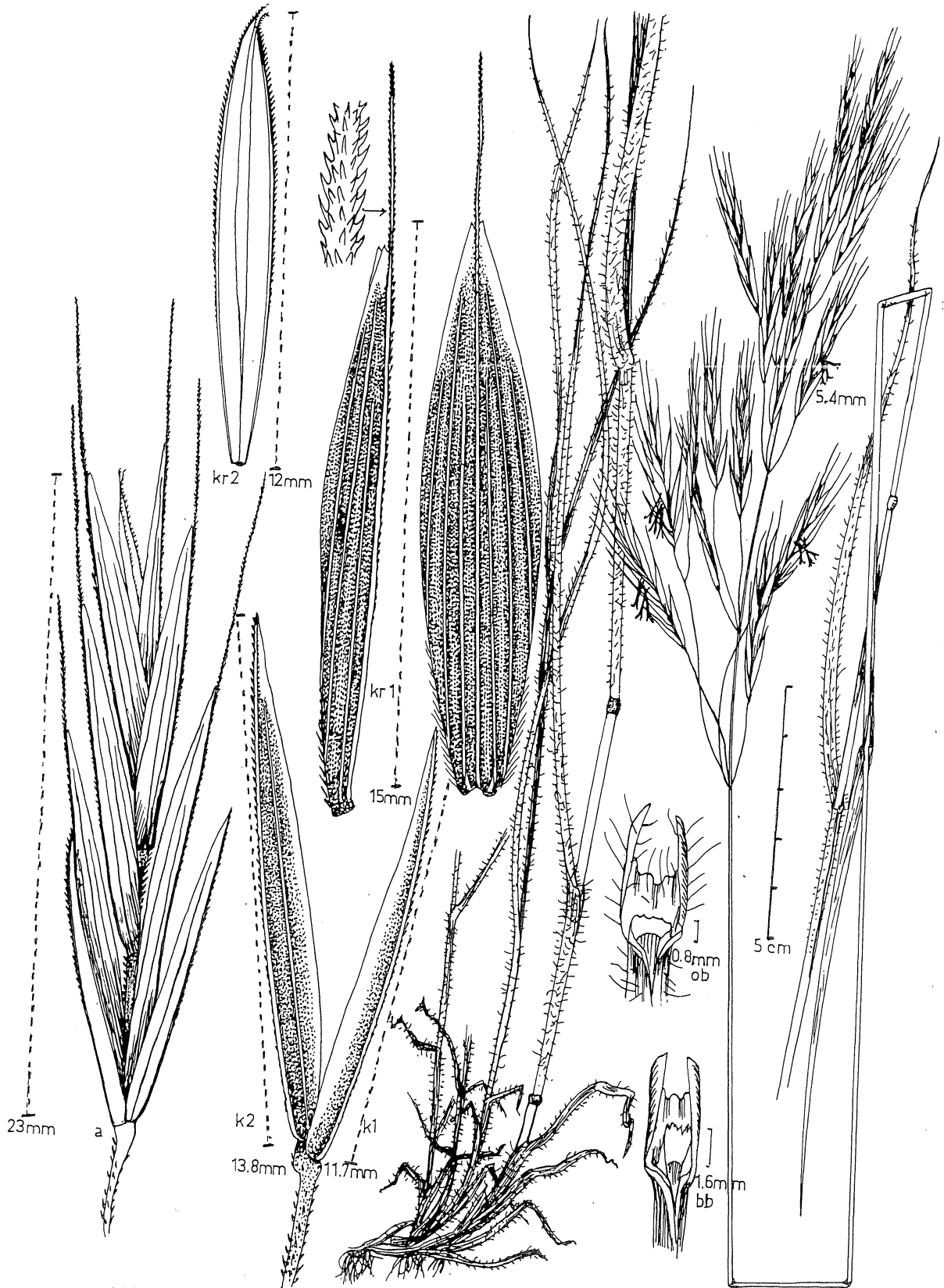


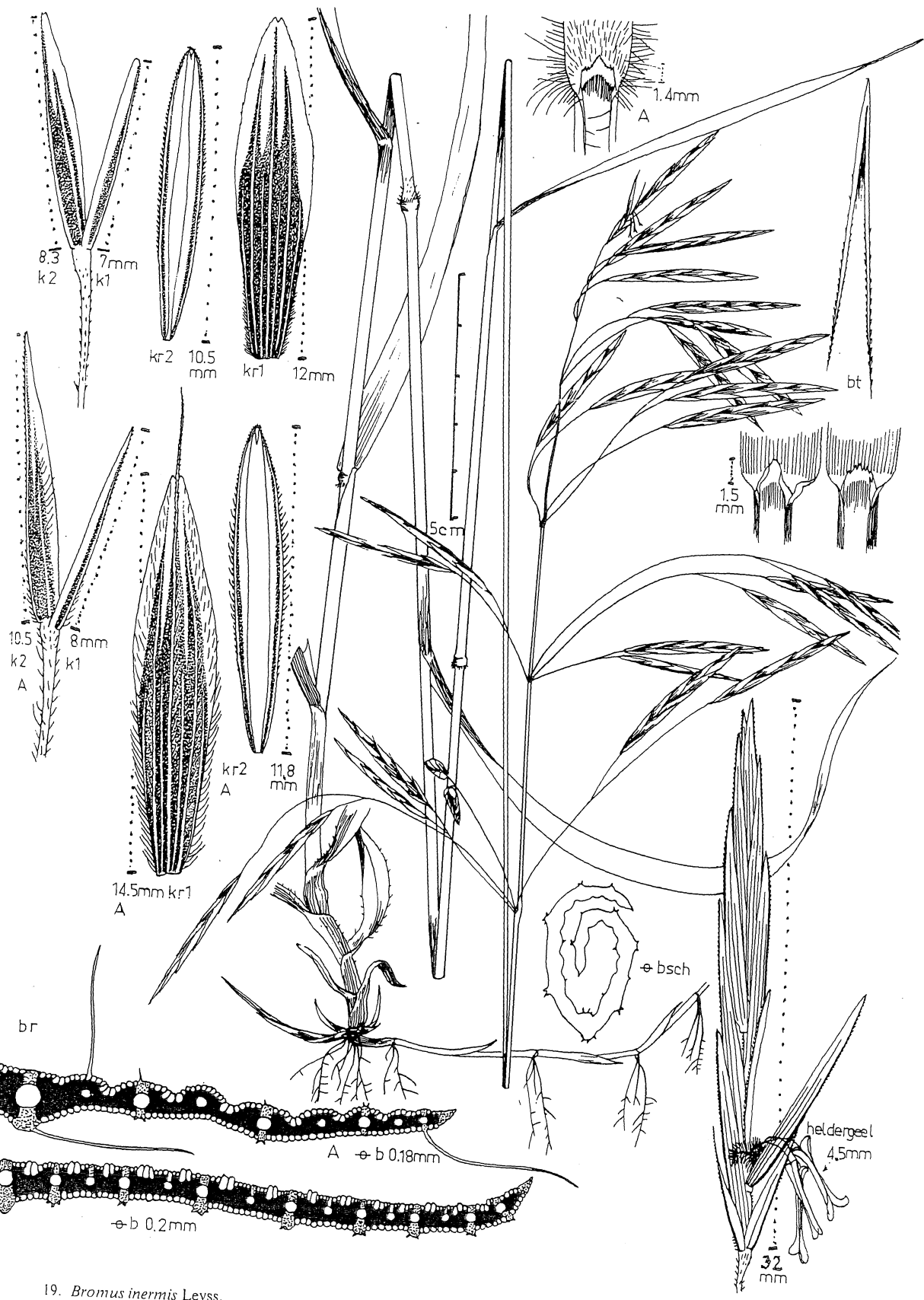
25. (*Bromus rigidus* Roth)  
*B. diandrus* Roth subsp. *maximus* (Desf.) Soó



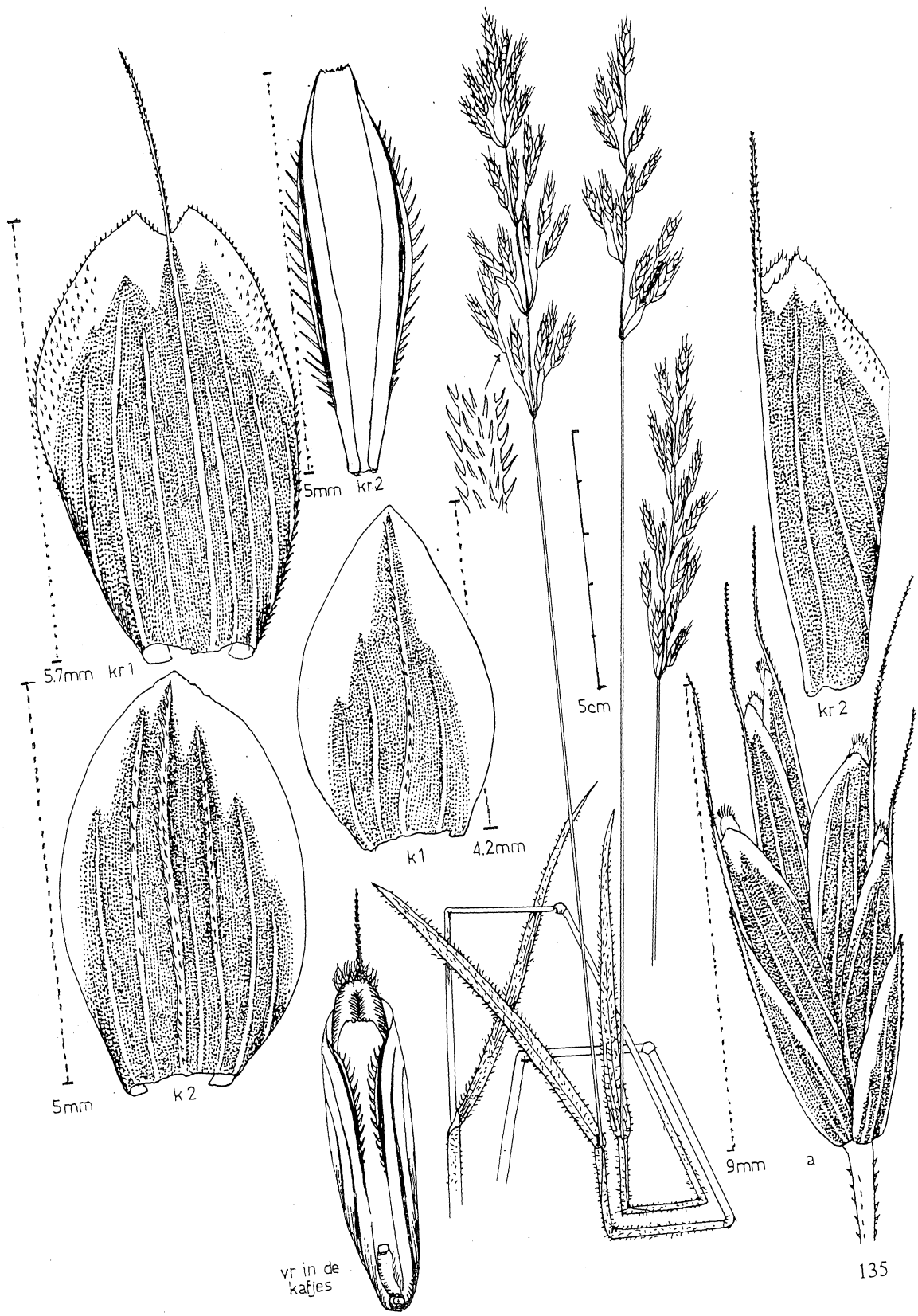




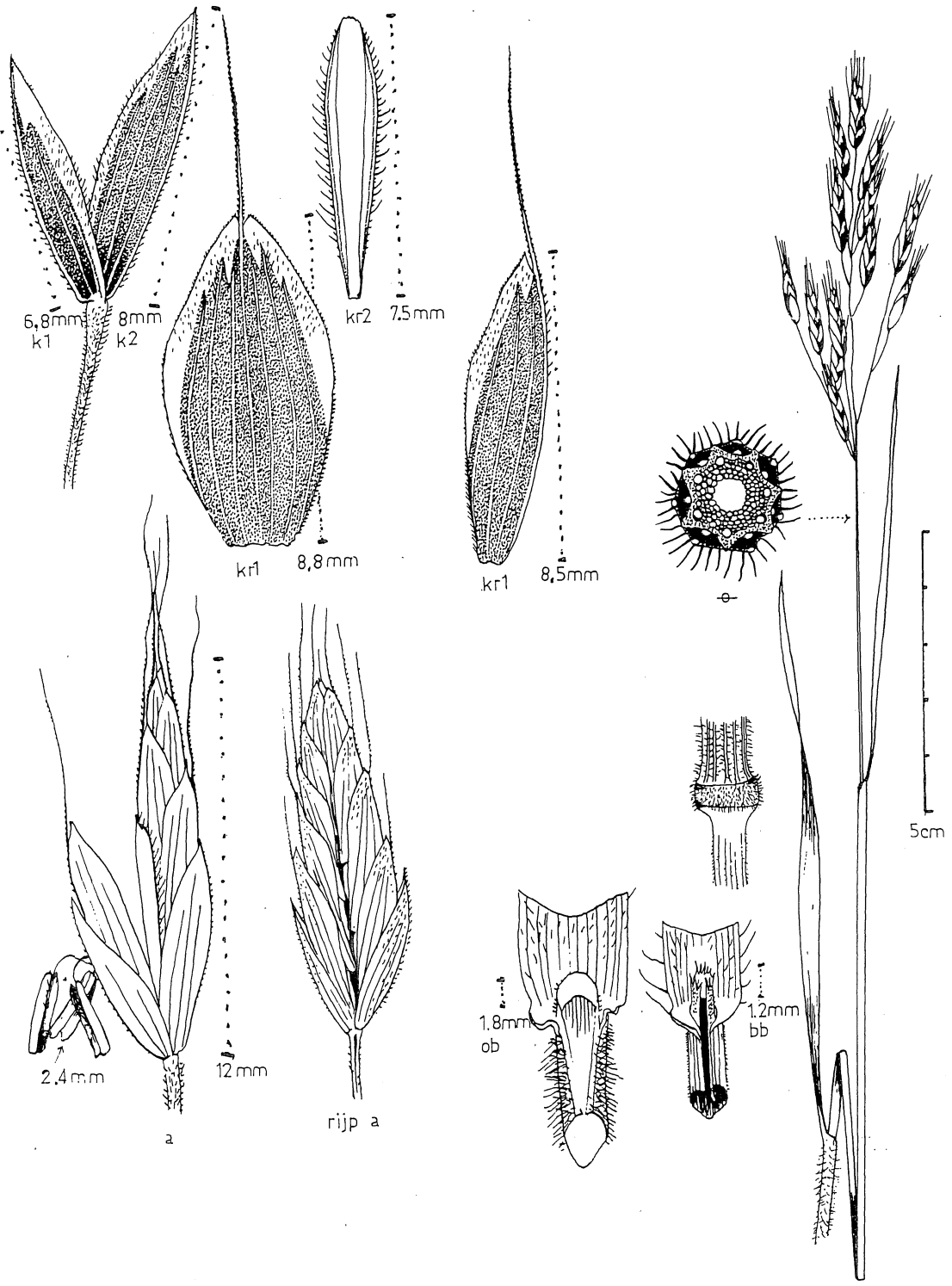




19. *Bromus inermis* Leys.

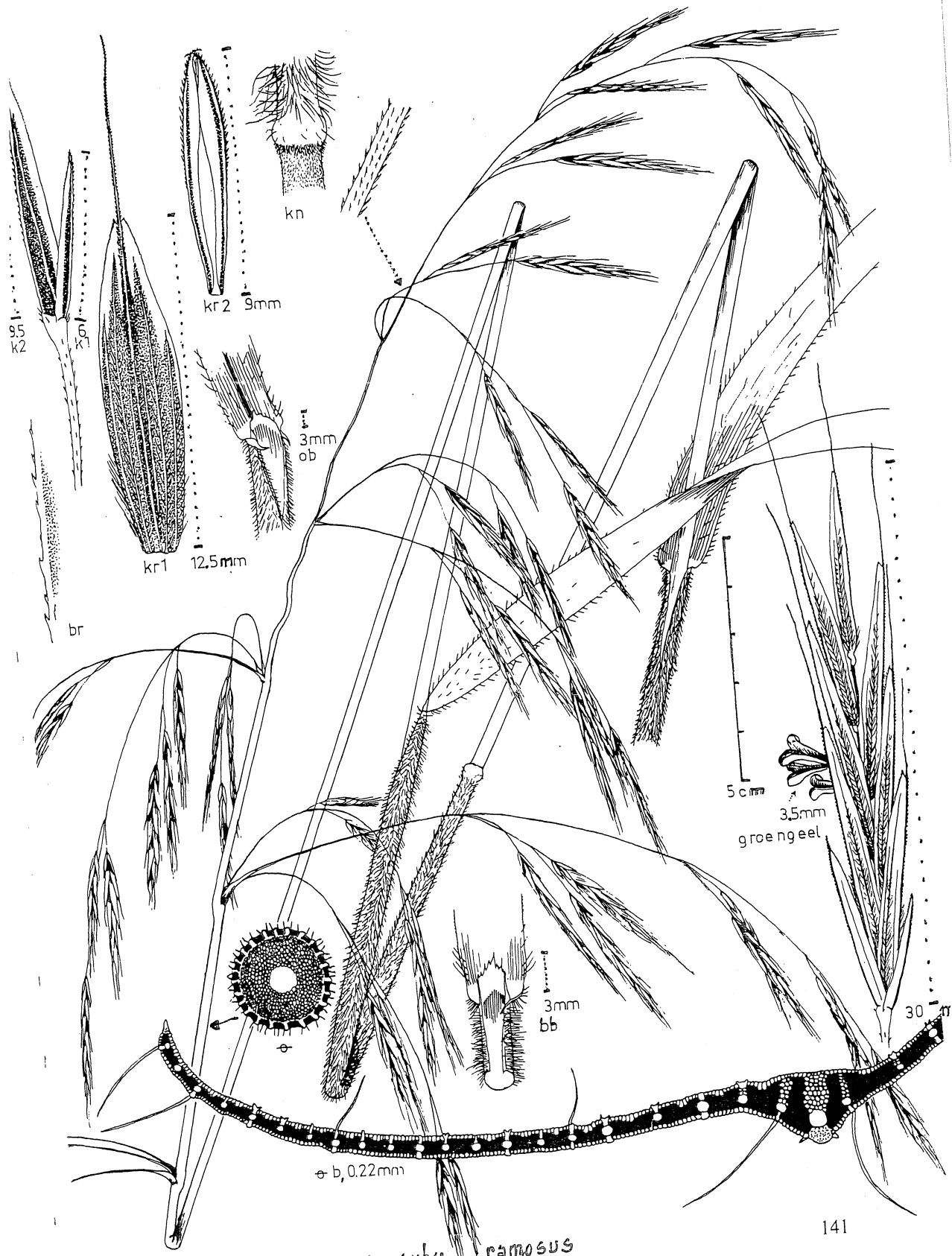


11. *Bromus lepidus* Holmb.

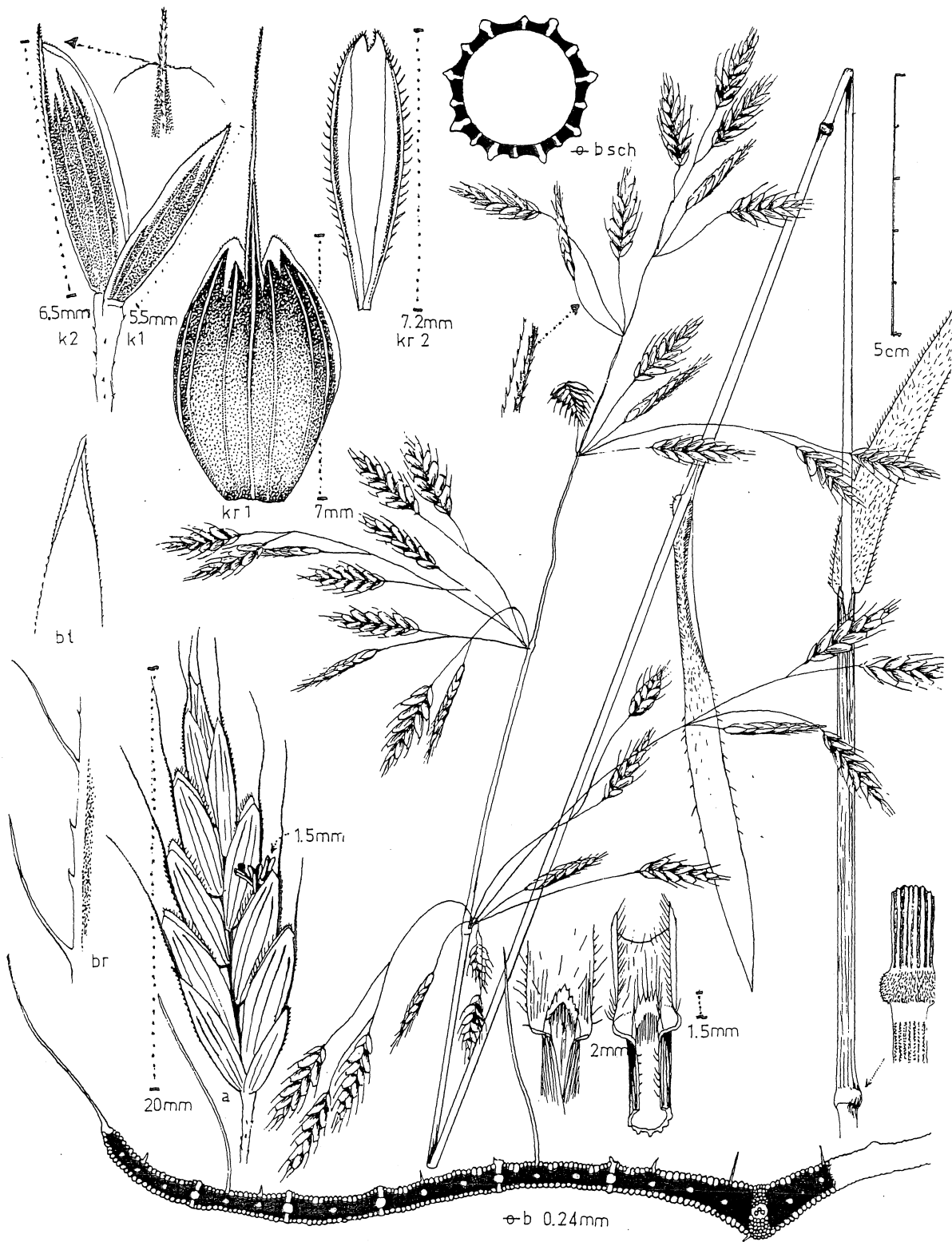




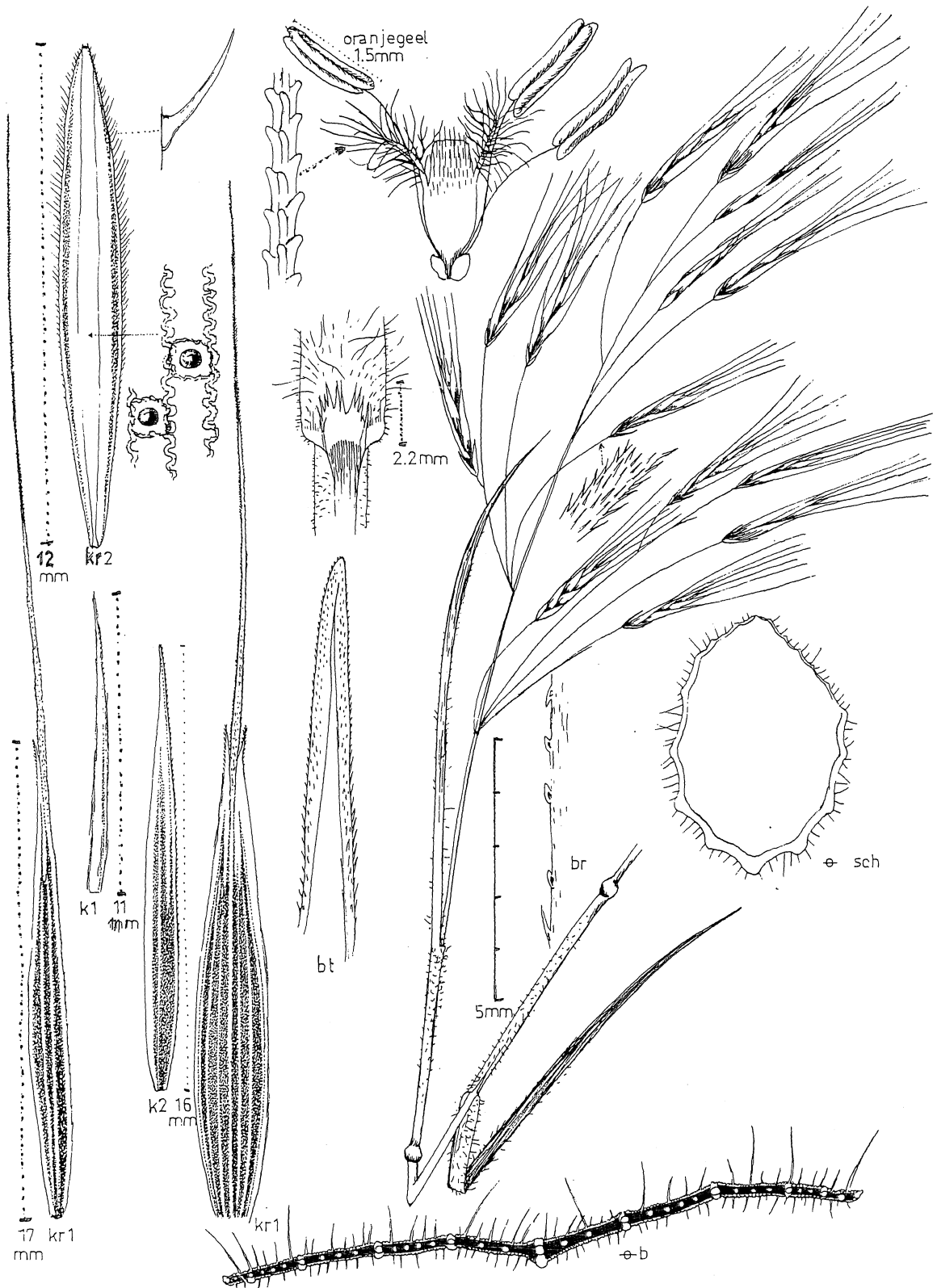
18. (*Bromus benekenii* (Lange) Trimen)  
*B. pamosus* HUDS. subsp. *benekenii* (LANGE) -  
 SCHINZ et THELL.



17. *Bromus ramosus* Huds. subsp. *ramosus*

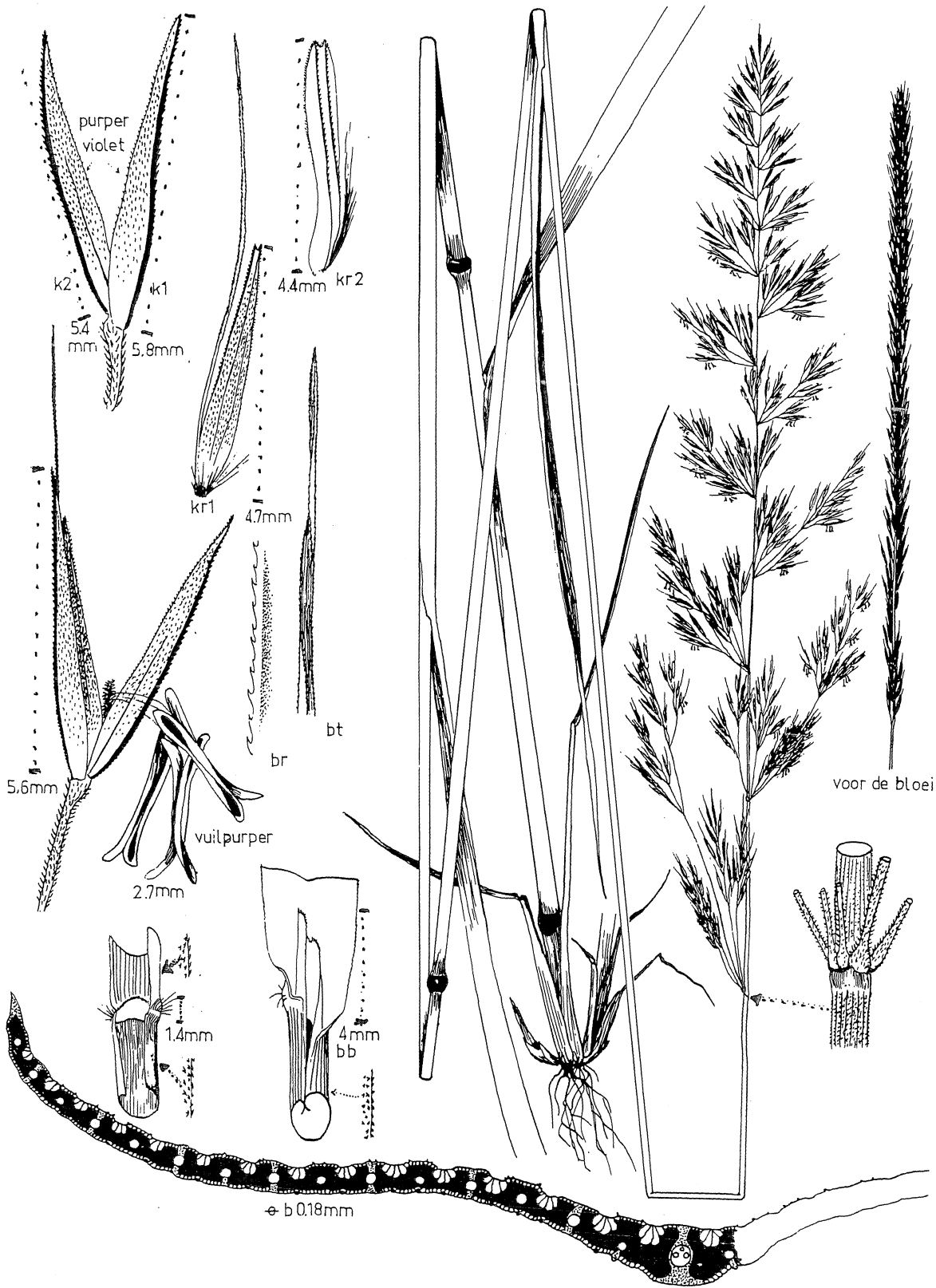


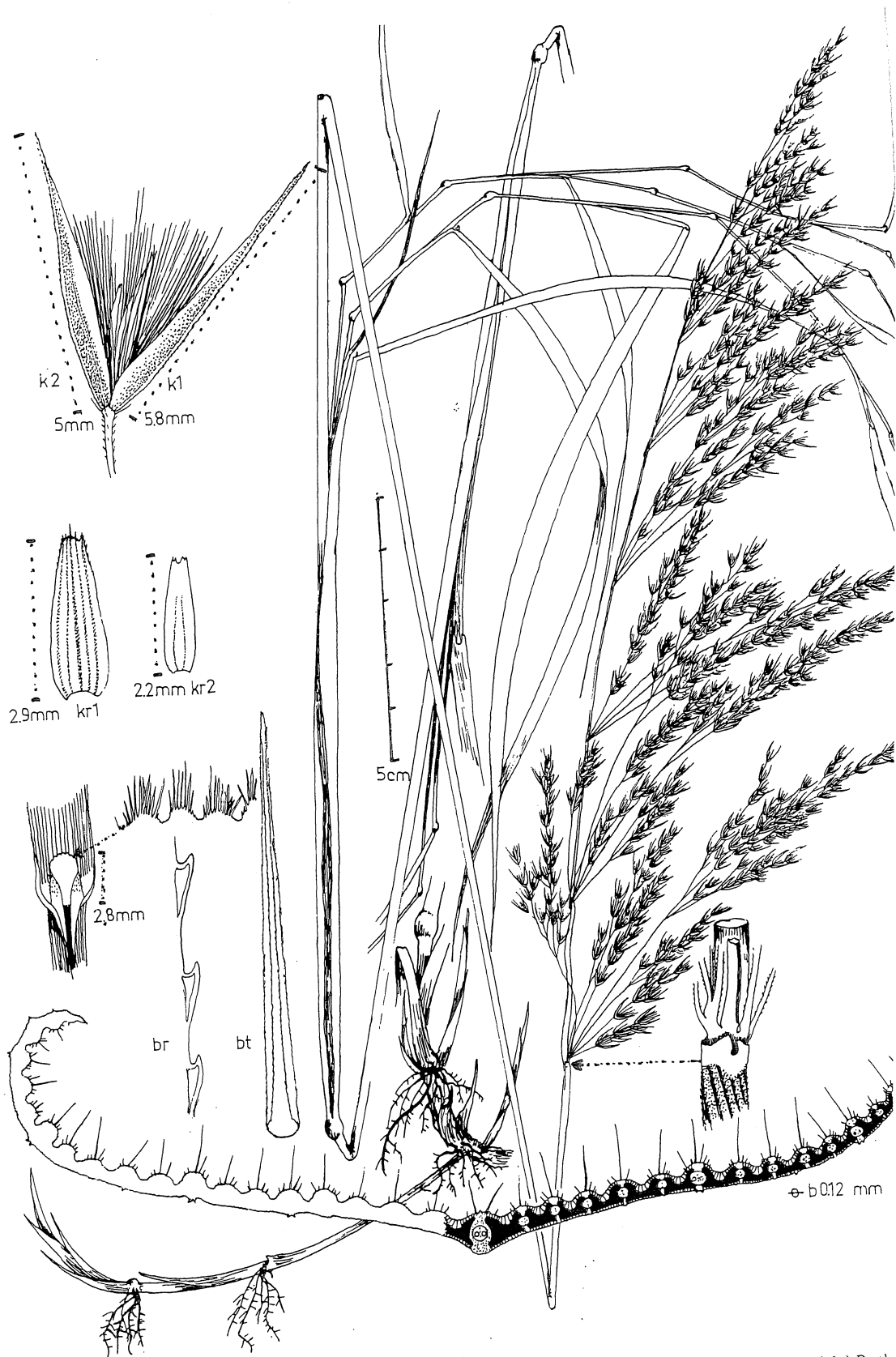




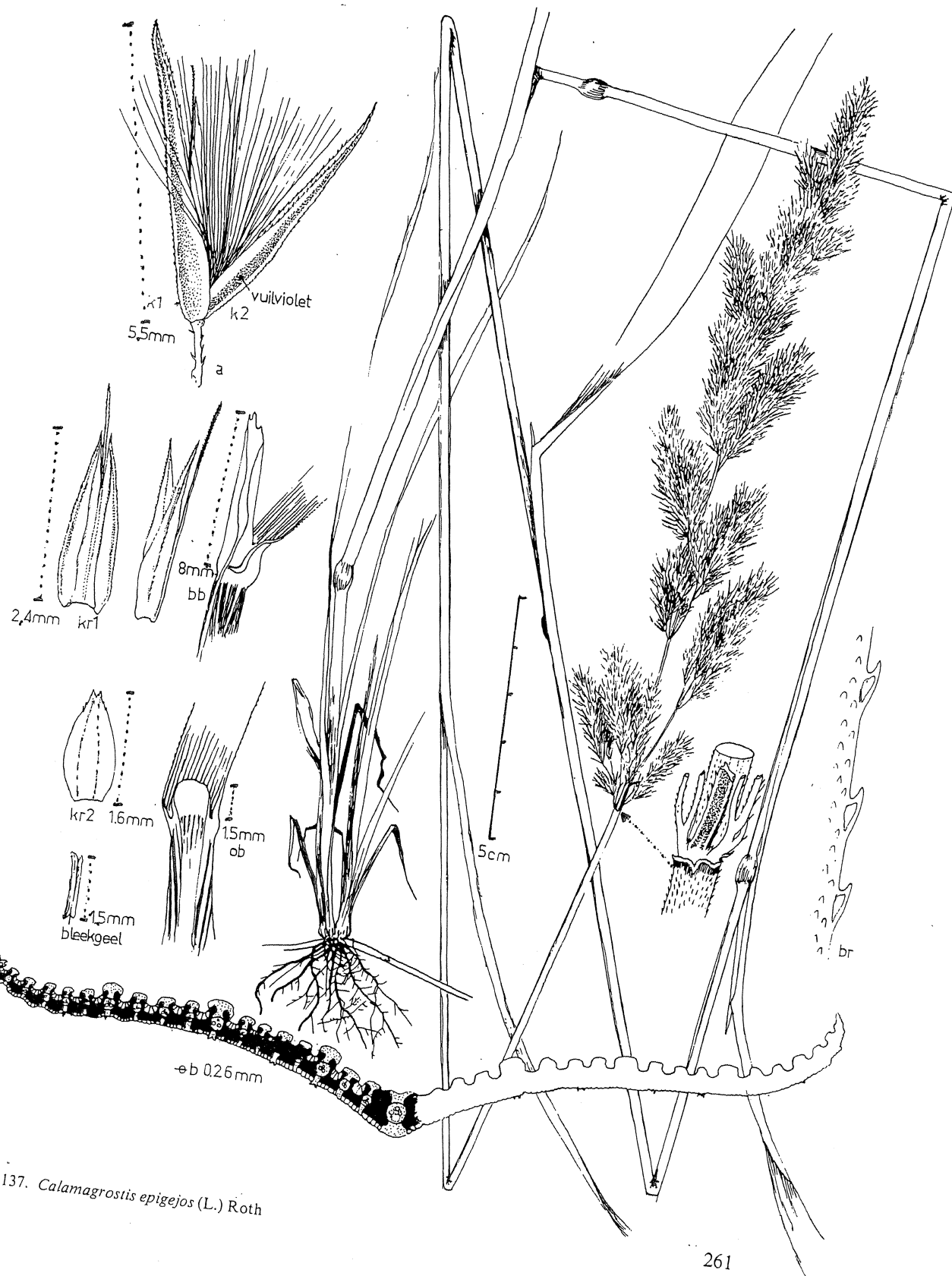


21. *Bromus tectorum* L.





136. *Calamagrostis canescens* (Web.) Roth

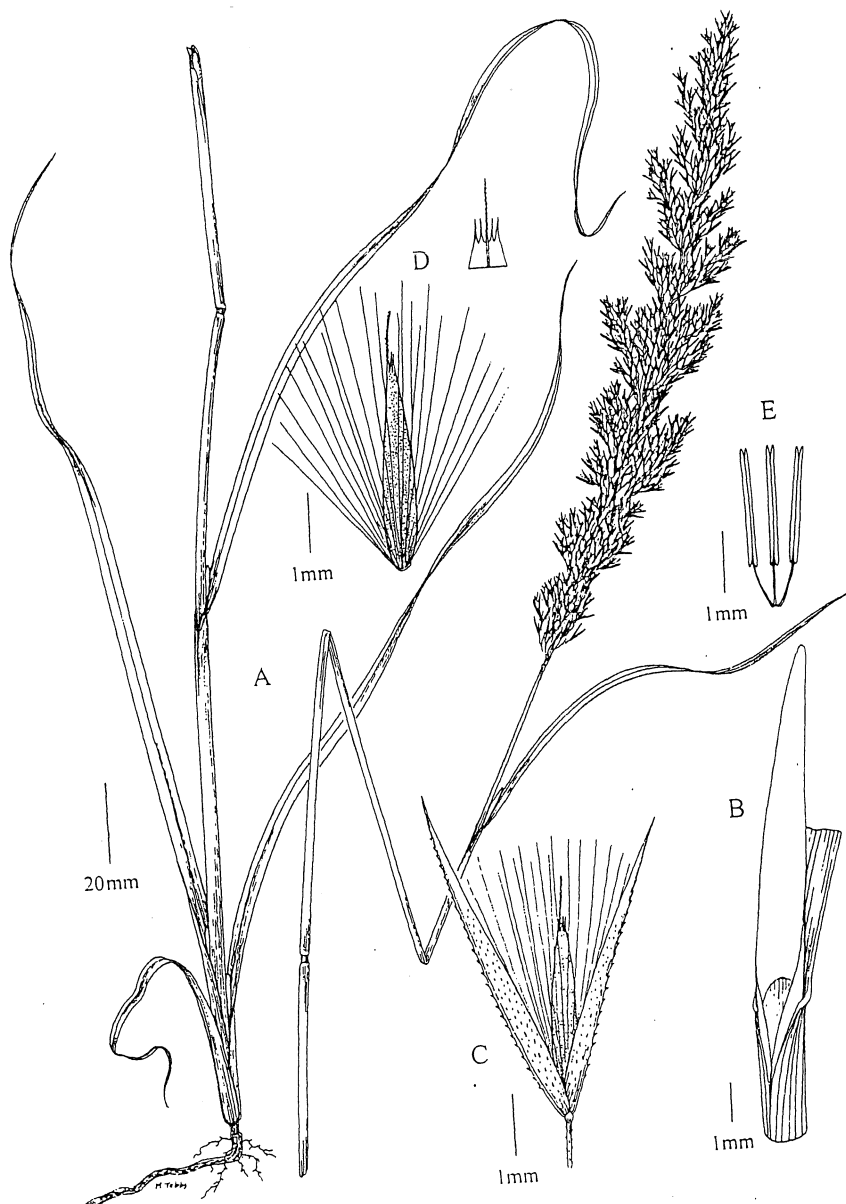


137. *Calamagrostis epigejos* (L.) Roth

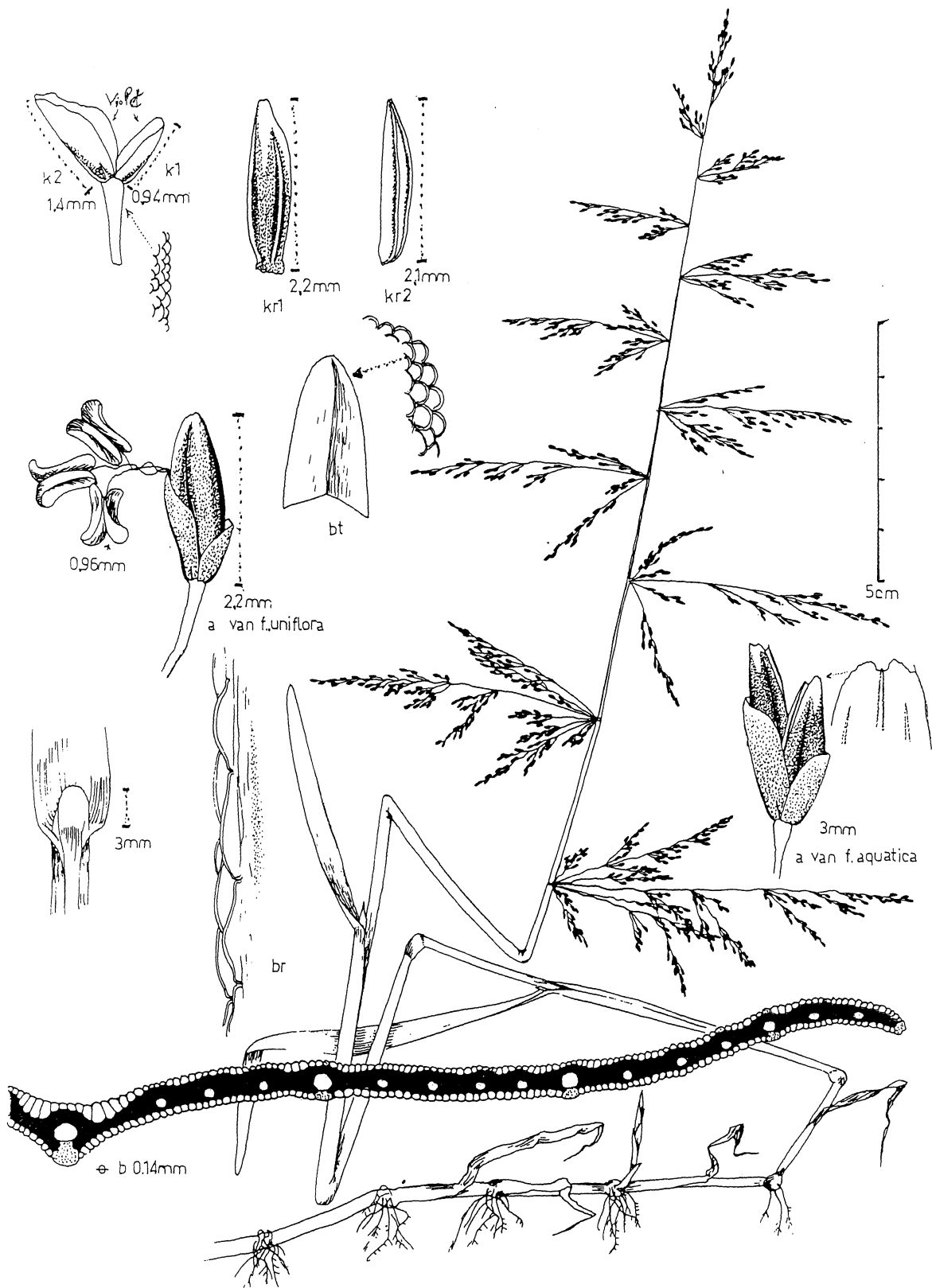


137-A. *Calamagrostis pseudophragmites* (Hall. f.) Koel.

*Calamagrostis purpurea* 107

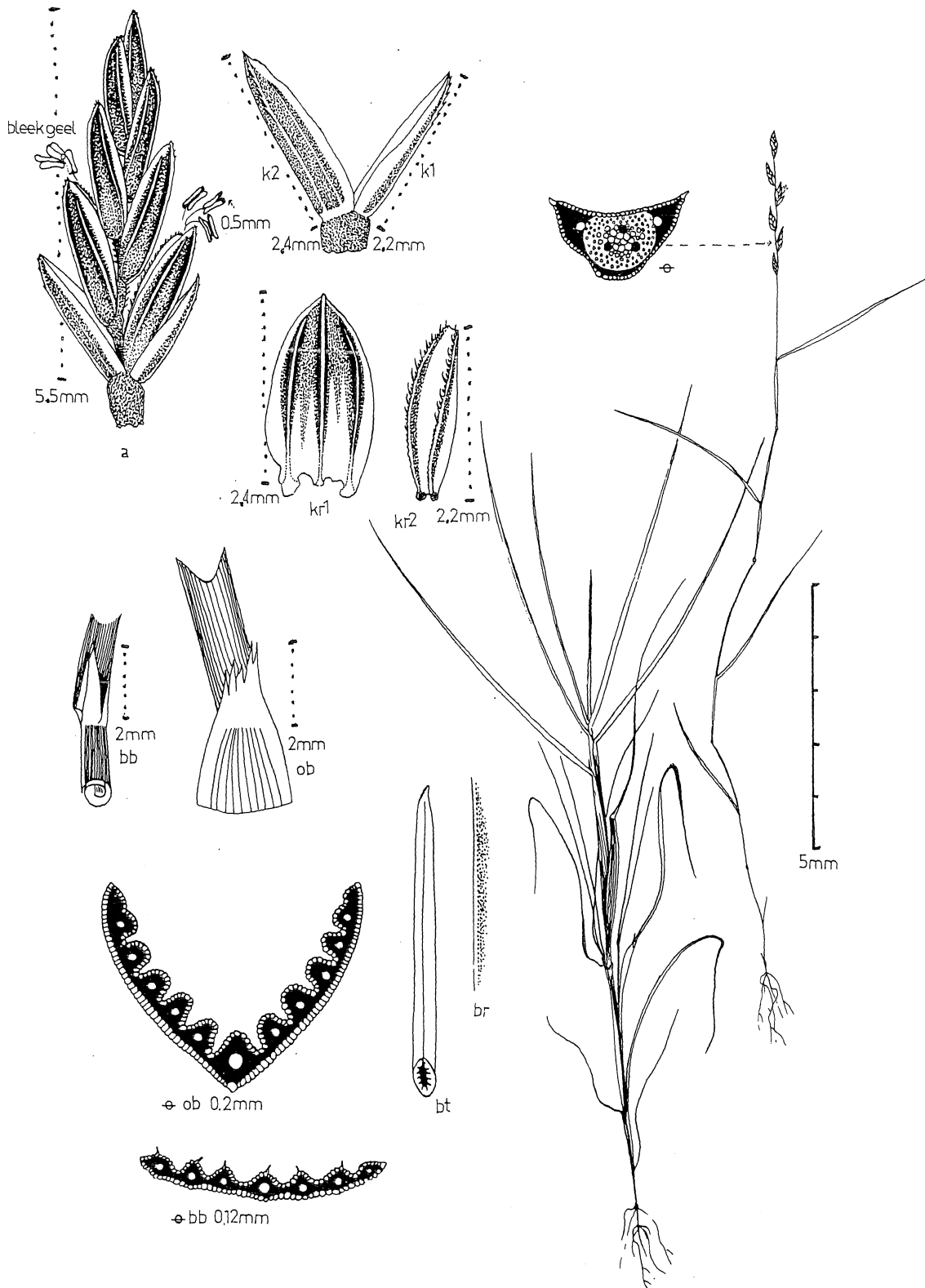


*Calamagrostis purpurea* subsp. *phragmitoides*: A, habit; B, ligule; C, spikelet; D, floret with flattened lemma tip shown separately; E, anthers.



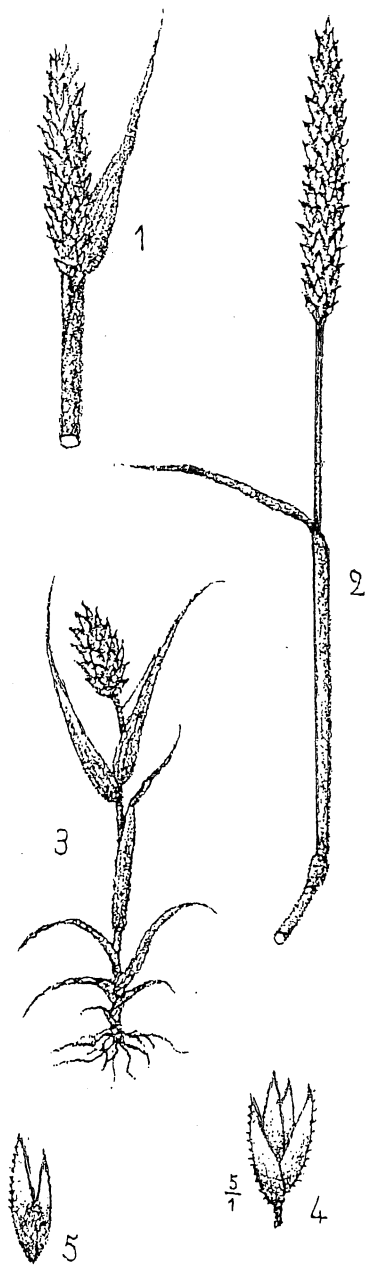
52. *Catabrosa aquatica* (L.) P. B.





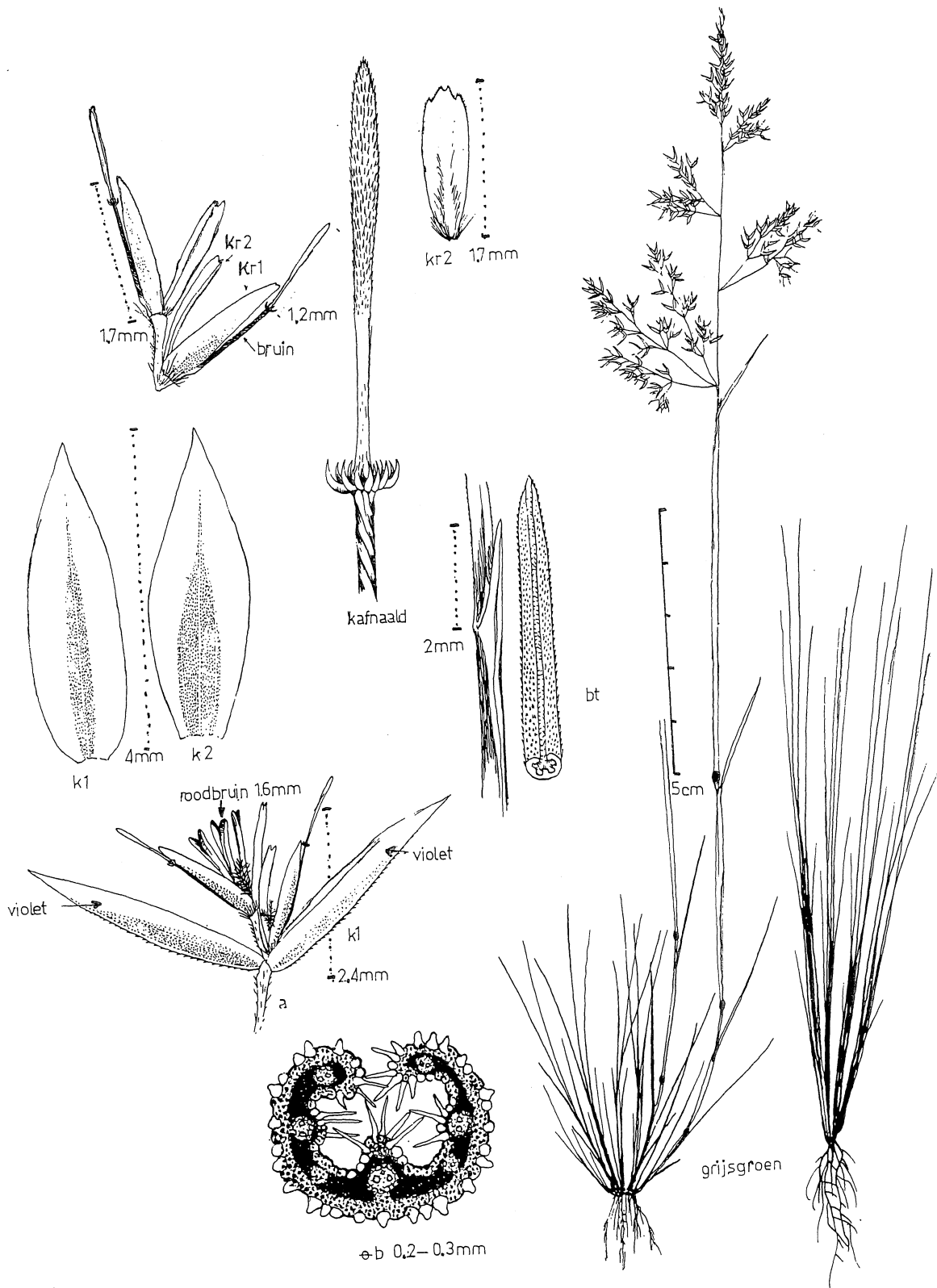
27. *Catapodium marinum* (L.) Hubb.





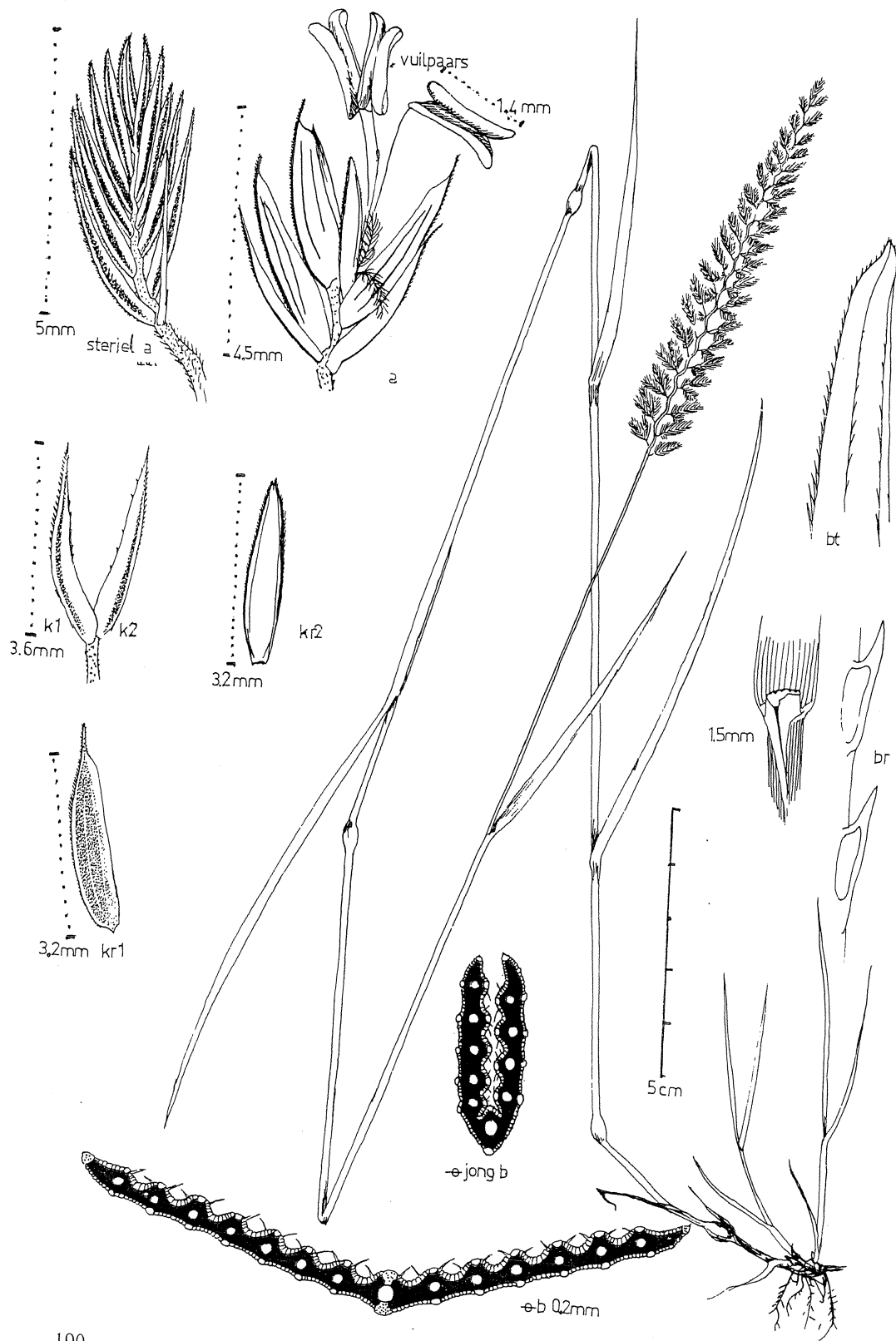
1,2,3: panicles  
4: glumes  
5: glumelles

*Crypsis alopecuroides* (Pill. et Mitterp.) Schrad.



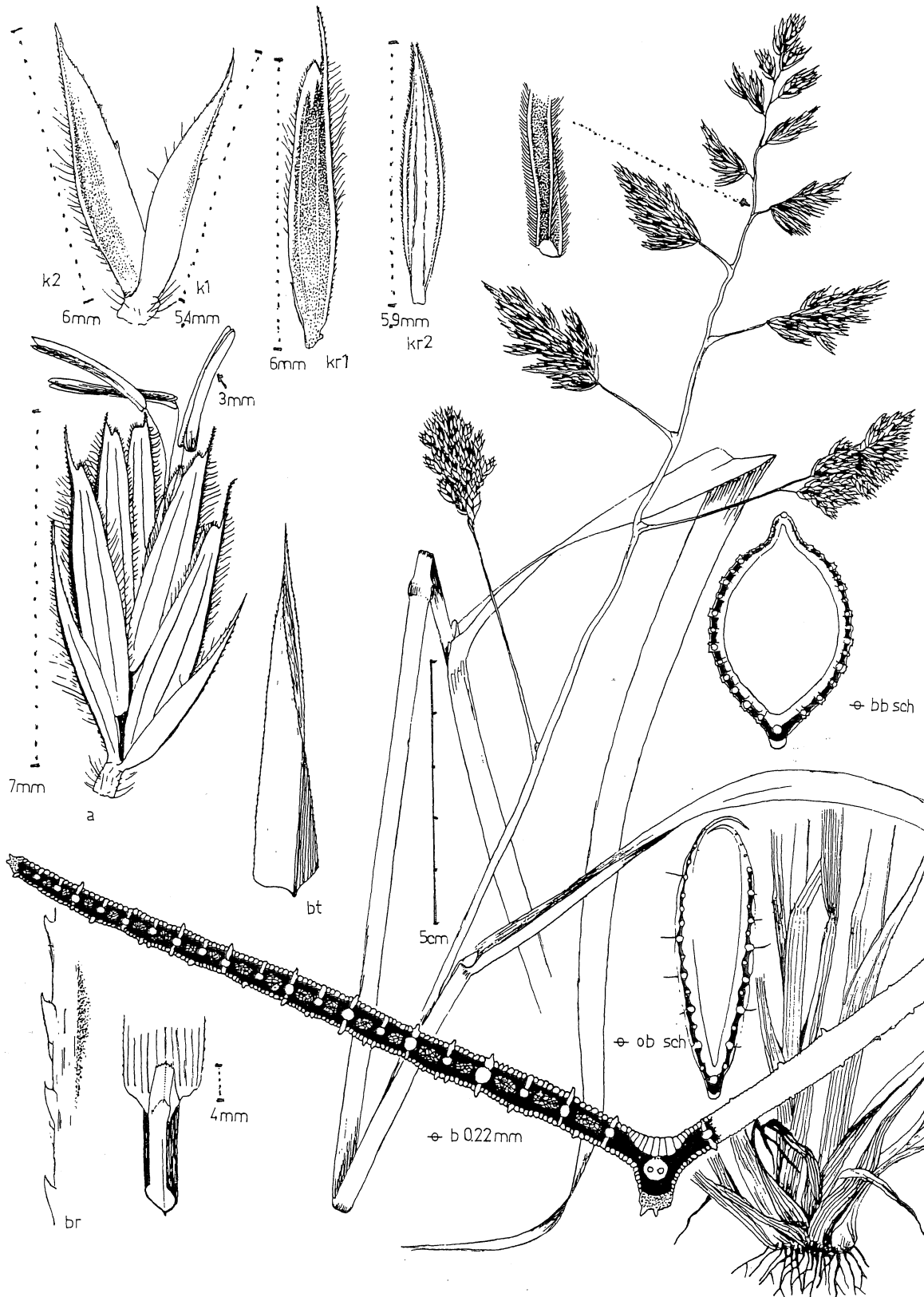
133. *Corynephorus canescens* (L.) P. B.







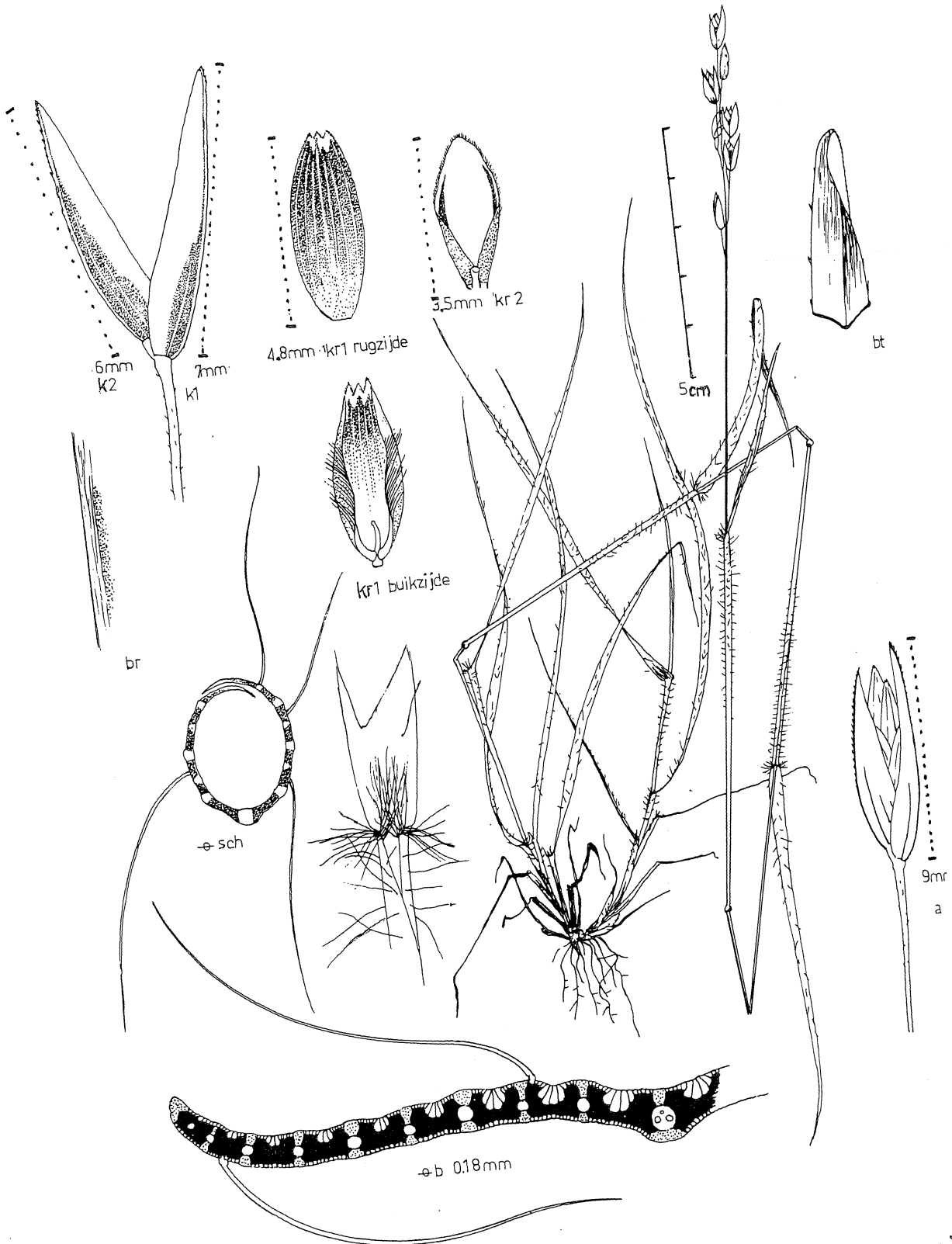
68. *Cynosurus echinatus* L.







66. *Dactylis polygama* Horvat





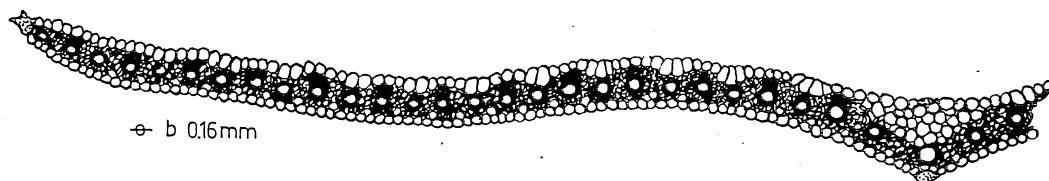
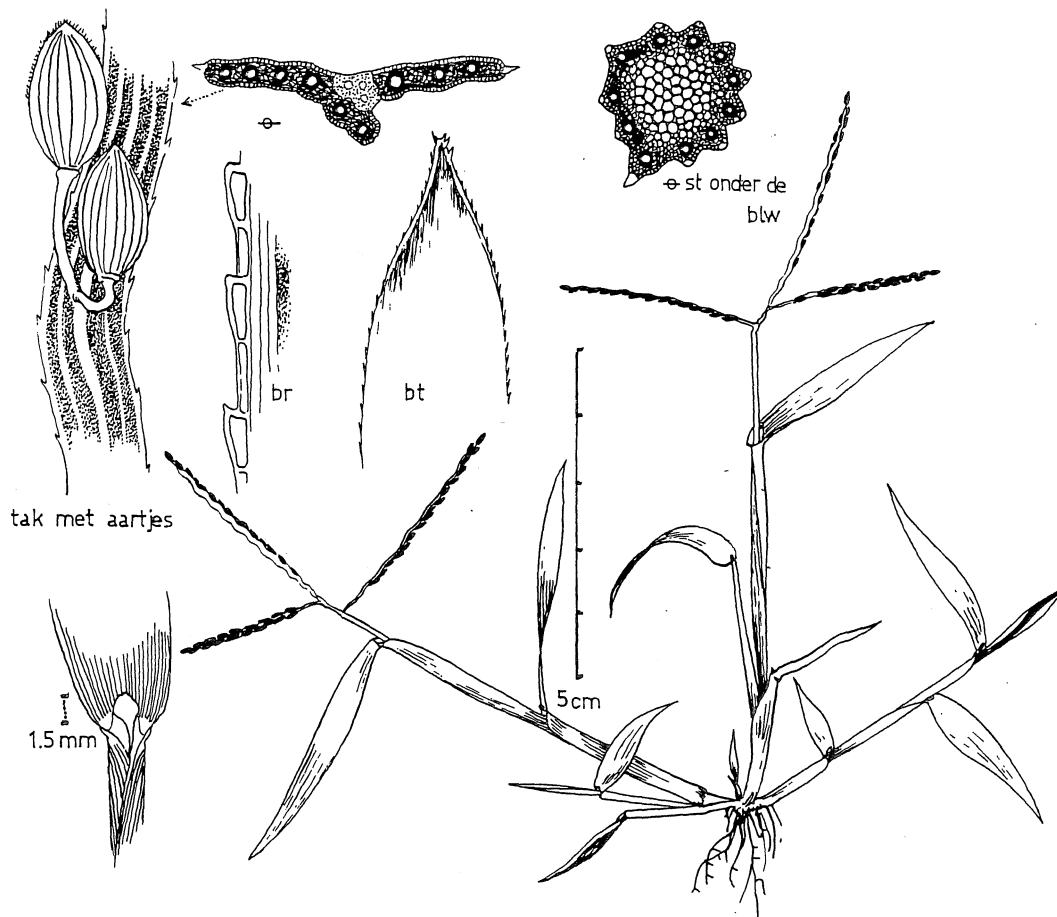
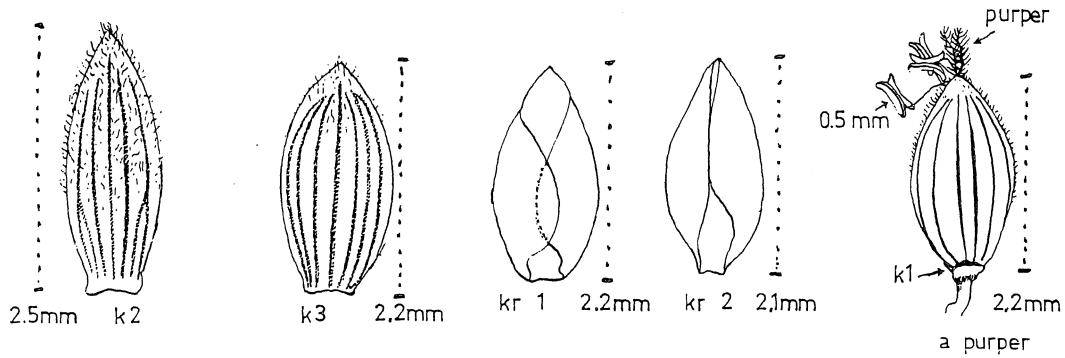
127. *Deschampsia cespitosa* (L.) P. B.

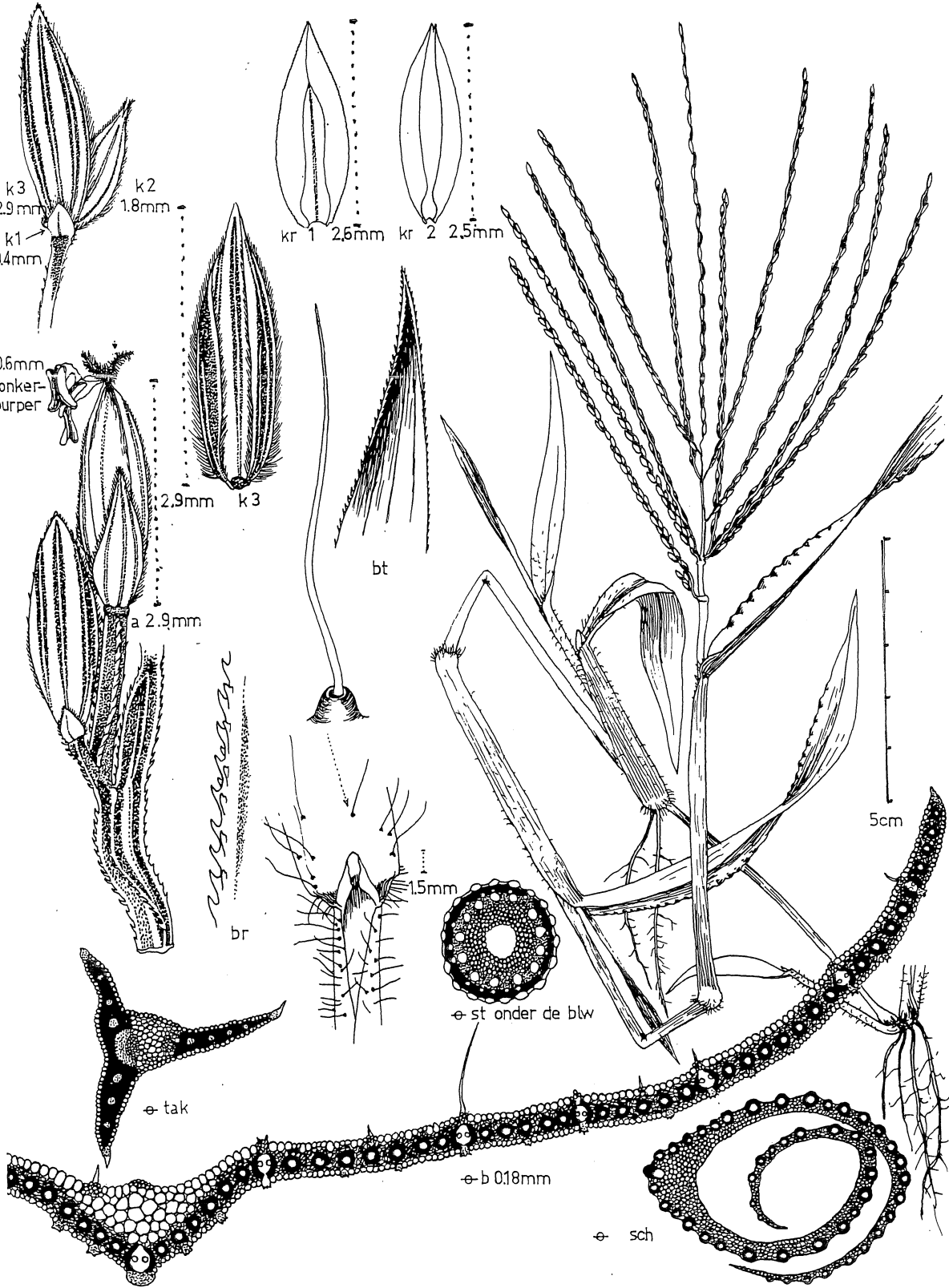


128. *Deschampsia flexuosa* (L.) Trin.



129. *Deschampsia setacea* (Huds.) Hack.

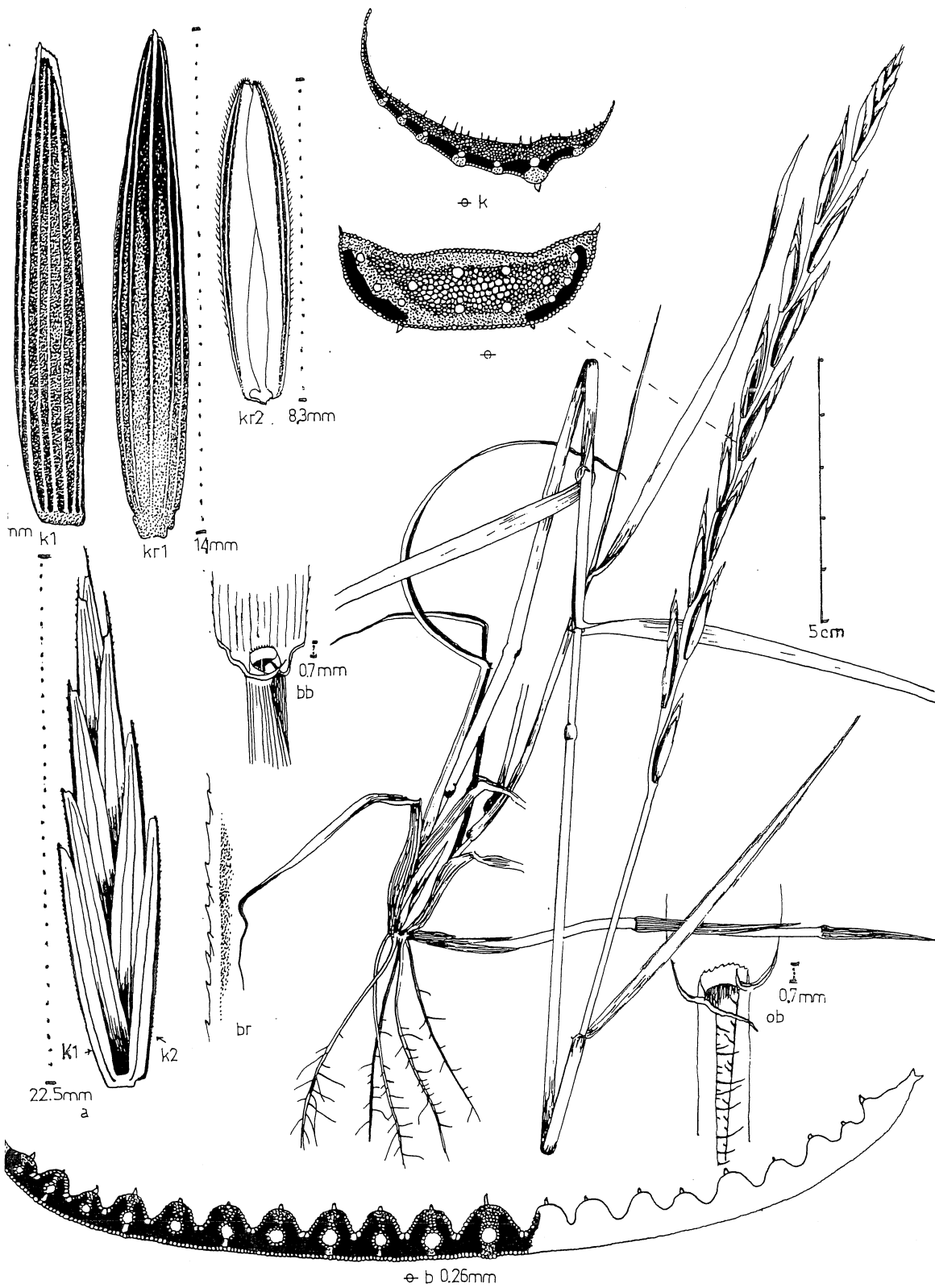




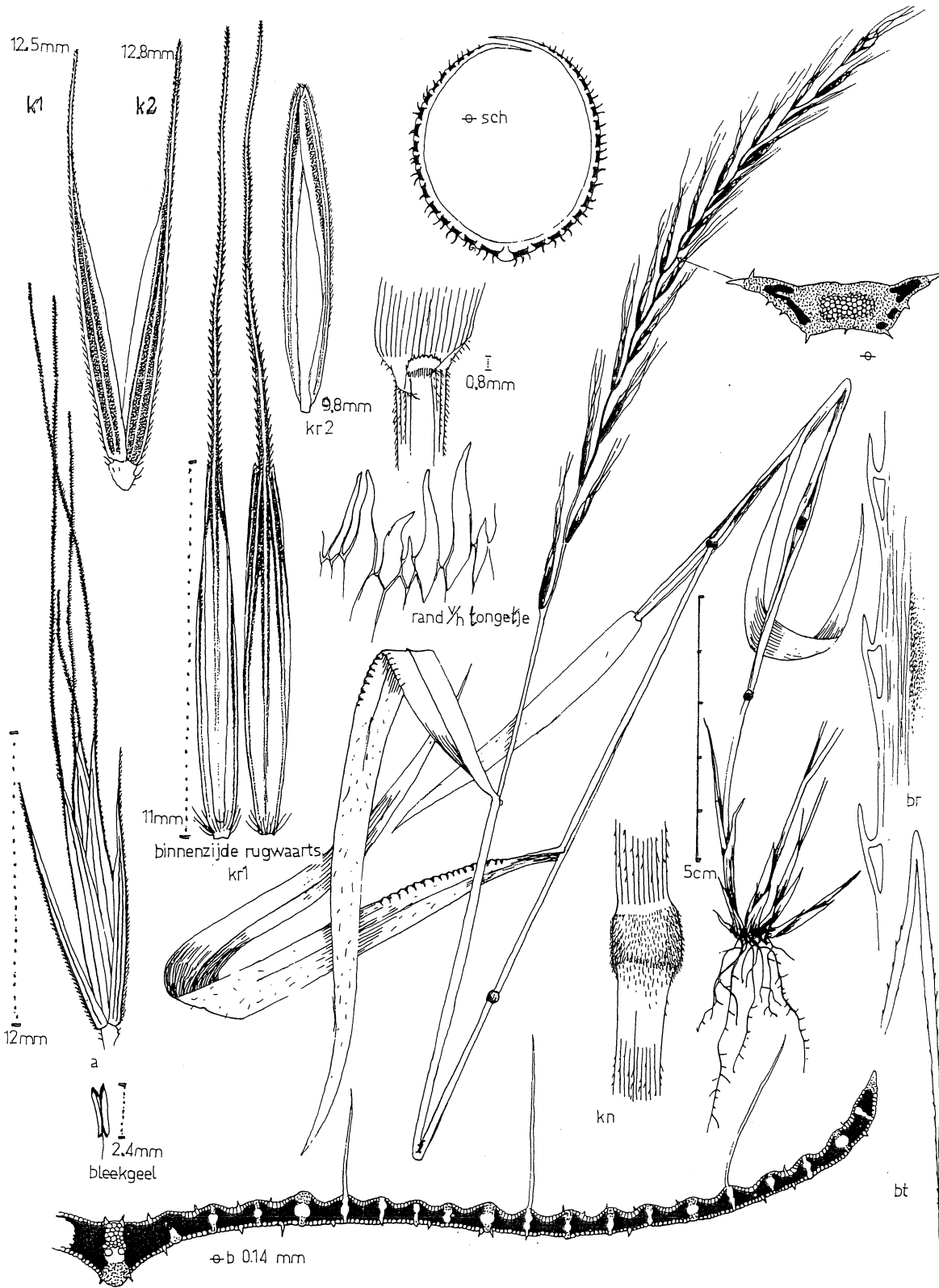
181. *Digitaria sanguinalis* (L.) Scop.

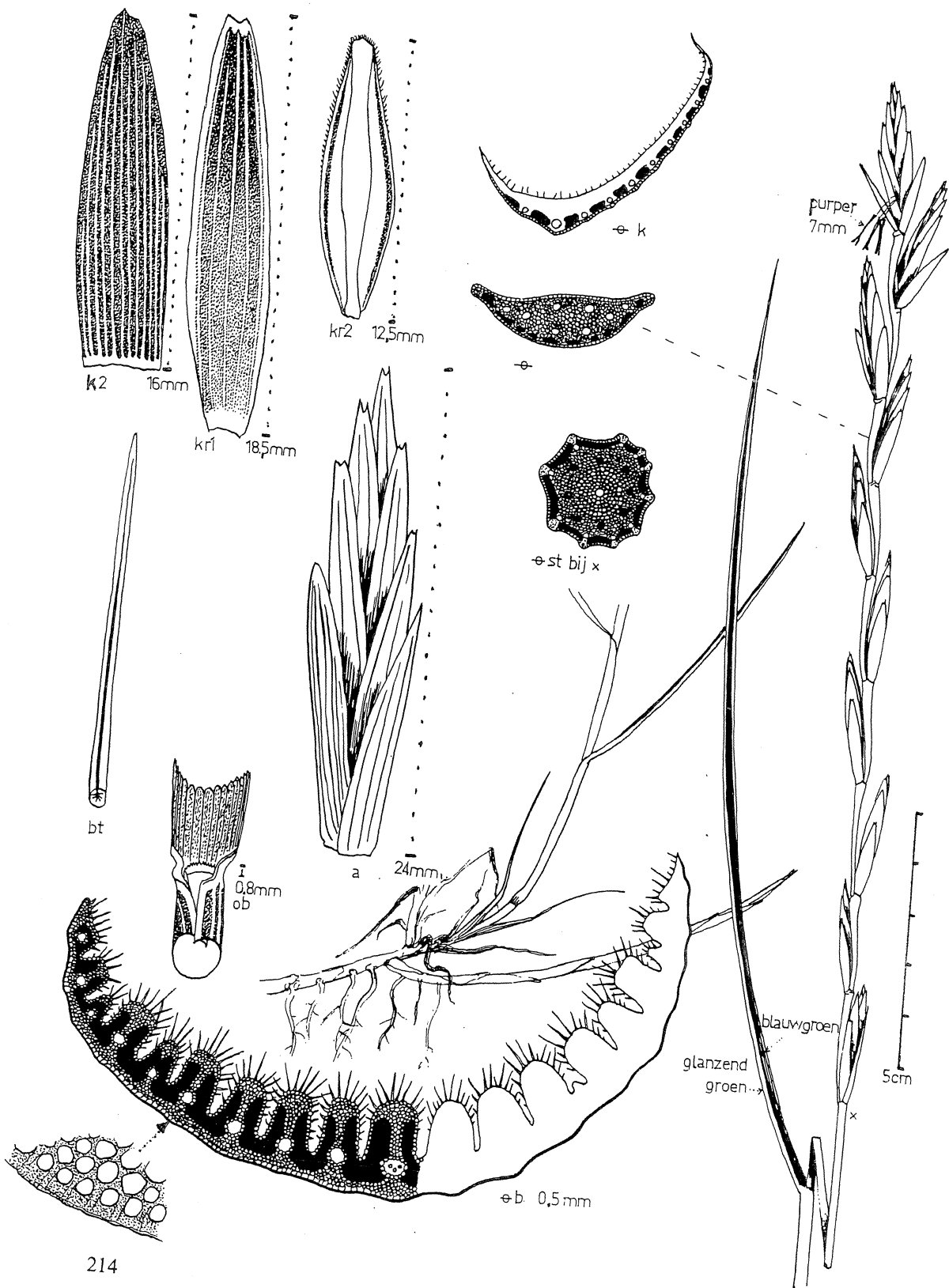


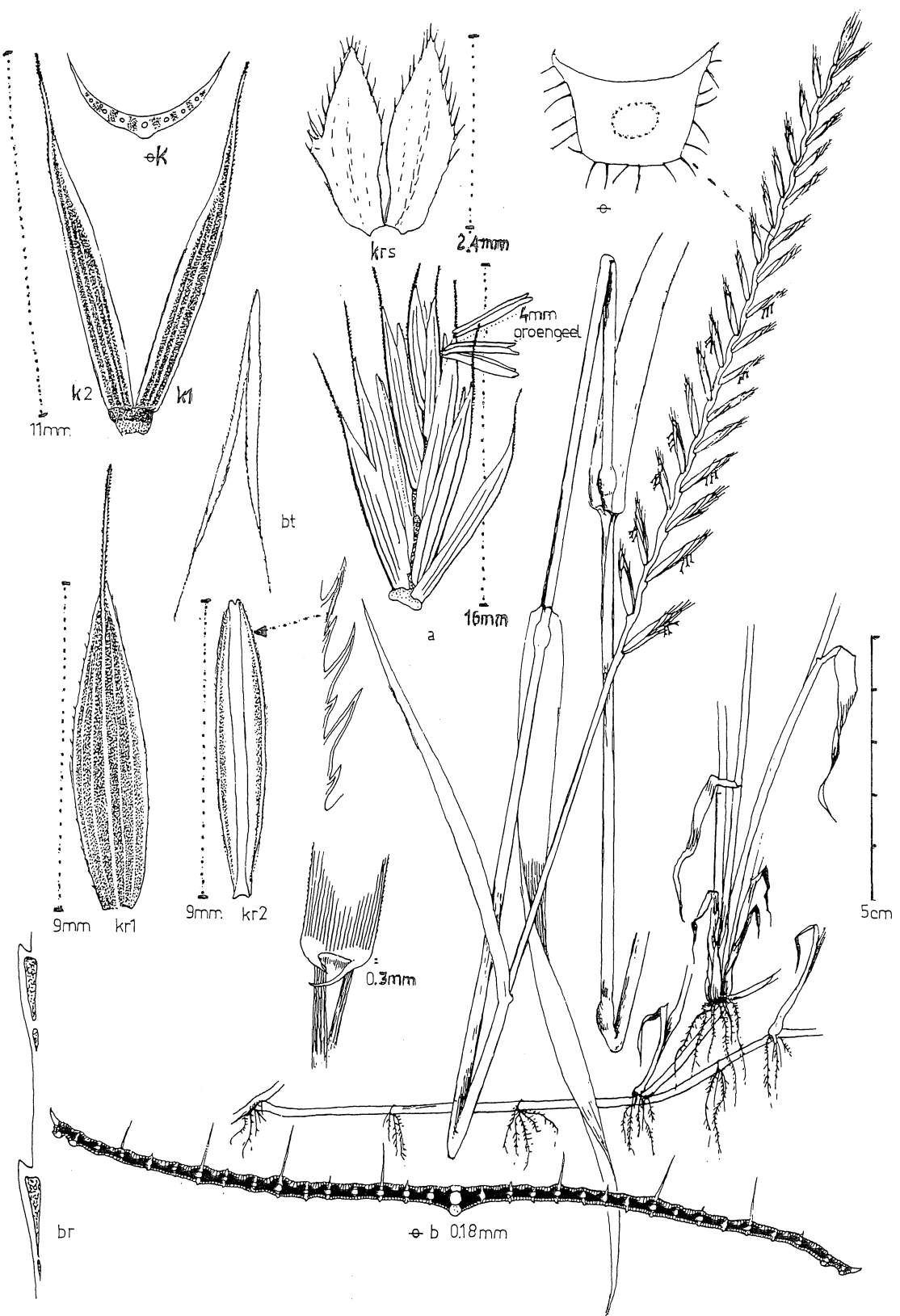




92. (*Elytrichia pungens* (Pers.) Tutin)  
*Elymus athericus* (Link) Kerguelen

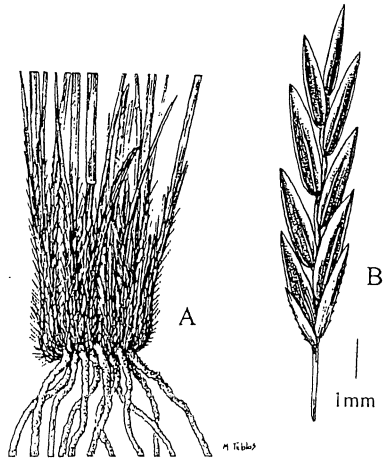




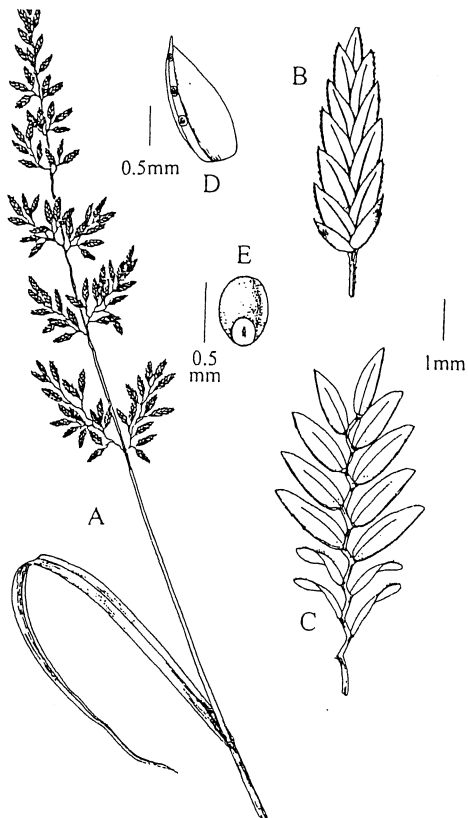


90. (*Elytrichia repens* (L.) Desv.)  
*Elymus repens* (L.) Gould.

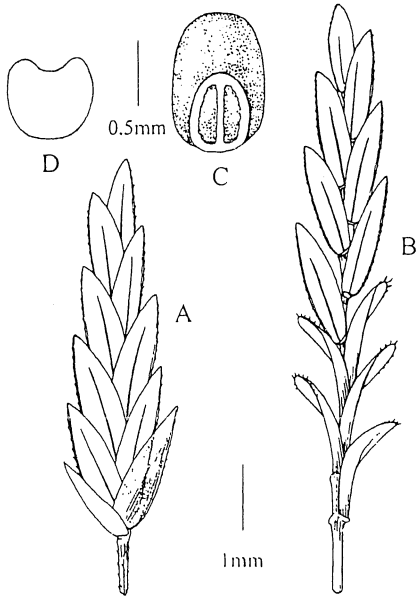
*Eragrostis curvula*:  
A, base of plant;  
B, spikelet.



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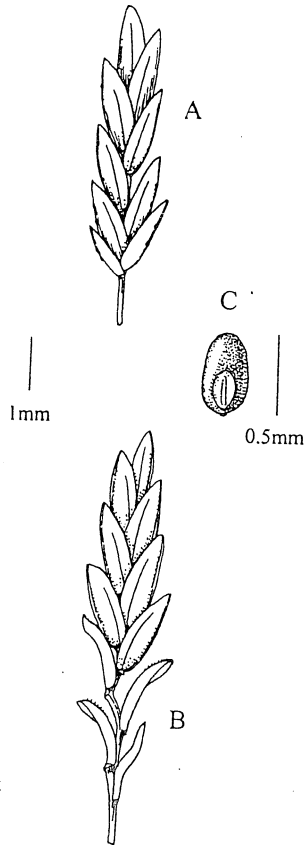


*Eragrostis cilianensis*:  
A, panicle; B, whole spikelet;  
C, partially disarticulated spikelet;  
D, lemma; E, caryopsis.



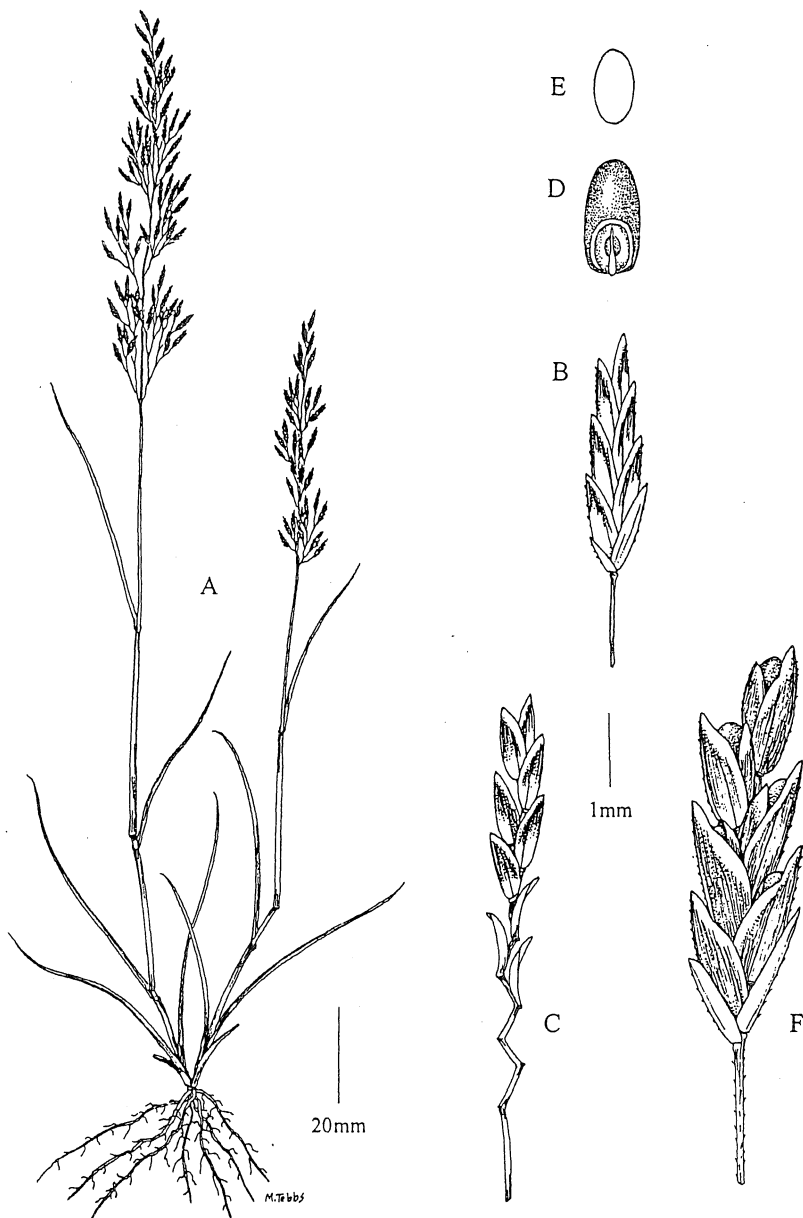
*Eragrostis mexicana*:  
 A, whole spikelet;  
 B, partially disarticulated spikelet;  
 C, caryopsis;  
 D, transverse section through caryopsis.

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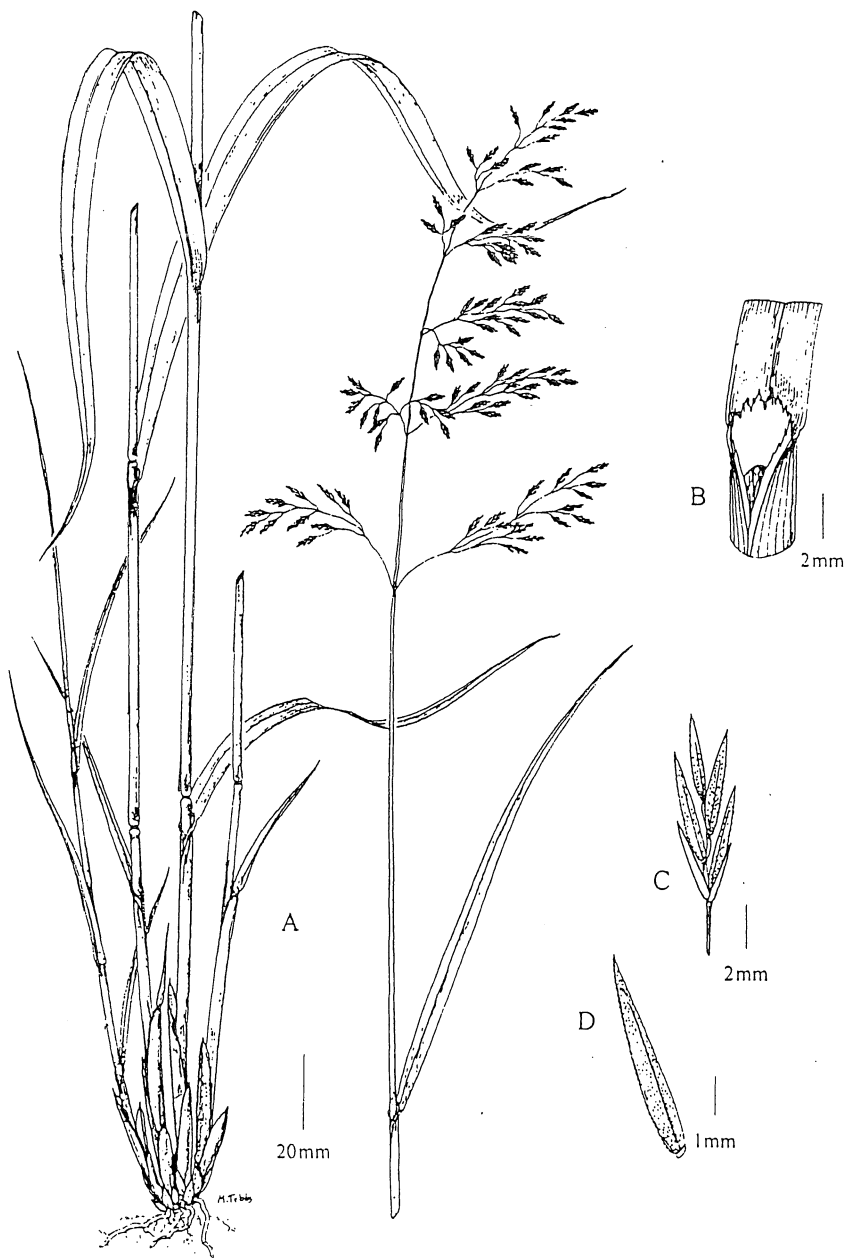
*Eragrostis minor*:  
 A, whole spikelet;  
 B, partially disarticulated spikelet  
 C, caryopsis.

*Eragrostis pilosa* 177  
*Eragrostis tef* 178



*Eragrostis pilosa*: A, habit; B, whole spikelet; C, partially disarticulated spikelet; D, caryopsis, E, transverse section through caryopsis. *Eragrostis tef*: F, spikelet.

*Festuca altissima* 11

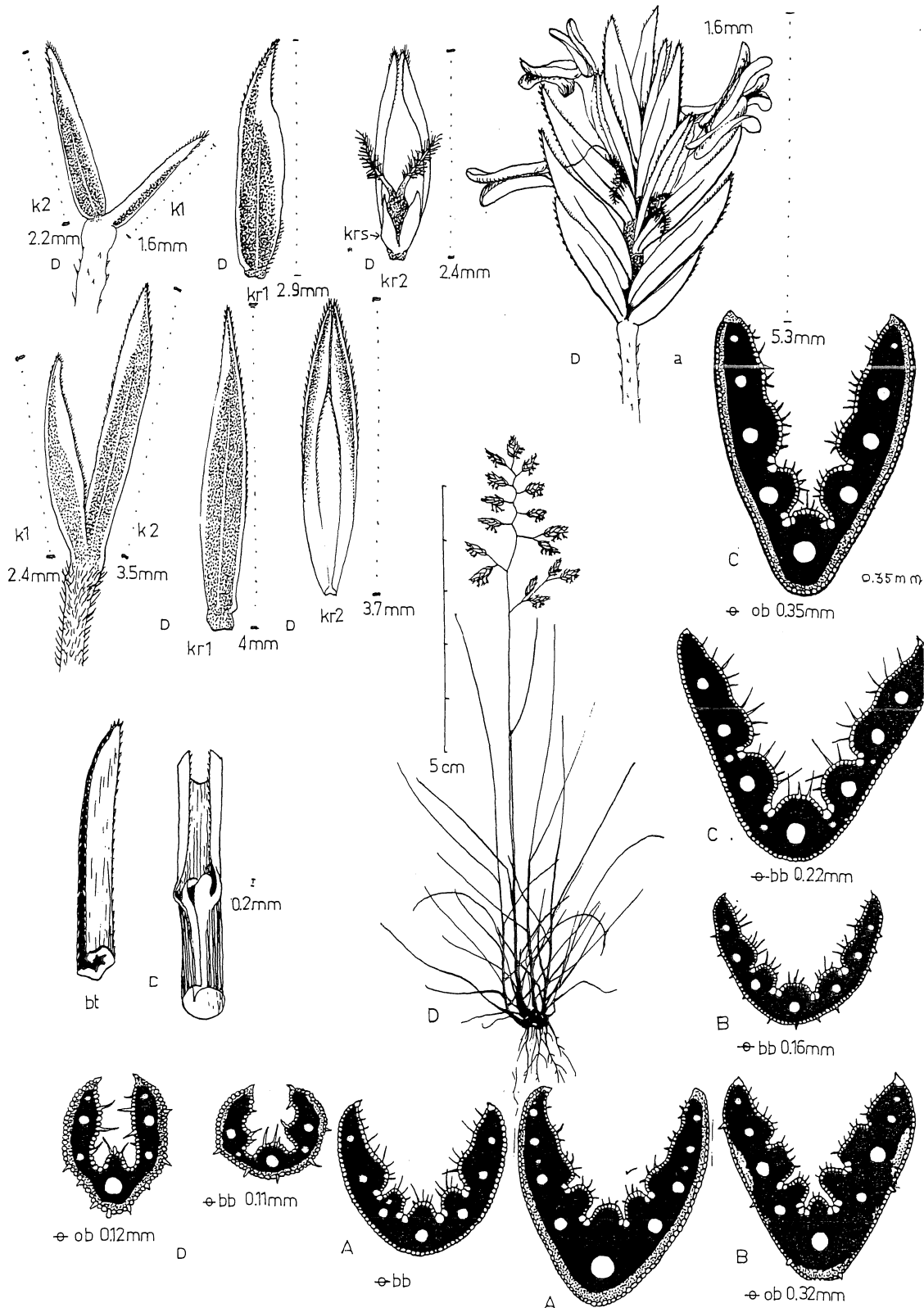


*Festuca altissima*: A, habit; B, ligule; C, spikelet; D, lemma.



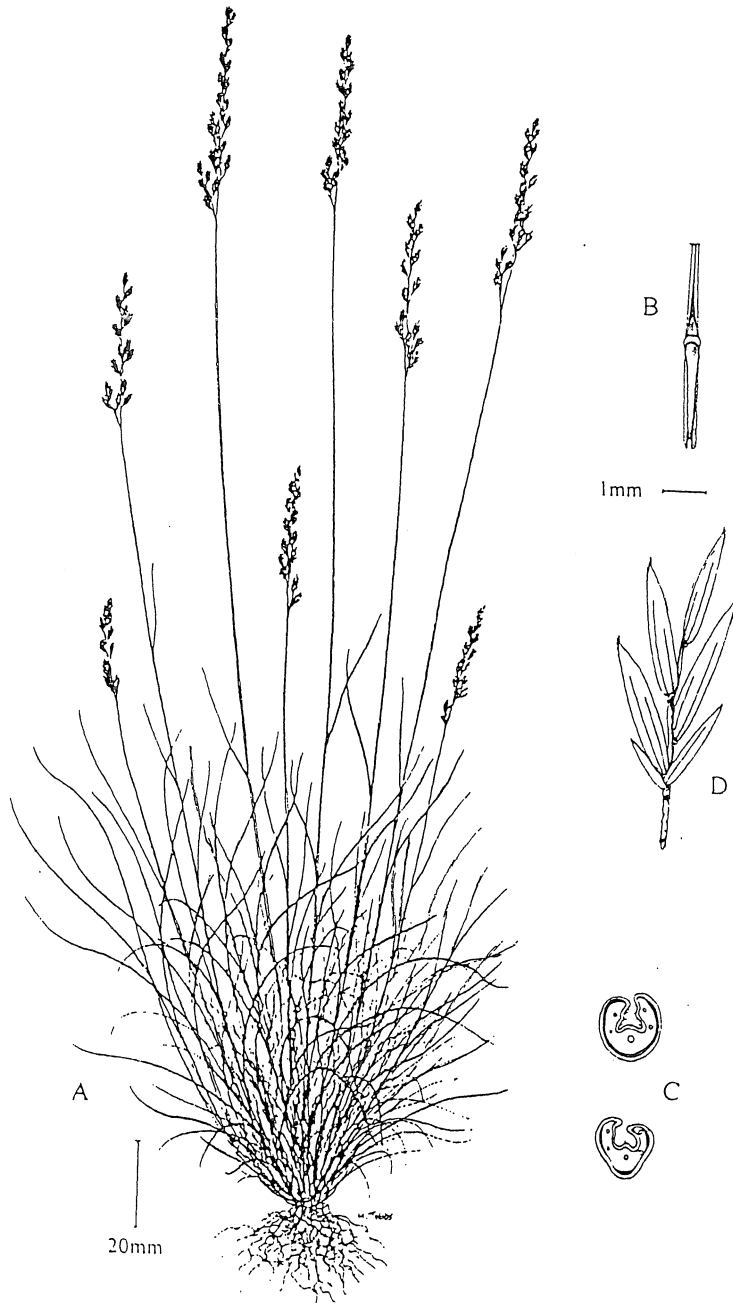


35. *Festuca arundinacea* Schreb.

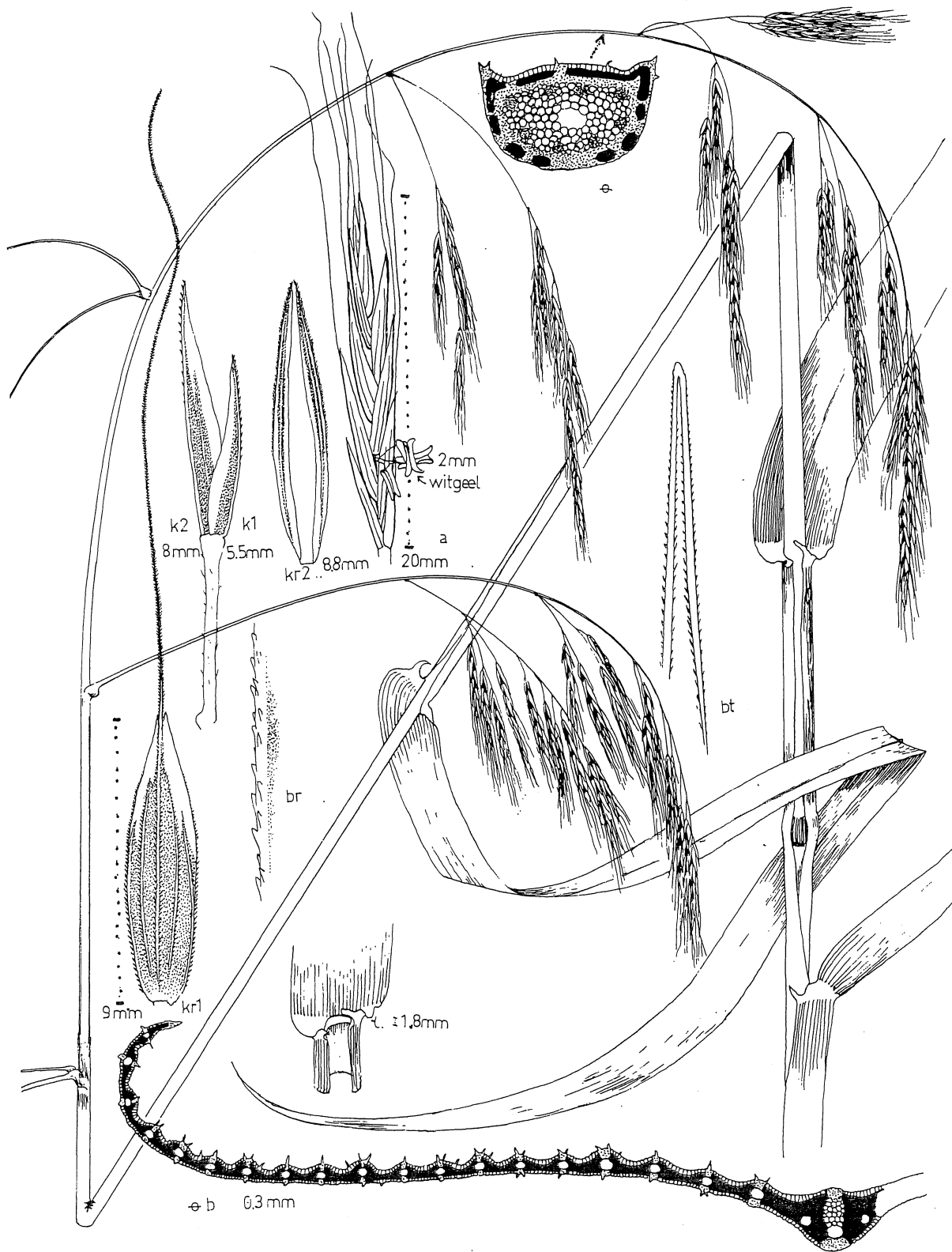


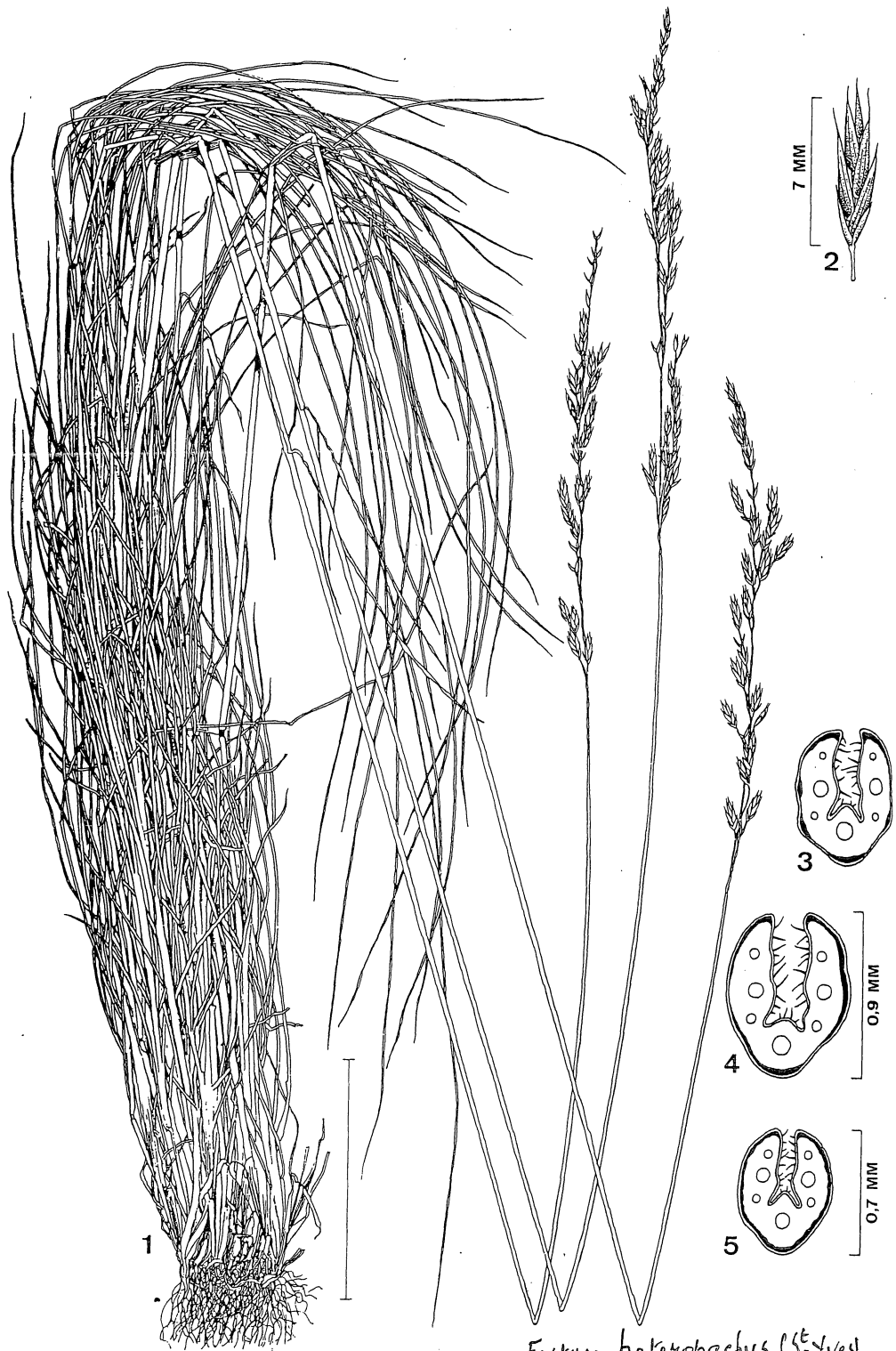
28A-C. *Festuca ovina* L. ssp. *ovina*  
 28D. *Festuca ovina* L. ssp. *tenuifolia* (Sibth.) Celak.  
*F. filiformis* POURR. = 28B. *Festuca trachyphylla* (Hack.) Kraj.  
*F. brevipila* R. Tracey =

*Festuca filiformis* 18

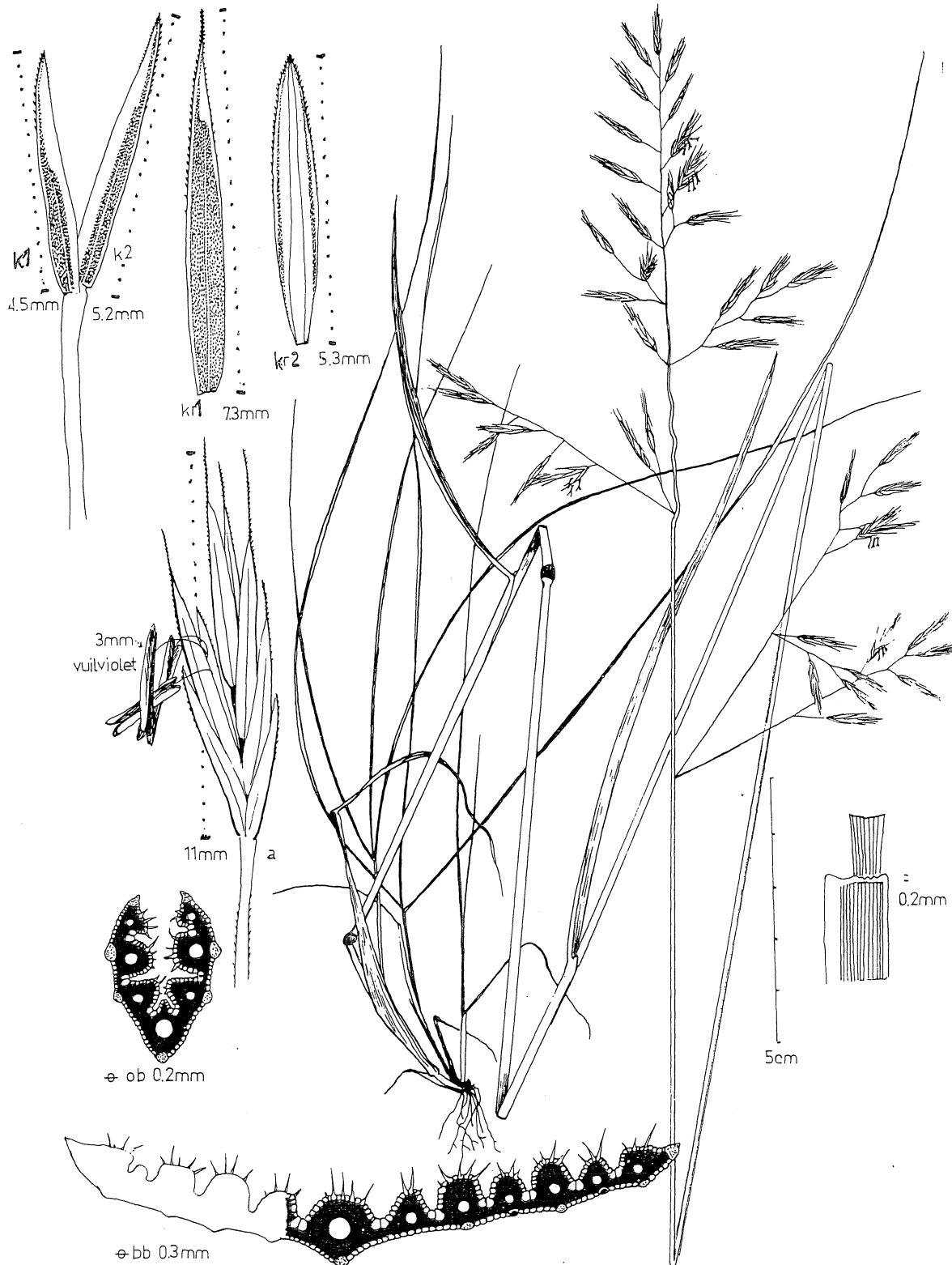


*Festuca filiformis*: A. habit; B. ligule; C. transverse sections of tiller leaves; D. spikelet.

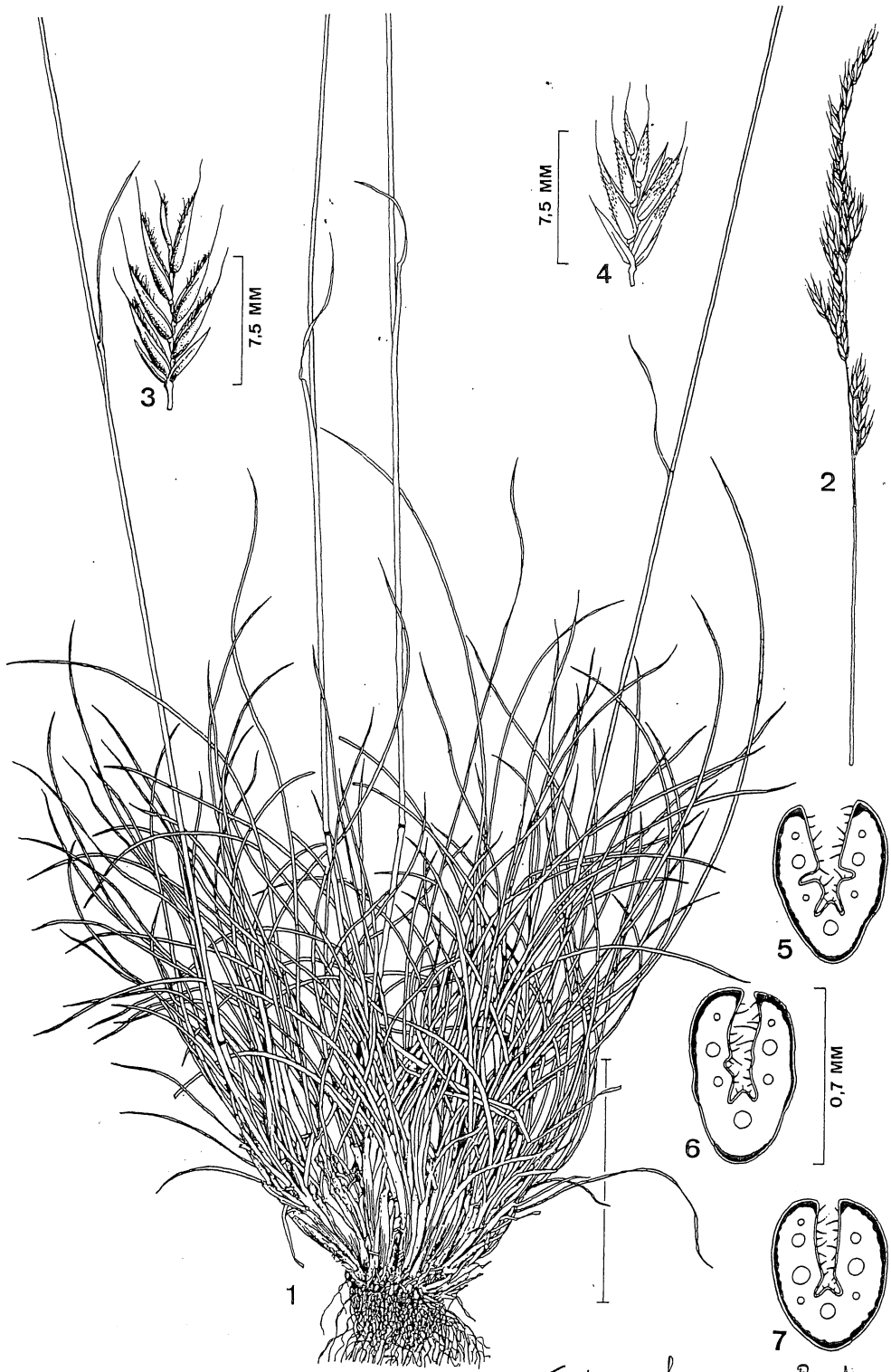




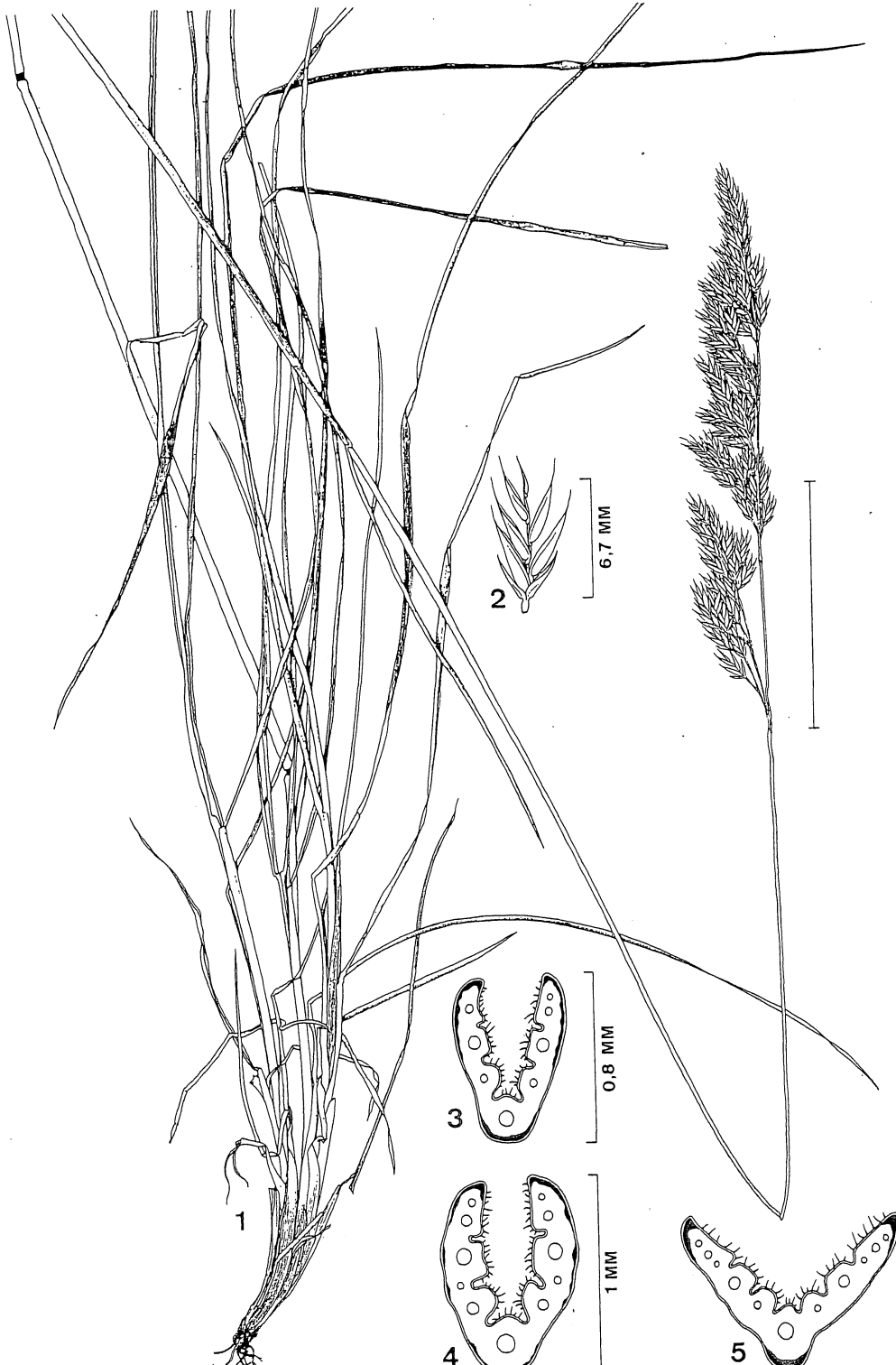
*Festuca heteropachys* (St. Yves)  
Patzke ex Auquier.



30. *Festuca heterophylla* Lamk.



*Festuca lemarii* Bast.

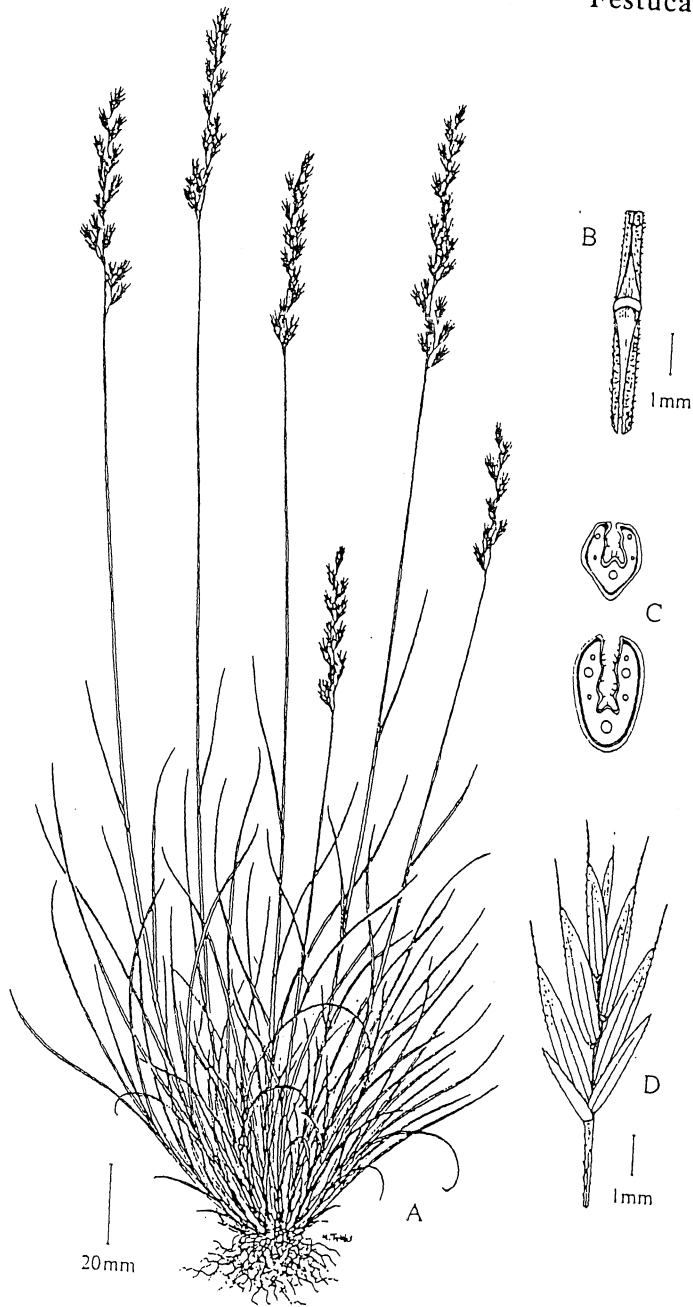


1 *Festuca longifolia* subsp. *pseudo-costei*  
200

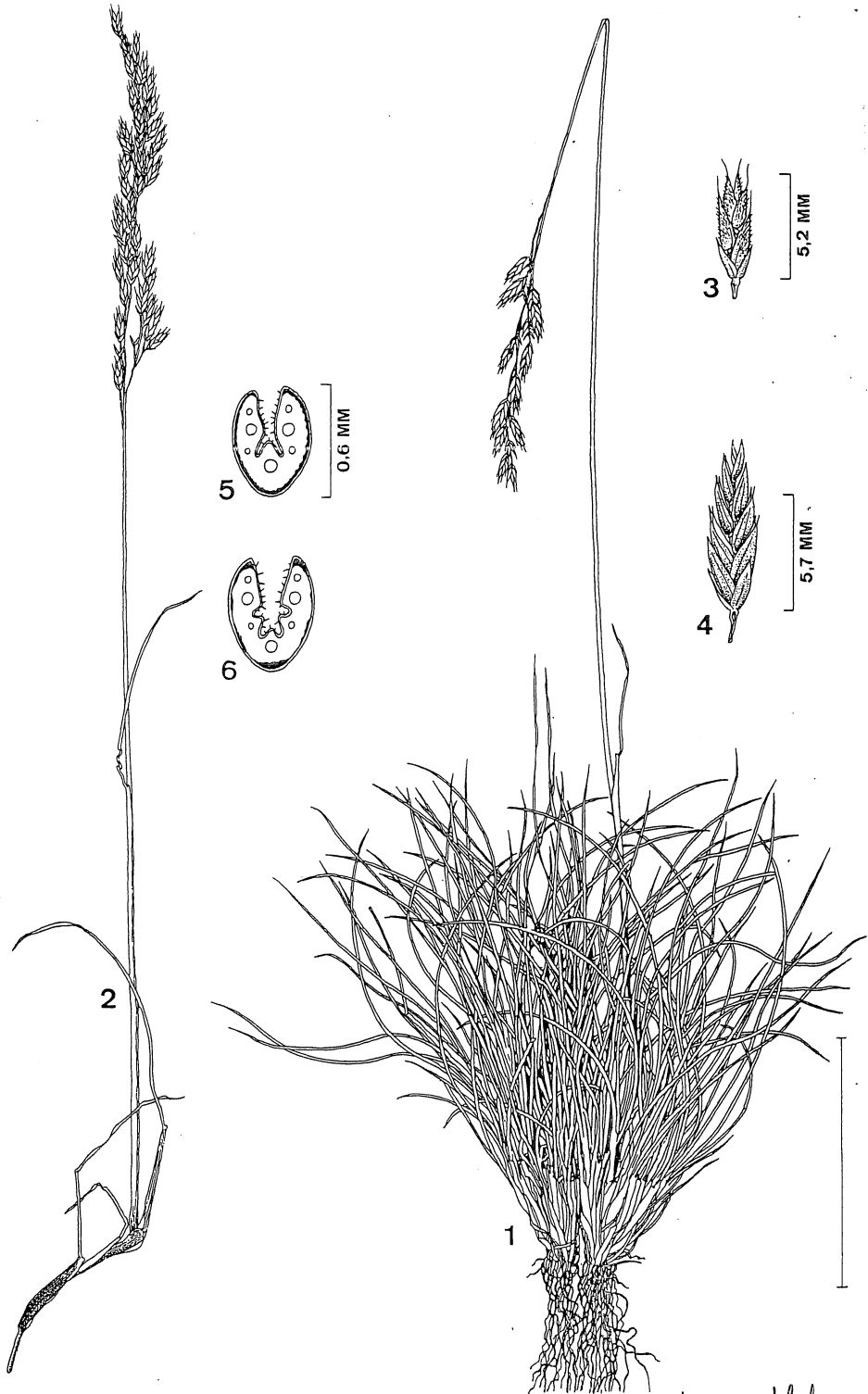




*Festuca ovina* 19

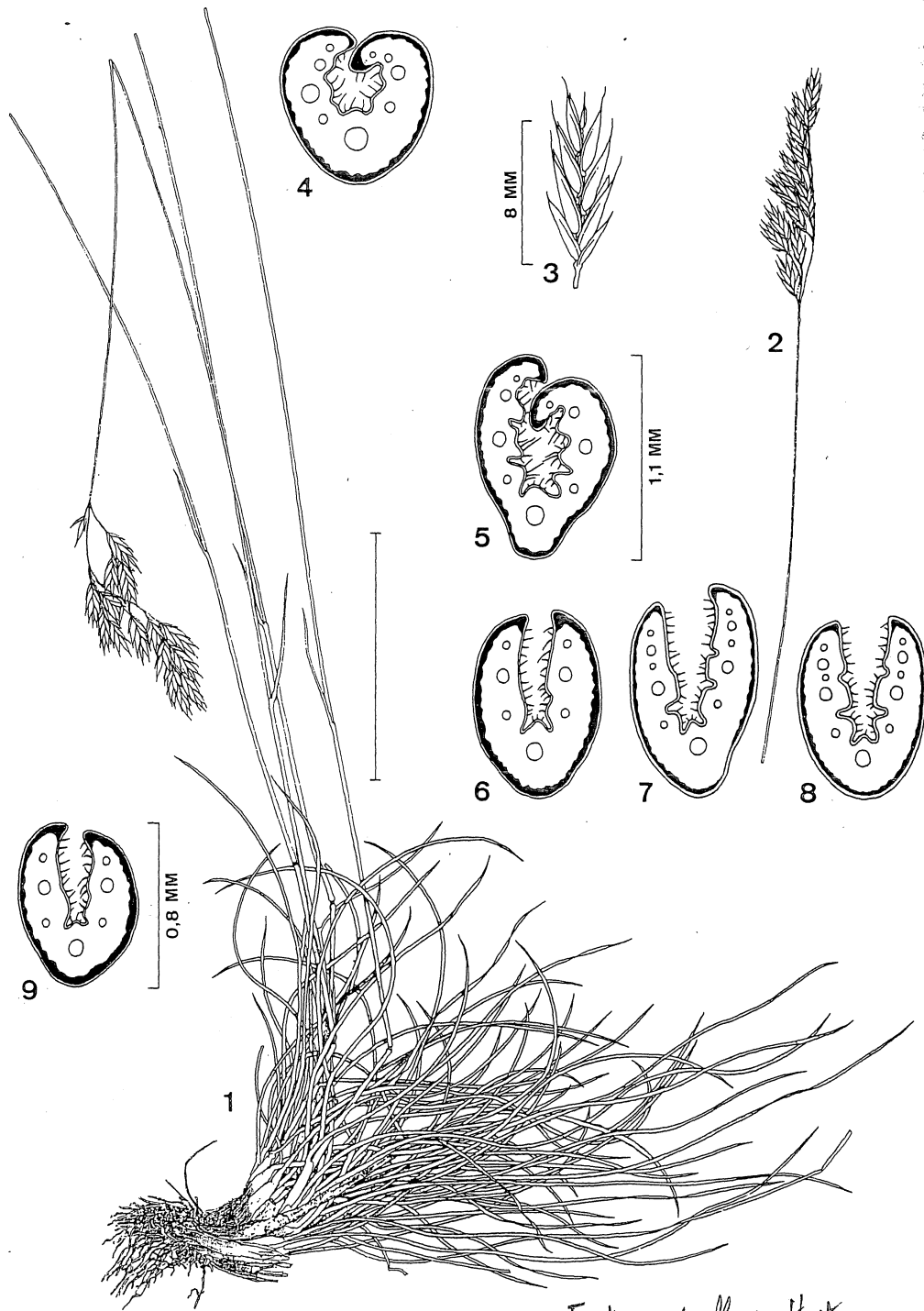


*Festuca ovina*: A, habit; B, ligule; C, transverse sections of tiller leaves; D, spikelet.

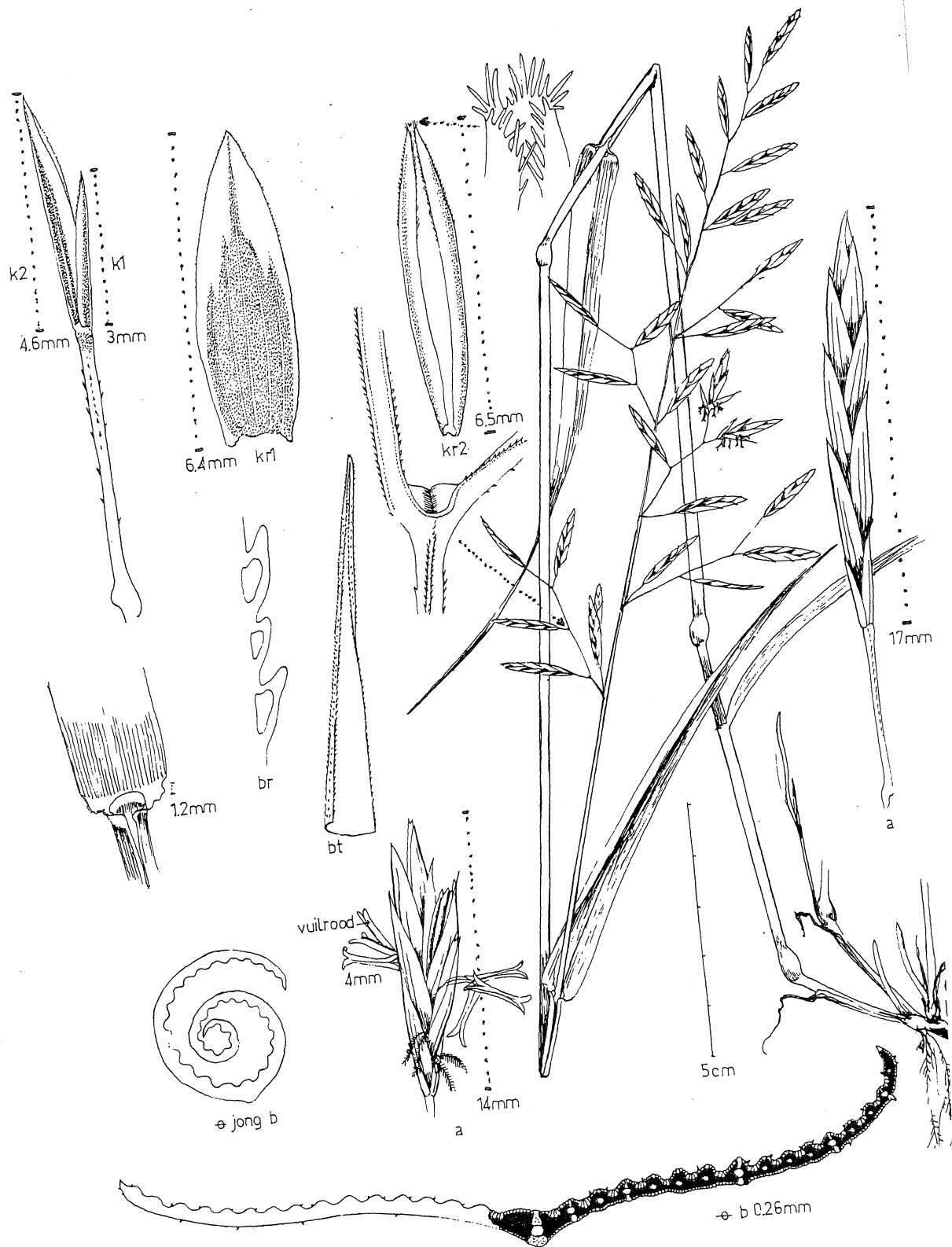


224 *Festuca ovina* subsp. *questfalia*





*Festuca pallens* Host



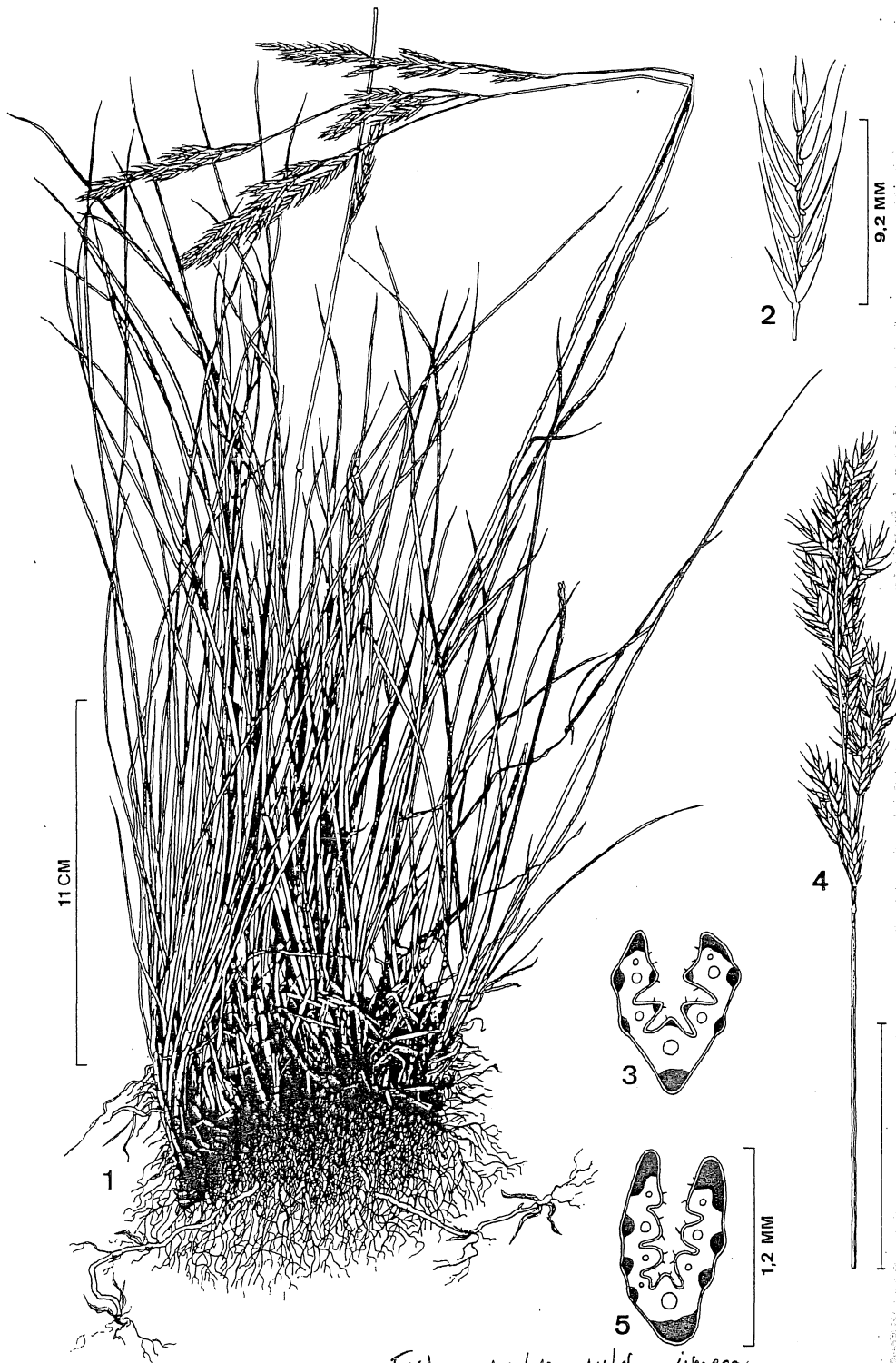
36. *Festuca pratensis* Huds.



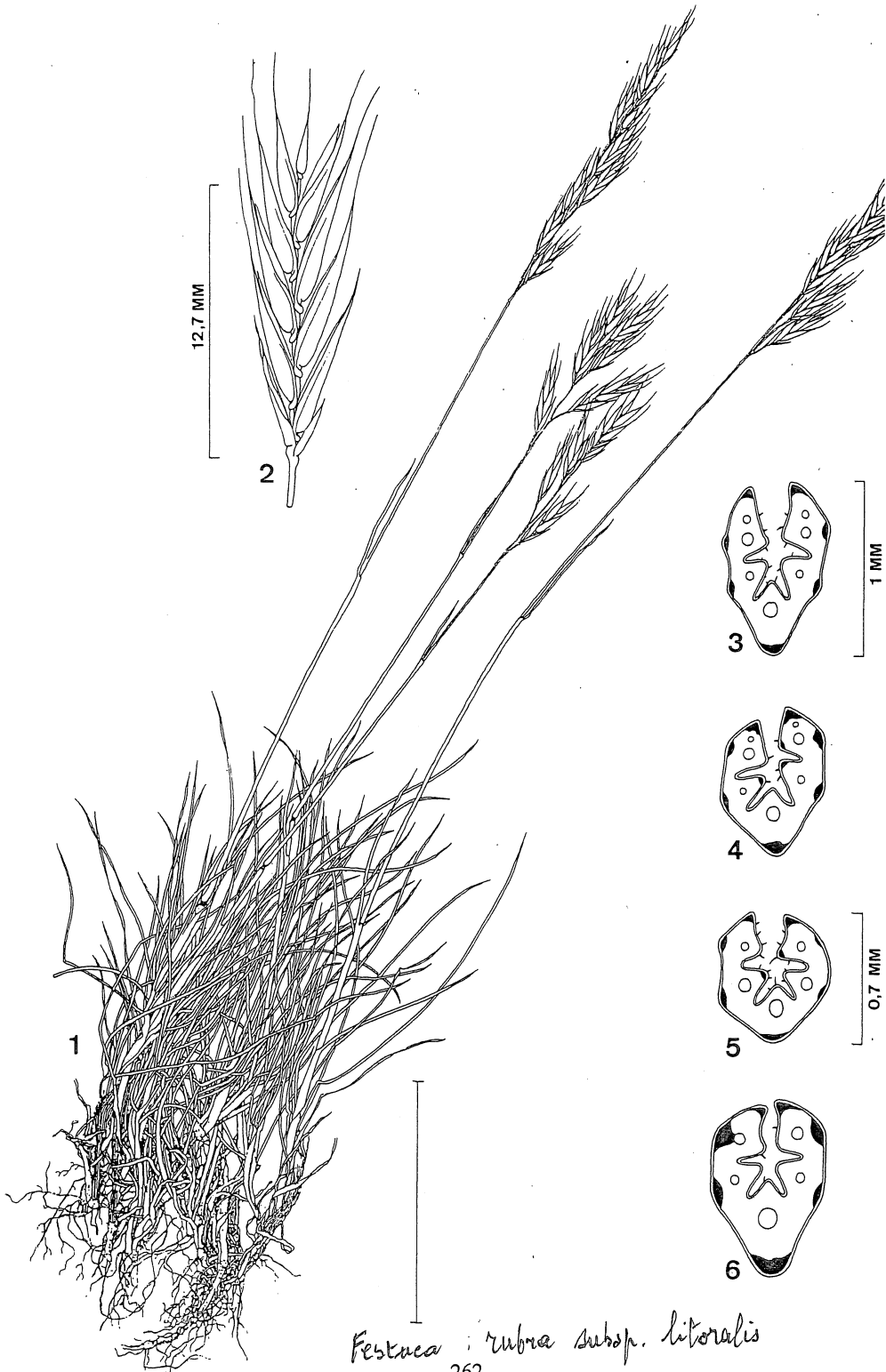


33. *Festuca fallax* Thuil. = *F. rubra* L. subsp. *fallax* (THUILL.) NYMAN



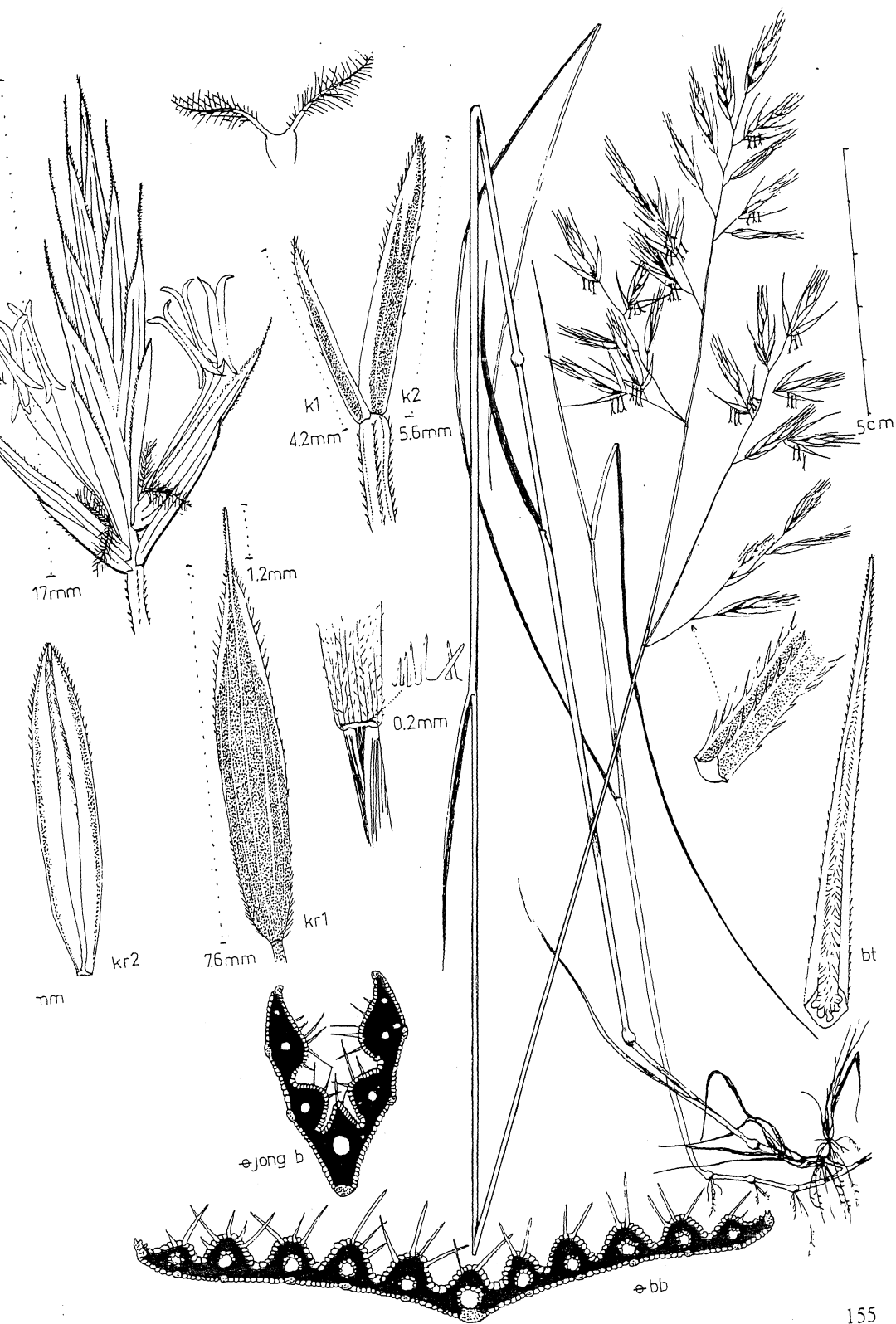


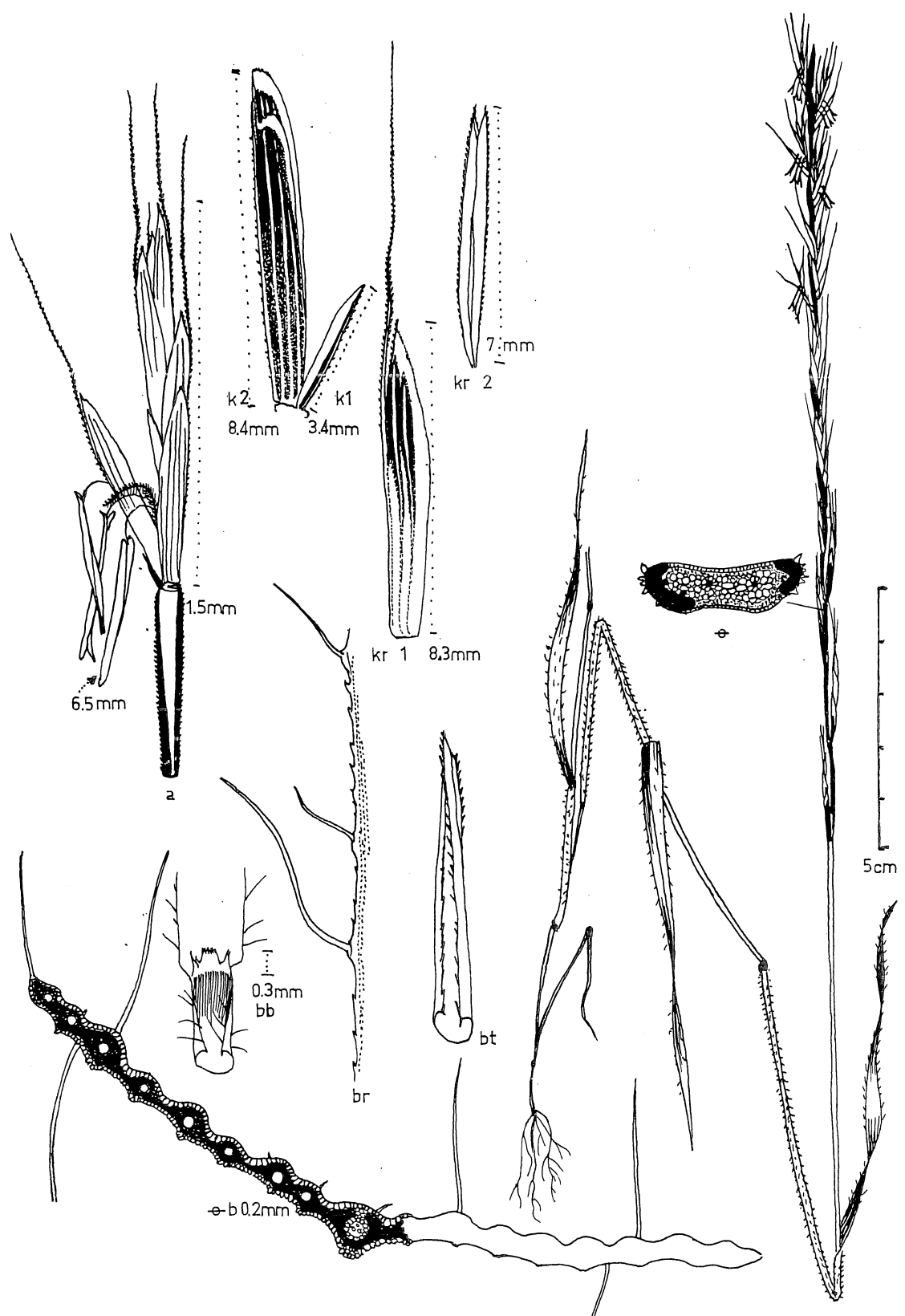
*Festuca rubra* subsp. *juncea*



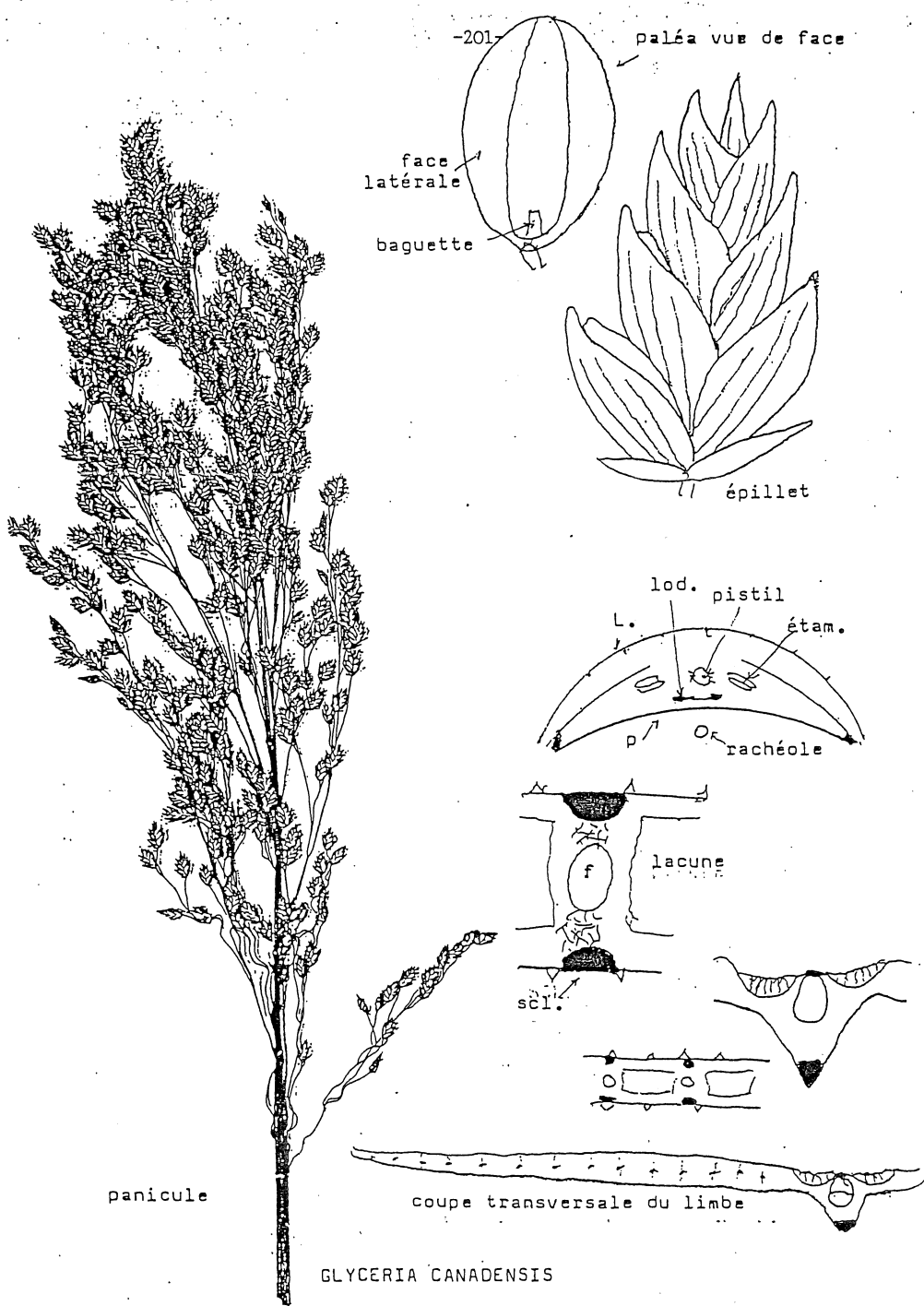


*Festuca rubra* subsp. *pruinosa*

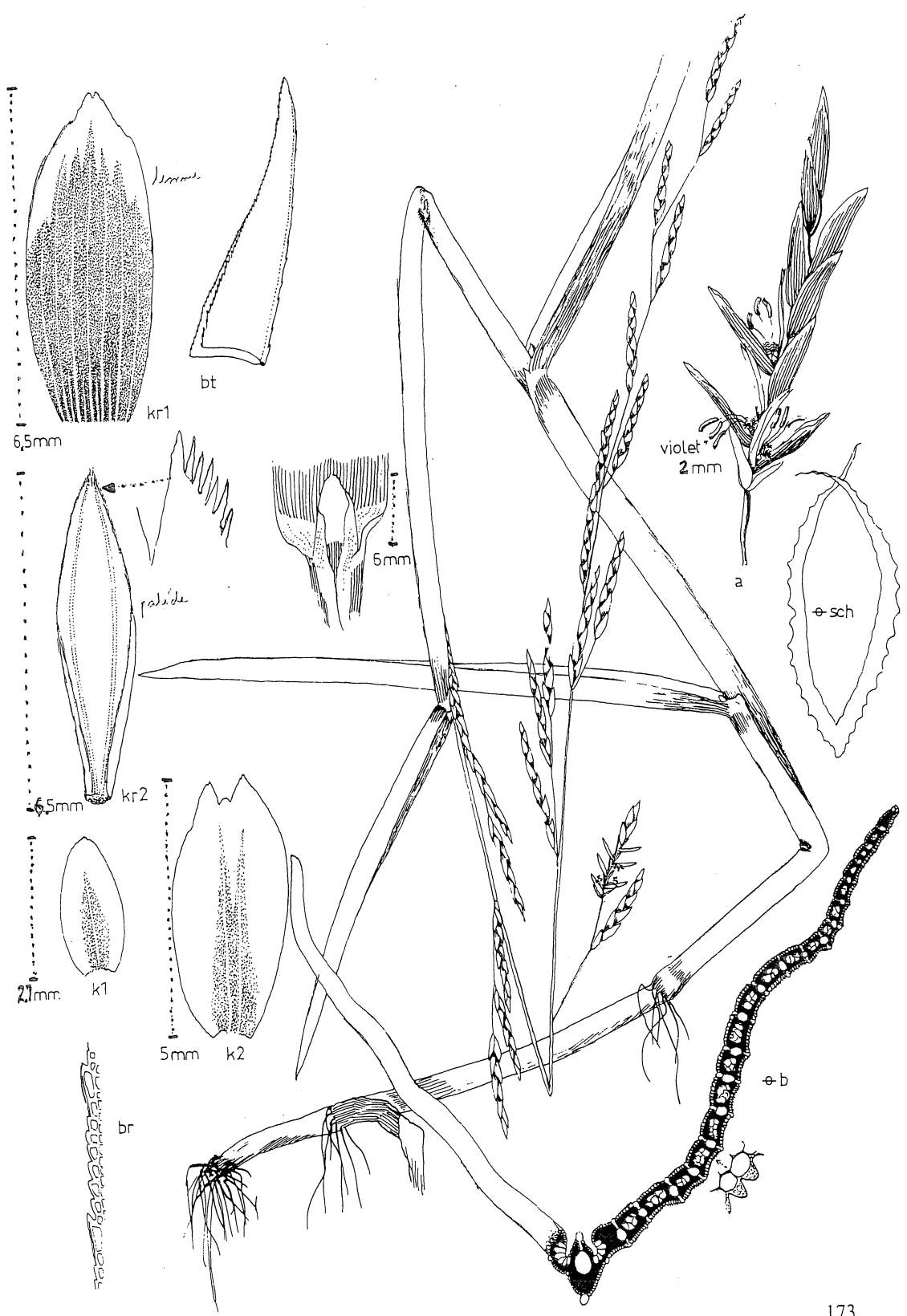




195. *Gaudinia fragilis* (L.) P. B.



GLYCERIA CANADENSIS

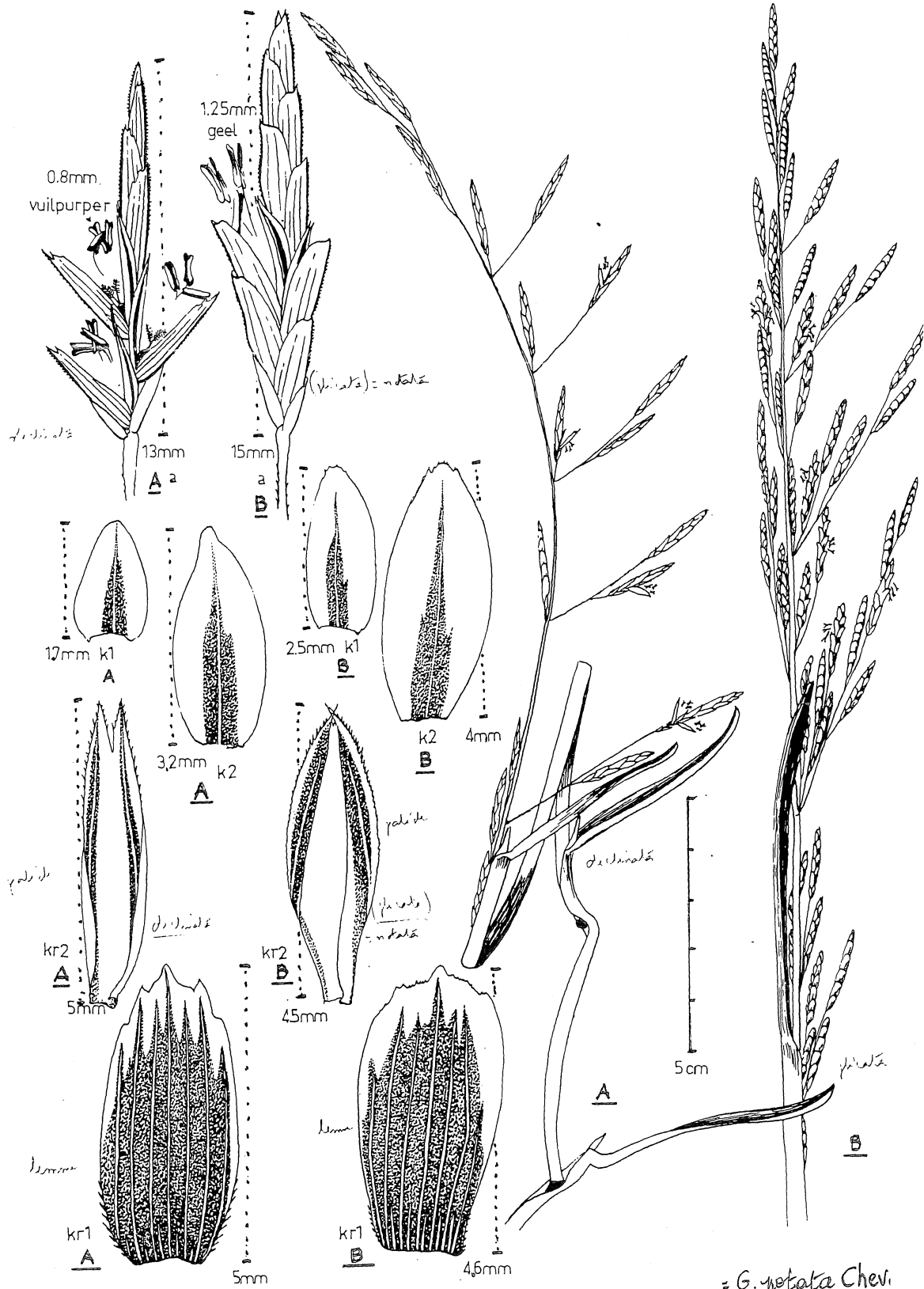


49. *Glyceria fluitans* (L.) R. Br.



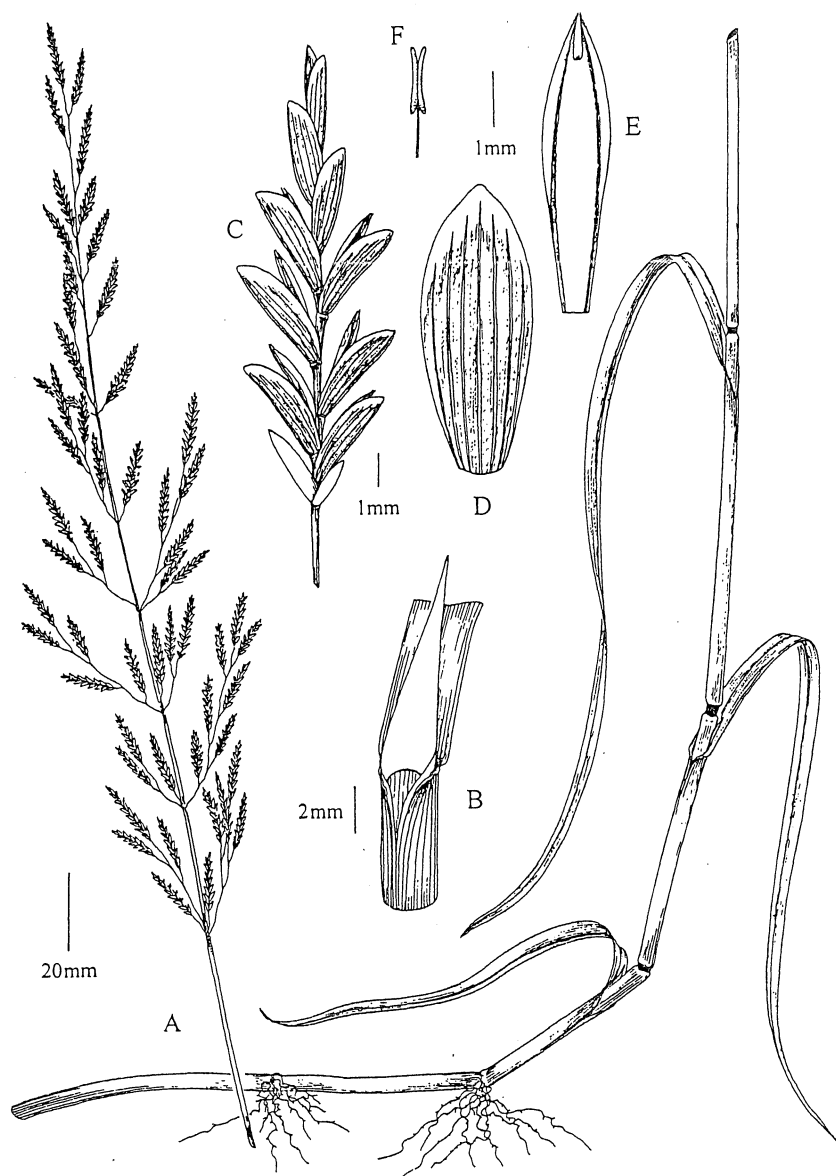
48. *Glyceria maxima* (Hartm.) Holmb.



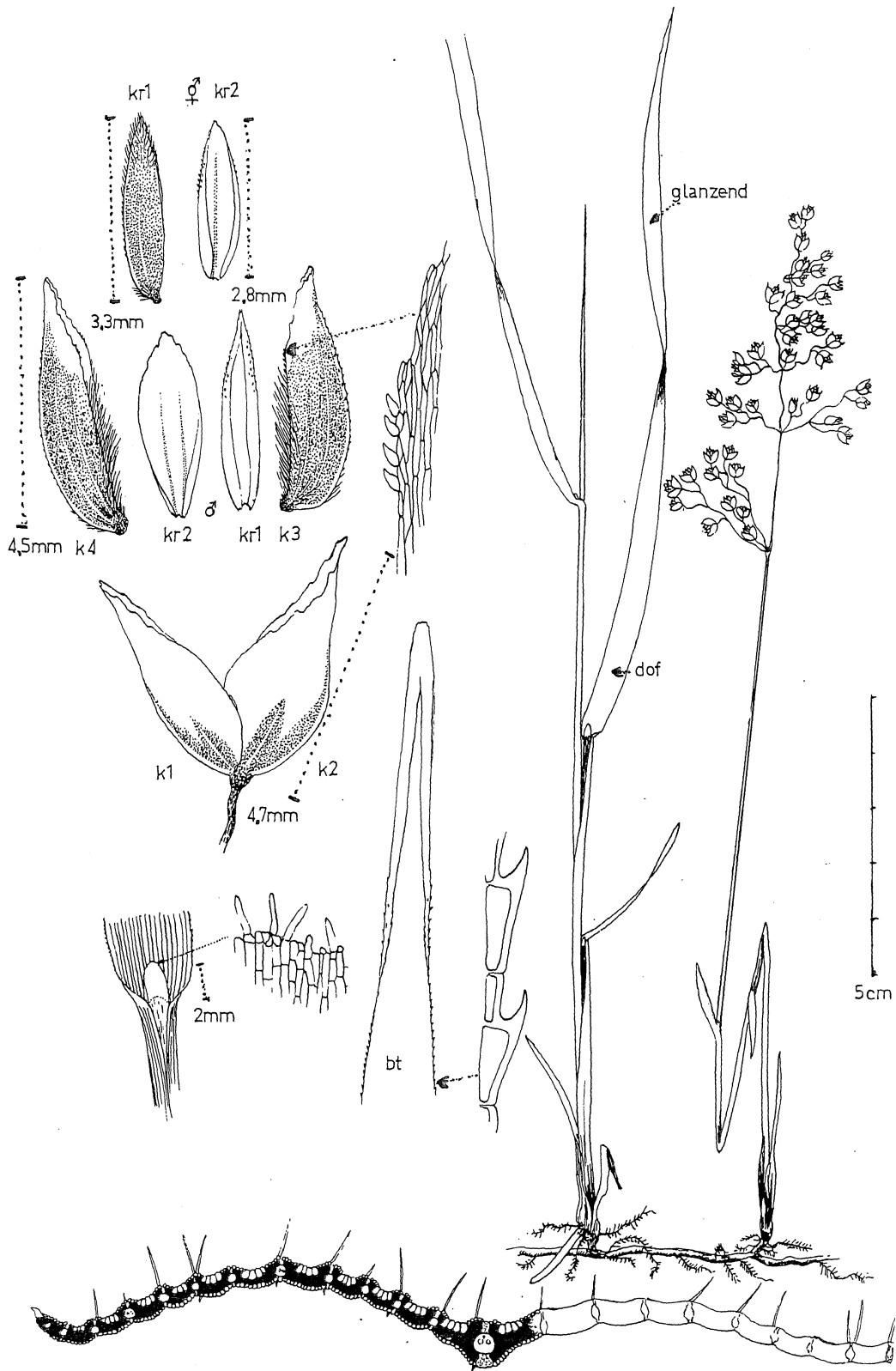


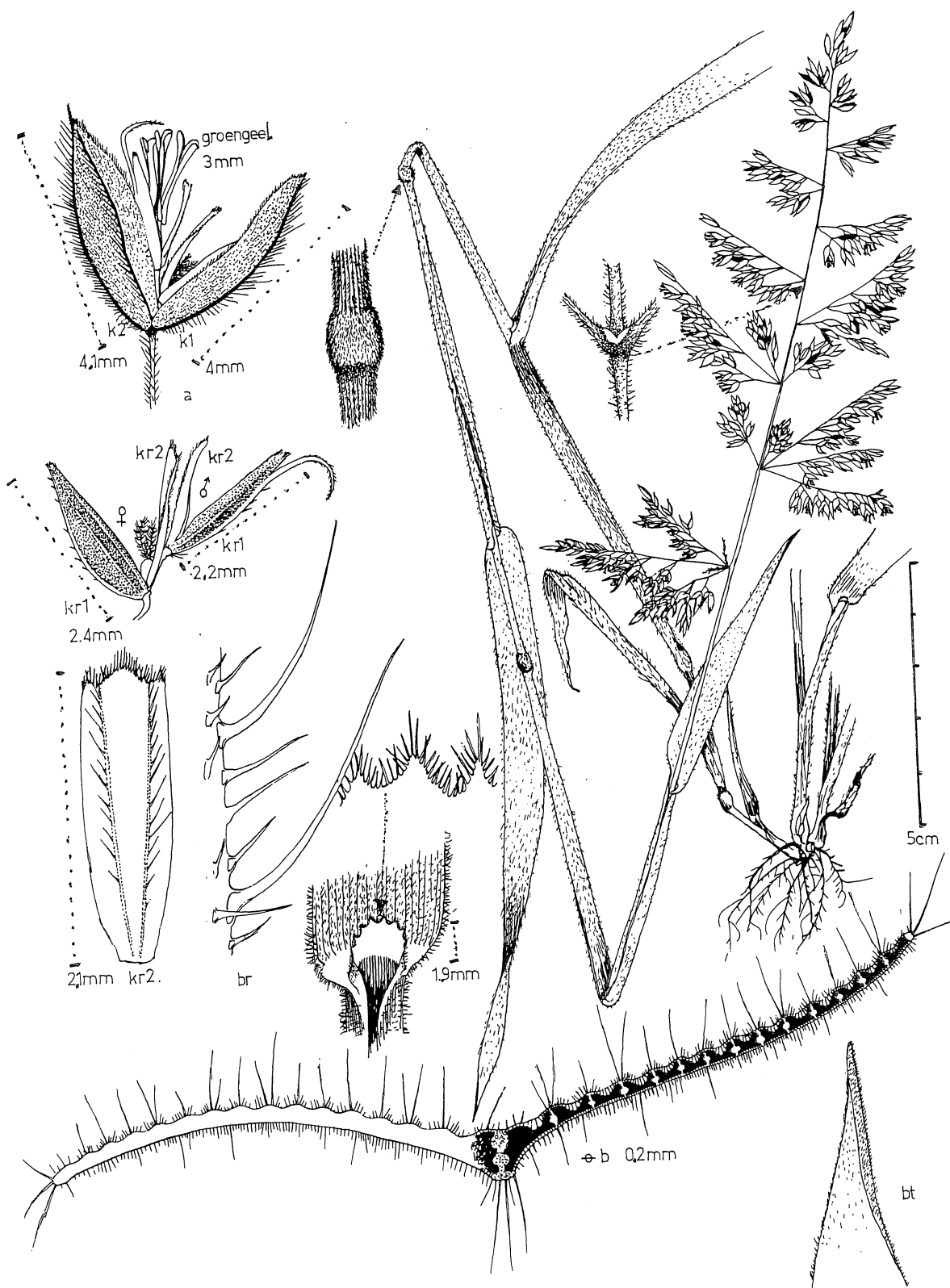
= *G. notata* Chev.  
 50B. *Glyceria plicata* Fr.  
 51A. *Glyceria declinata* Bréb.

*Glyceria ×pedicellata* 130

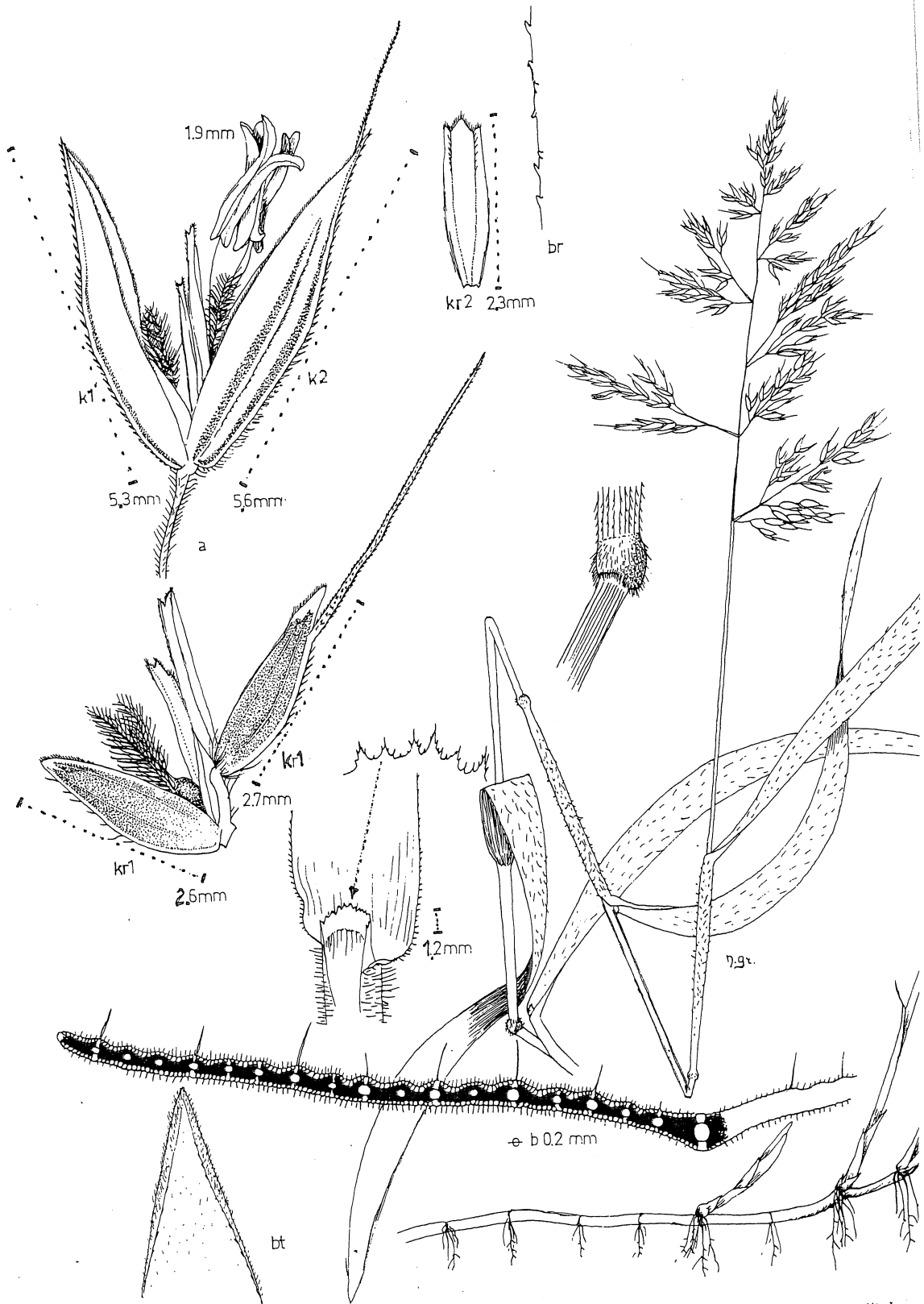


*Glyceria ×pedicellata*: A, habit; B, ligule; C, spikelet; D, lemma, flattened; E, palea; F, anther.

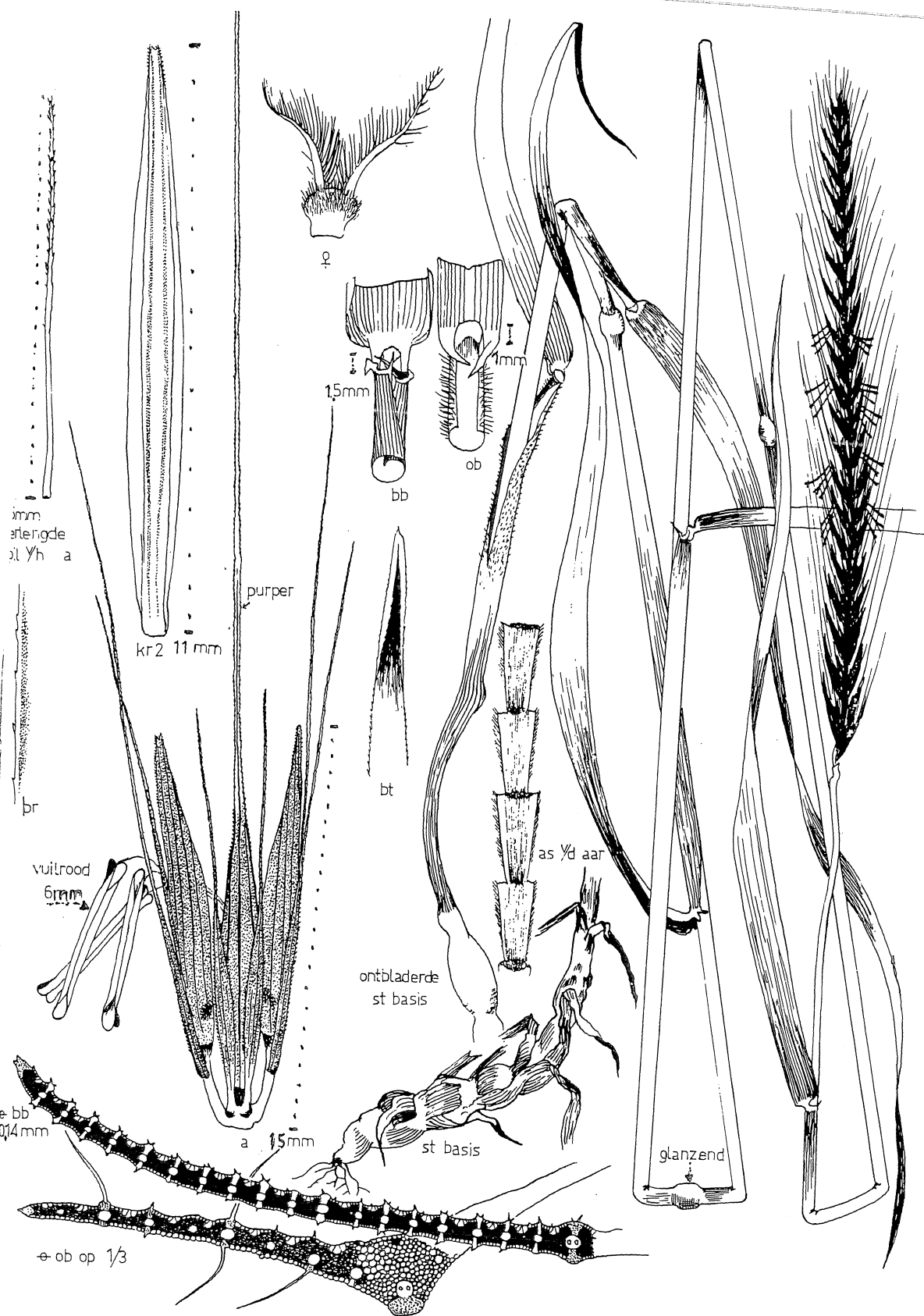




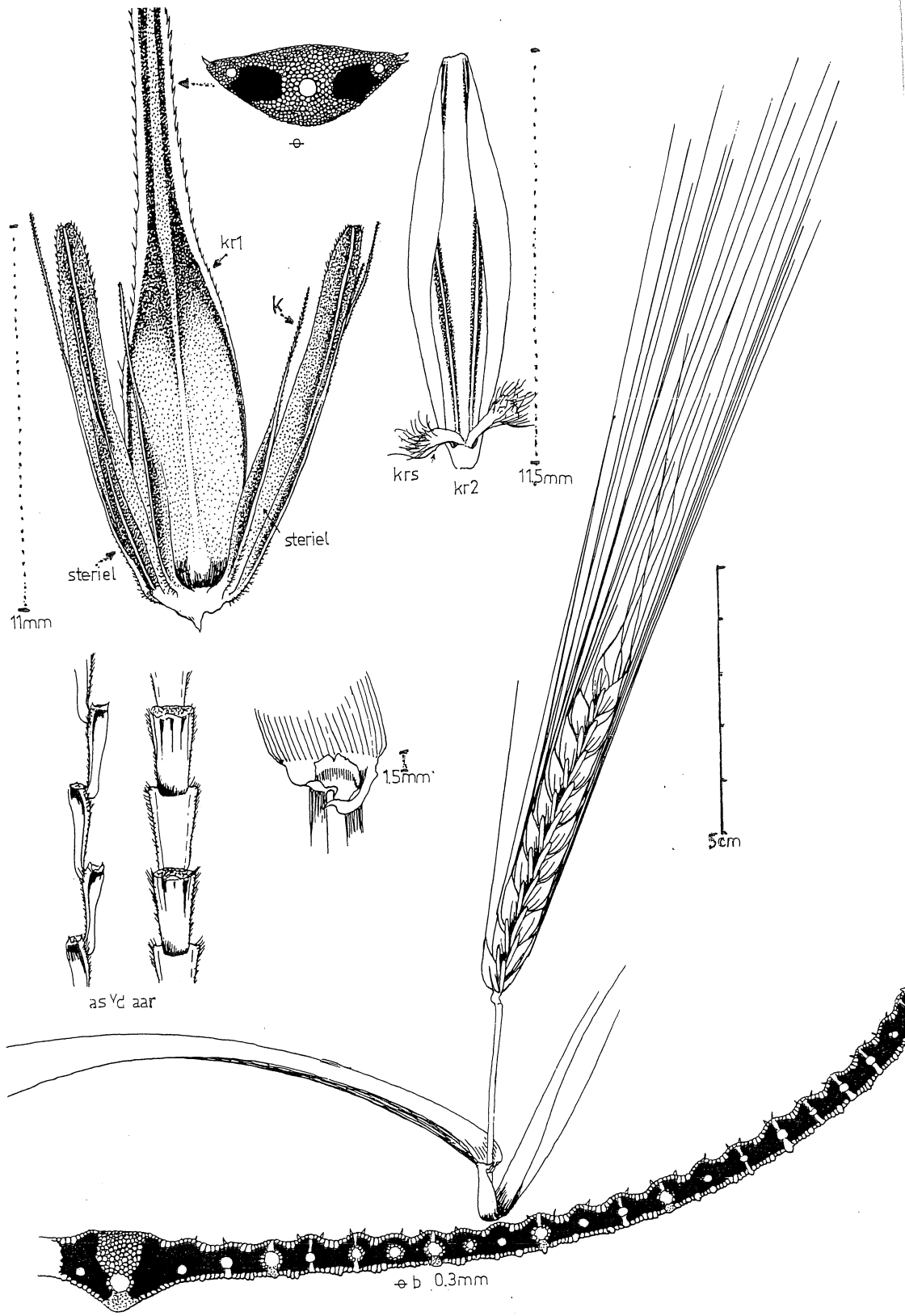
125. *Holcus lanatus* L.

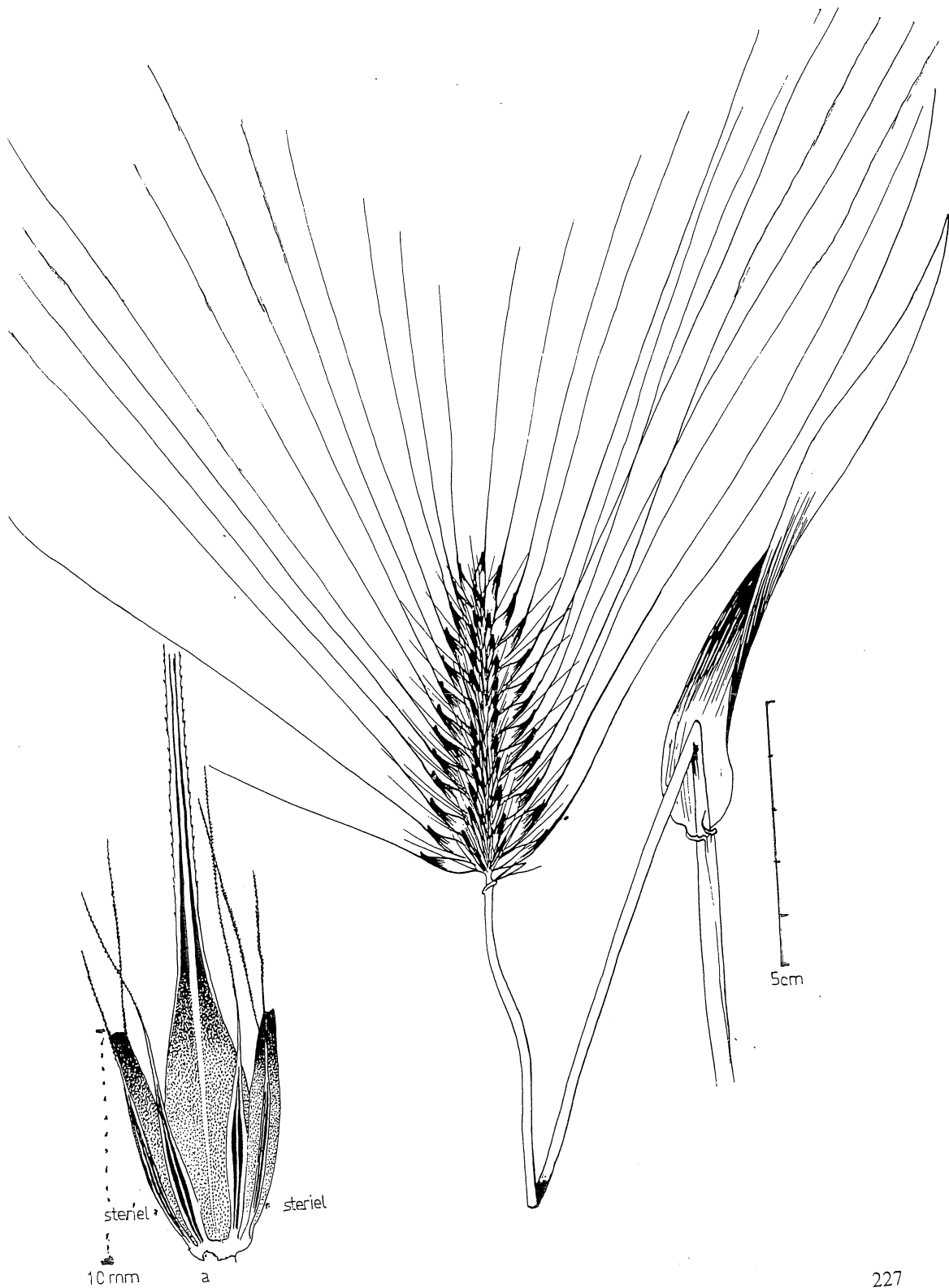


126. *Holcus mollis* L.



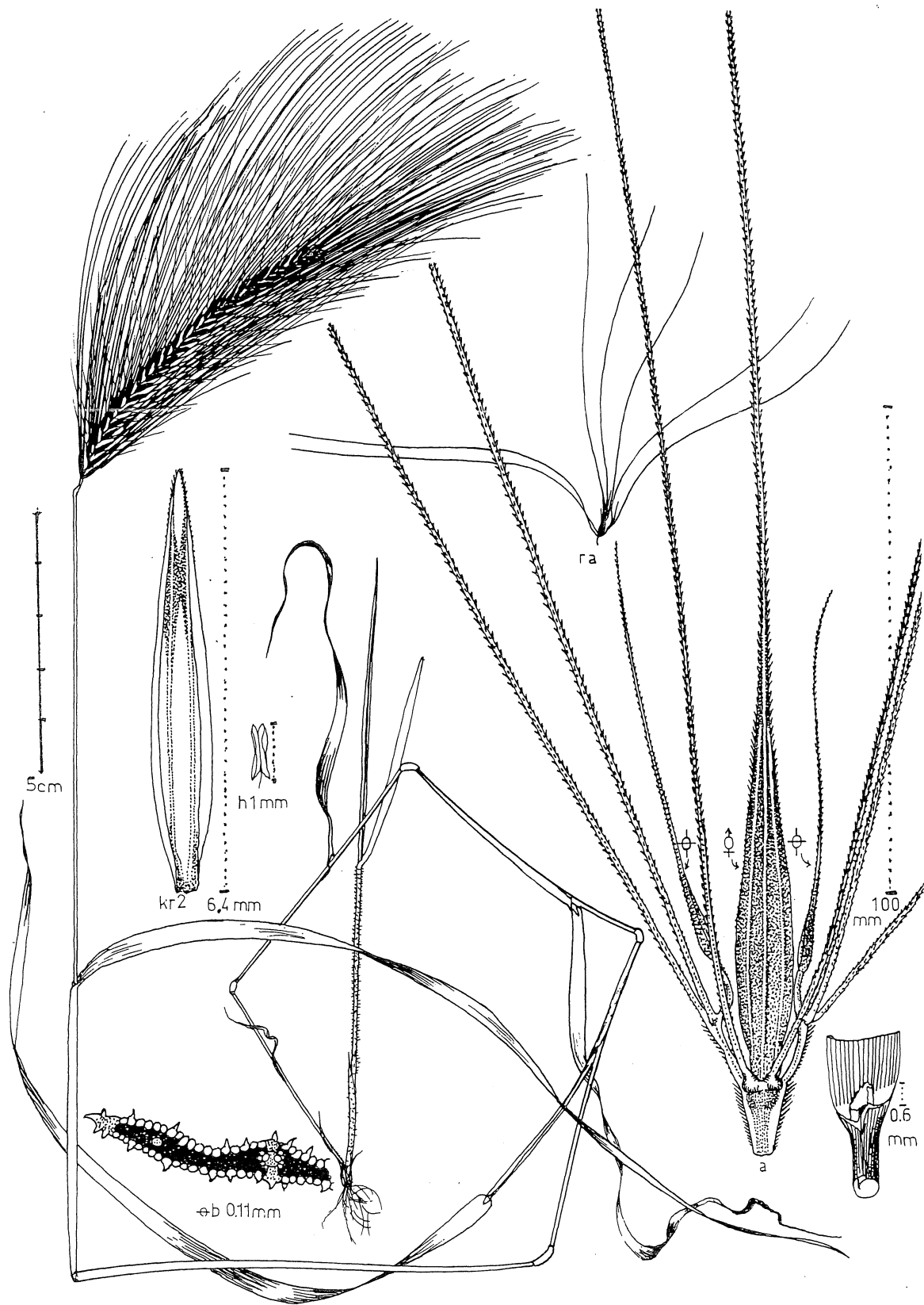
96. *Hordelymus europaeus* (L.) Harz.



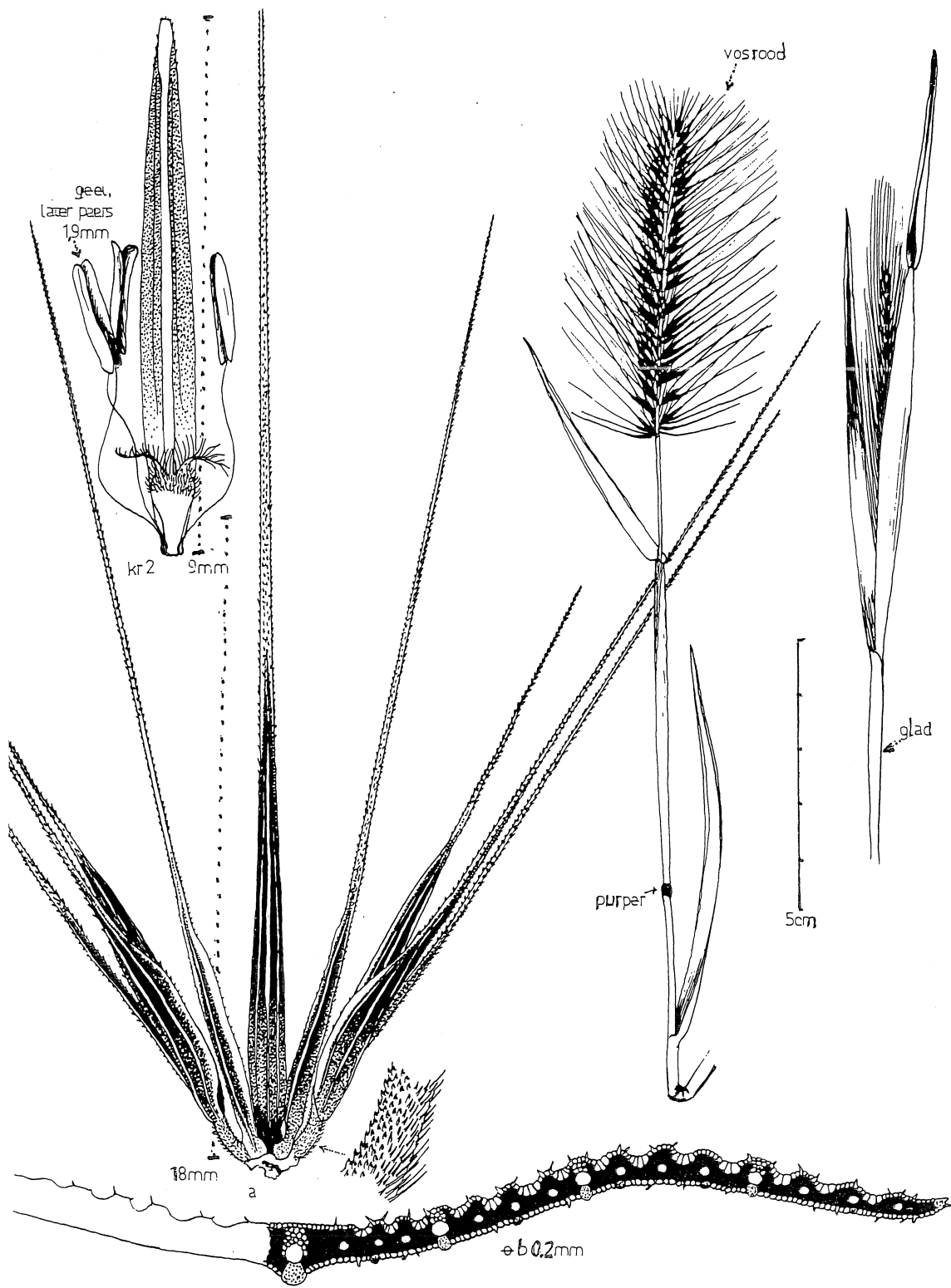


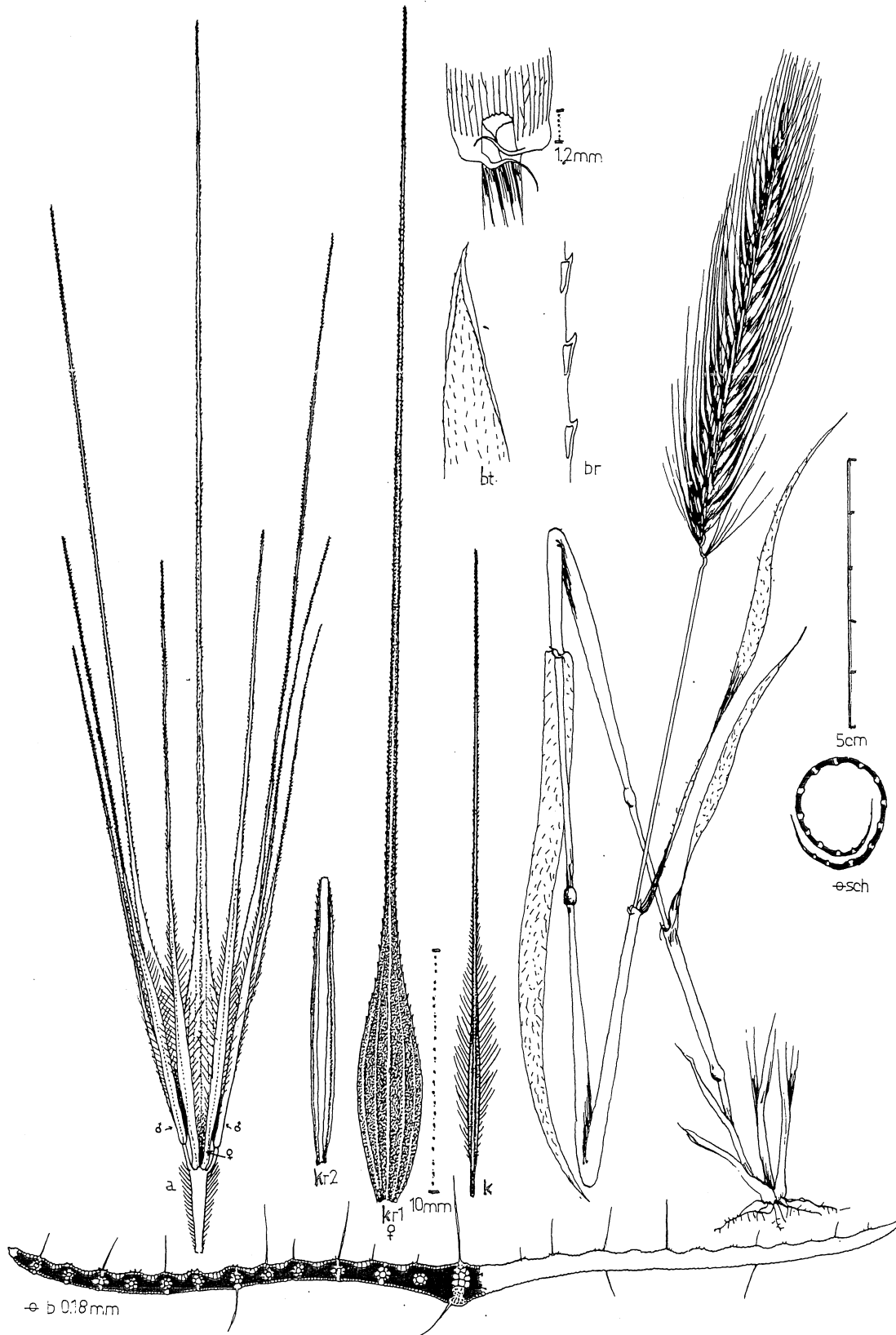
104. *Hordeum distichon* L. ssp. *zeocriton* (L.) Sch. et Kell.

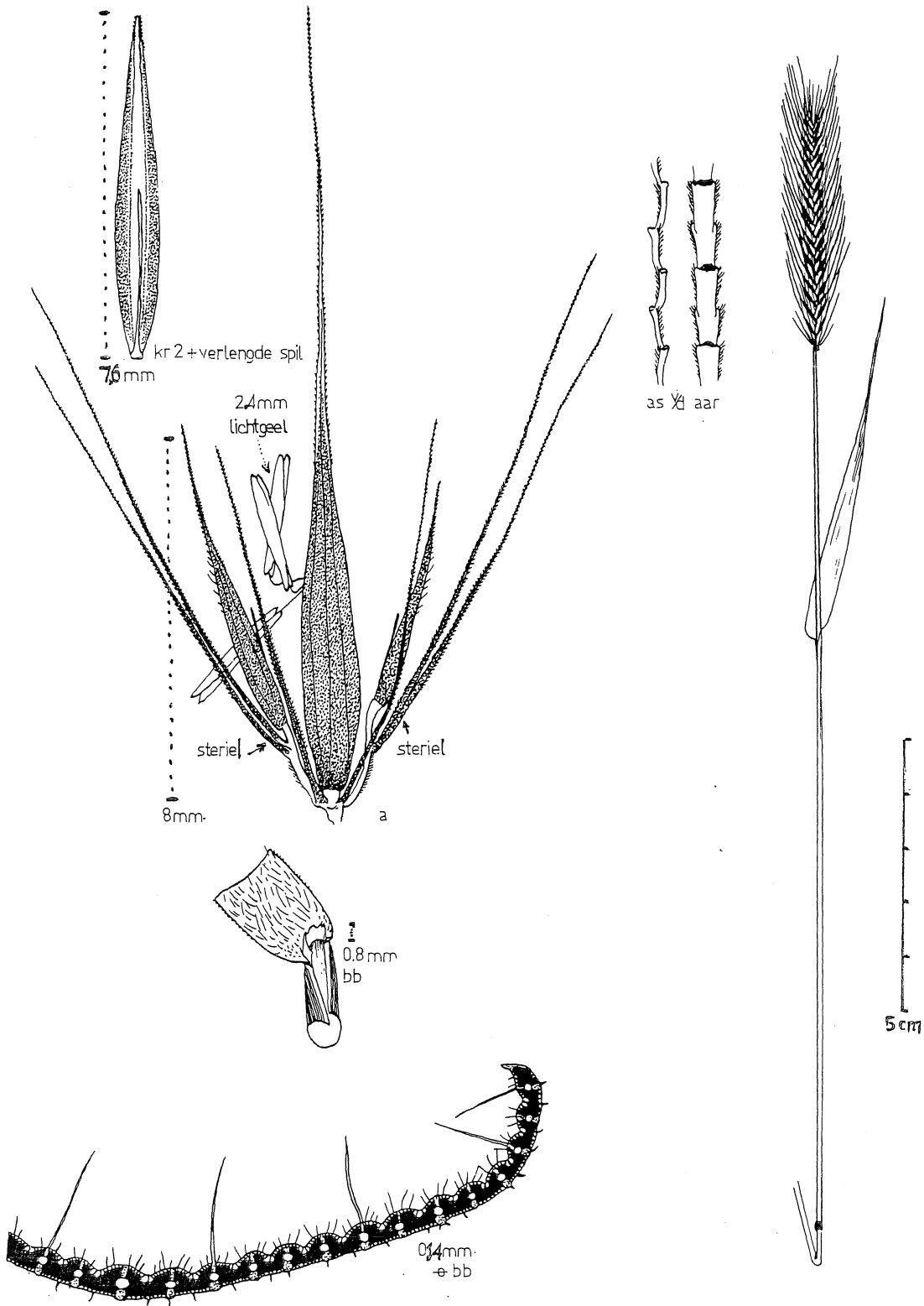


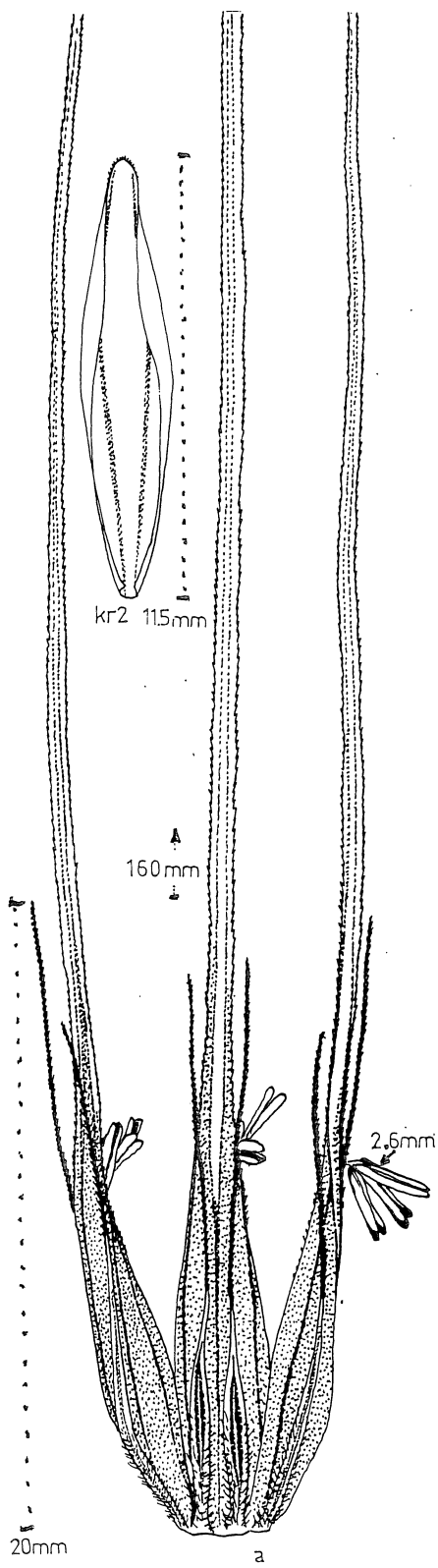


100. *Hordeum jubatum* L. var. *pampeanum* Haum.

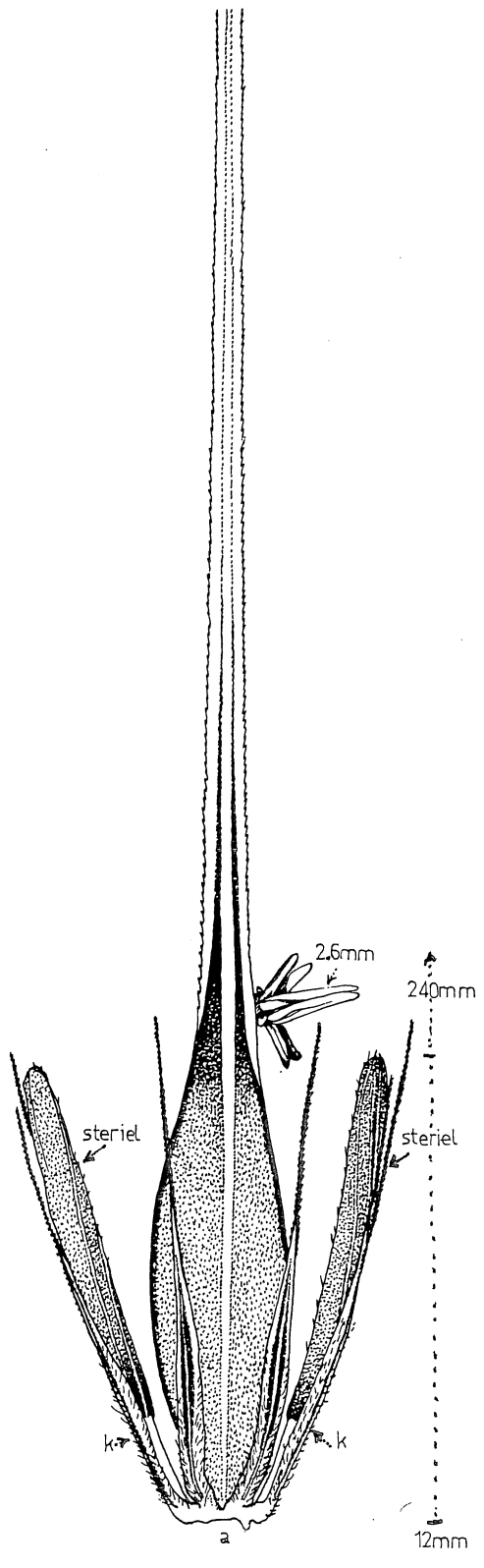




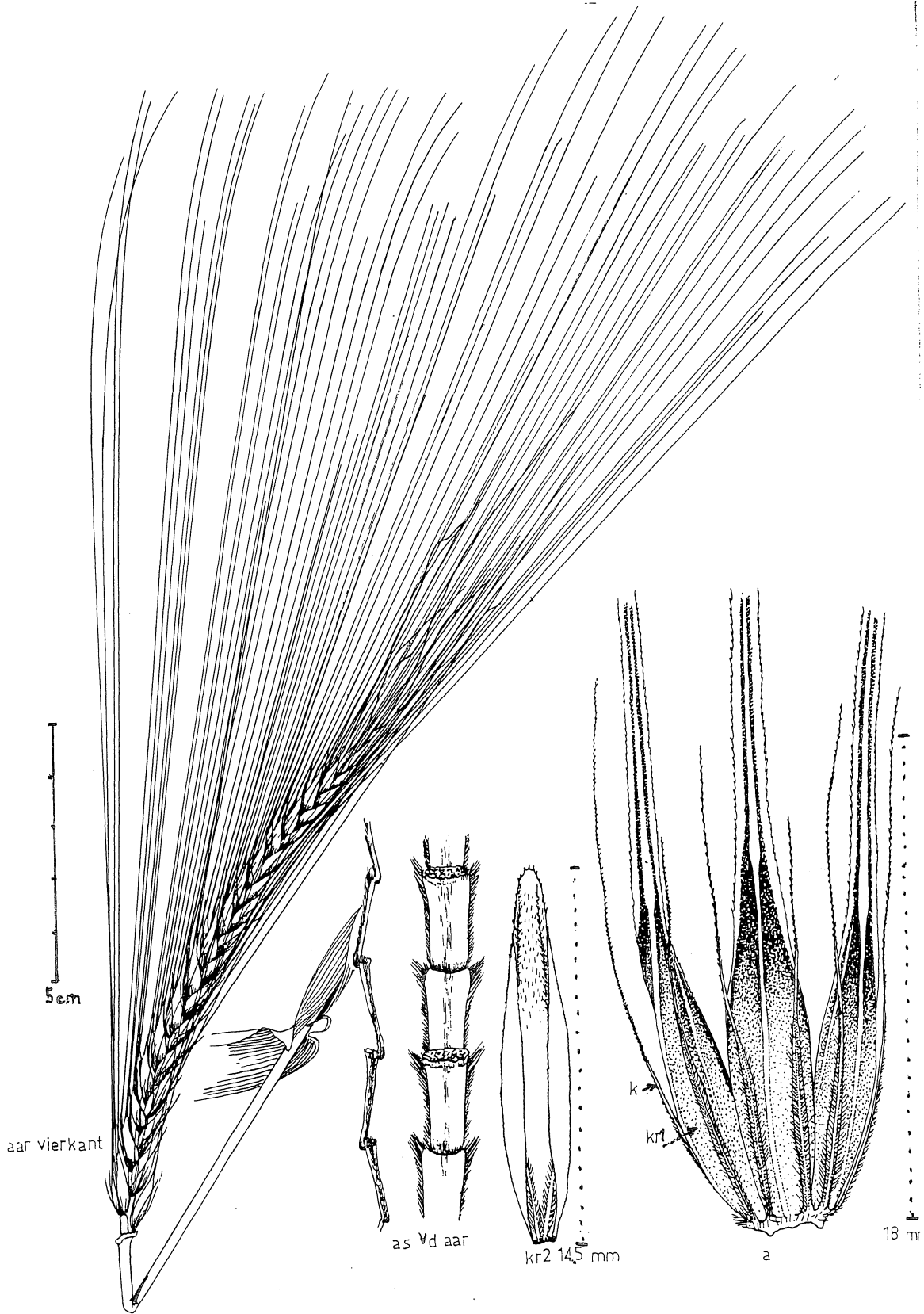


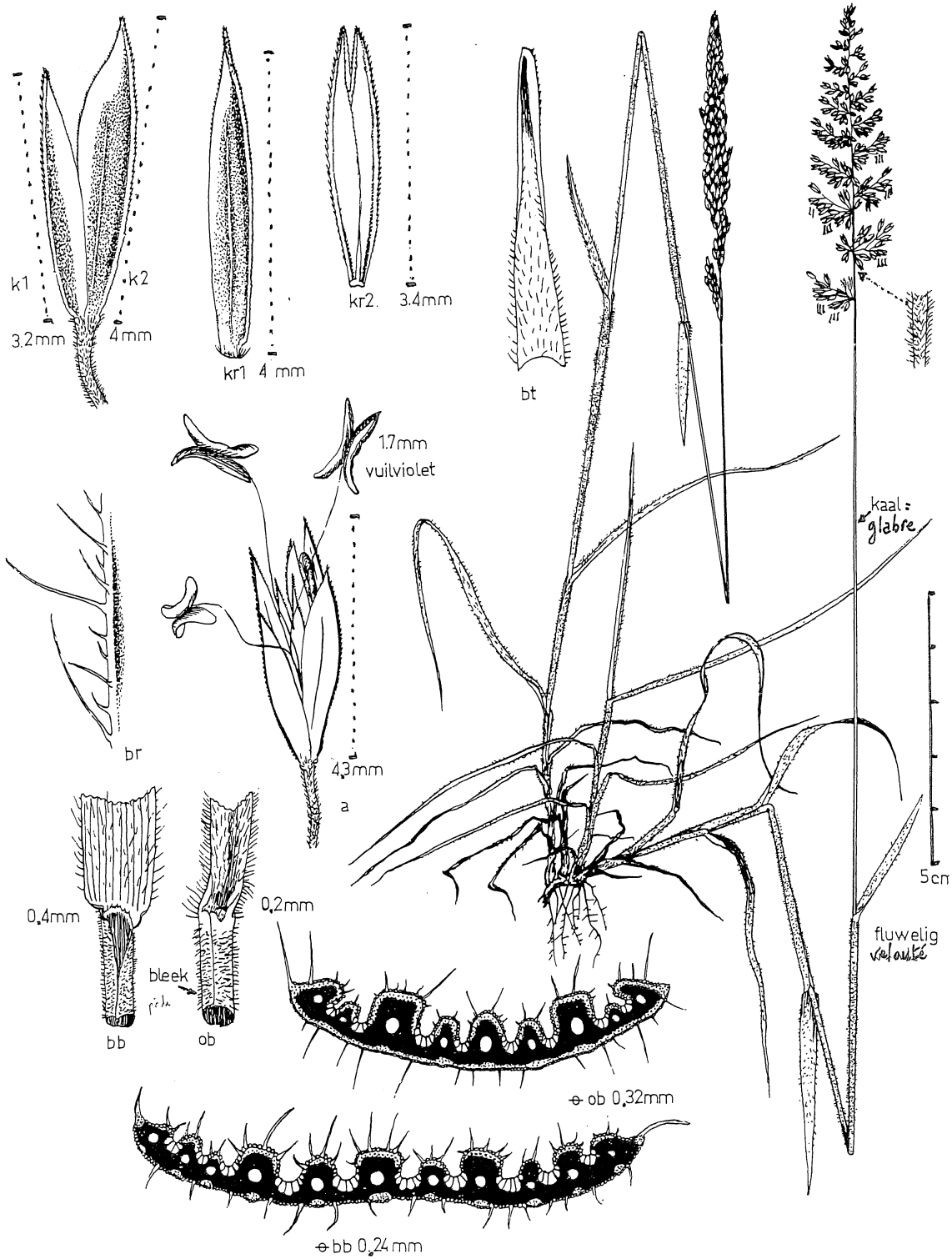


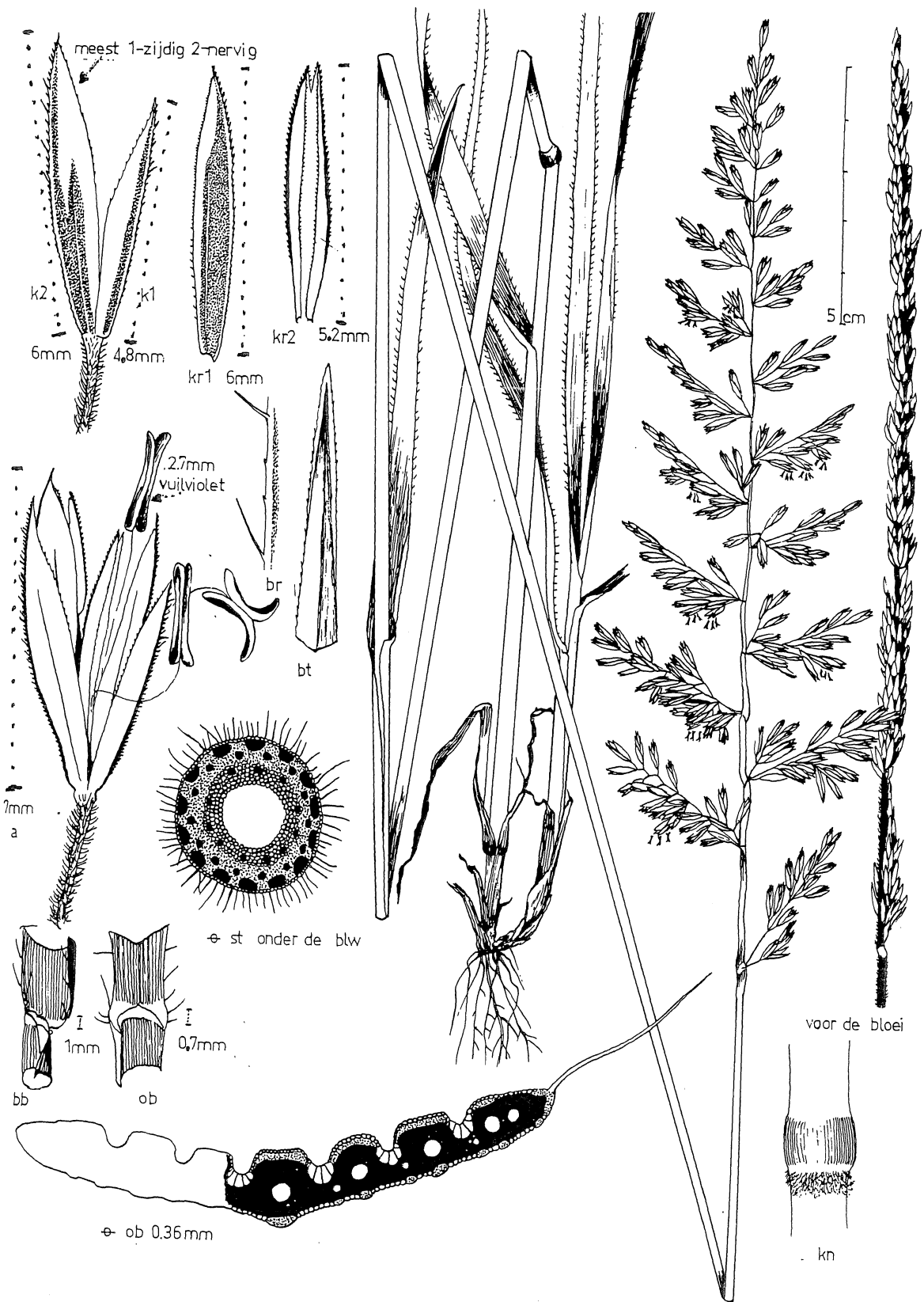
101-1. *Hordeum vulgare* L. ssp. *vulgare*



102. *Hordeum distichon* L. ssp. *distichon* 225

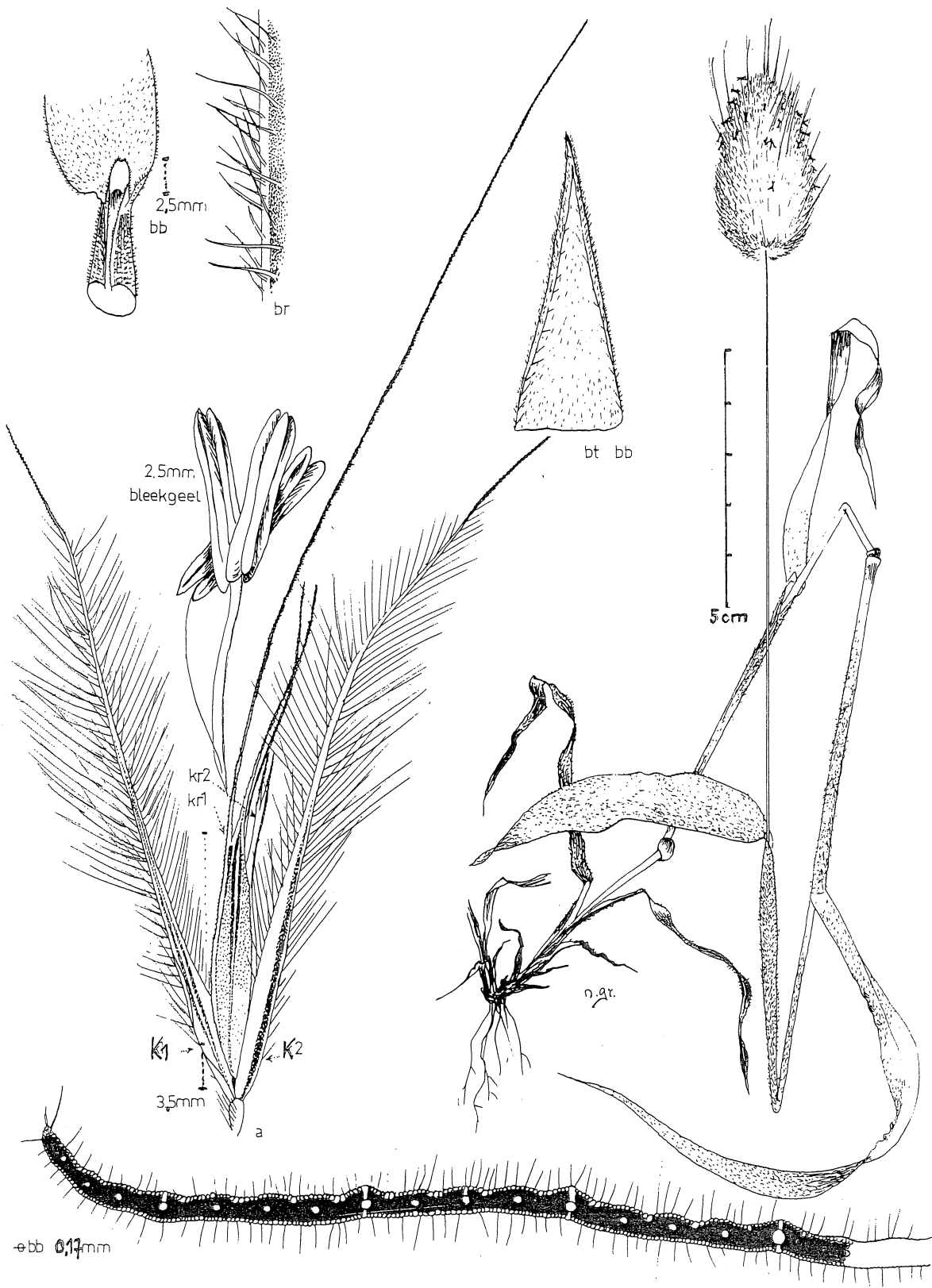






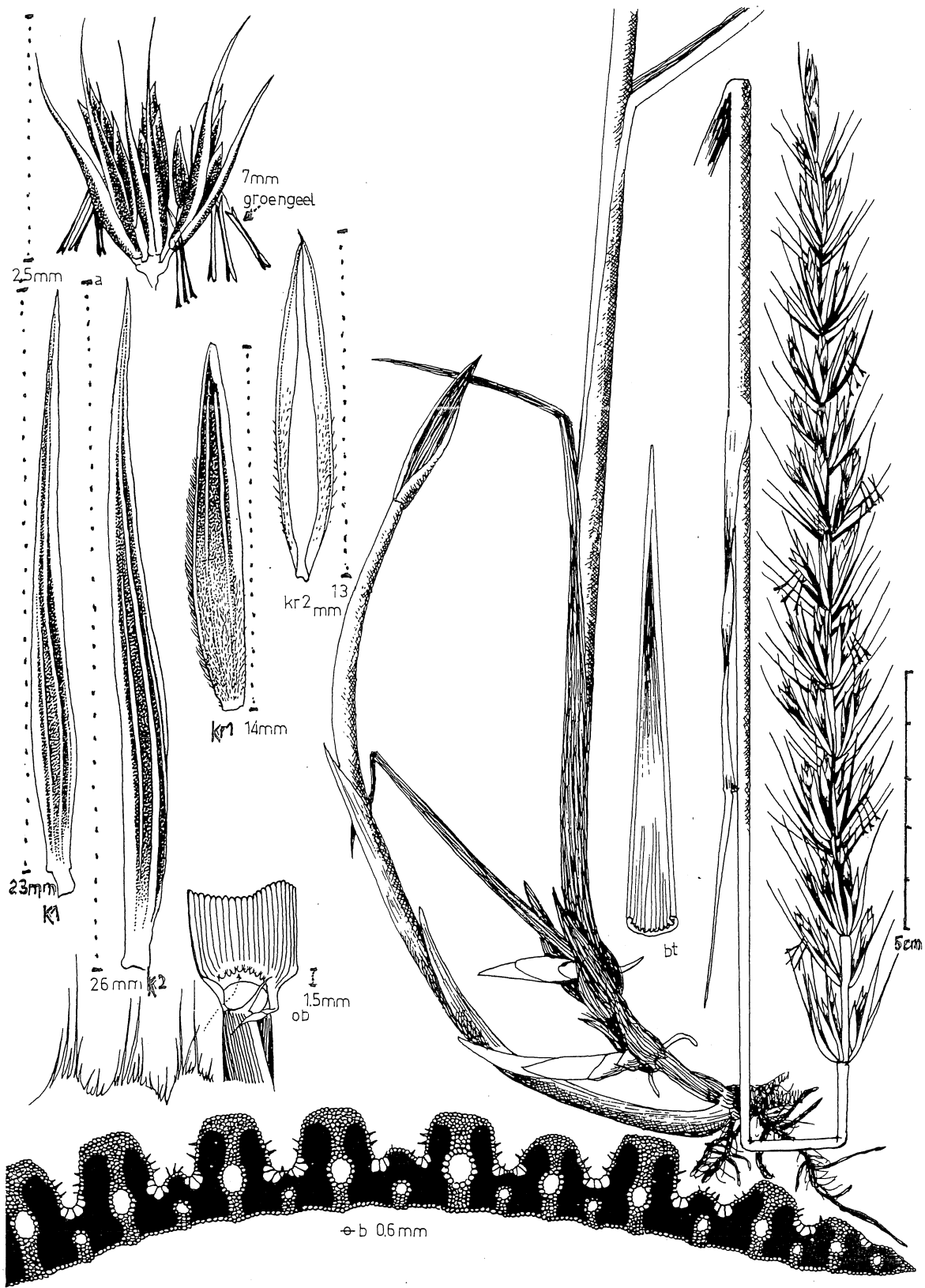
110. *Koeleria pyramidata* (Lamk.) P. B.

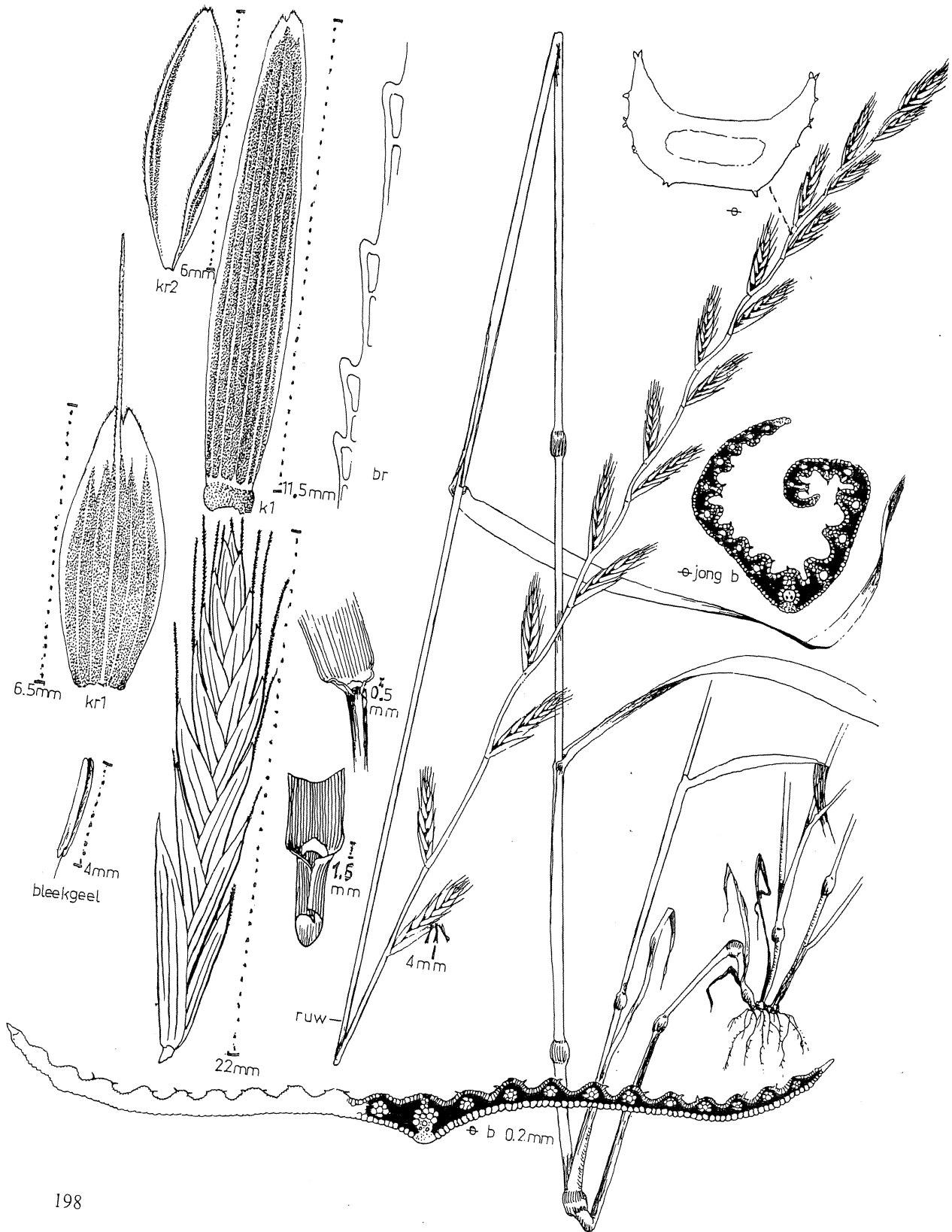


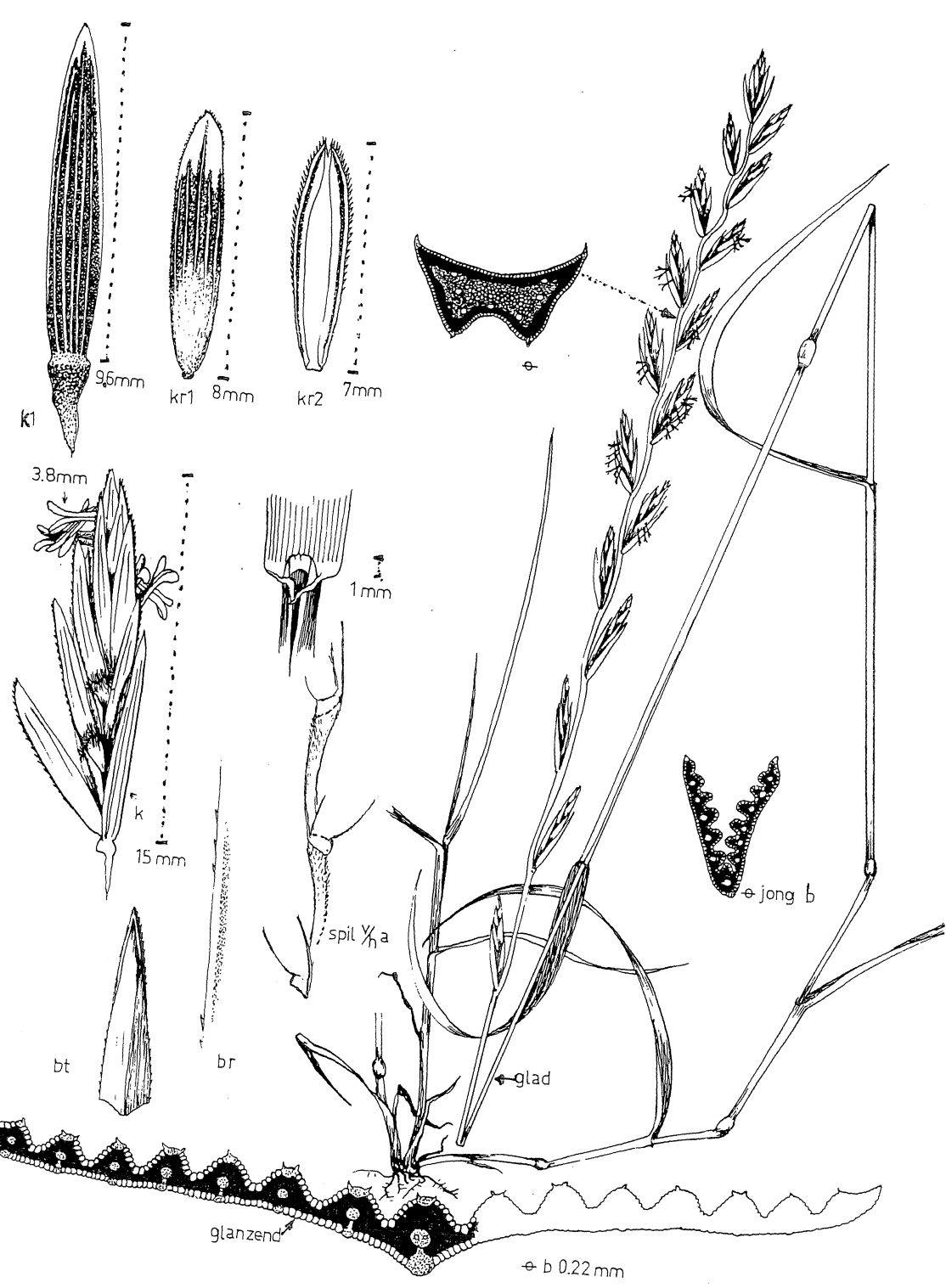




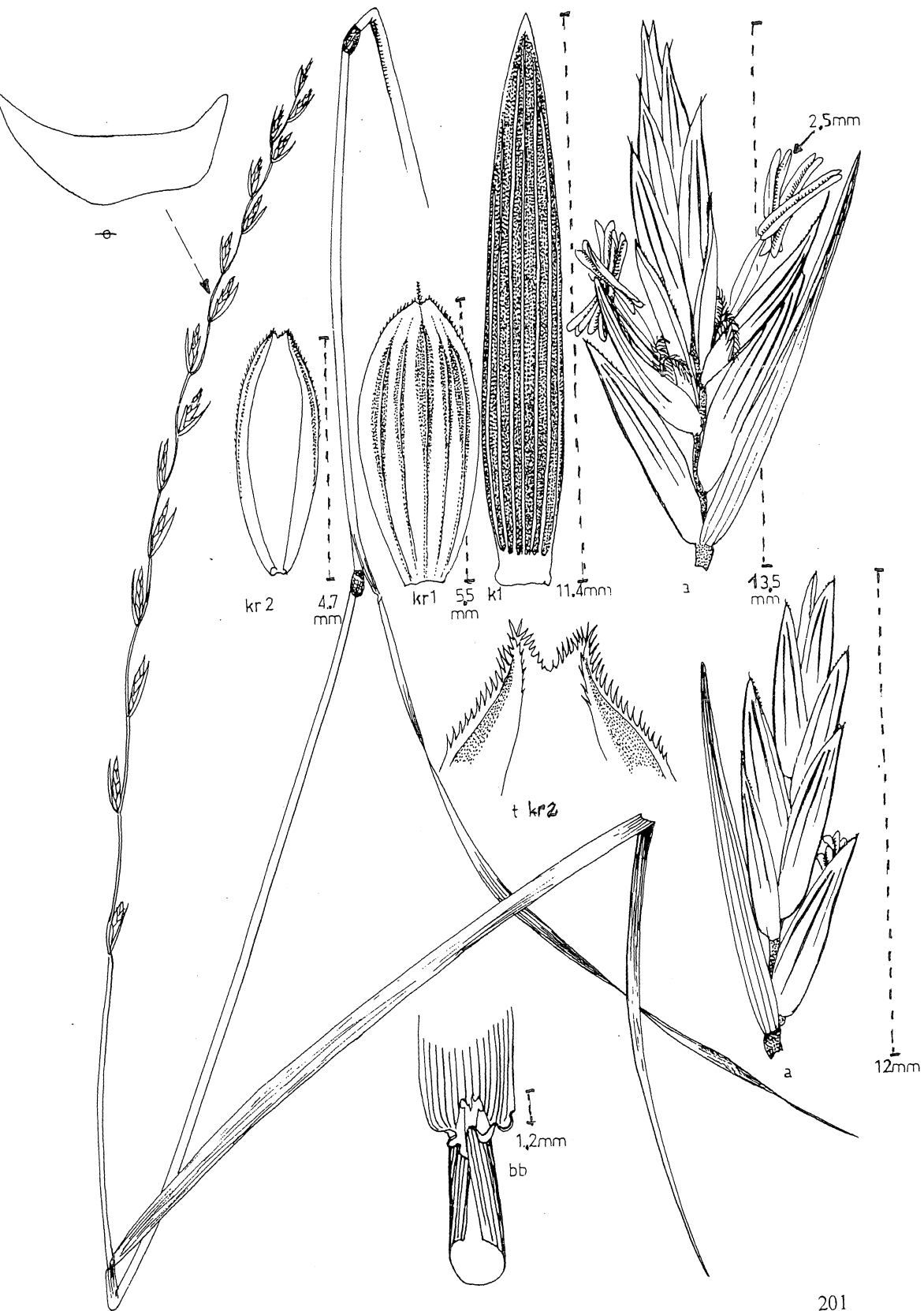
177. *Leersia oryzoides* (L.) Sw.



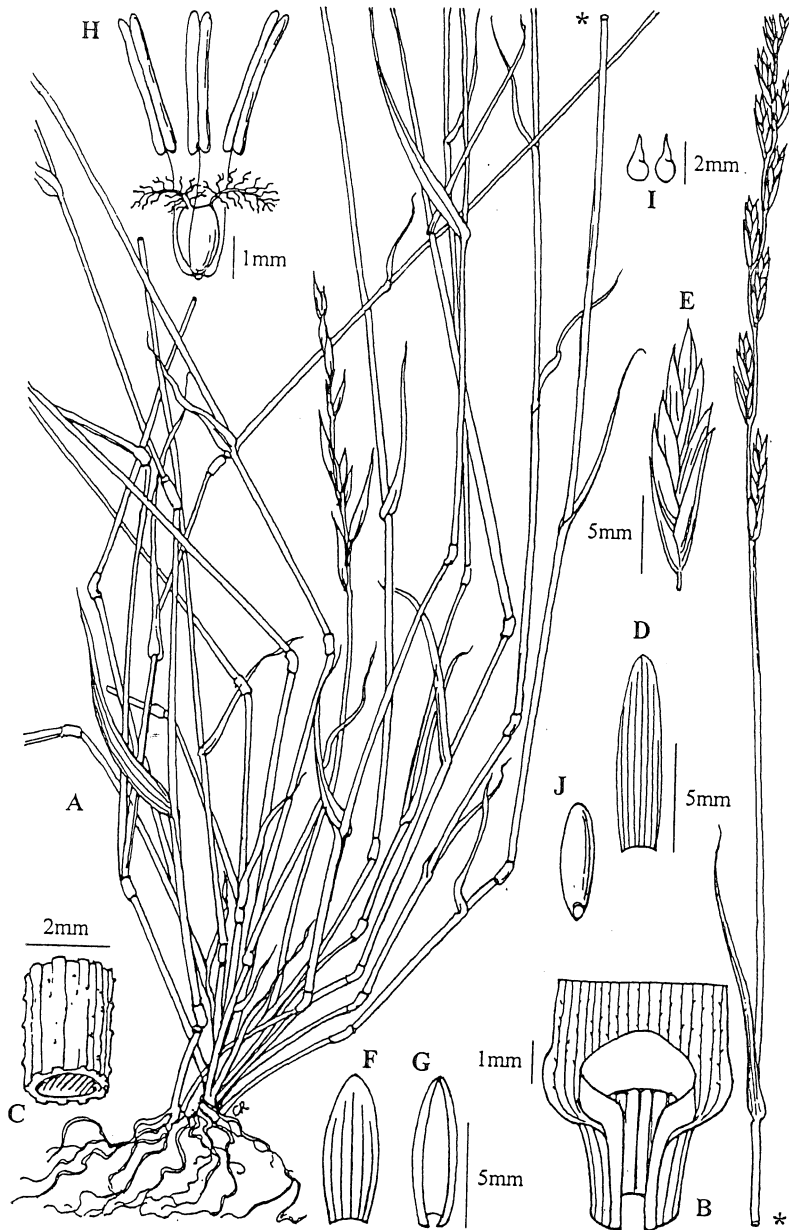




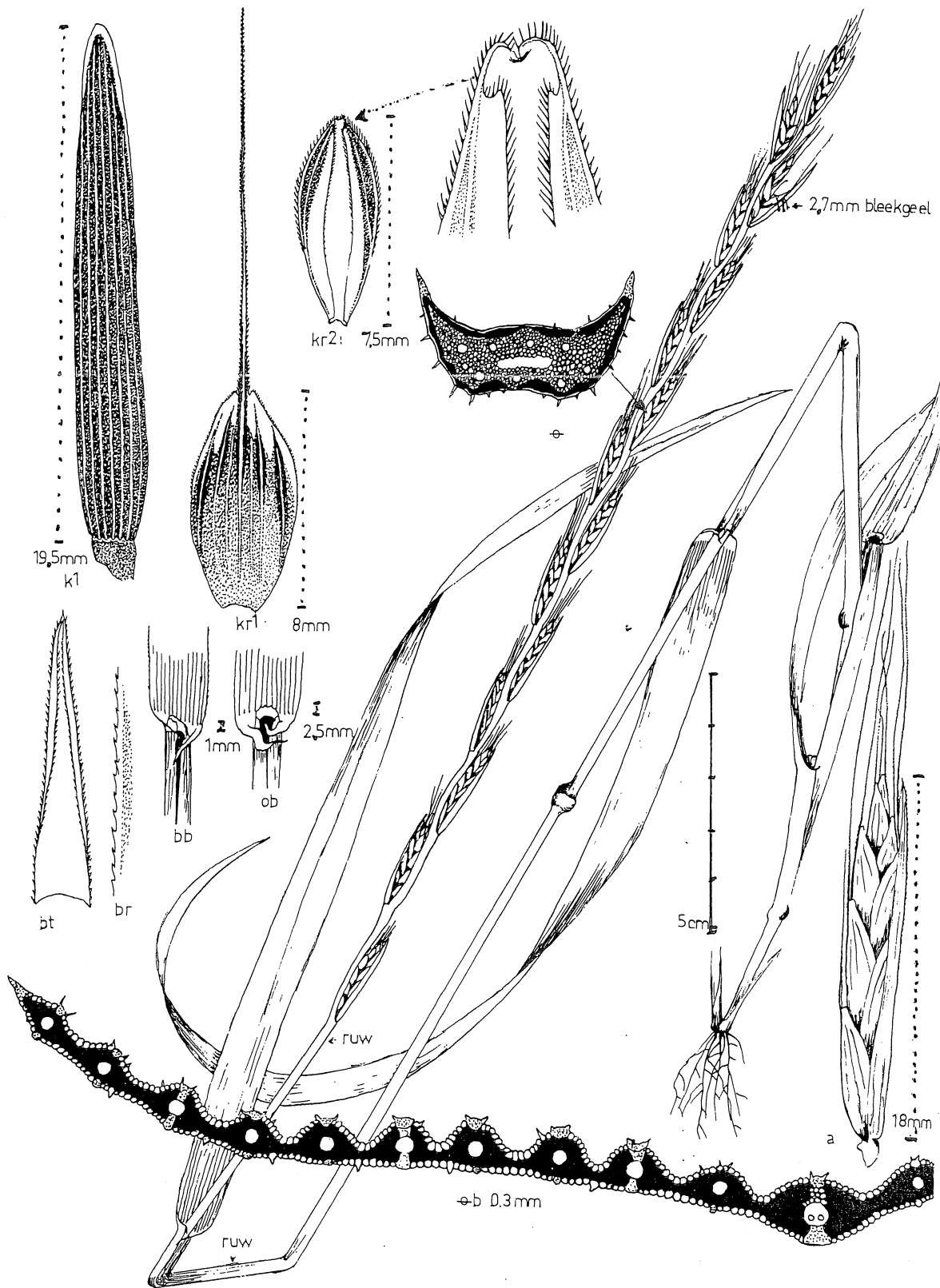
76. *Lolium perenne* L.



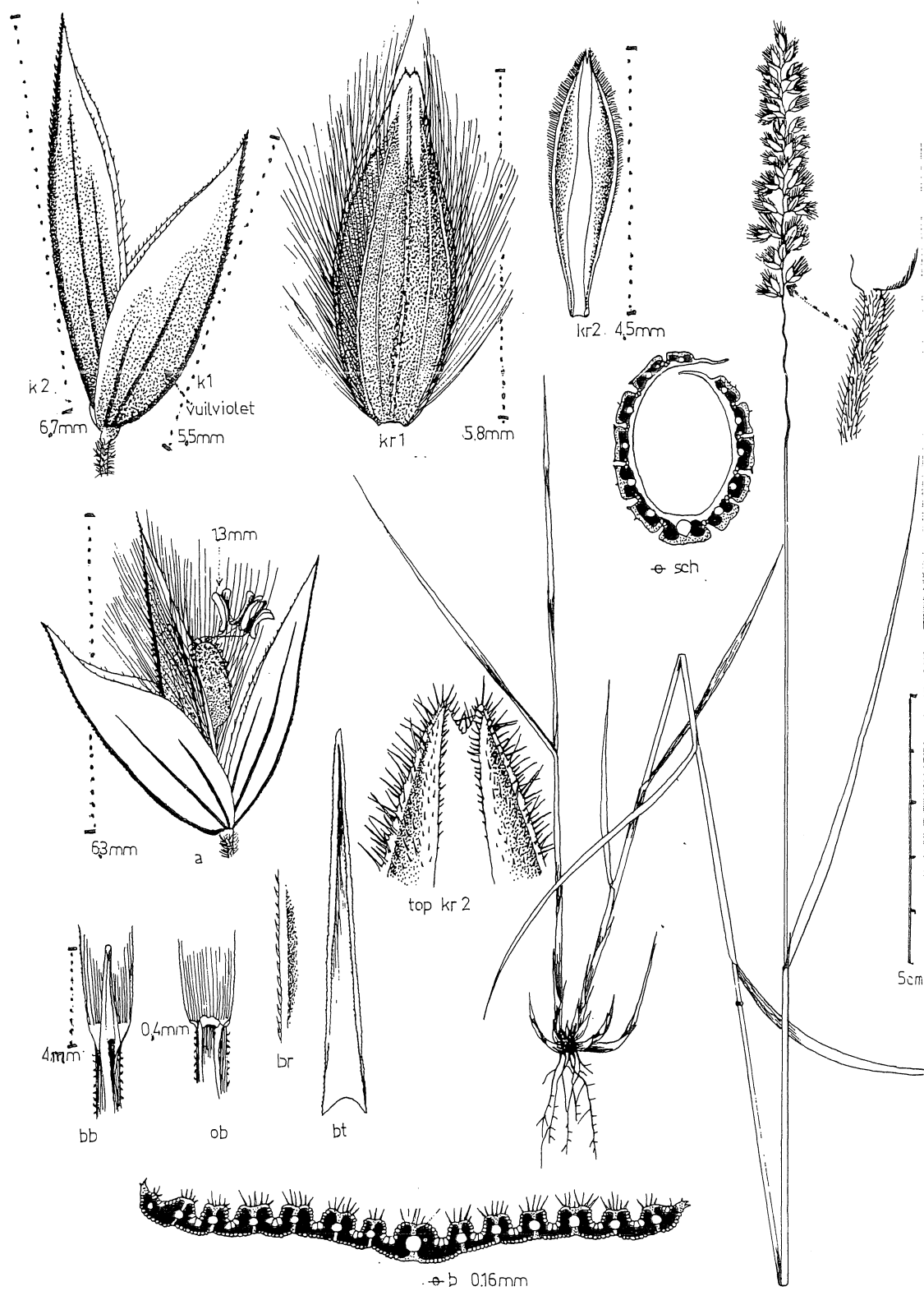
78. *Lolium remotum* L.

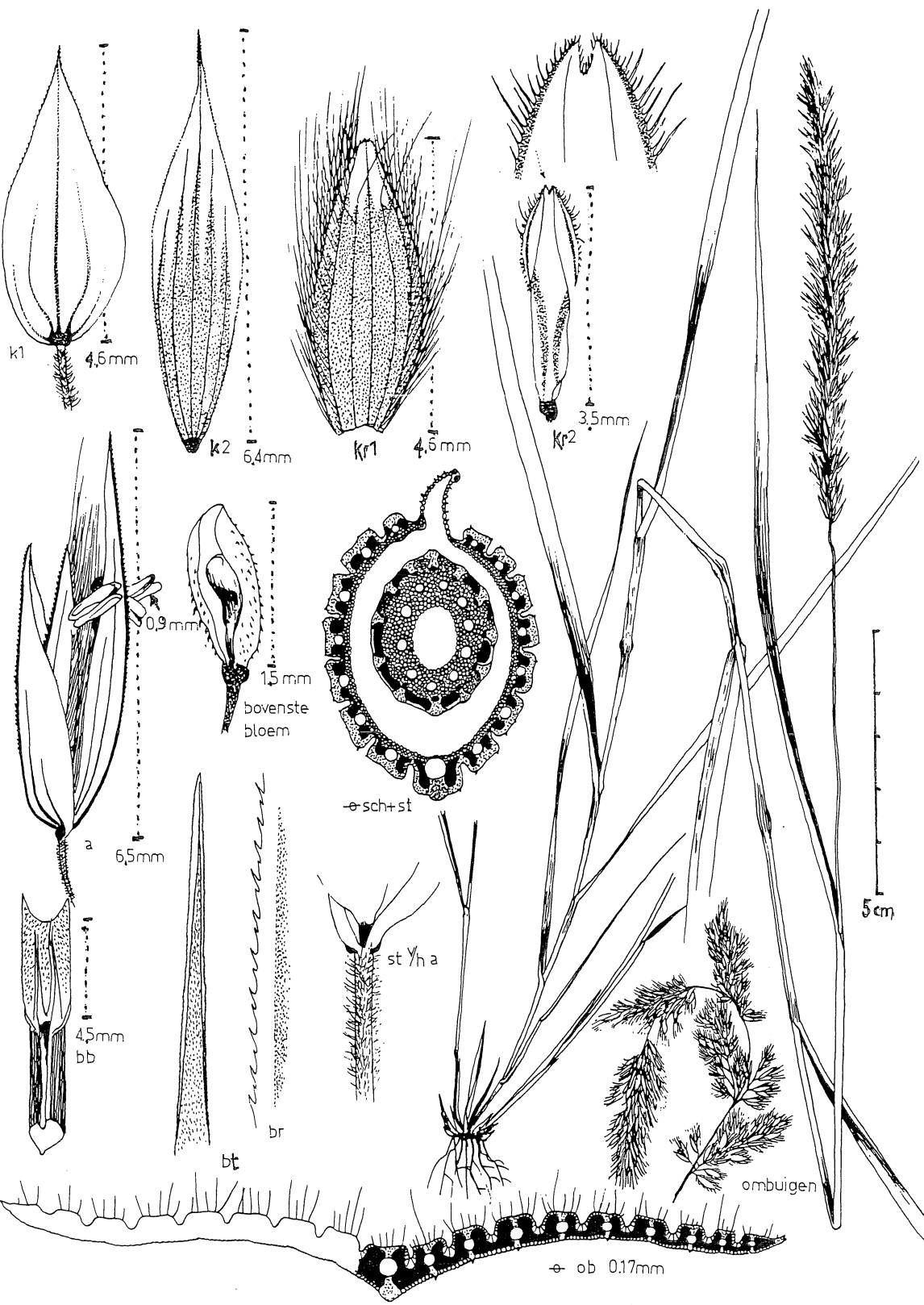


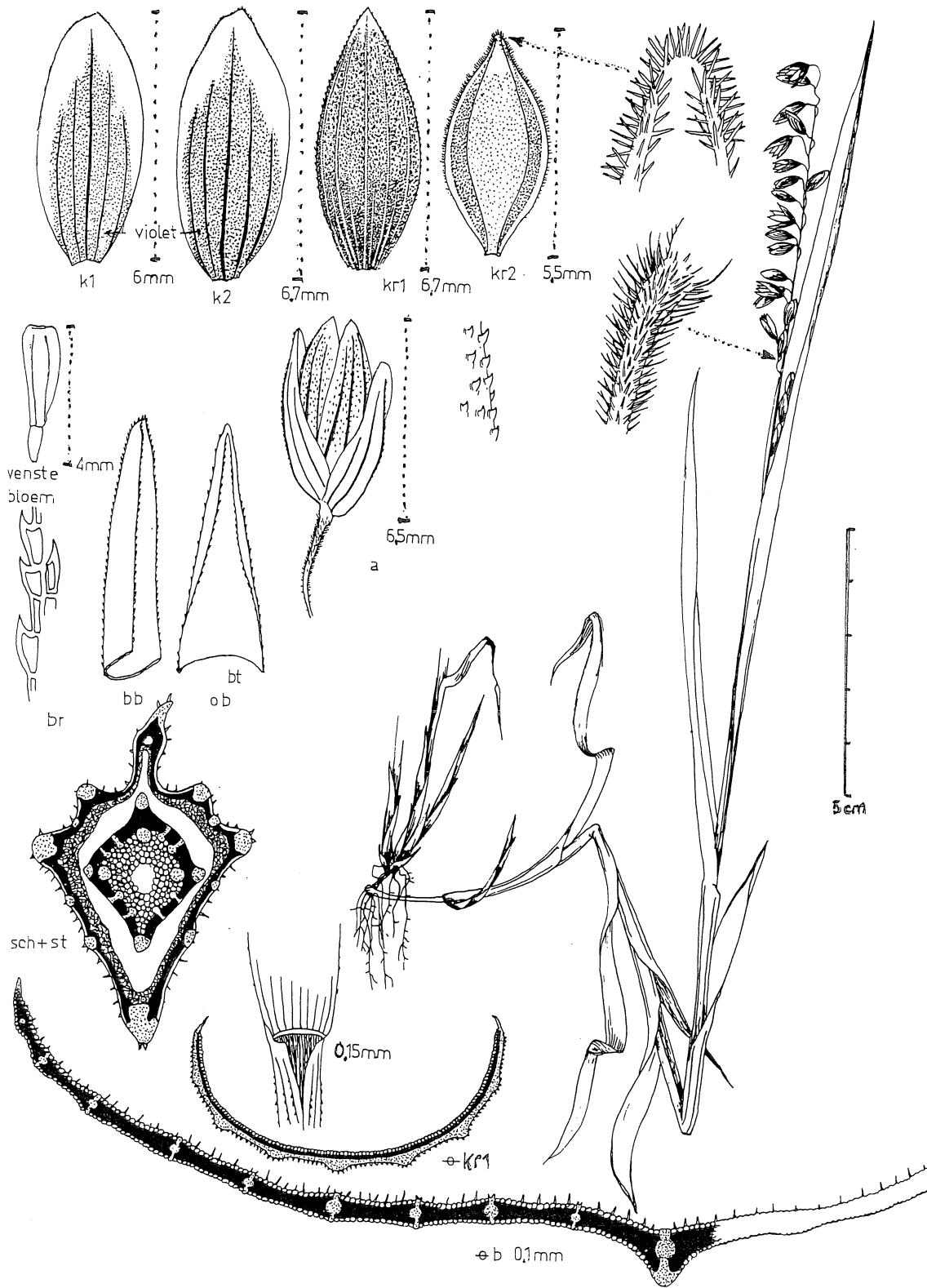
*Lolium rigidum* Gaudin (Mediterranean Rye-grass). A habit; B ligule; C part of culm below inflorescence; D lower glume; E terminal spikelet; F lemma; G palea; H flower; I lodicules; J caryopsis. (Source unknown). STACE 1014/852.

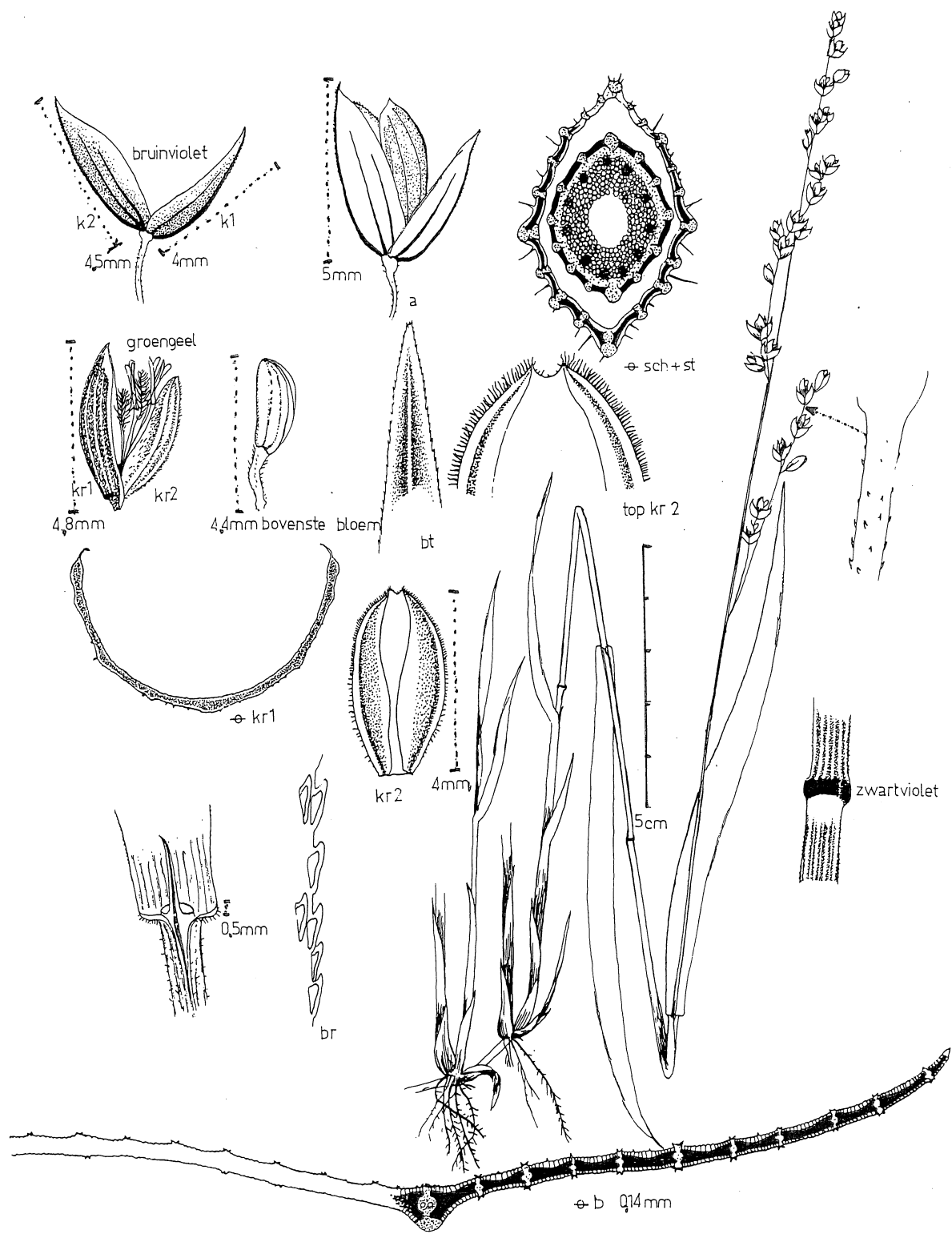


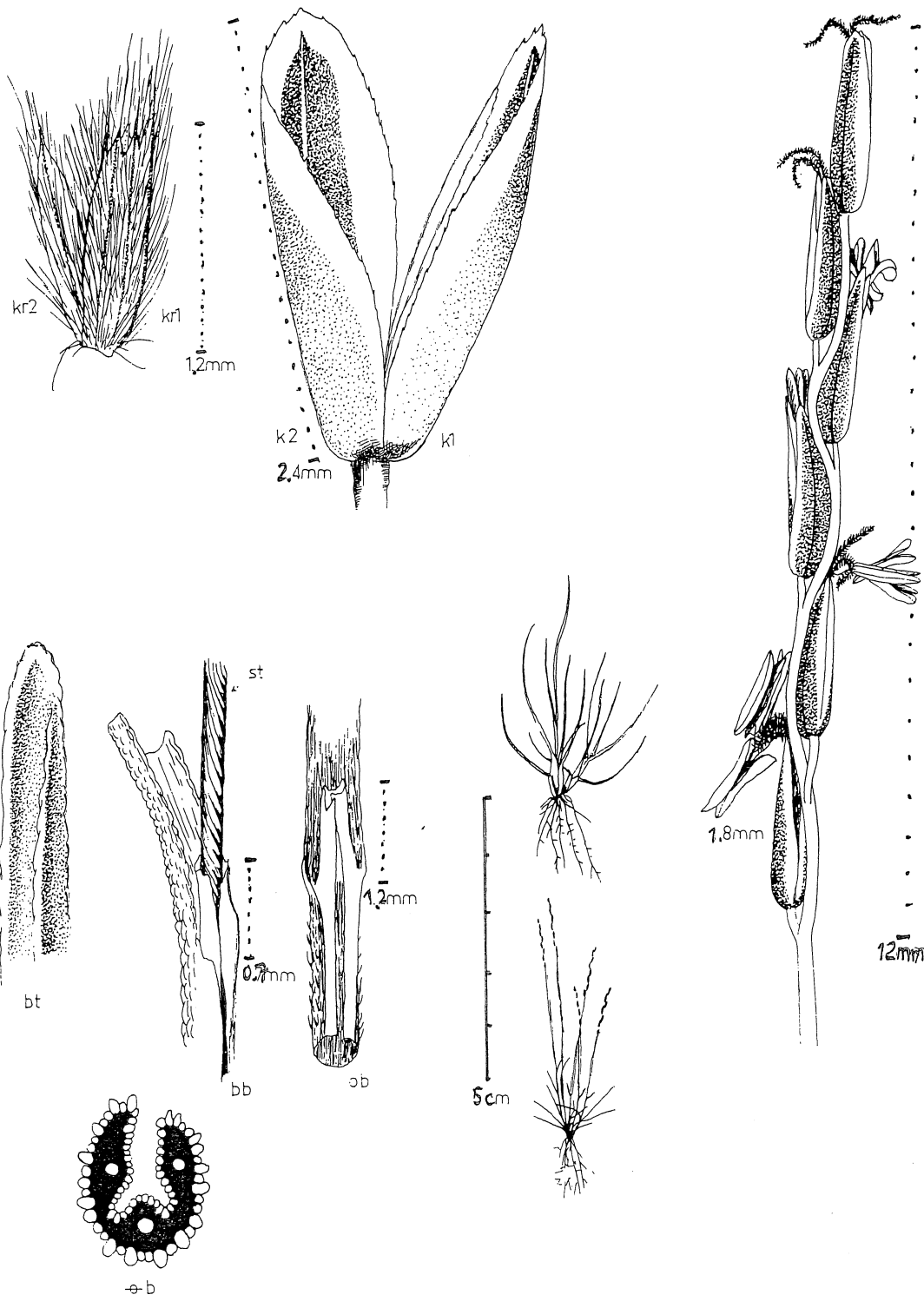


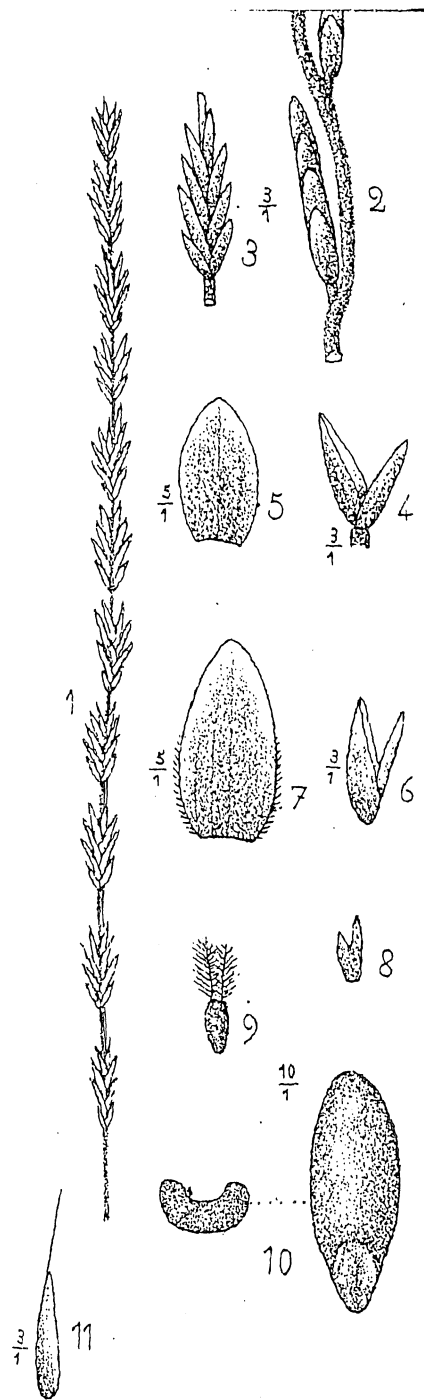










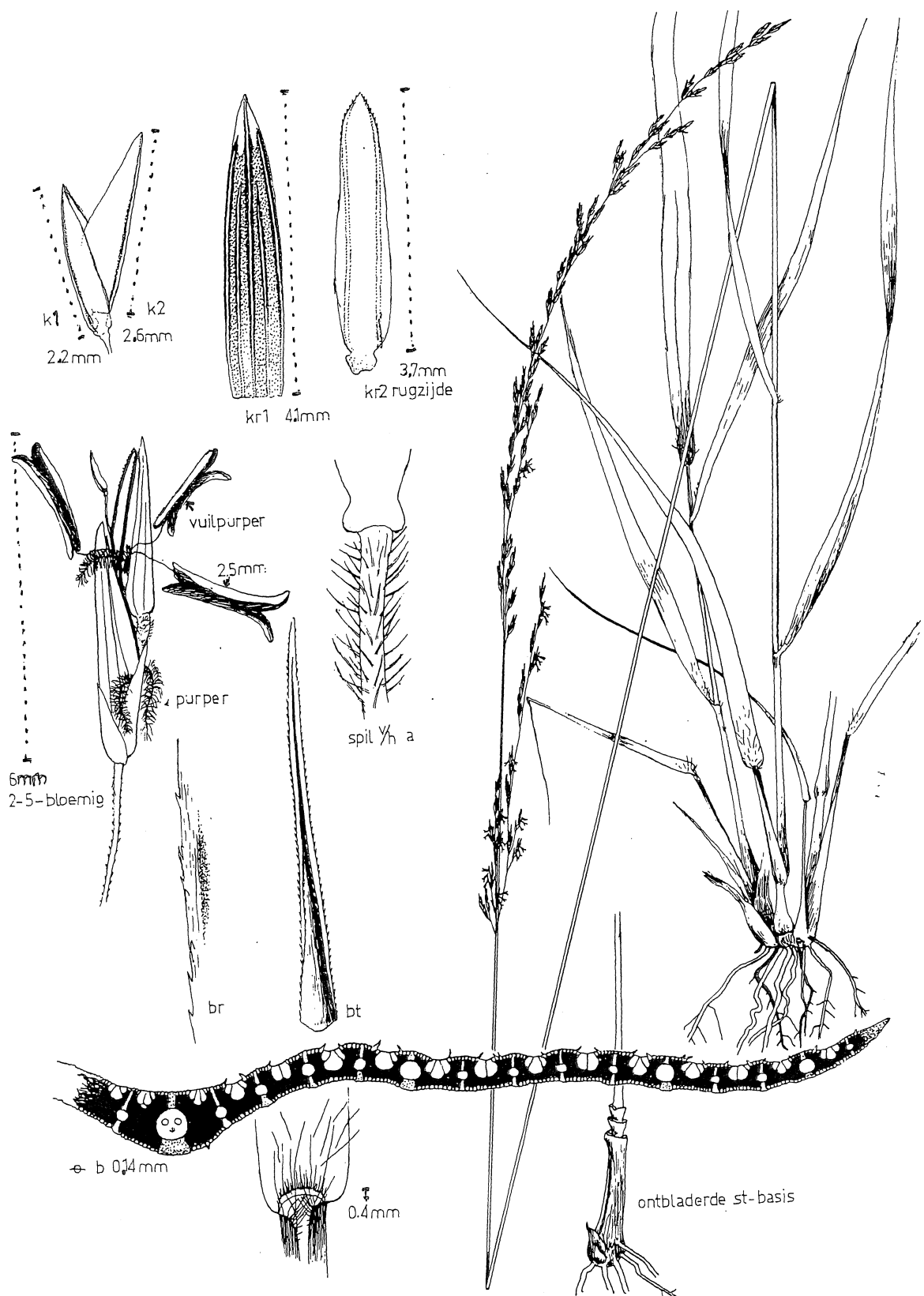


- 1: Epi
- 2,3: Epillets
- 3,4: Glumes
- 5: Glume sup.
- 6: Glumelles égales
- 7: Glumelle inf.(lemme)
- 8:
- 9: Andr. + gynec.
- 10: Caryopse
- 11: variété aristée

*Micropyrum tenellum* (L.) Link



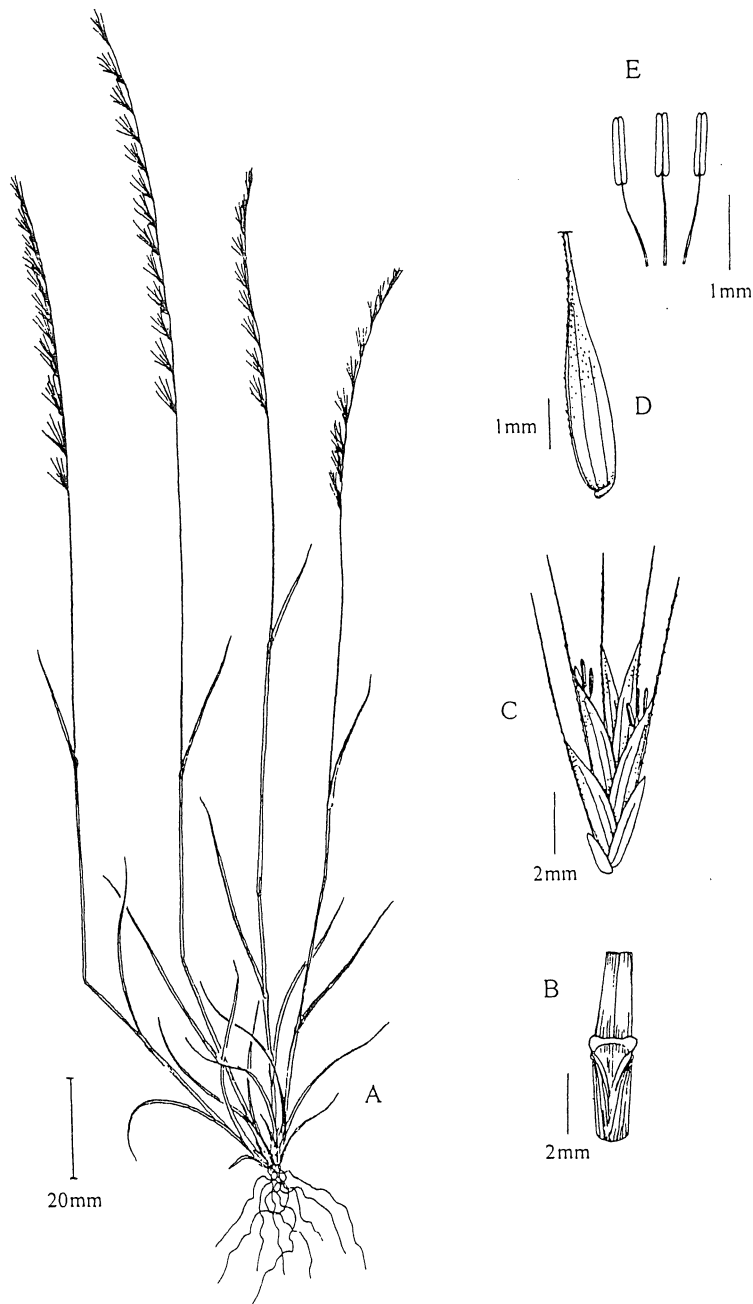
163. *Milium effusum* L.



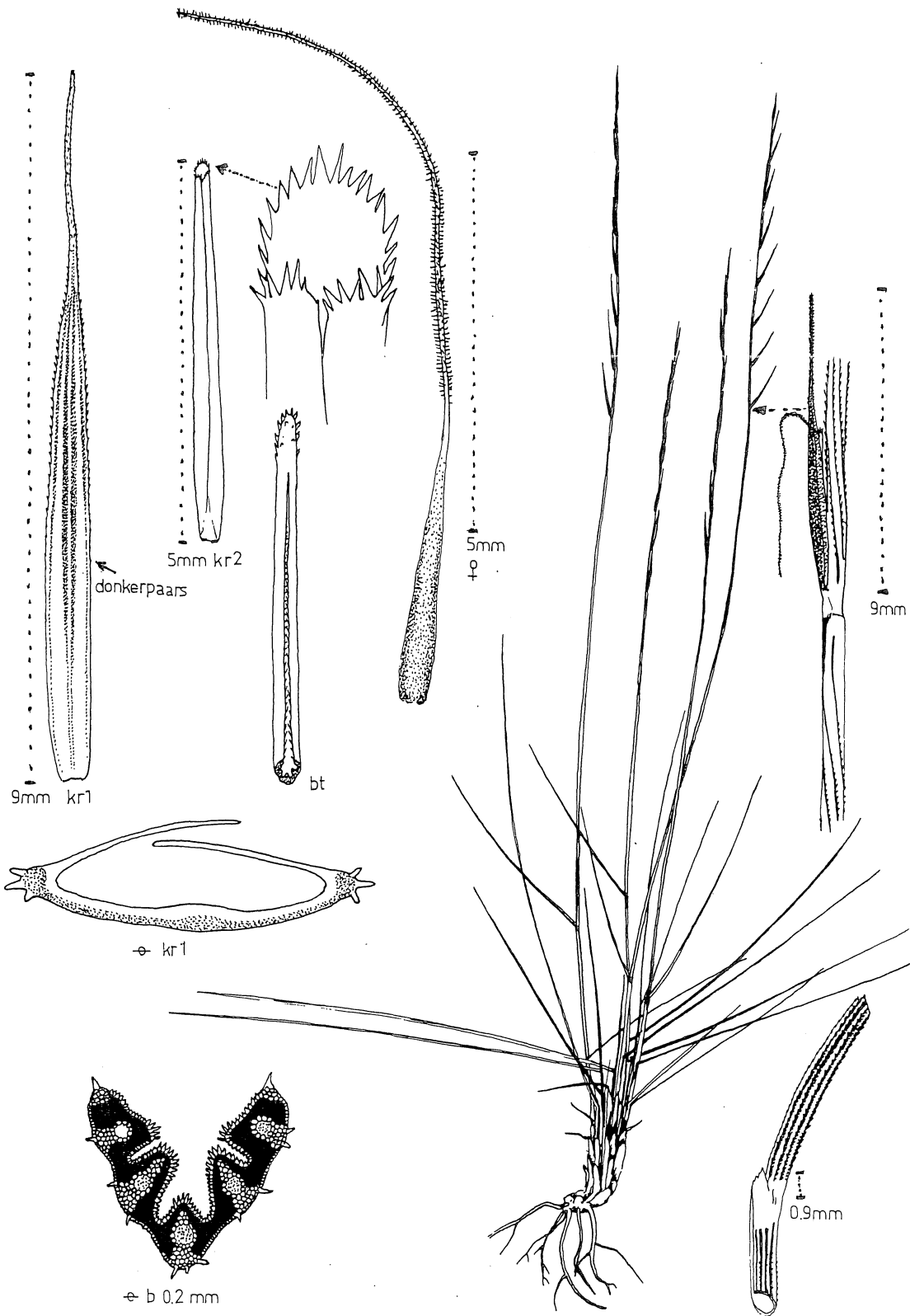
64. *Molinia caerulea* (L.) Moench

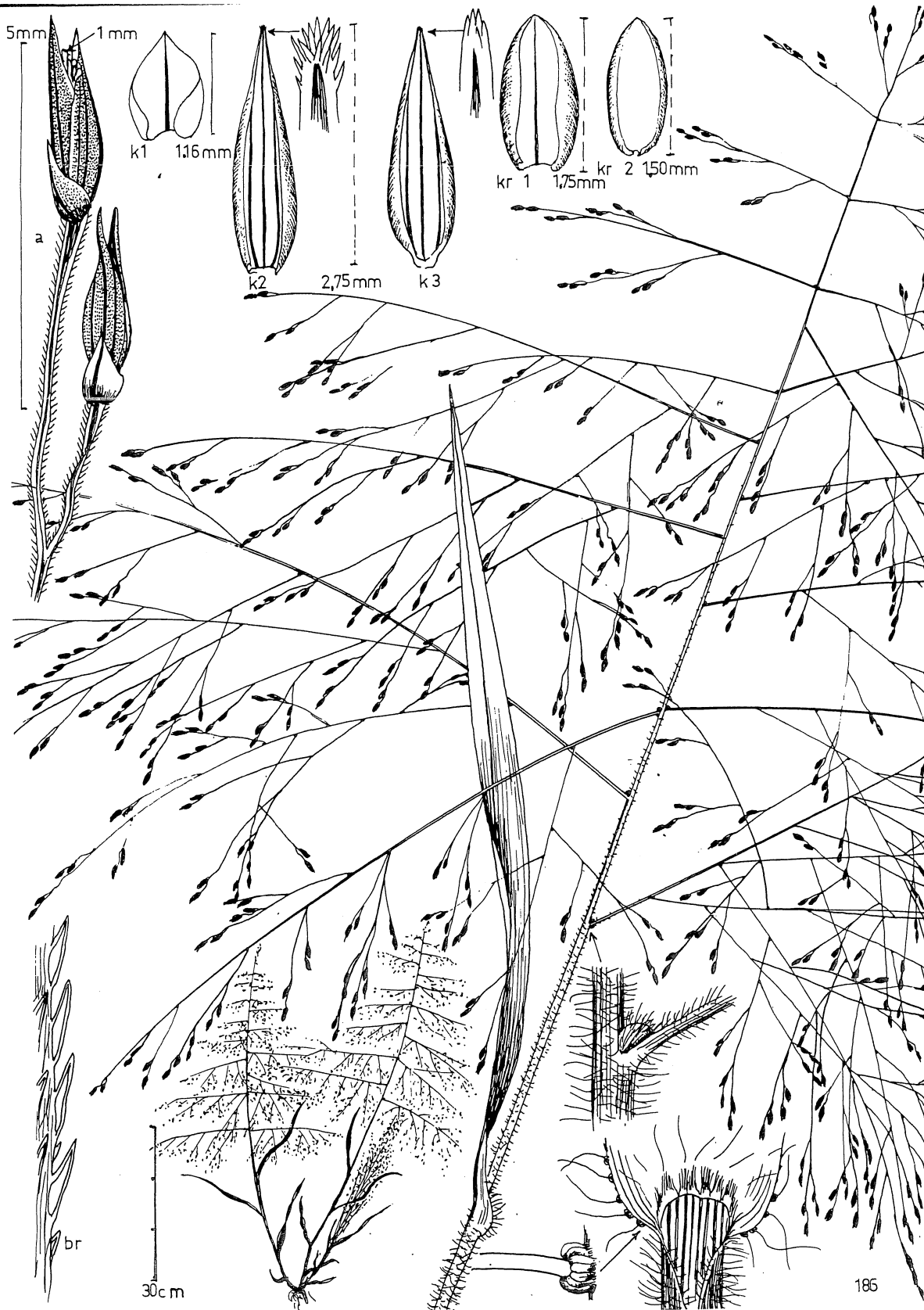


*Nardurus maritimus* (L.) Murb.  
(*Vulpia unilateralis*) 30



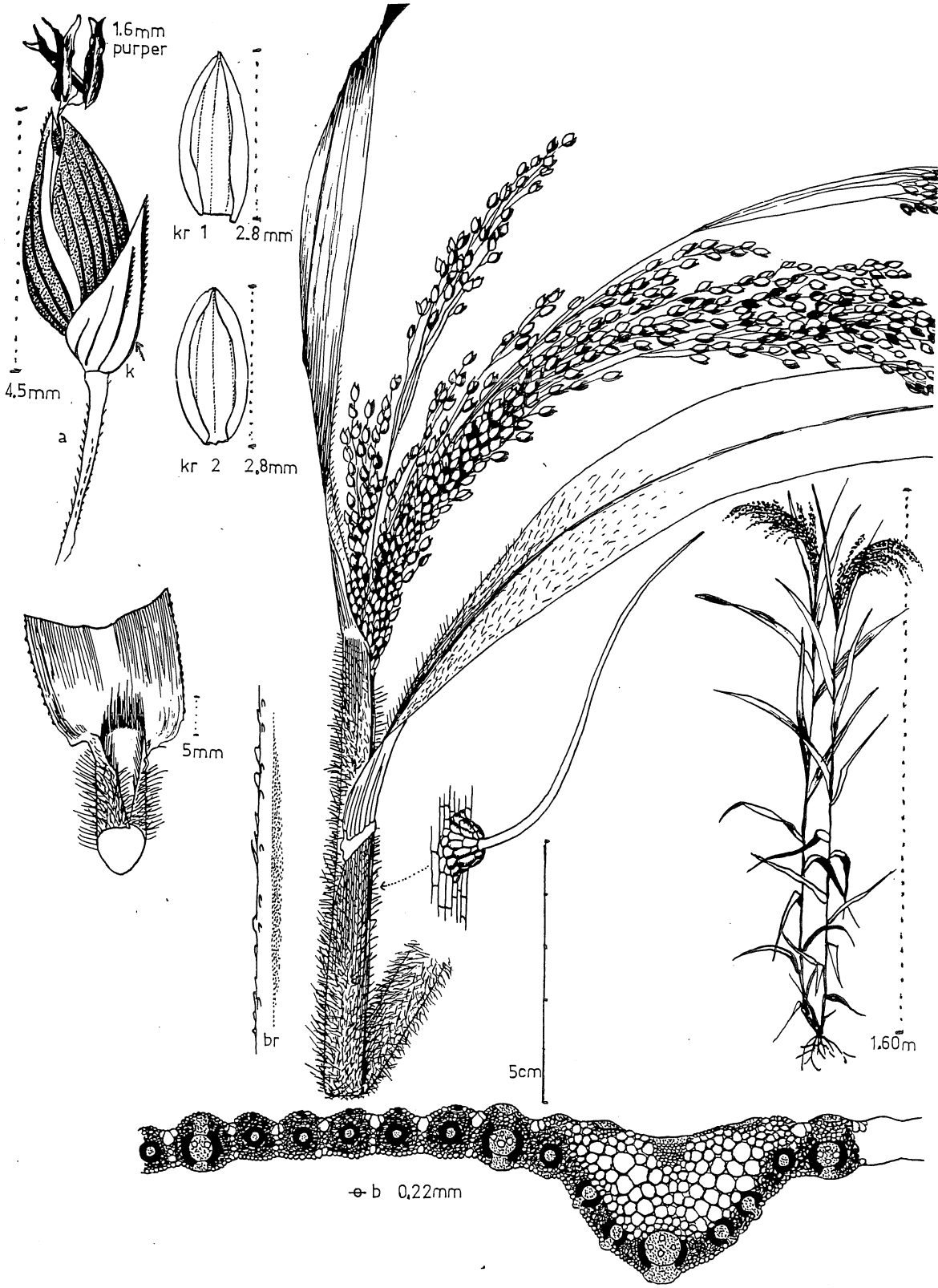
*Vulpia unilateralis*: A, habit; B, ligule; C, spikelet; D, floret showing callus; E, anthers.



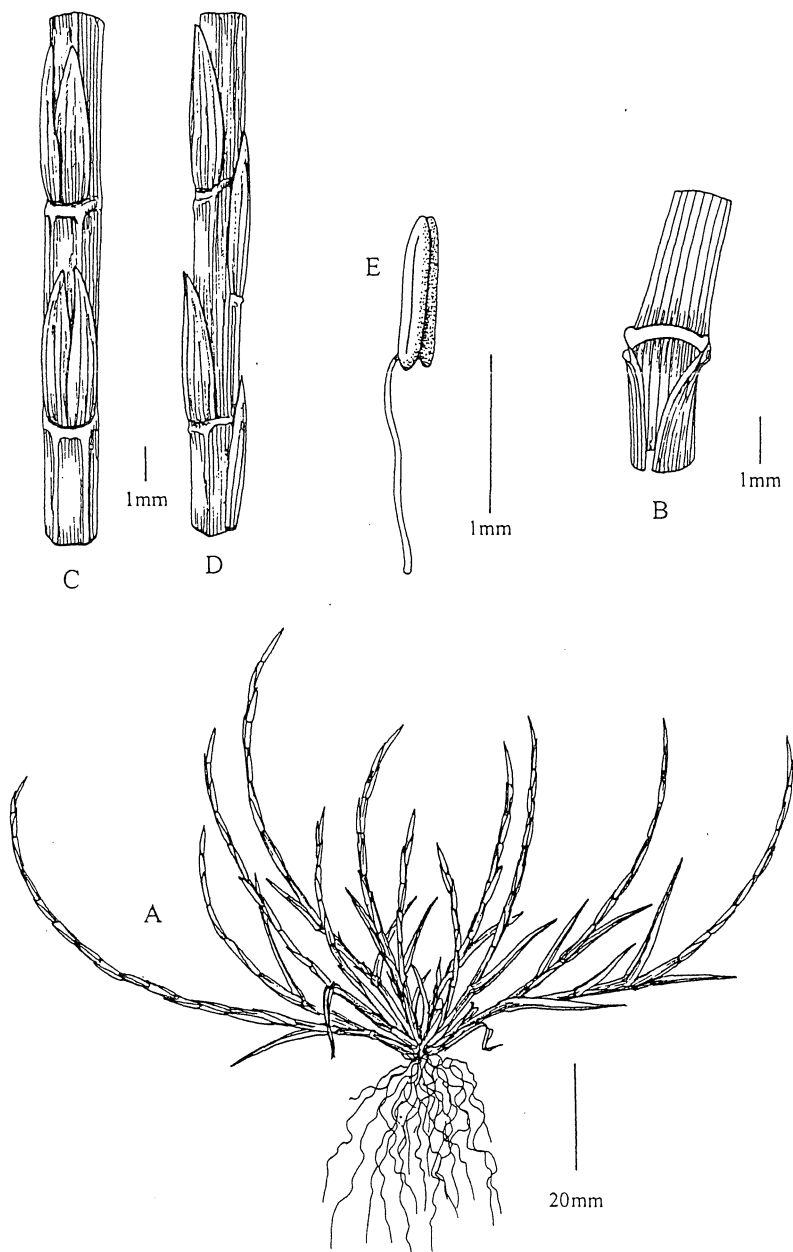


312

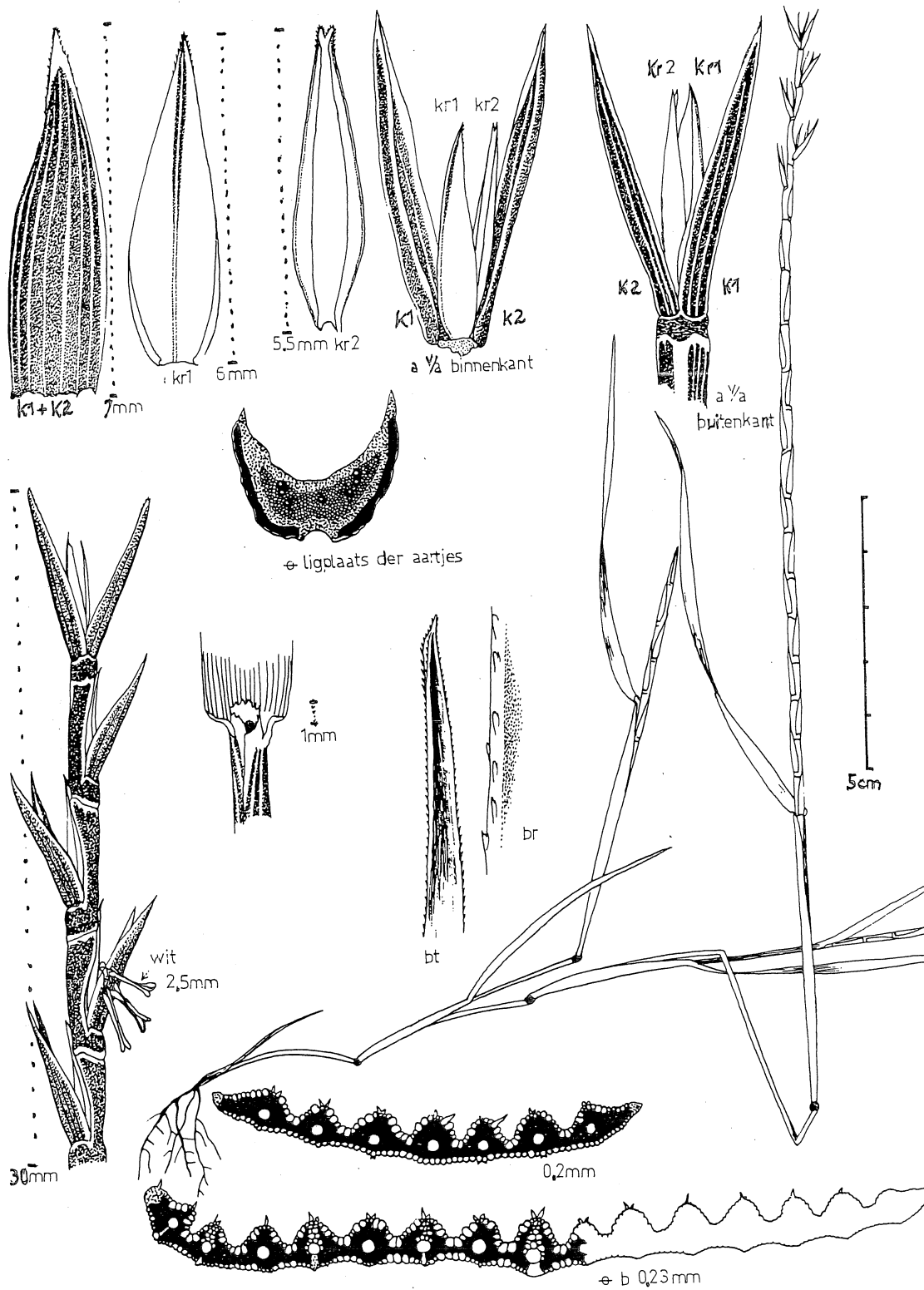
186. *Panicum capillare* L.

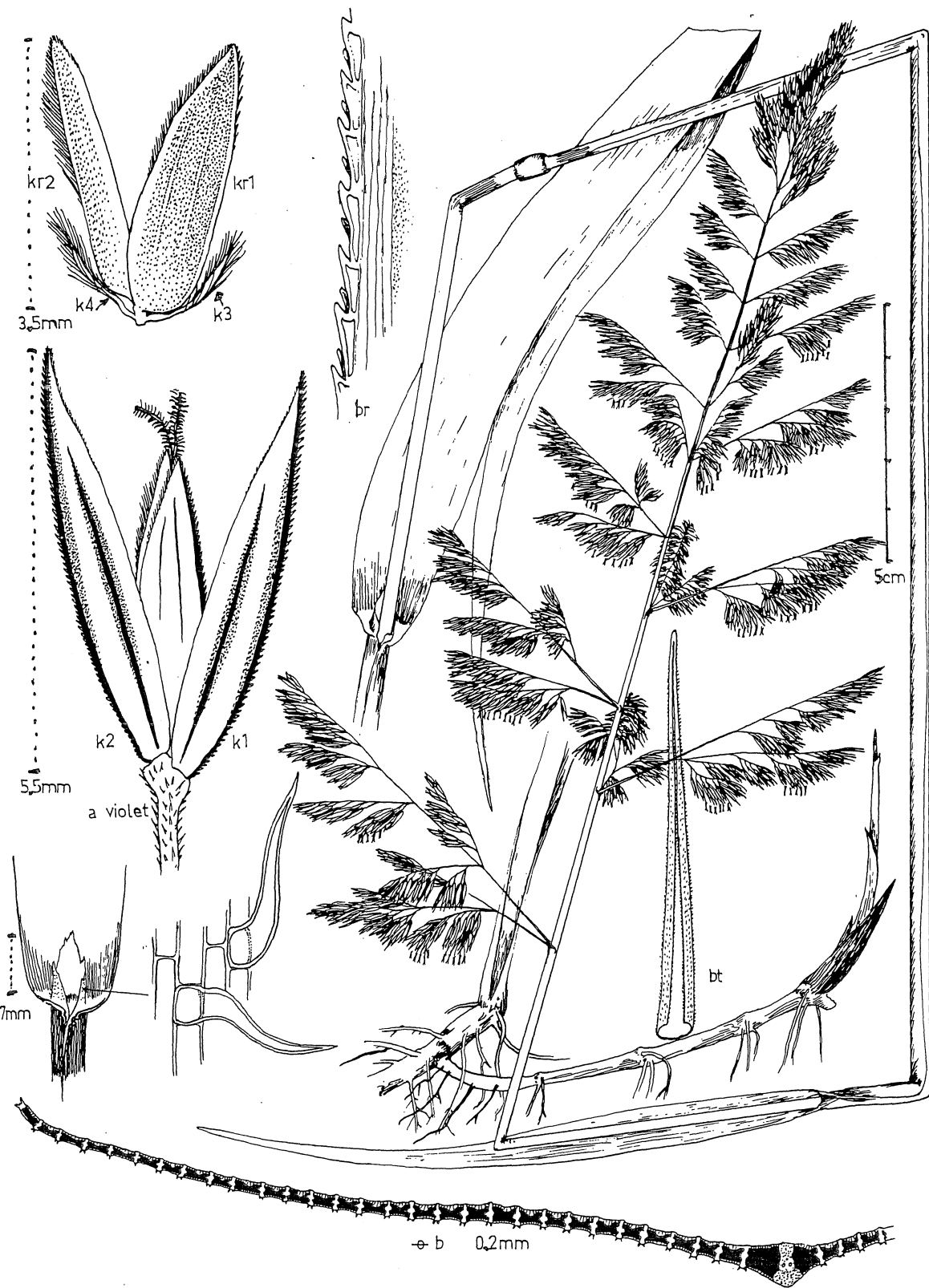


Parapholis incurva 59

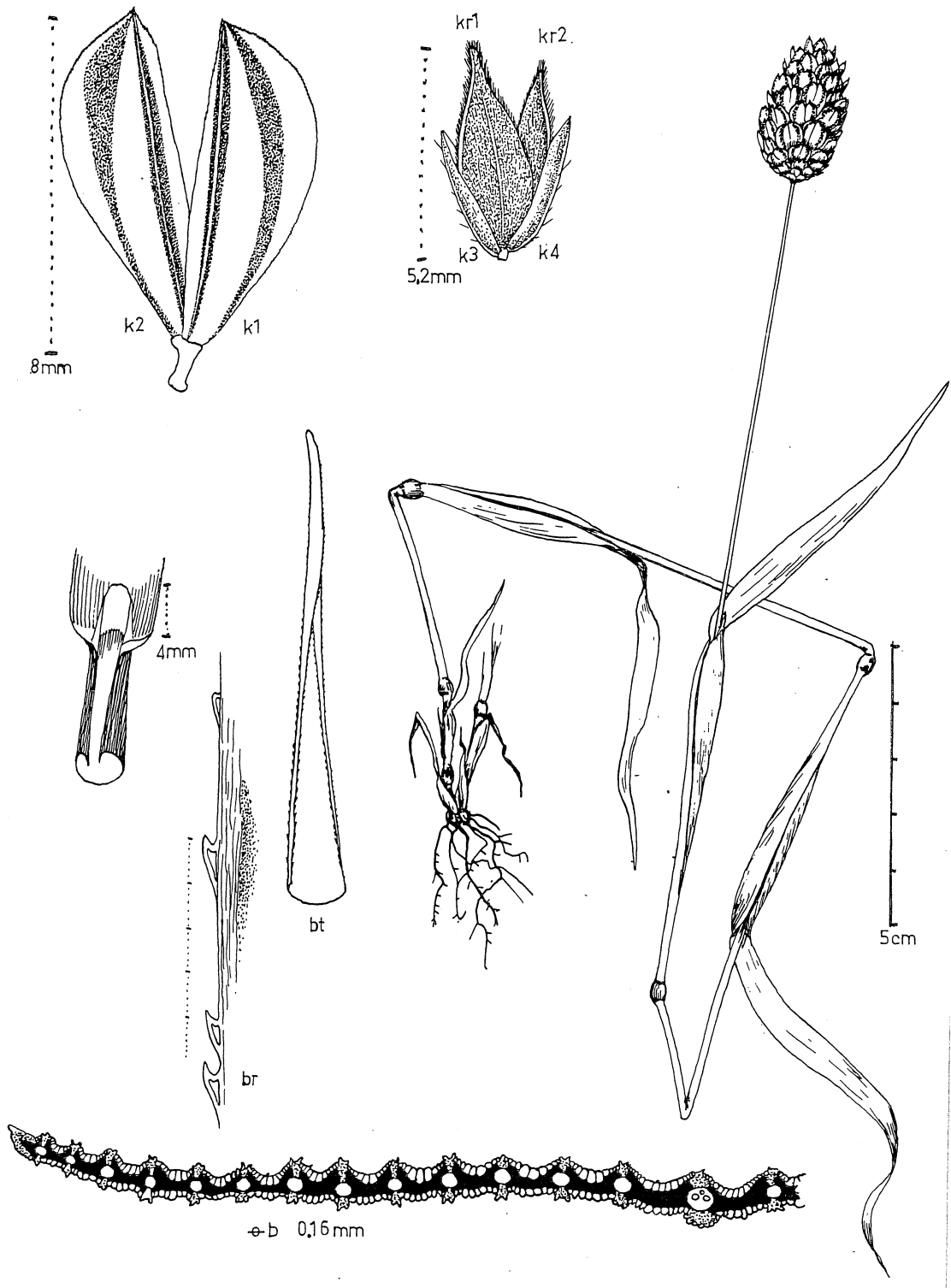


*Parapholis incurva*: A, habit; B, ligule; C, segment of raceme from the back; D, segment of raceme from the side; E, anther.

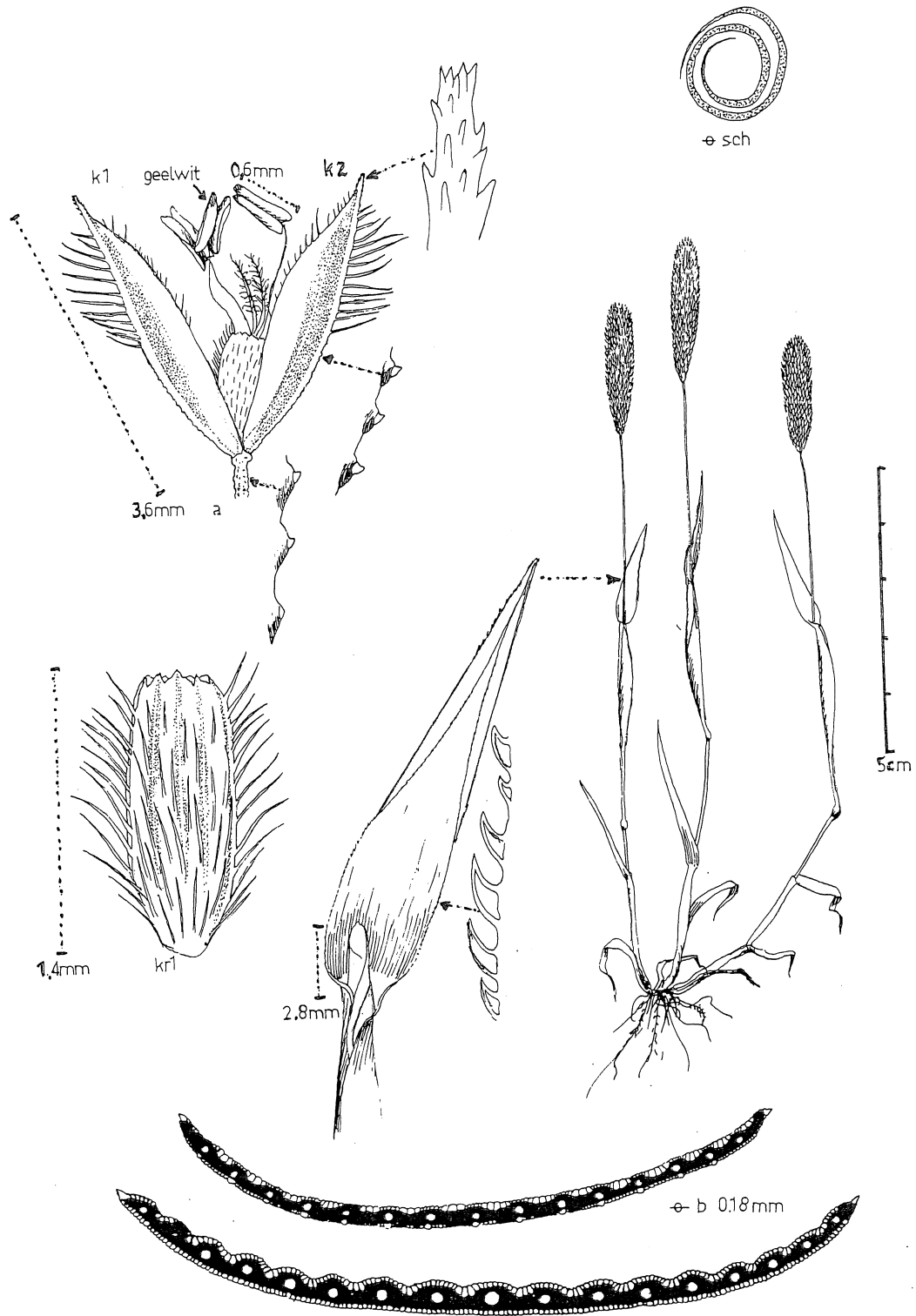




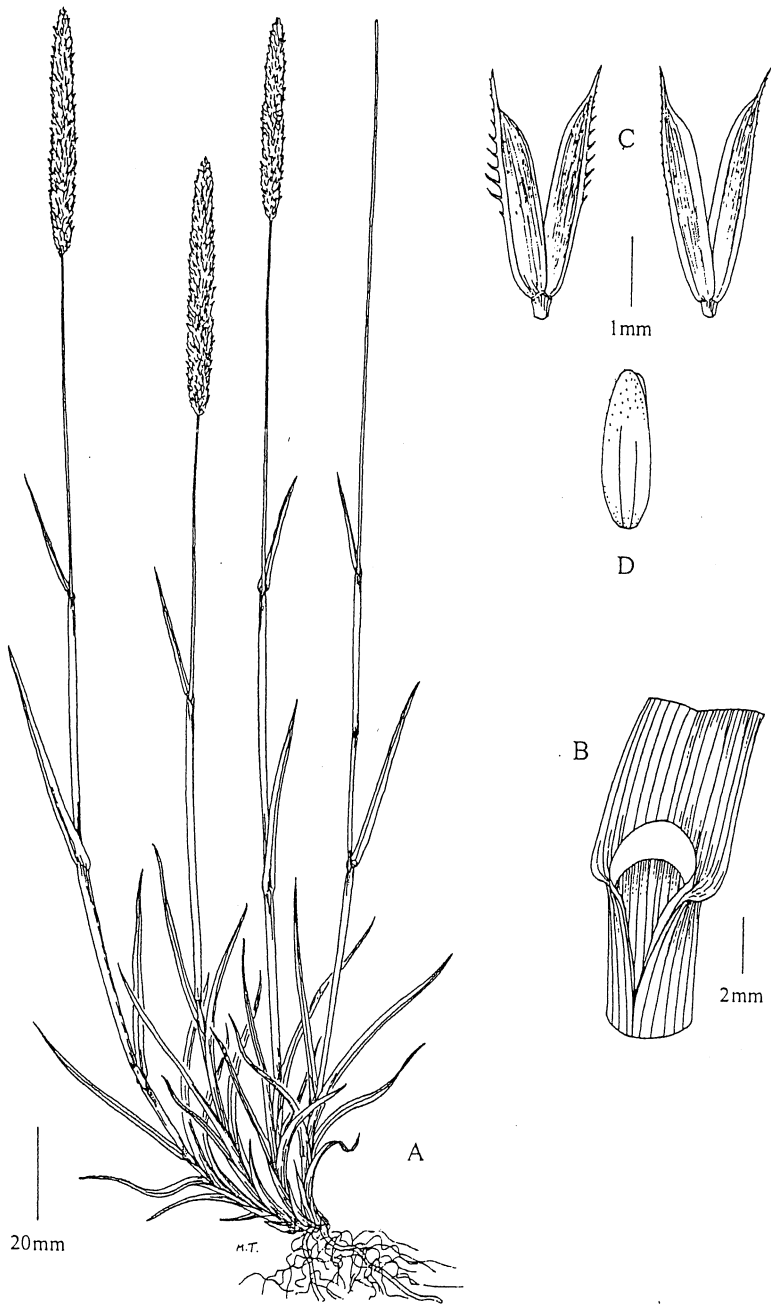
171. *Phalaris arundinacea* L.



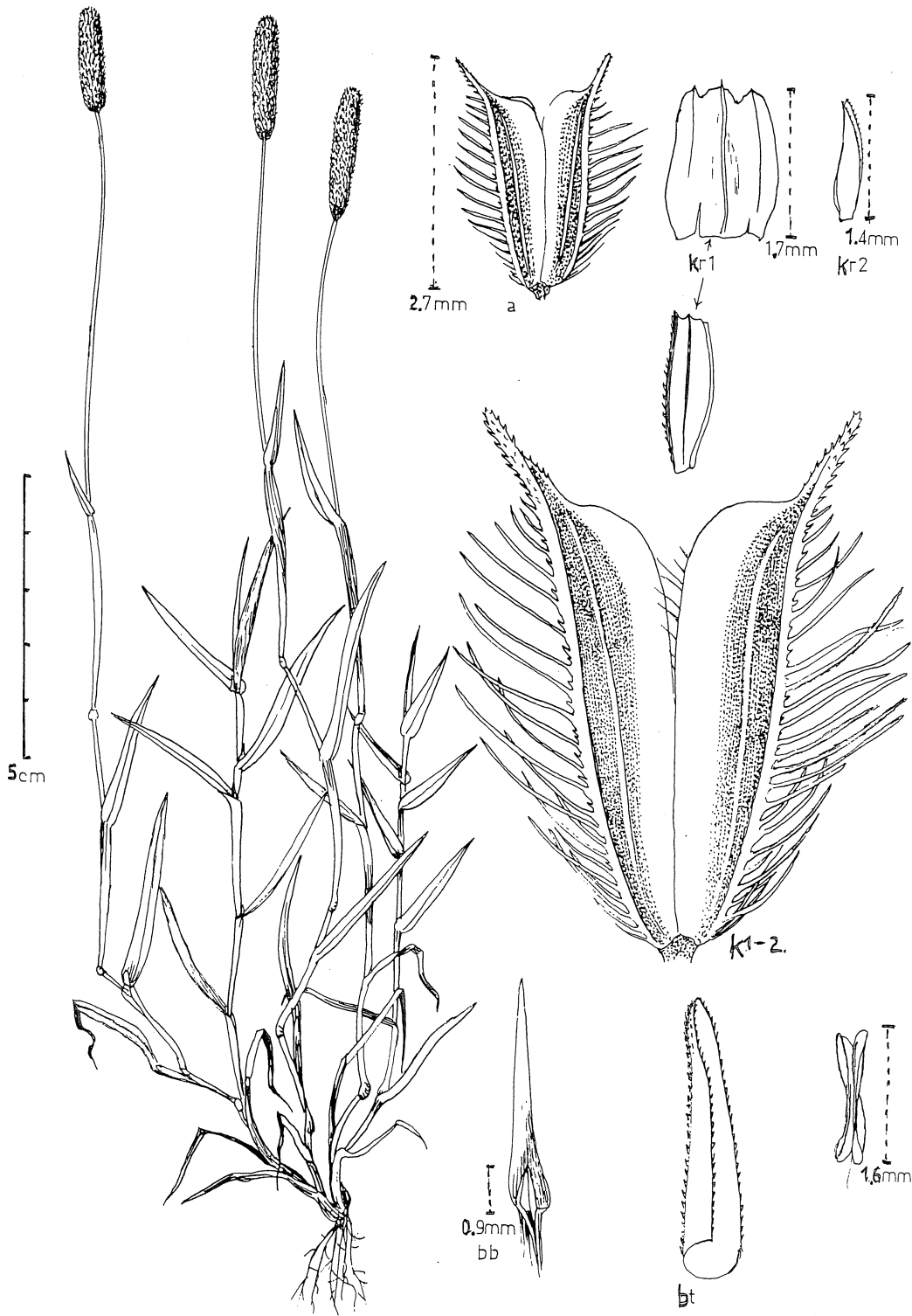


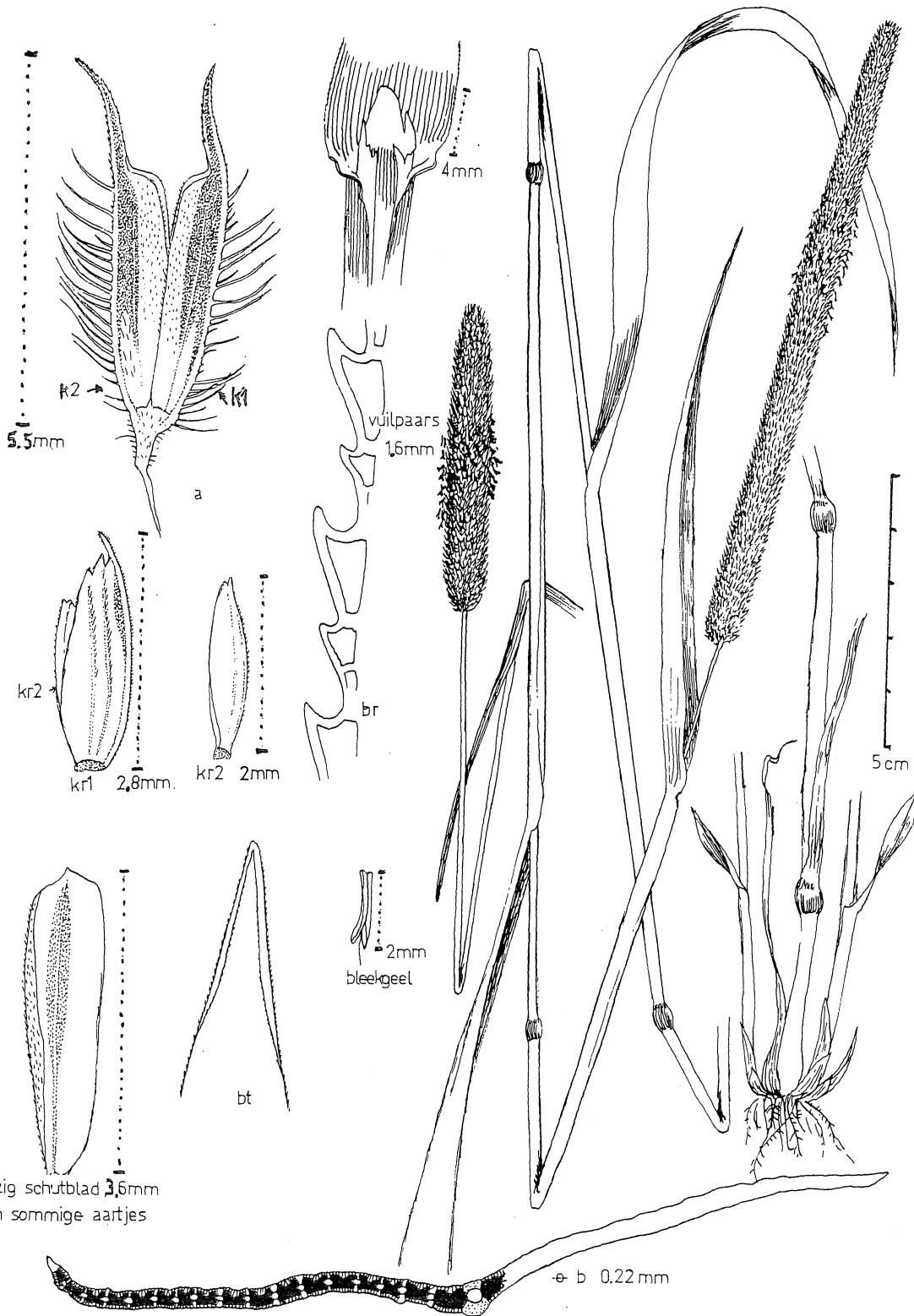


Phleum phleoides 124



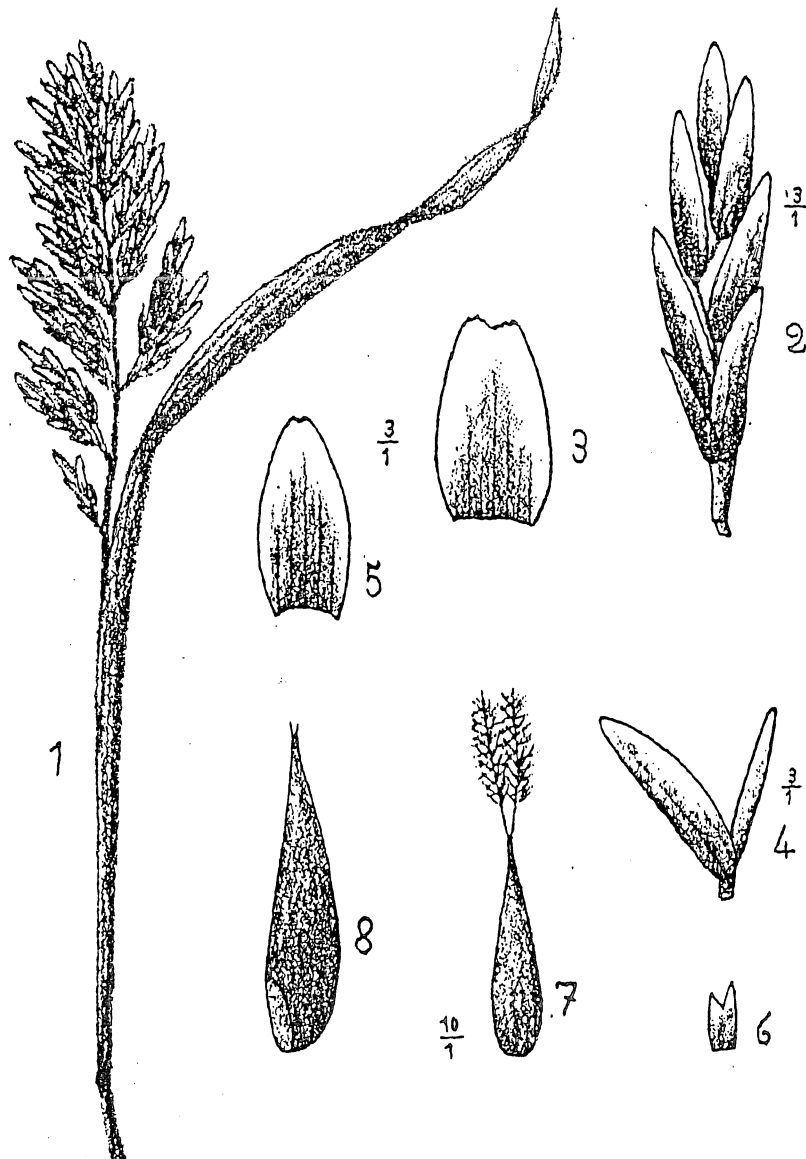
*Phleum phleoides*: A, habit; B, ligule; C, glumes of two sorts; D, floret.



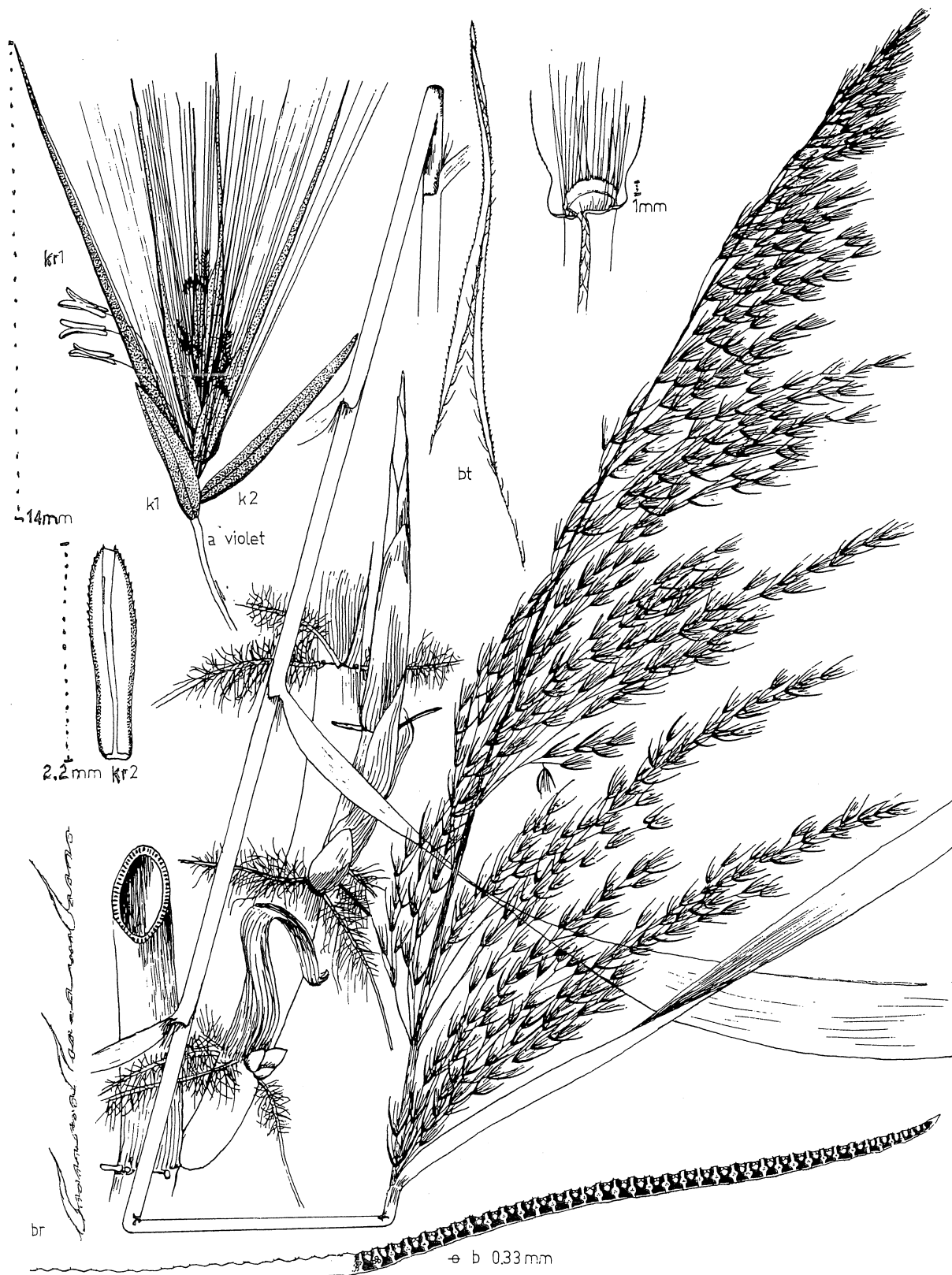


vliezig schutblad 3,6mm  
aan sommige aartjes

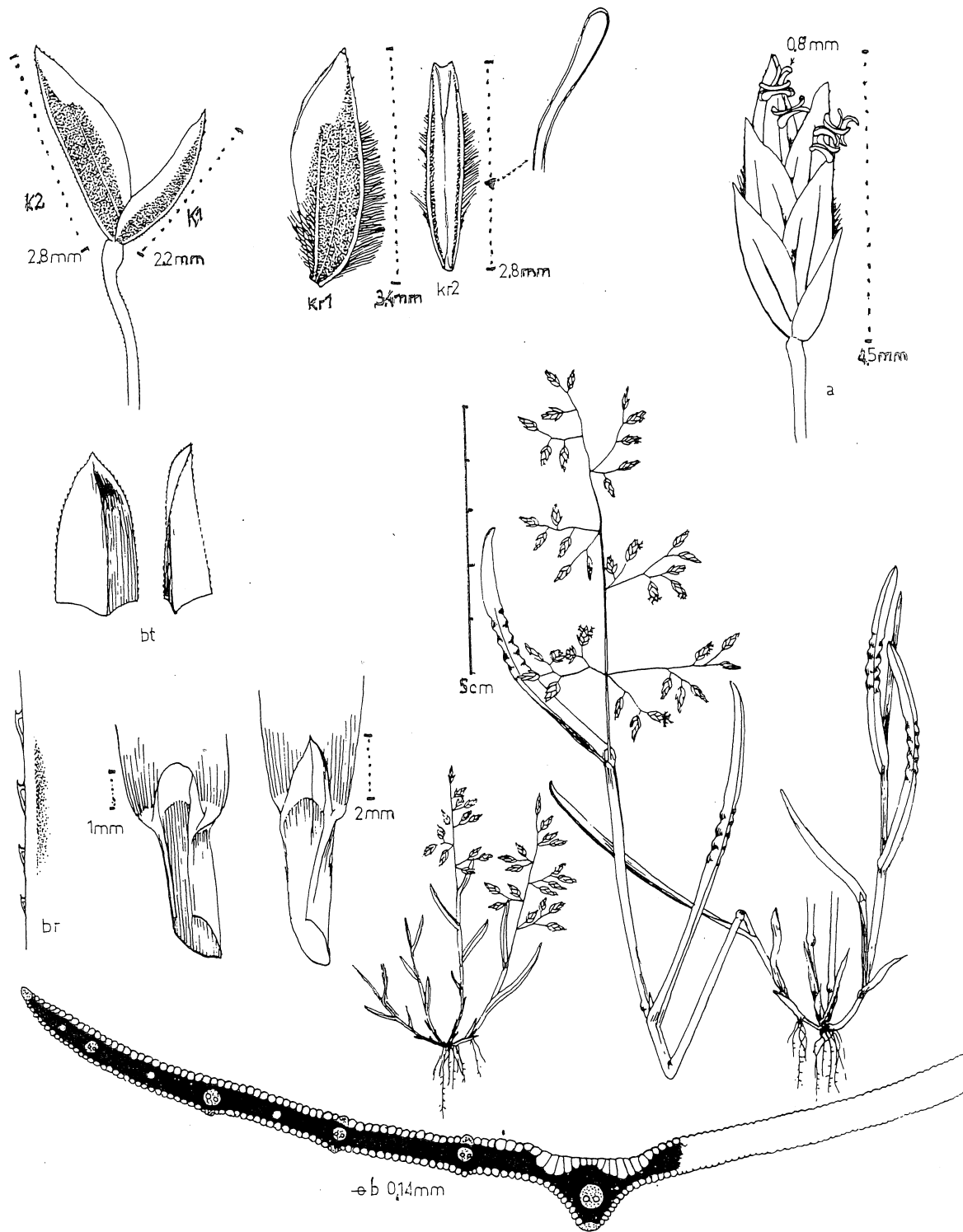
*Sclerochloa dura* (L.) BEAUV.

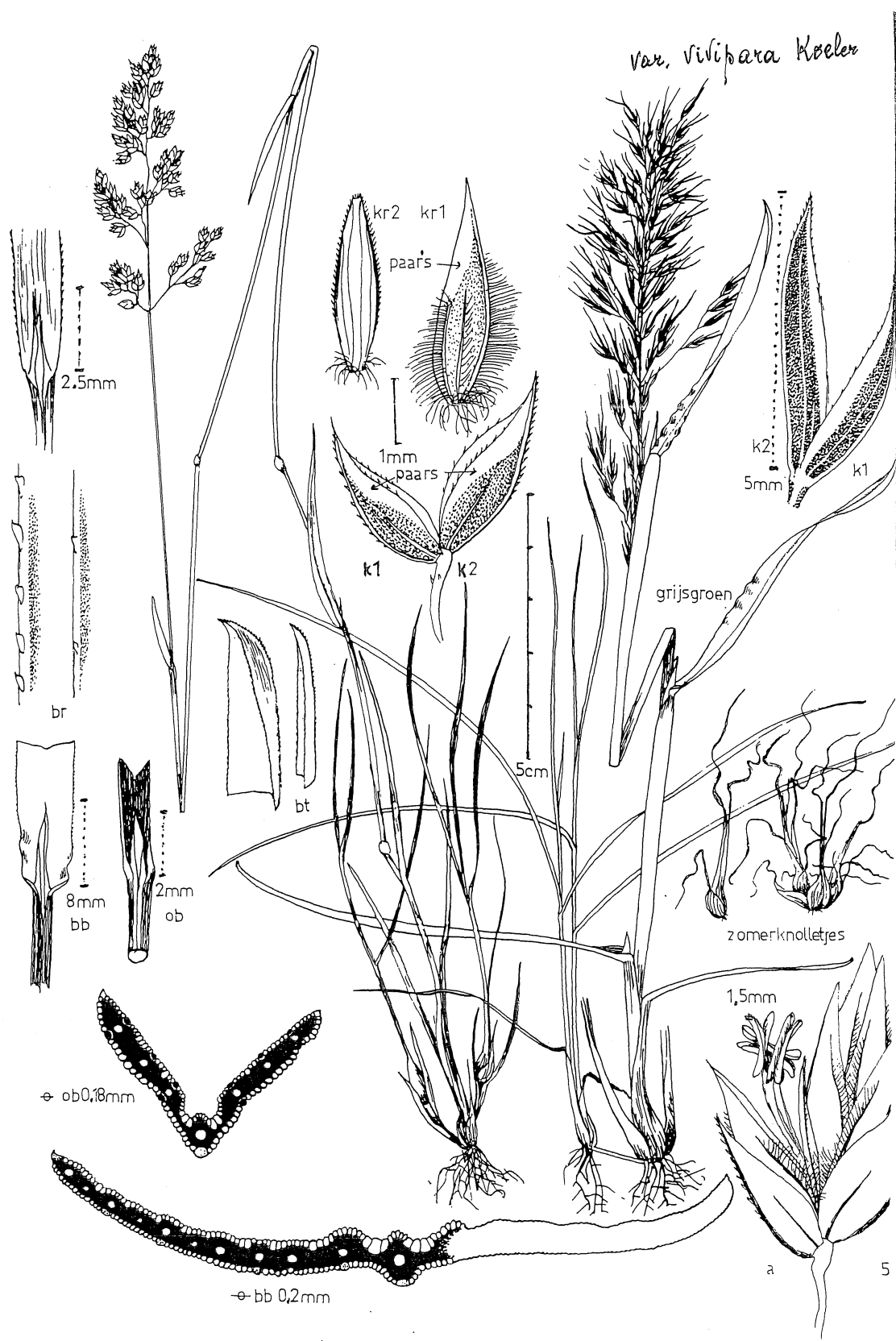


1: Panicule - 2: Epillet - 3: Glume sup. - 4: Glumelles égales  
5: Lemme - 6: Glumellules - 7: Ovaire - 8: Caryopse



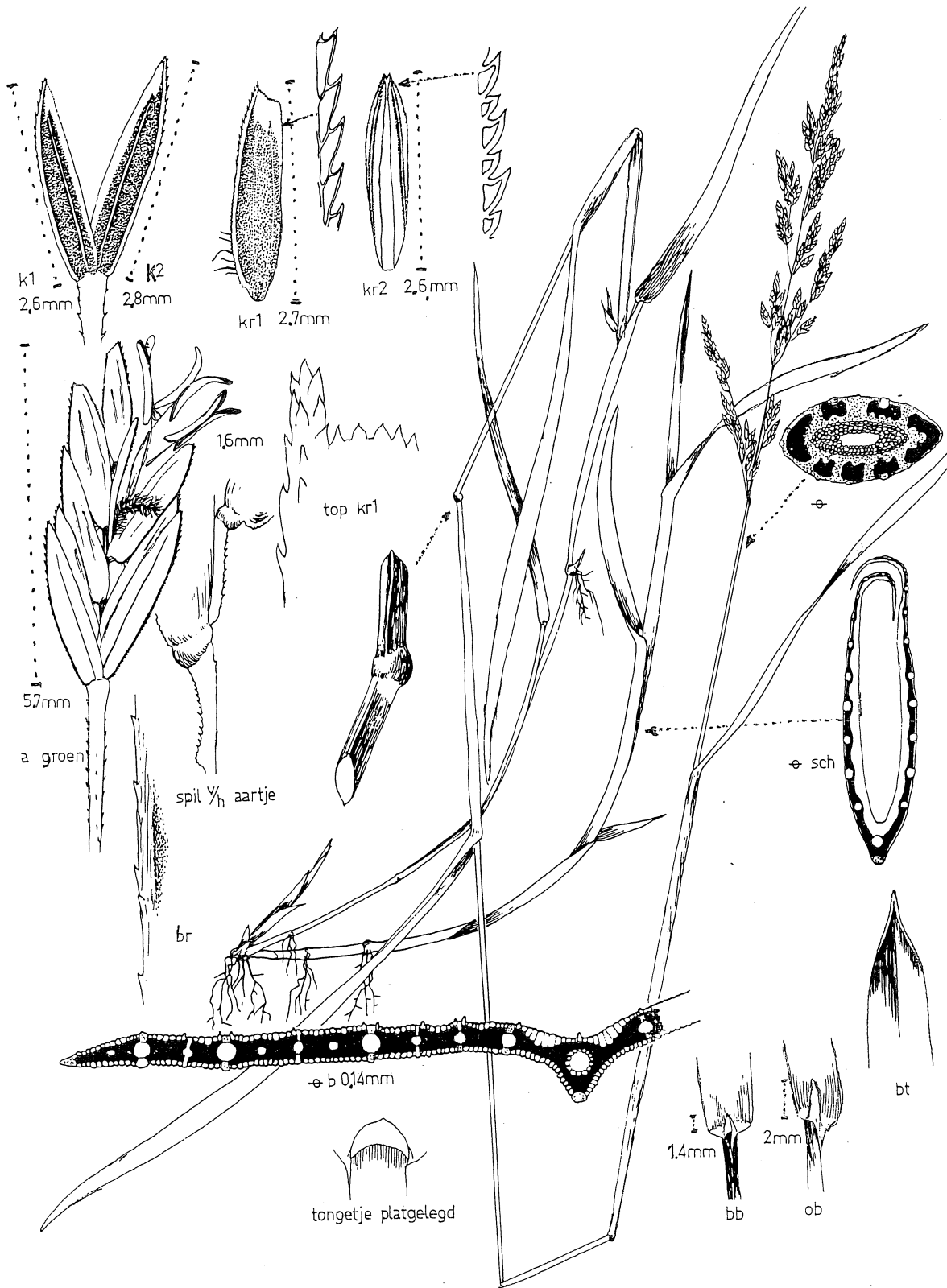
106. *Phragmites australis* (Cav.) Trin. ex Steud.

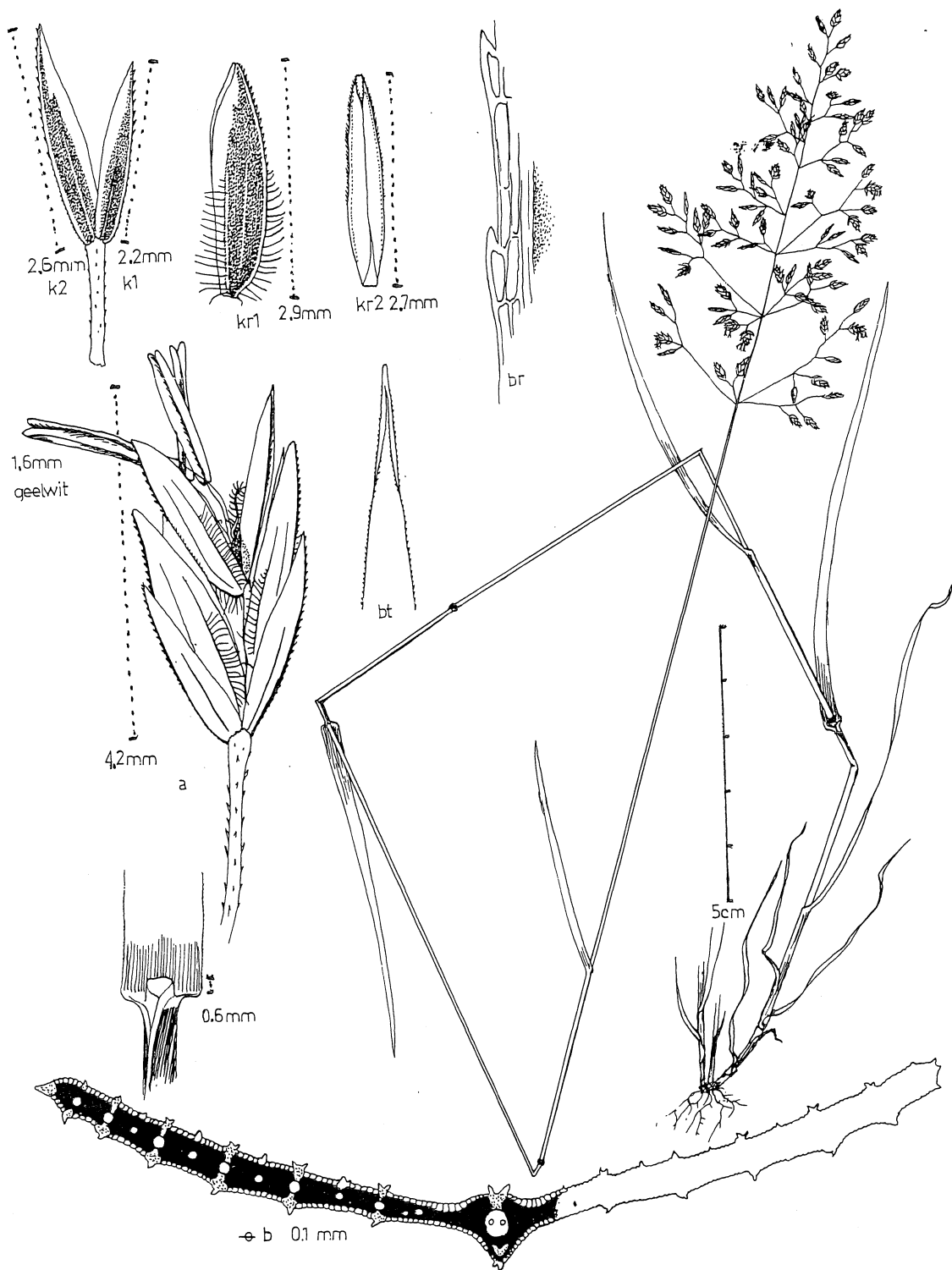






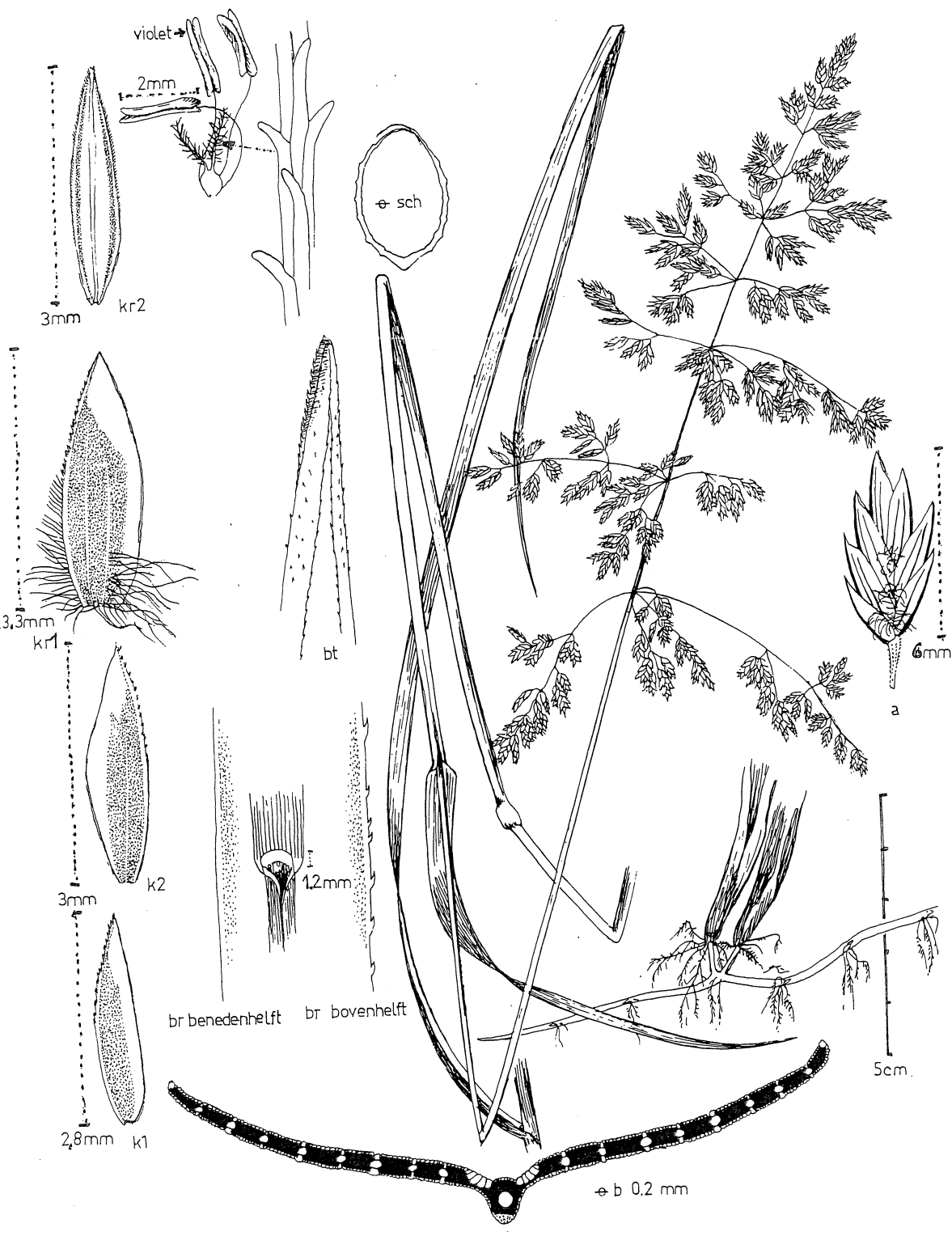






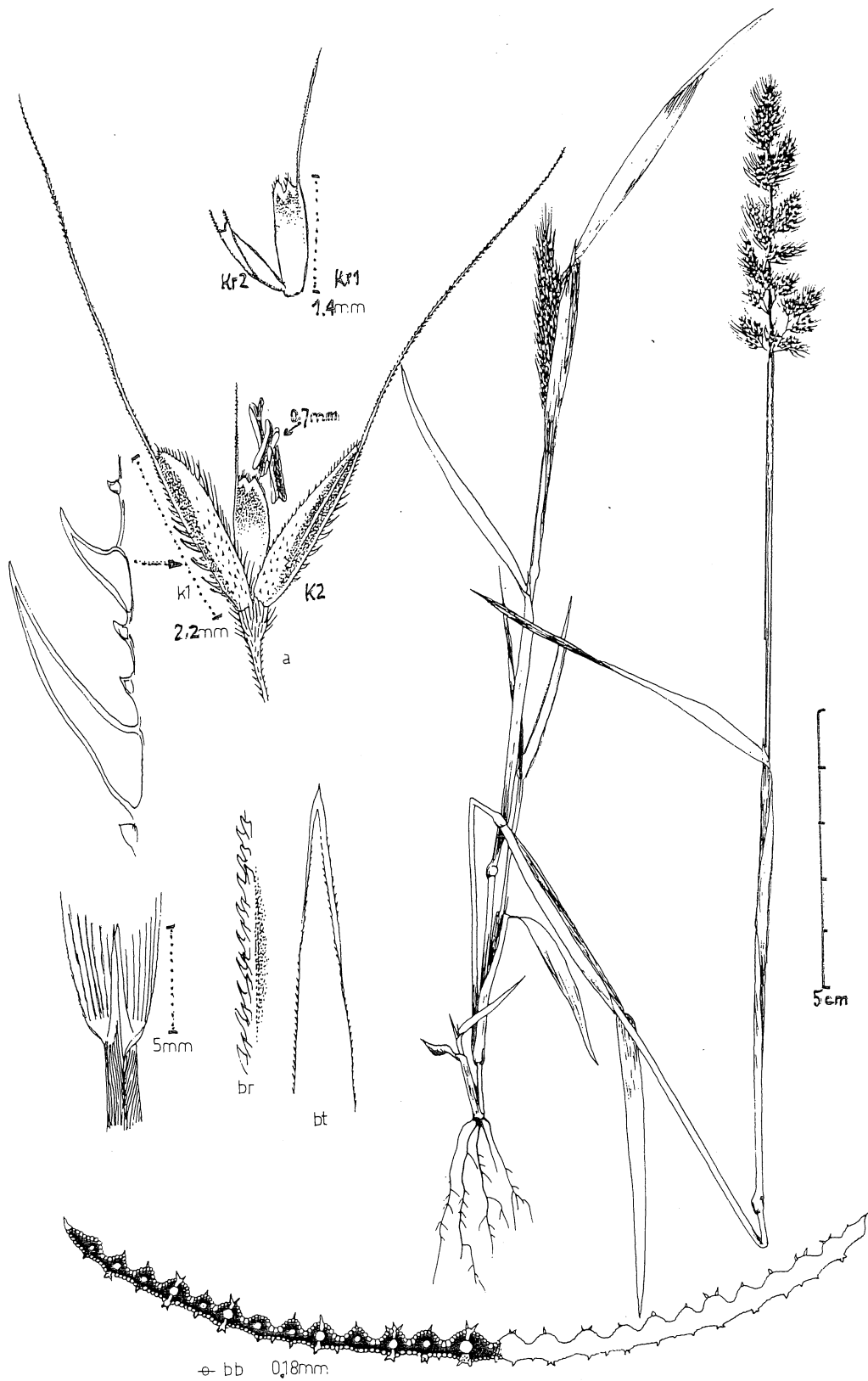


57. *Poa palustris* L.



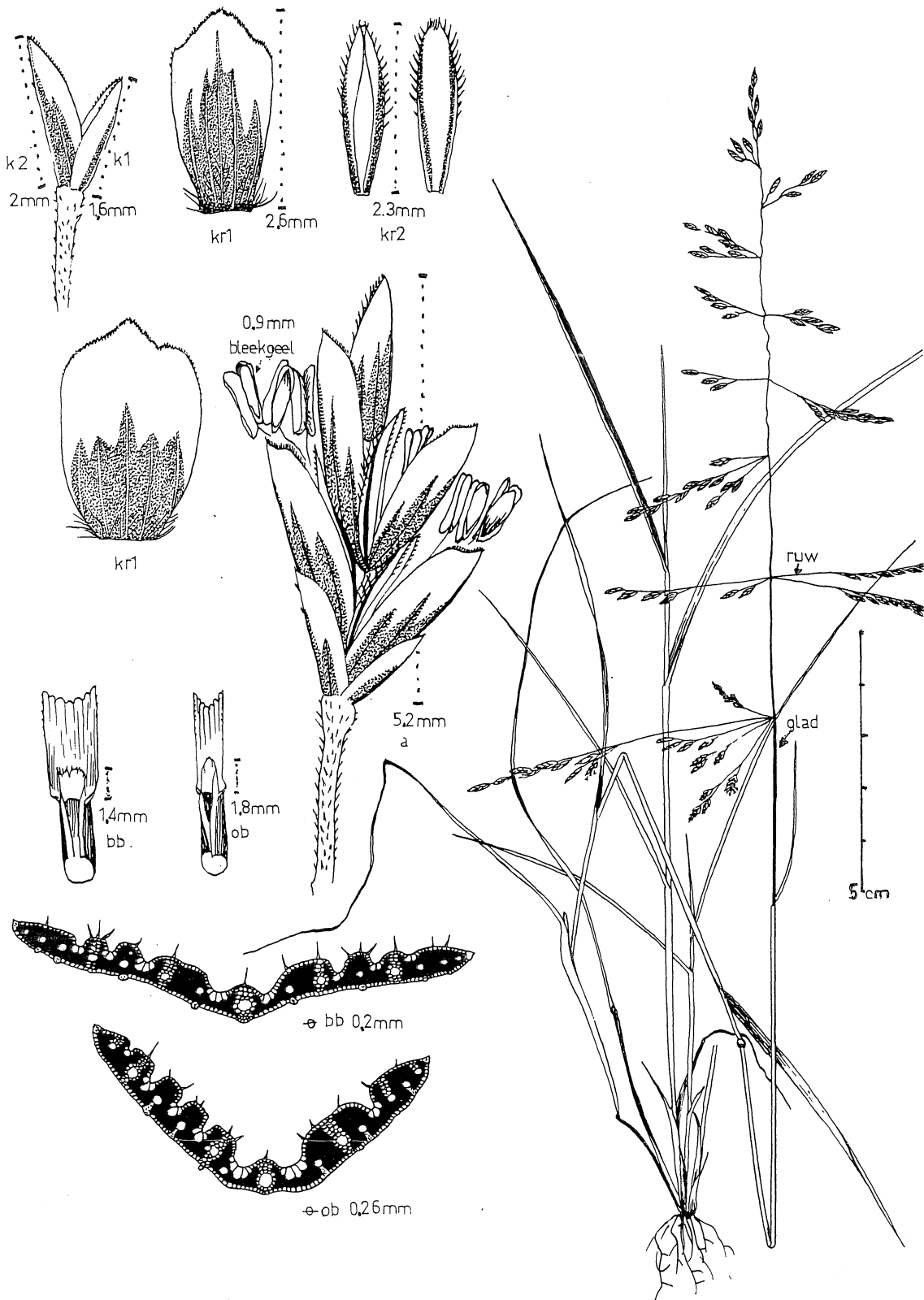


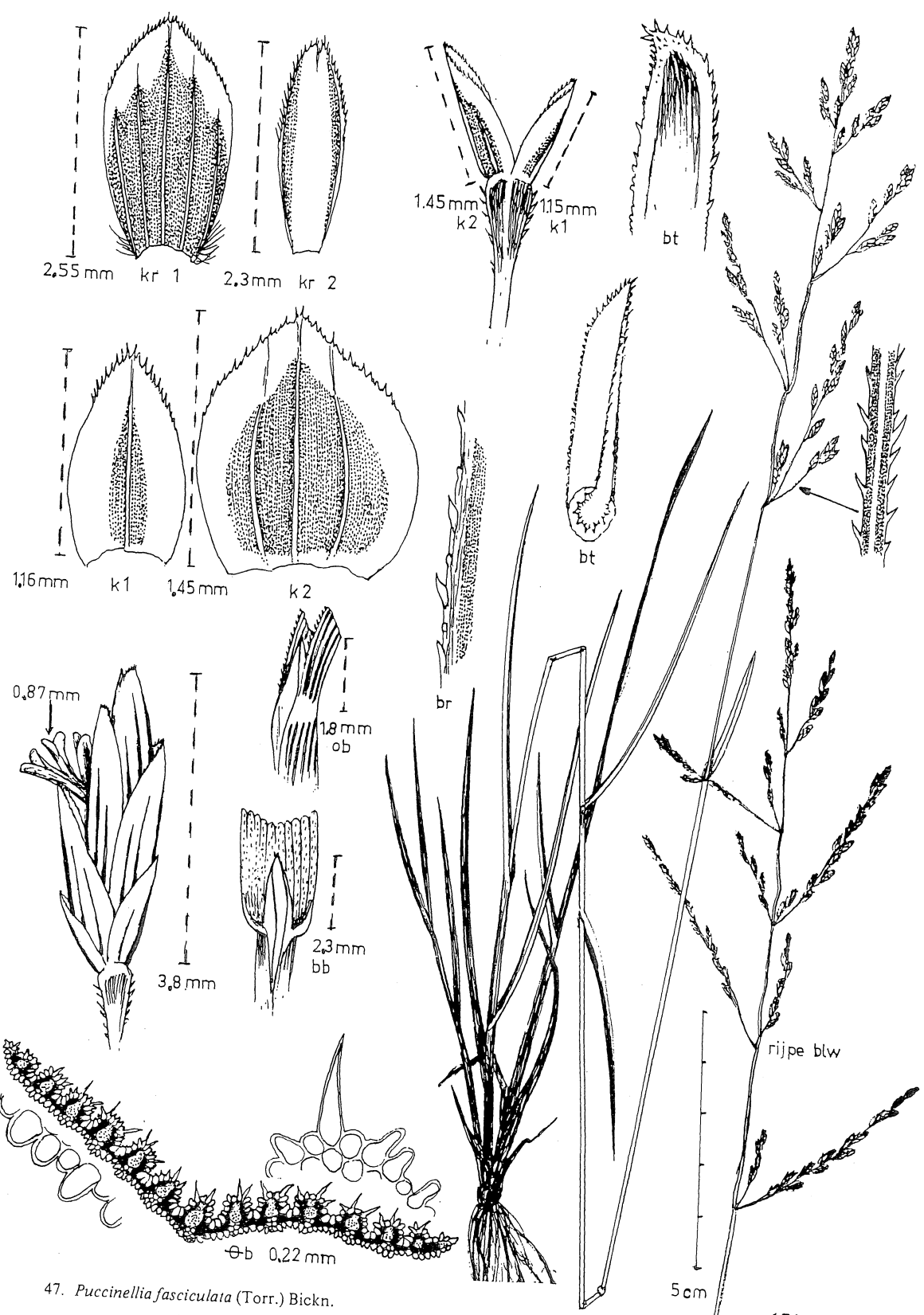
58. *Poa trivialis* L.



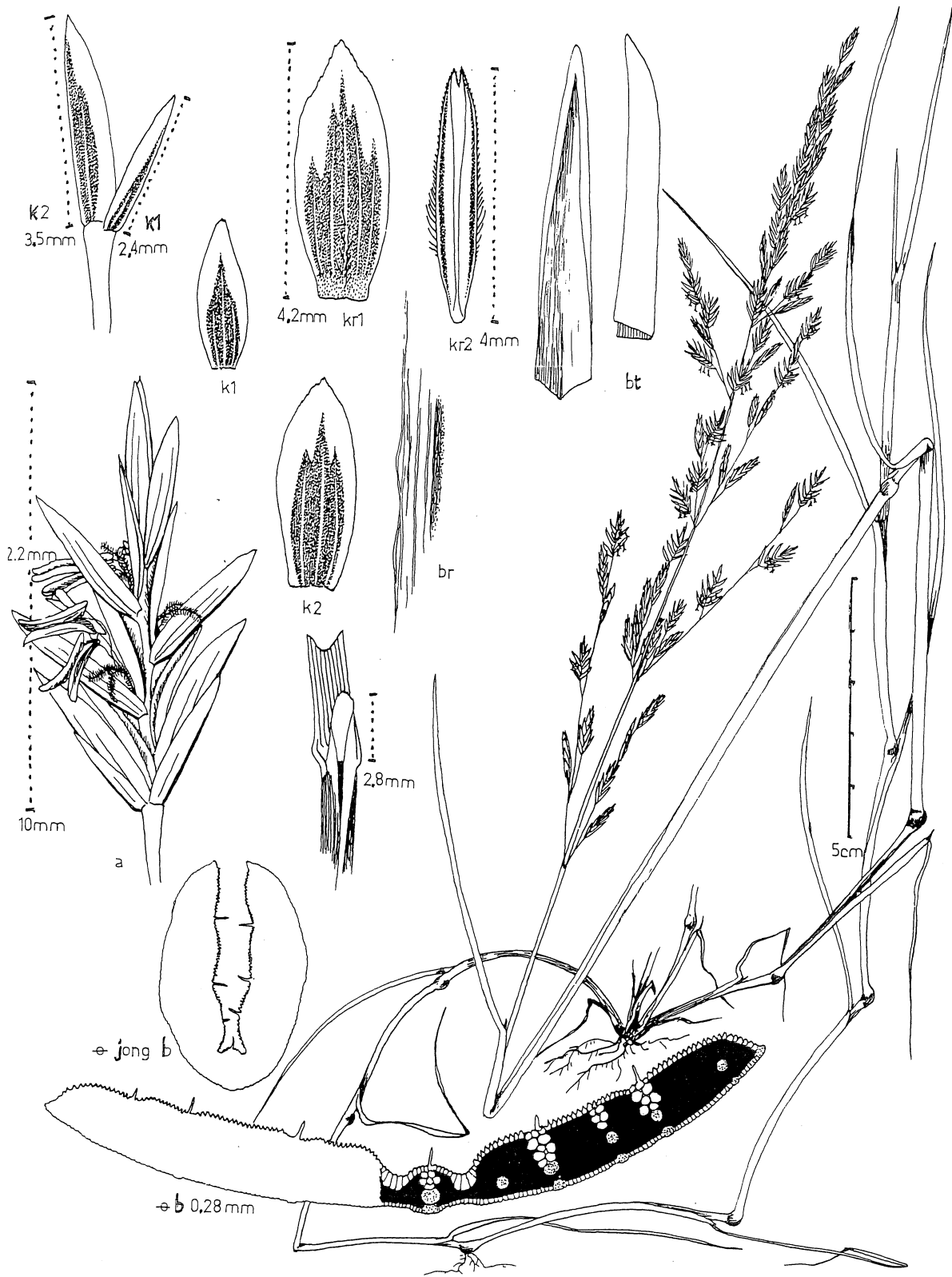




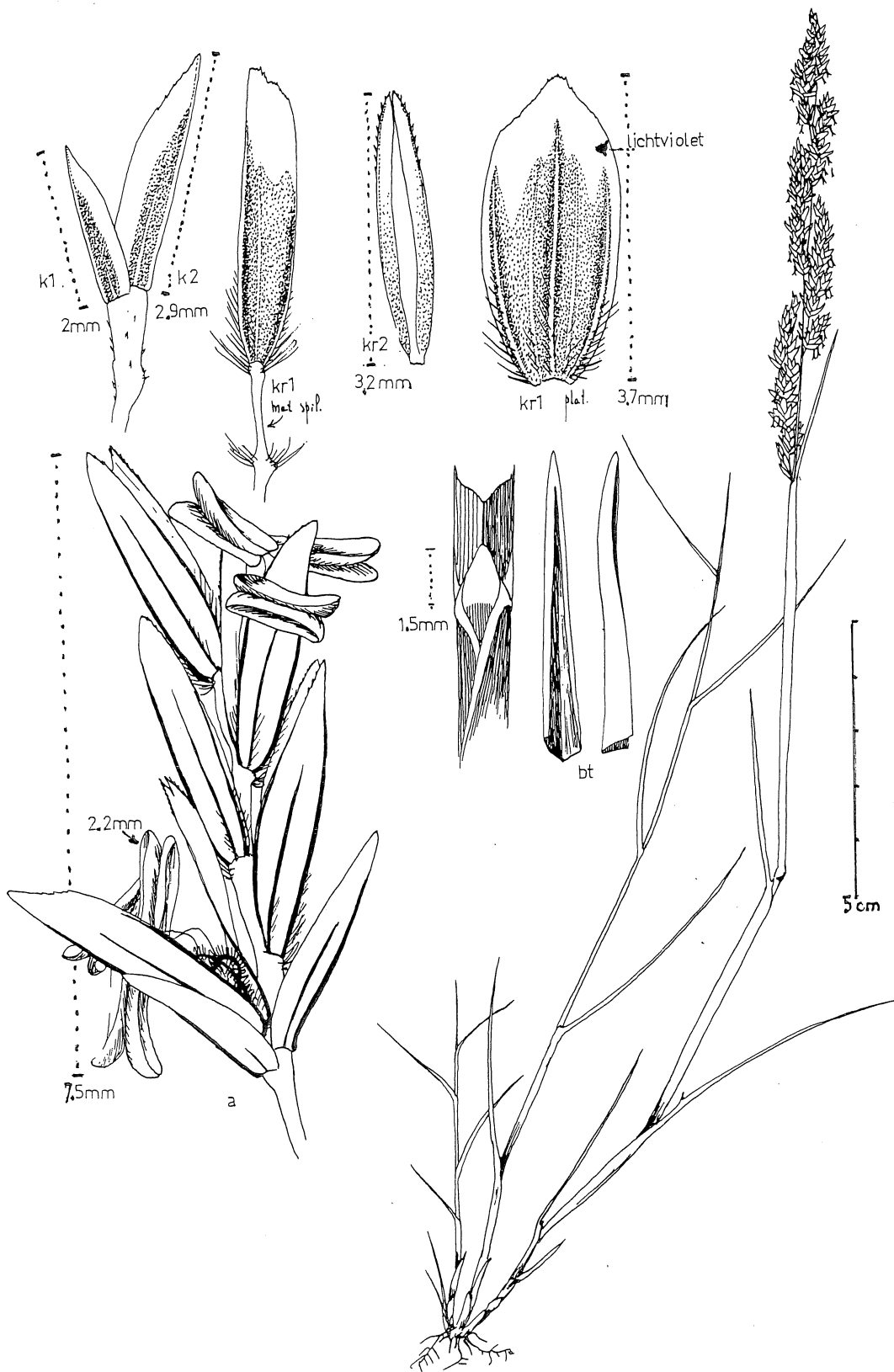




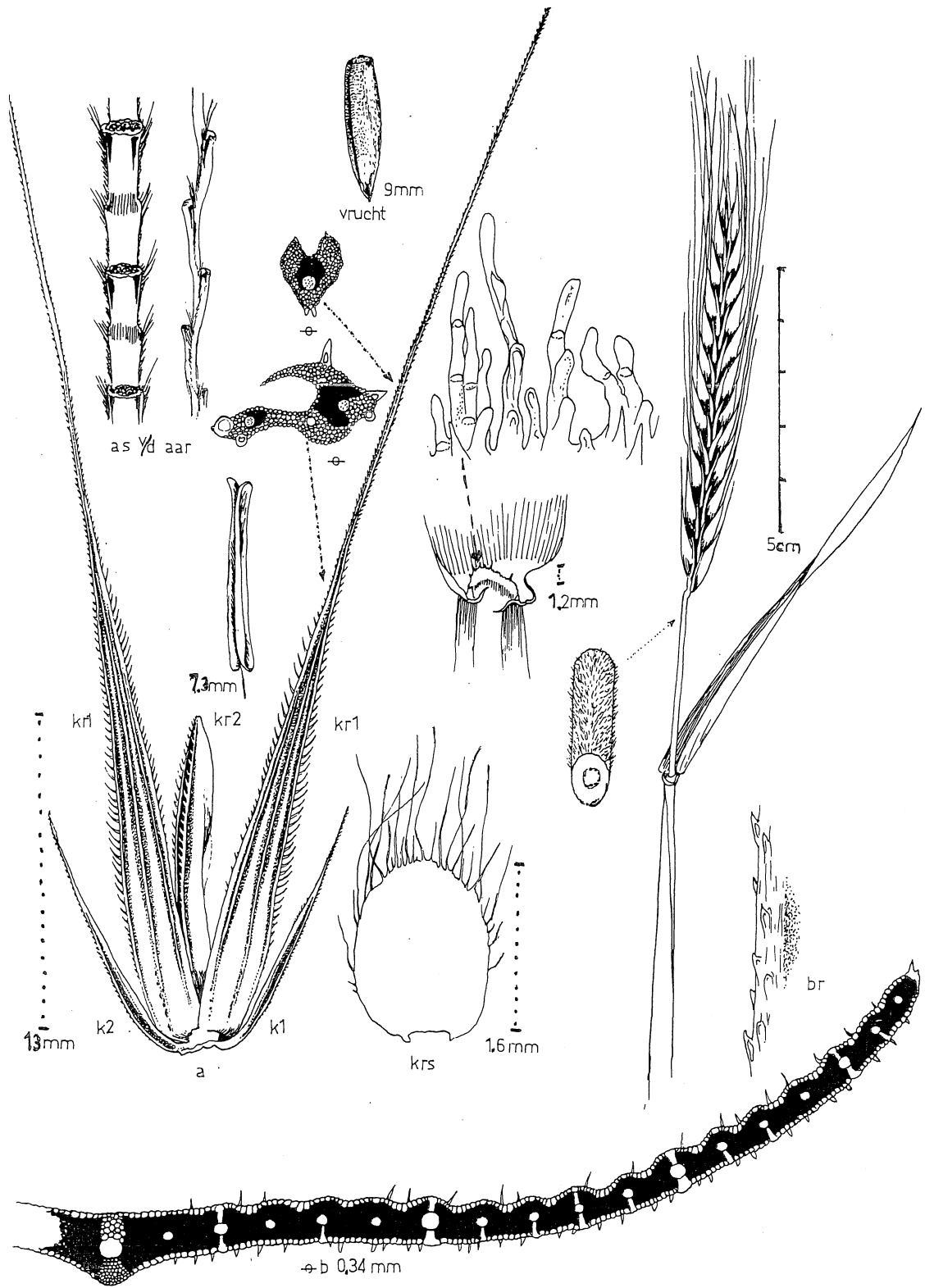
47. *Puccinellia fasciculata* (Torr.) Bickn.

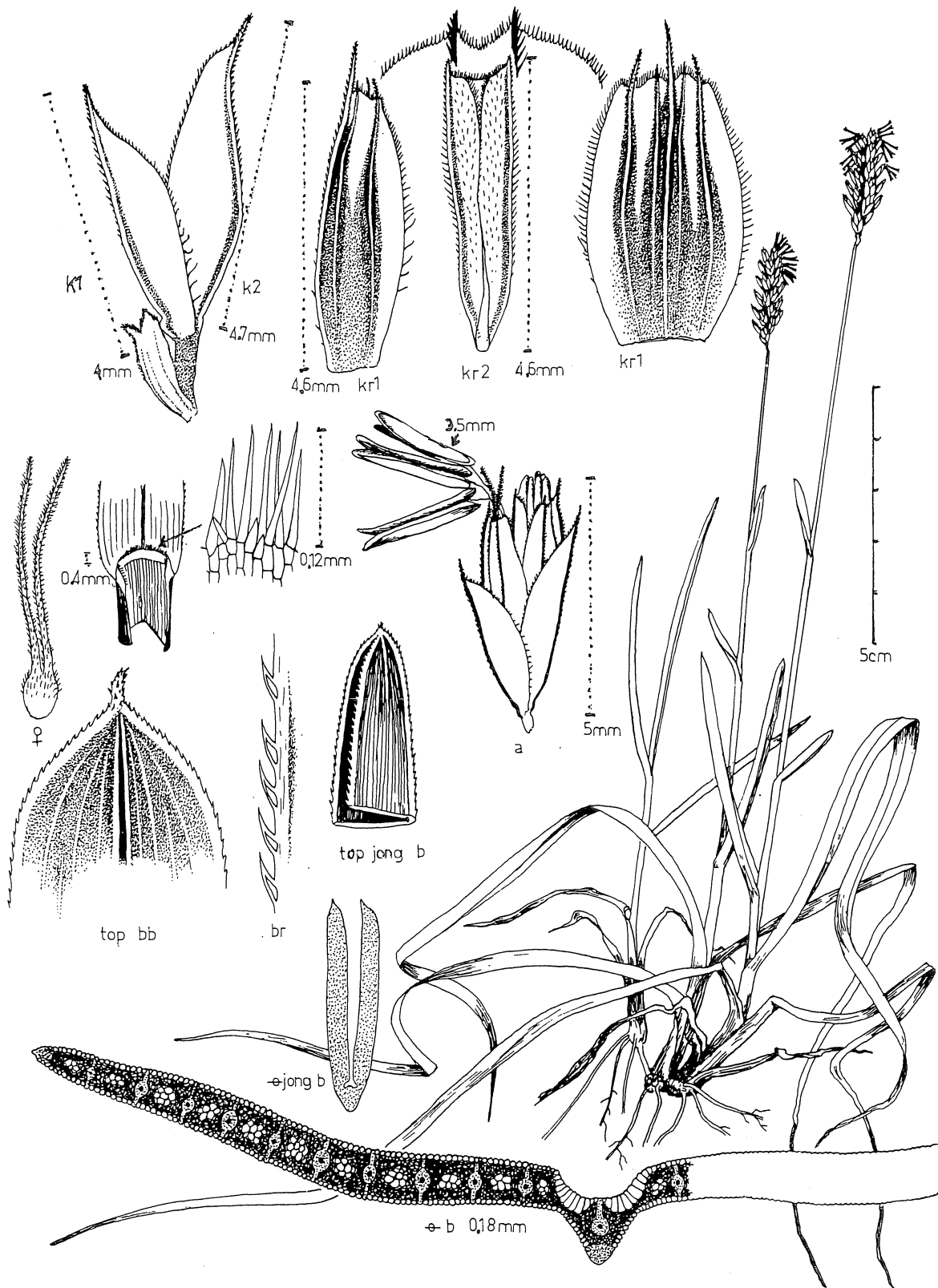


41. *Puccinellia maritima* (Huds.) Parl.

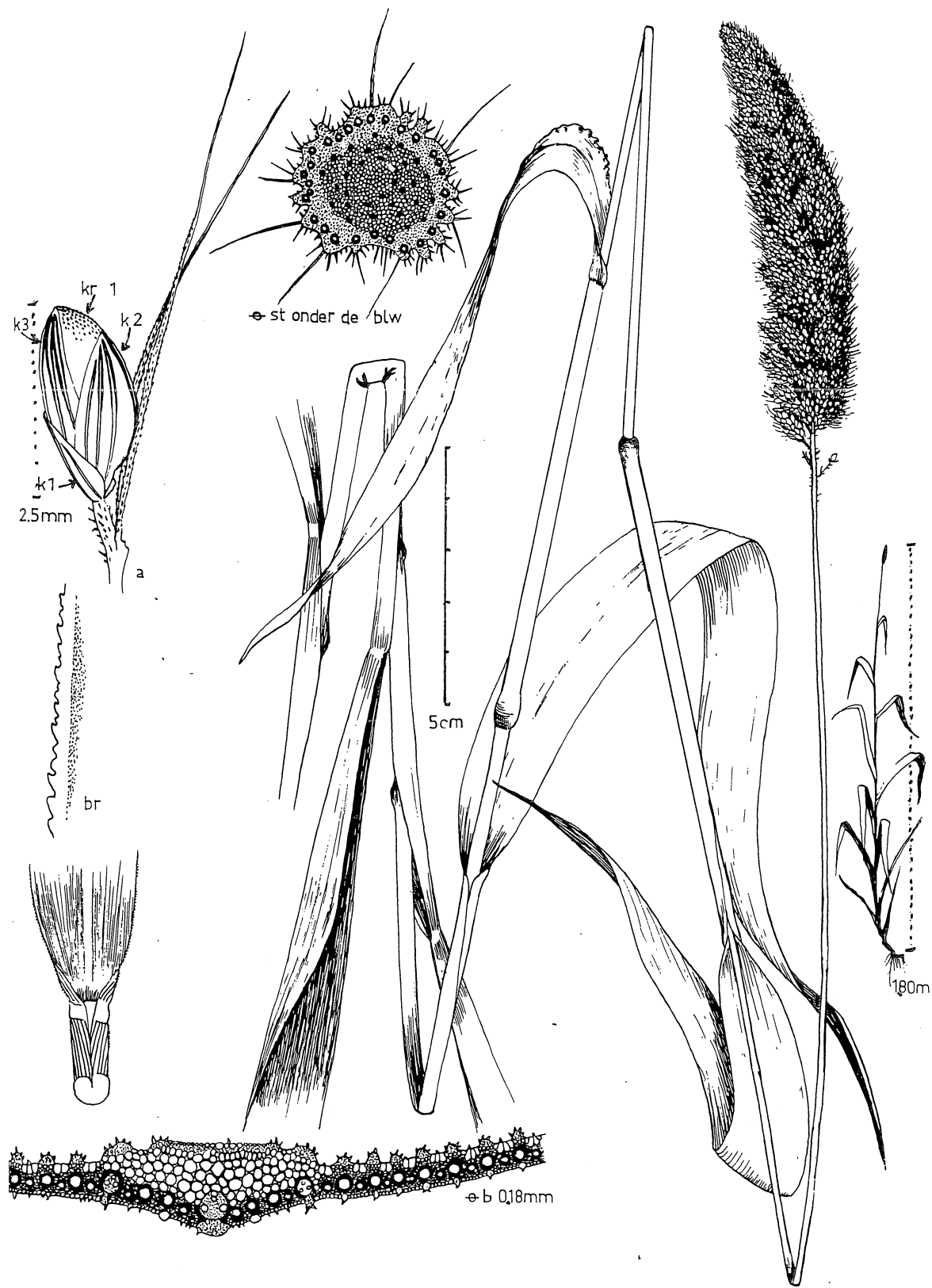






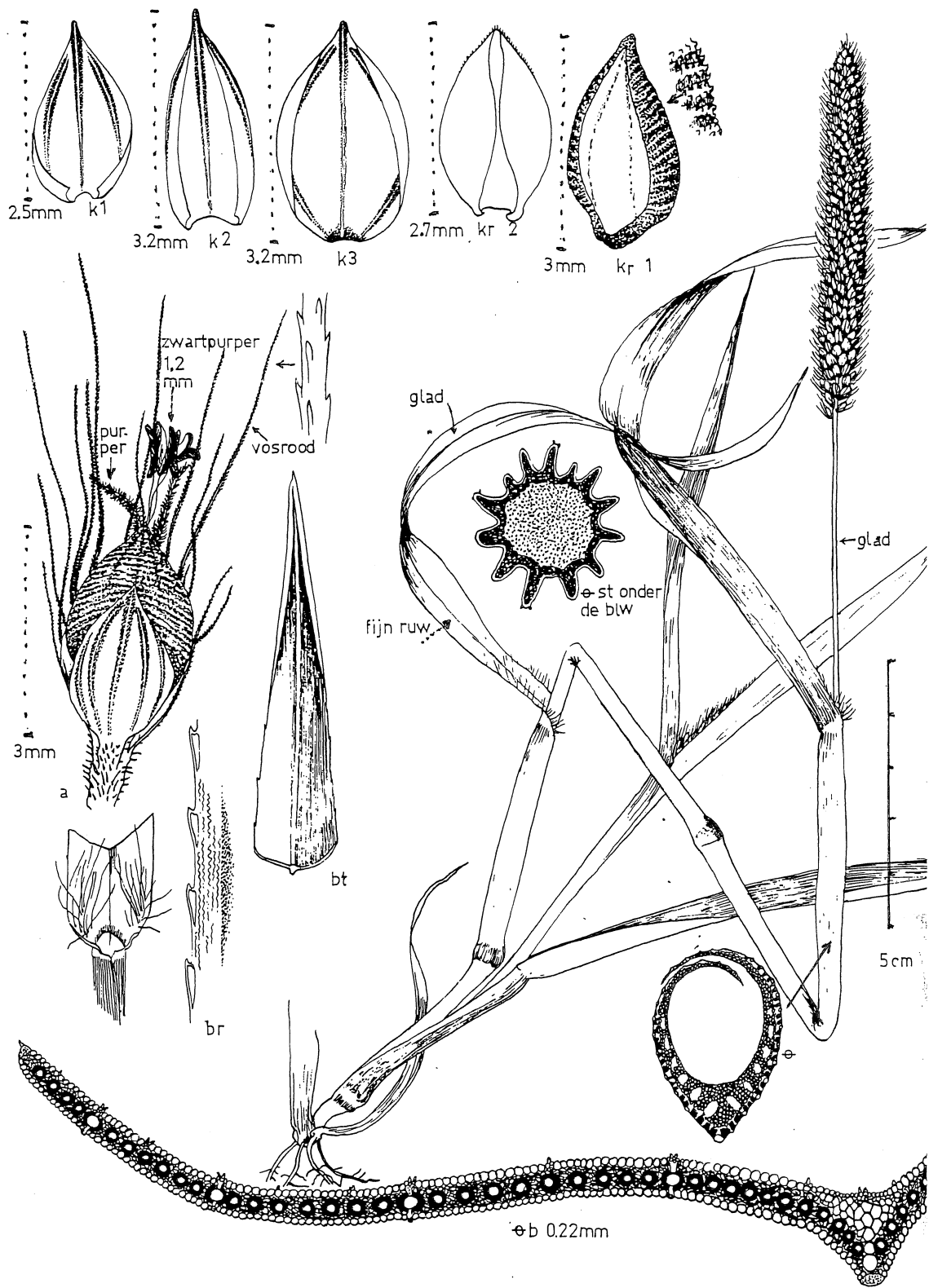


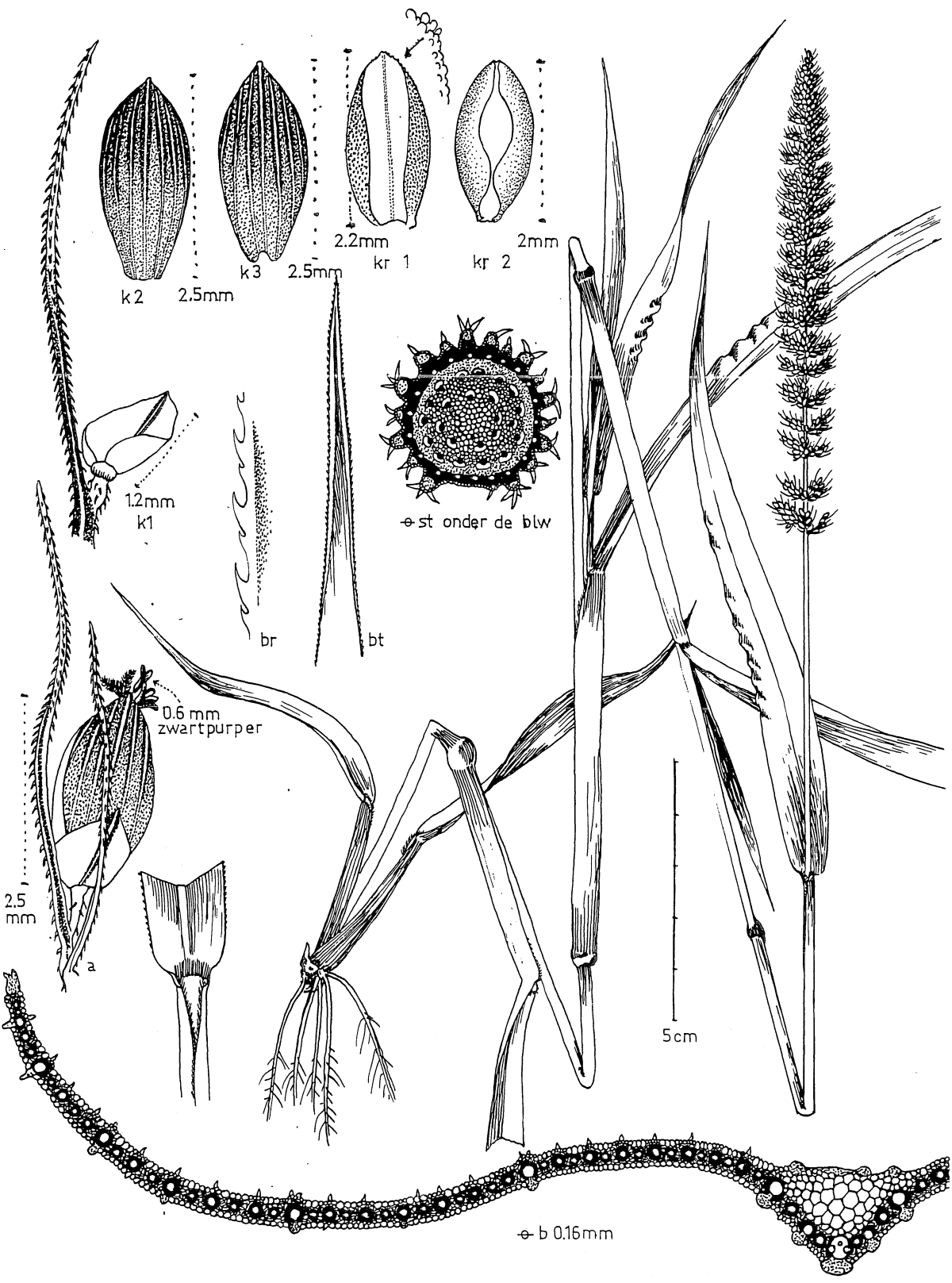
74. *Sesleria caerulea* (L.) Ard. ssp. *calcarea* (Celac.) Hegi

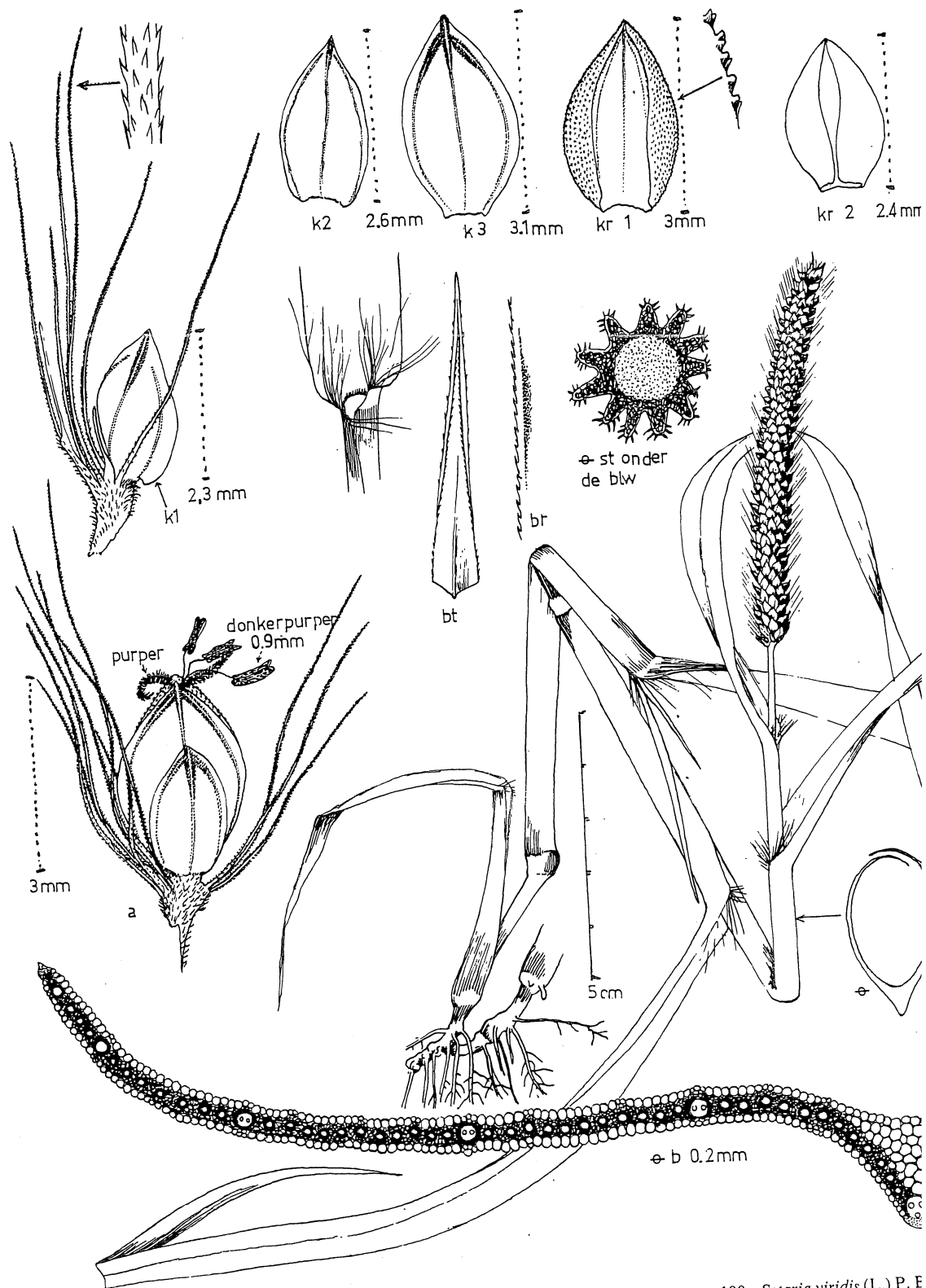


191. *Setaria italica* (L.) P. B.

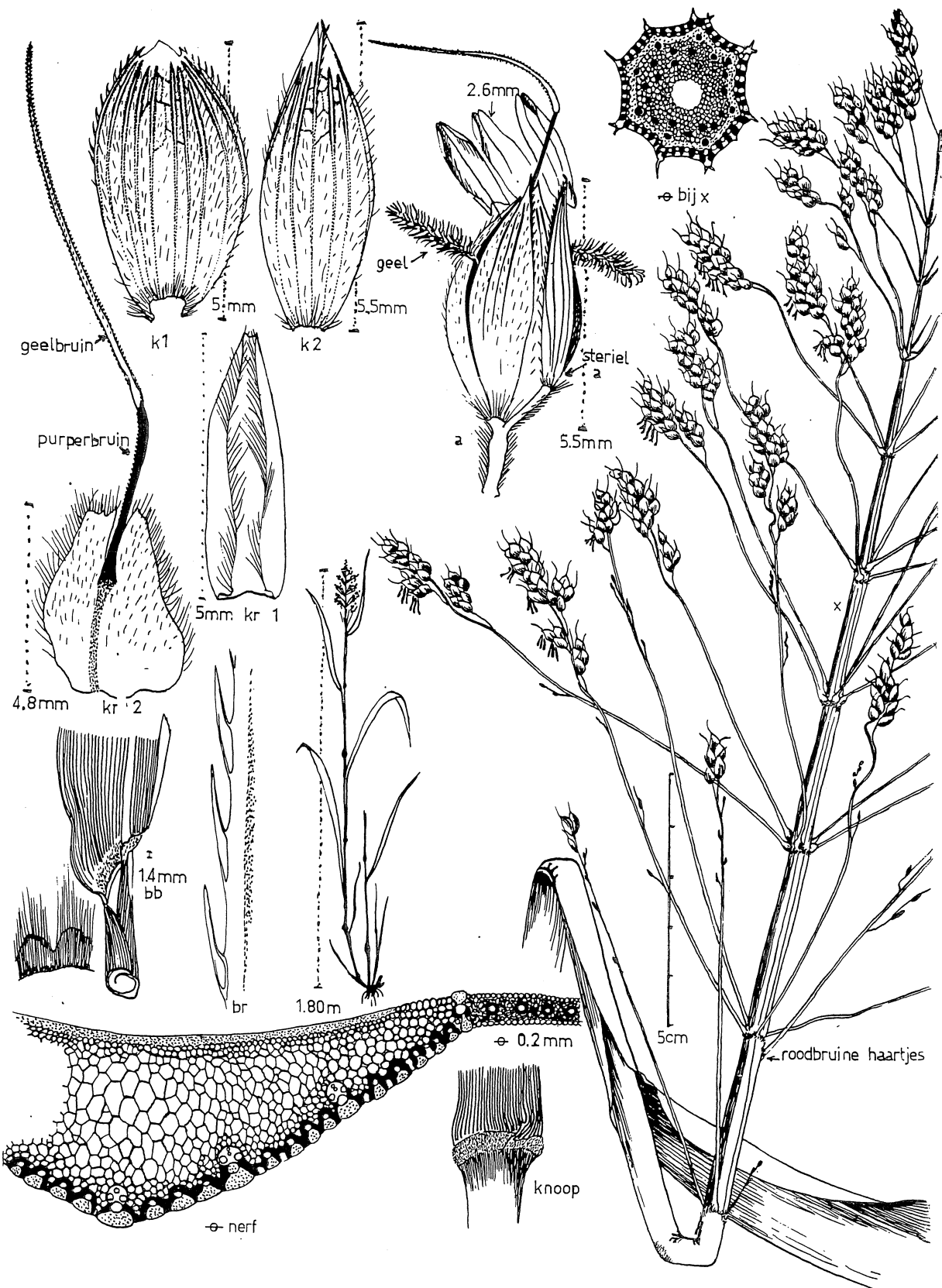




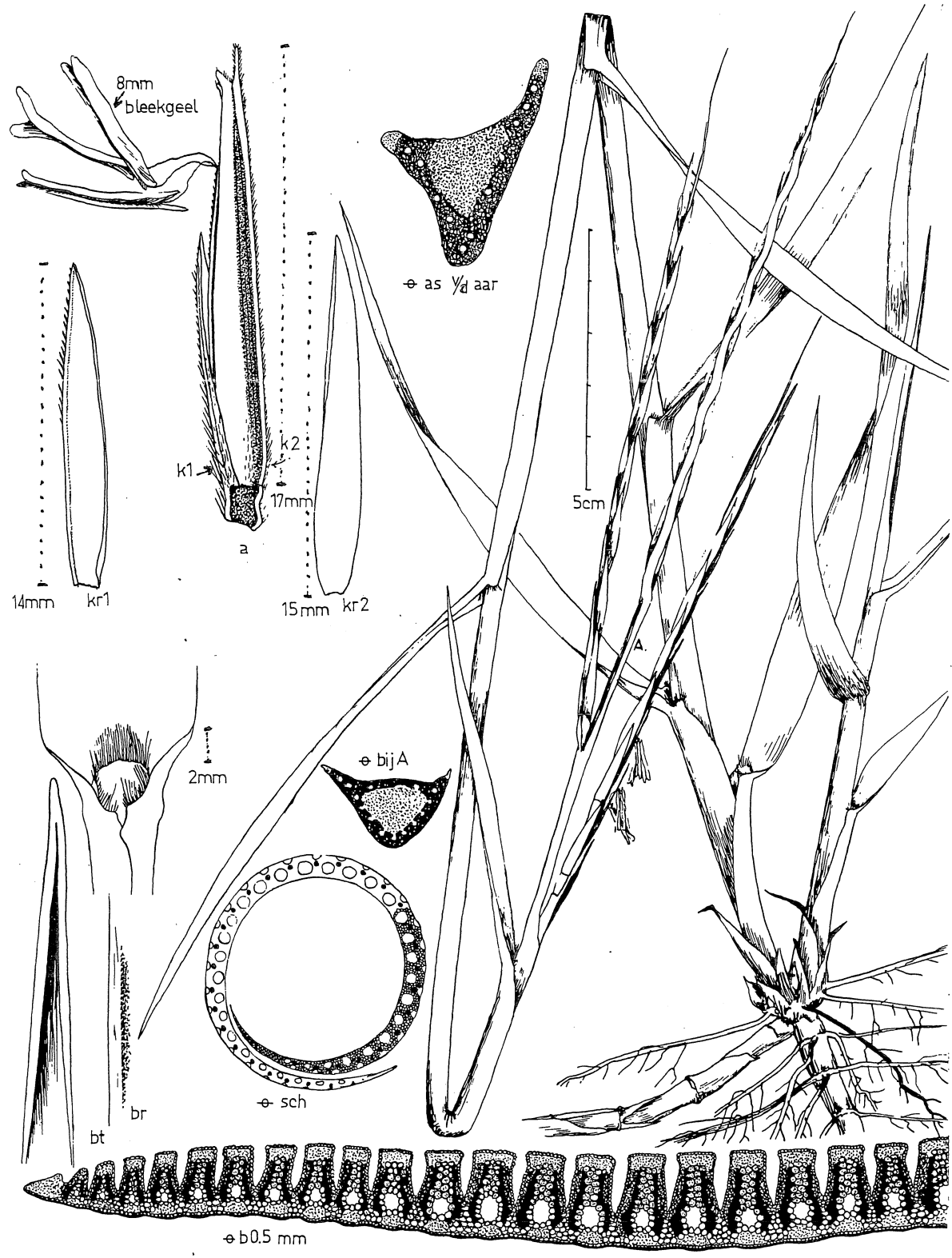


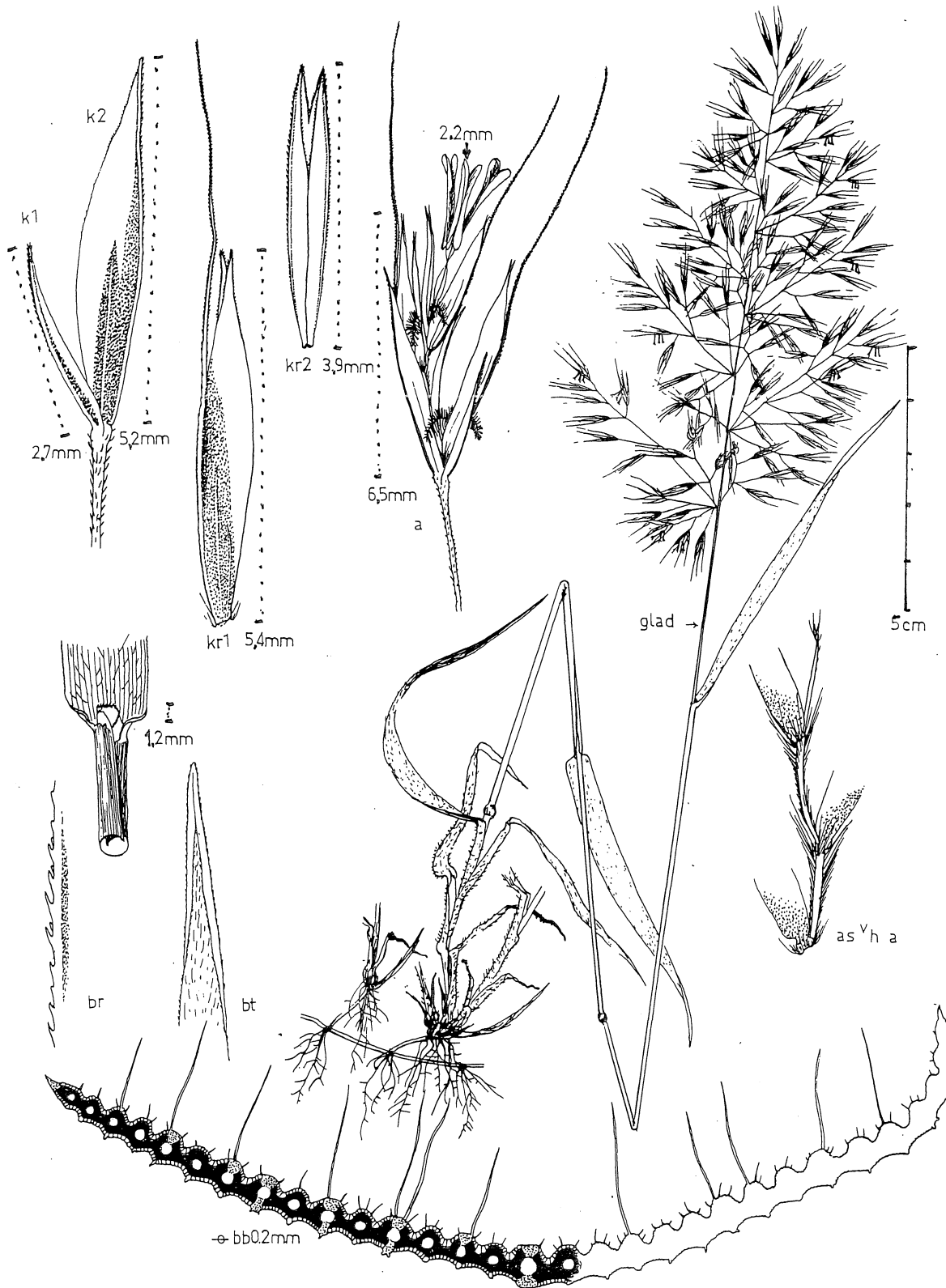


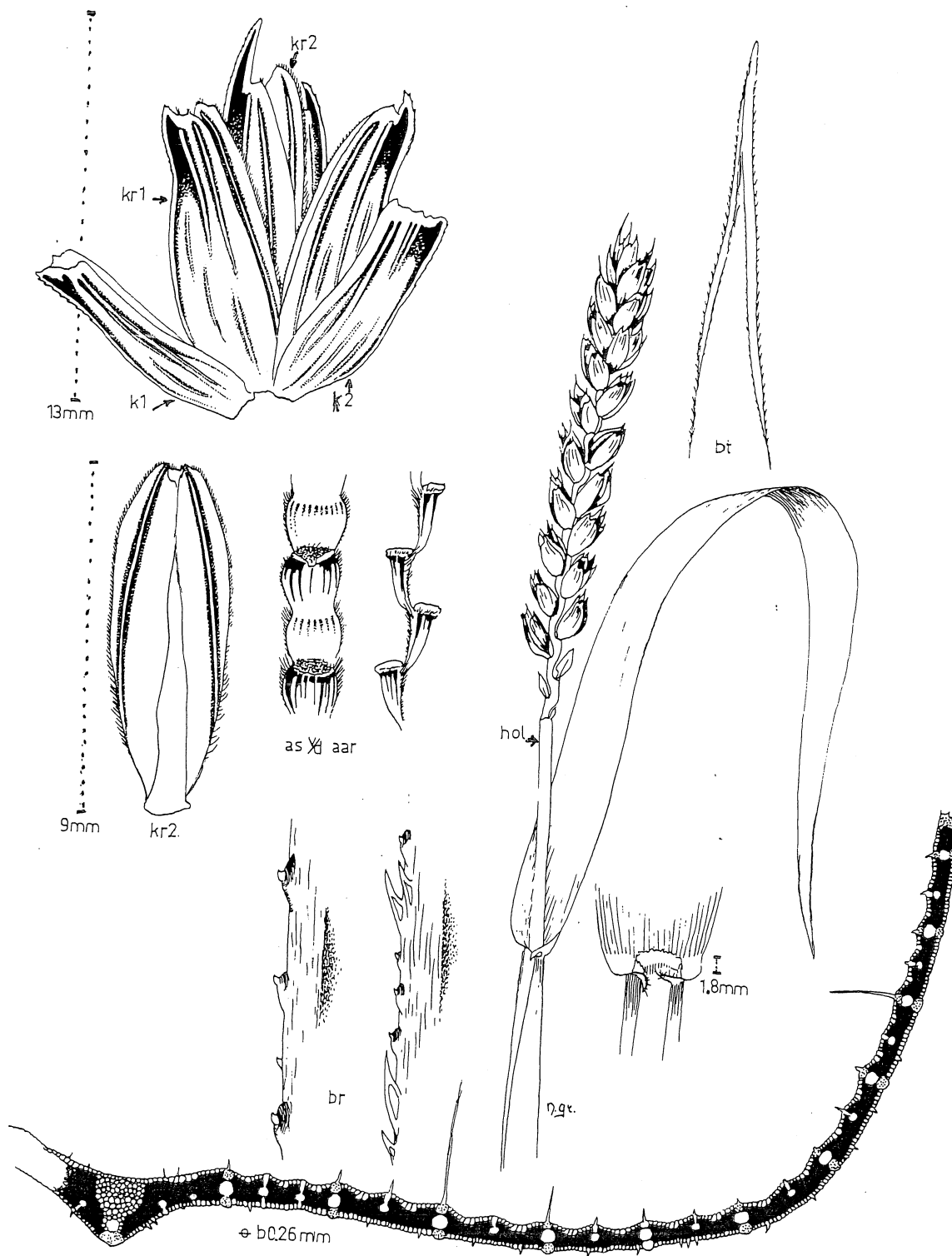
190. *Setaria viridis* (L.) P. E



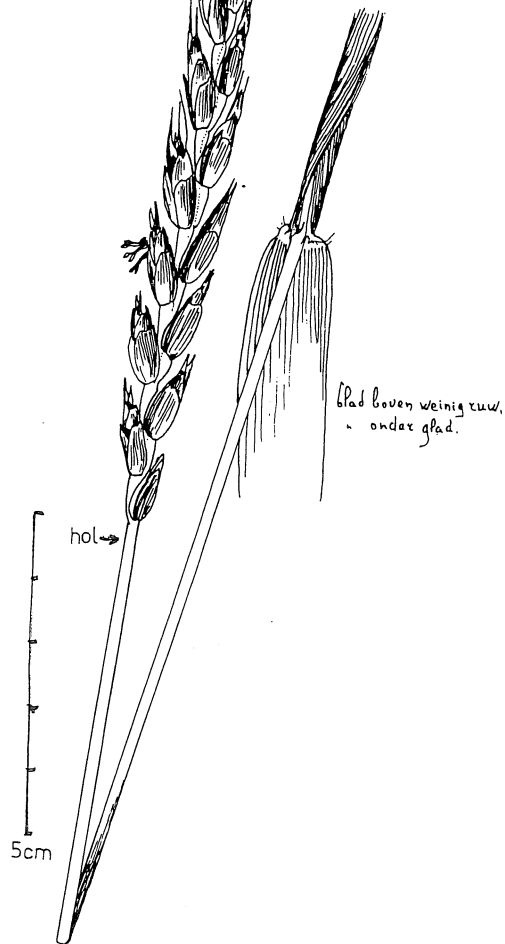
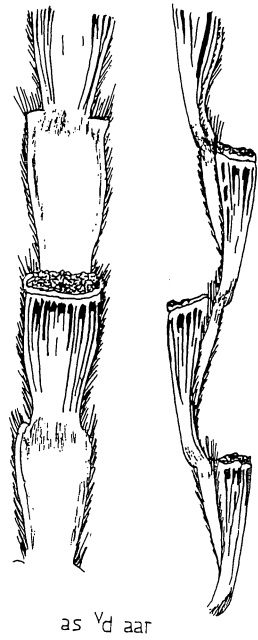
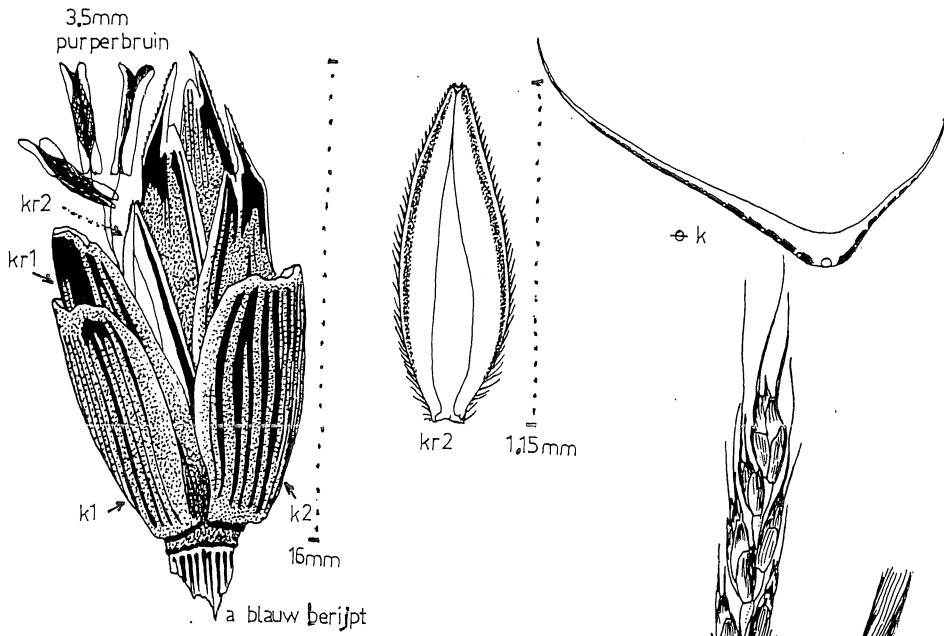


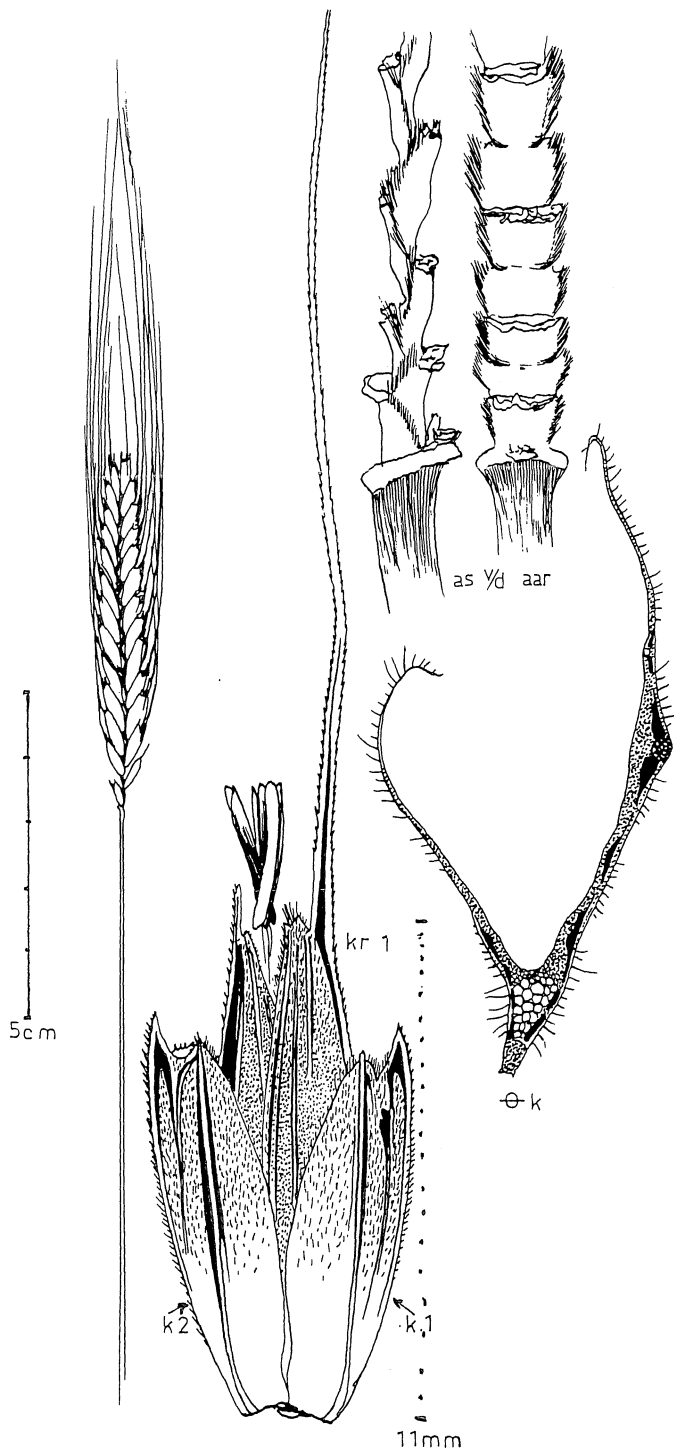






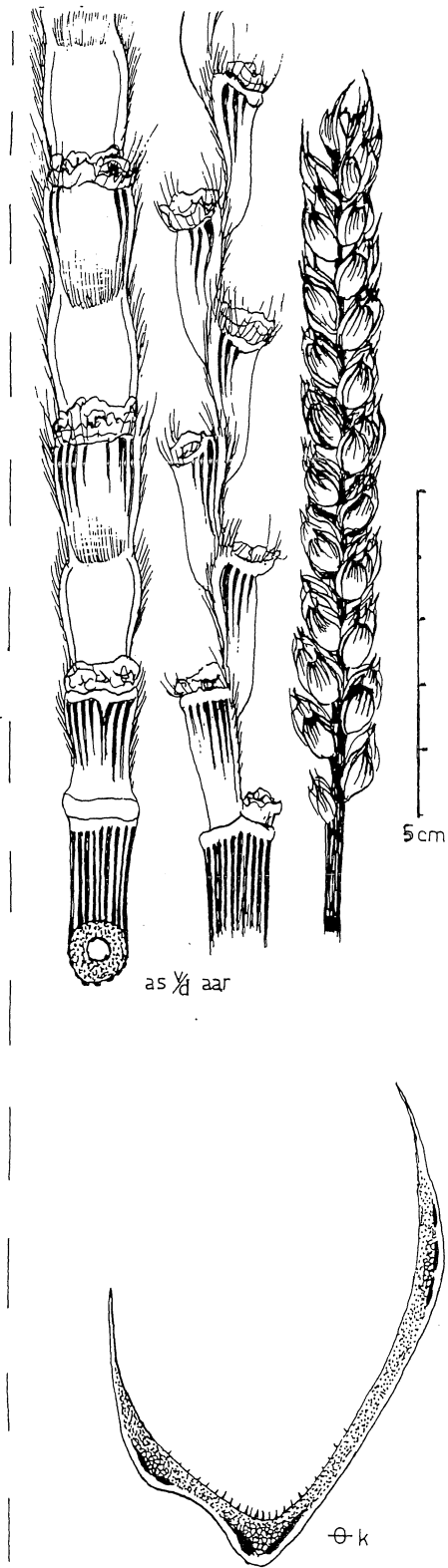




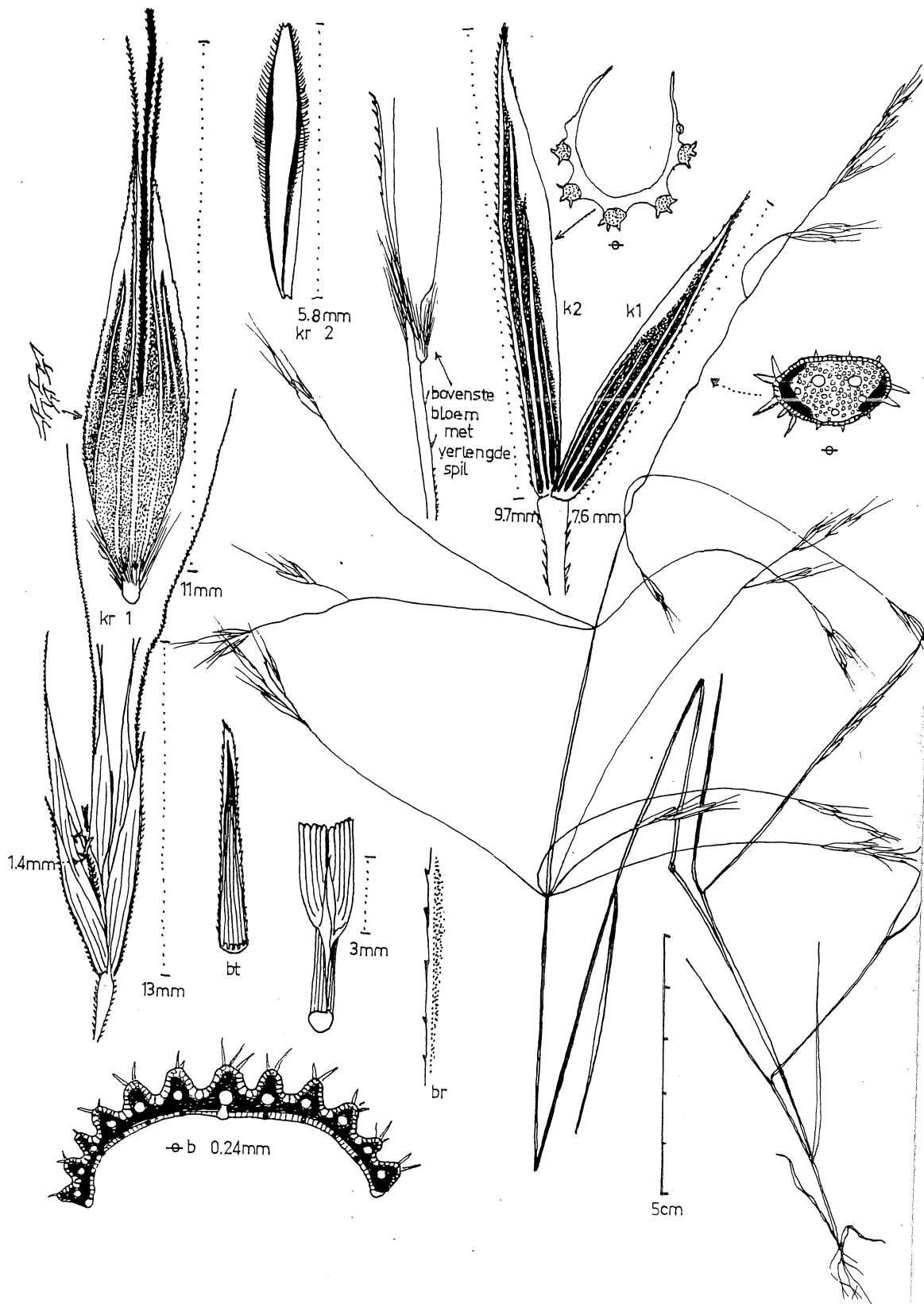


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88. *Triticum monococcum* L.

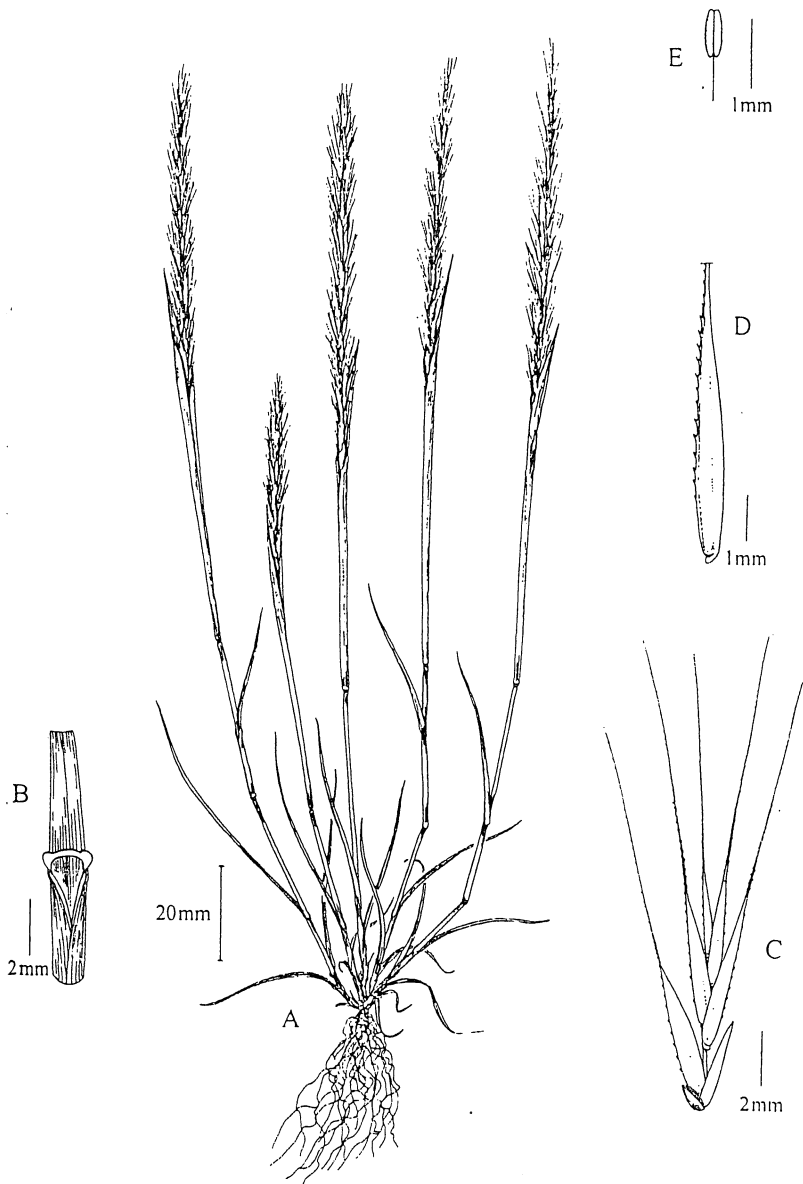


87. *Triticum turgidum* L.



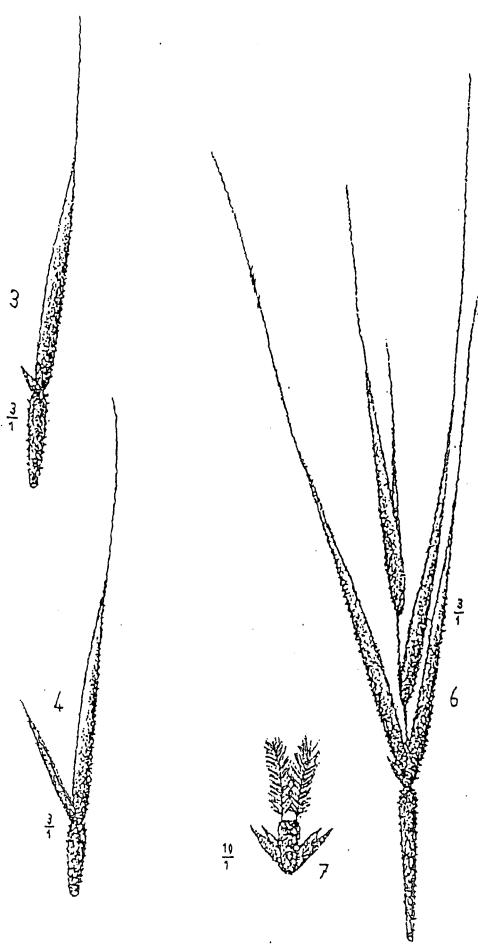


*Vulpia ciliata* 27



*Vulpia ciliata* subsp. *ambigua*: A, habit; B, ligule; C, spikelet; D, floret showing callus; E, anther.

*Vulpia membranacea* (L.) DUM.



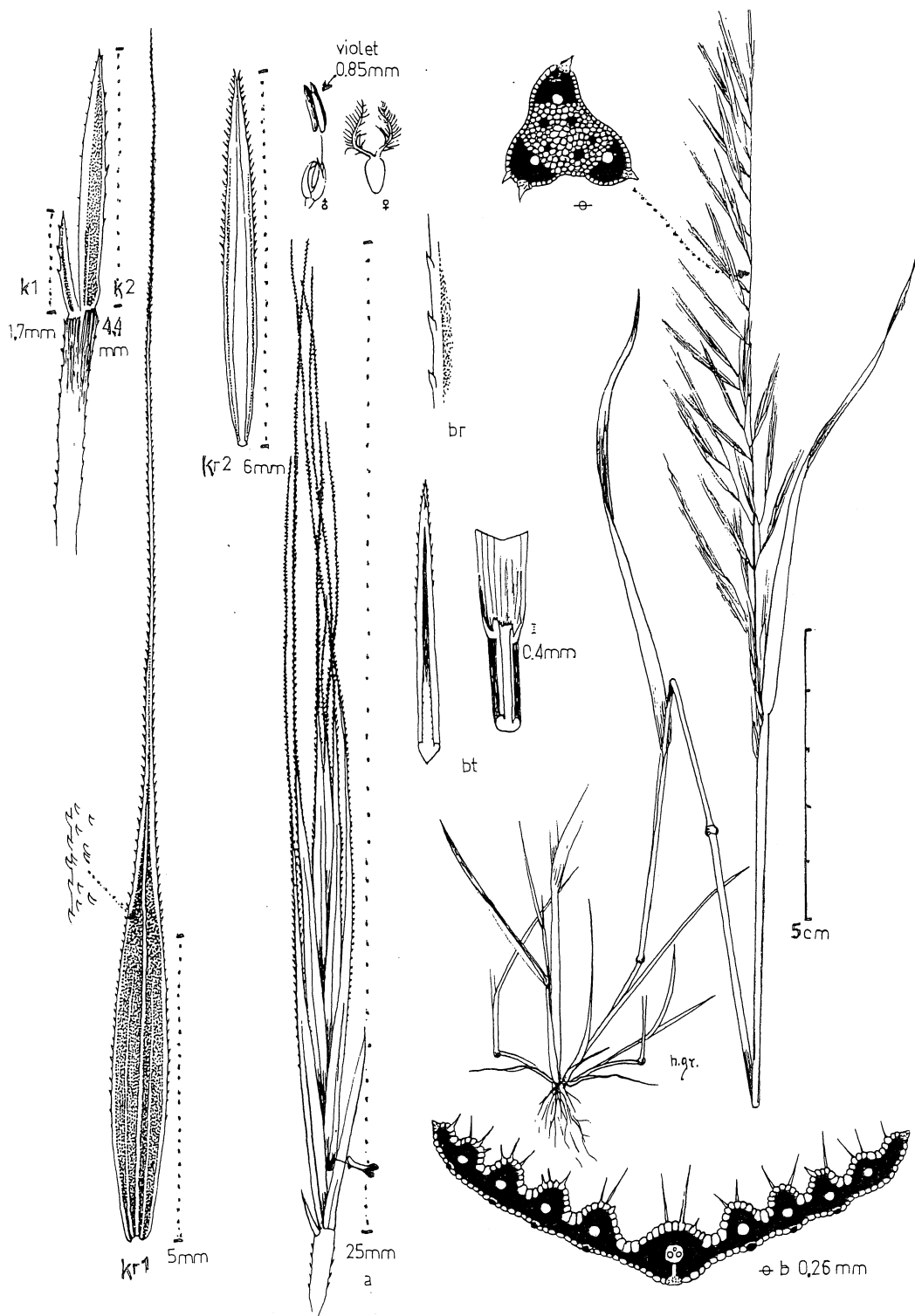
1: Panicule

3: Glumes

4: Glumes de l'épillet  
terminal de la tige ou  
d'un rameau

6: Epillet

7: Ovaire





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192. *Zea mays* L.