

Lectotypification of *Kengyilia mutica*  
(Keng ex Keng & S. L. Chen)

J. L. Yang, Yen & Baum (Poaceae), and Change of Circumscription

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**ABSTRACT.** A lectotype of *Kengyilia mutica* (Keng ex Keng & S. L. Chen) J. L. Yang, Yen & Baum is here designated based on an illustration of the holotype; the latter has been lost. A more complete description than the original, which was based on a single and incomplete specimen, is provided.

Professor Y. L. Keng identified a single specimen obtained from the Province of Qinghai, China, as *Roegneria mutica* Keng, nomen nudum. During 1944, Y. L. Keng collected grasses in Qinghai with his son, P. C. Keng. At that time Guide County was occupied by a military lord, Ma Bu-Fong and his herds of horses. Keng did not obtain permission to collect in this region. A friendly person who worked on the horse farm brought Keng a specimen. Keng examined the plant, decided that it differed from related species, and called it *Roegneria mutica* (P. C. Keng, pers. comm. 1992). He subsequently published *Roegneria mutica* Keng as a nomen nudum (Keng et al., 1957) and later provided a description (Keng et al., 1959), but in Chinese only, which resulted therefore in an illegitimate name. The Latin description was finally published in 1963 (Keng & Chen, 1963), giving it invalid status.

The single specimen on which this species was based may have been destroyed during the "Cultural Revolution" (Song Gui-Qing, pers. comm. 1992), or may not have been returned to the herbarium when it was lent for drawing the figure in Keng et al. (1959, and P. C. Keng, pers. comm.). This specimen is "No. 4, Military Horse Farm, Guide, Qinghai"—the precise locality is unknown; however, it was collected in an area near the two subsequent known locations (Fig. 1) and was conserved in the herbarium of Nanjing University (N). The only remains of the type collection are thus the illustration, figure 337 in Keng et al. (1959), be-

cause the protologue (Keng & Chen, 1963) referred to this figure. This interpretation is in accord with the definition of what constitutes type material in the *Code* (Greuter et al., 1994; Article 9.7 Footnotes). Thus, figure 337 in Keng et al. (1959) is here designated as the lectotype (Fig. 2).

***Kengyilia mutica*** (Keng ex Keng & S. L. Chen) J. L. Yang, Yen & Baum, *Hereditas* 116: 27. 1992. Basionym: *Roegneria mutica* Keng ex Keng & S. L. Chen, *Acta Nanjing Univ.* 1: 87. 1963. TYPE: China. Qinghai Province: Guide County, Military horse farm, 4 ["No. 4, Military Horse Farm, Guide, Qinghai"] (holotype, N now lost). Lectotype, here designated: figure 337 in Keng et al. (1959).

*Roegneria mutica* Keng in Keng et al., *Clav. Gen. & Sp. Gram. Sin.* 75, 188. 1957. Nomen nudum. *Roegneria mutica* Keng in Keng et al., *Fl. Illustr. Plant. Prim. Sin. Gram.* 408, figure 337. 1959. Nomen inval., based only on Chinese description.

An expedition to Guide County, Qinghai Province, was conducted in 1993 in order to study the morphological variation at the type locality. There, we realized that what was described as an awnless species was in fact an unusual type and that most of the individuals of *Kengyilia mutica* have short lemma awns. Although we collected awnless specimens in 1986 on the Lajishan mountains, at 3200 m, we found in the 1993 collections only a few specimens with awnless florets intermixed with short-awned florets on the same spike. Most individuals of this species, based on study of extensive collections, are short-awned. Totally awnless plants have yet to be found. We provide here a revised description of *Kengyilia mutica* and a drawing (Fig. 3).

Perennial with fibrous roots. Culms 40–70 cm

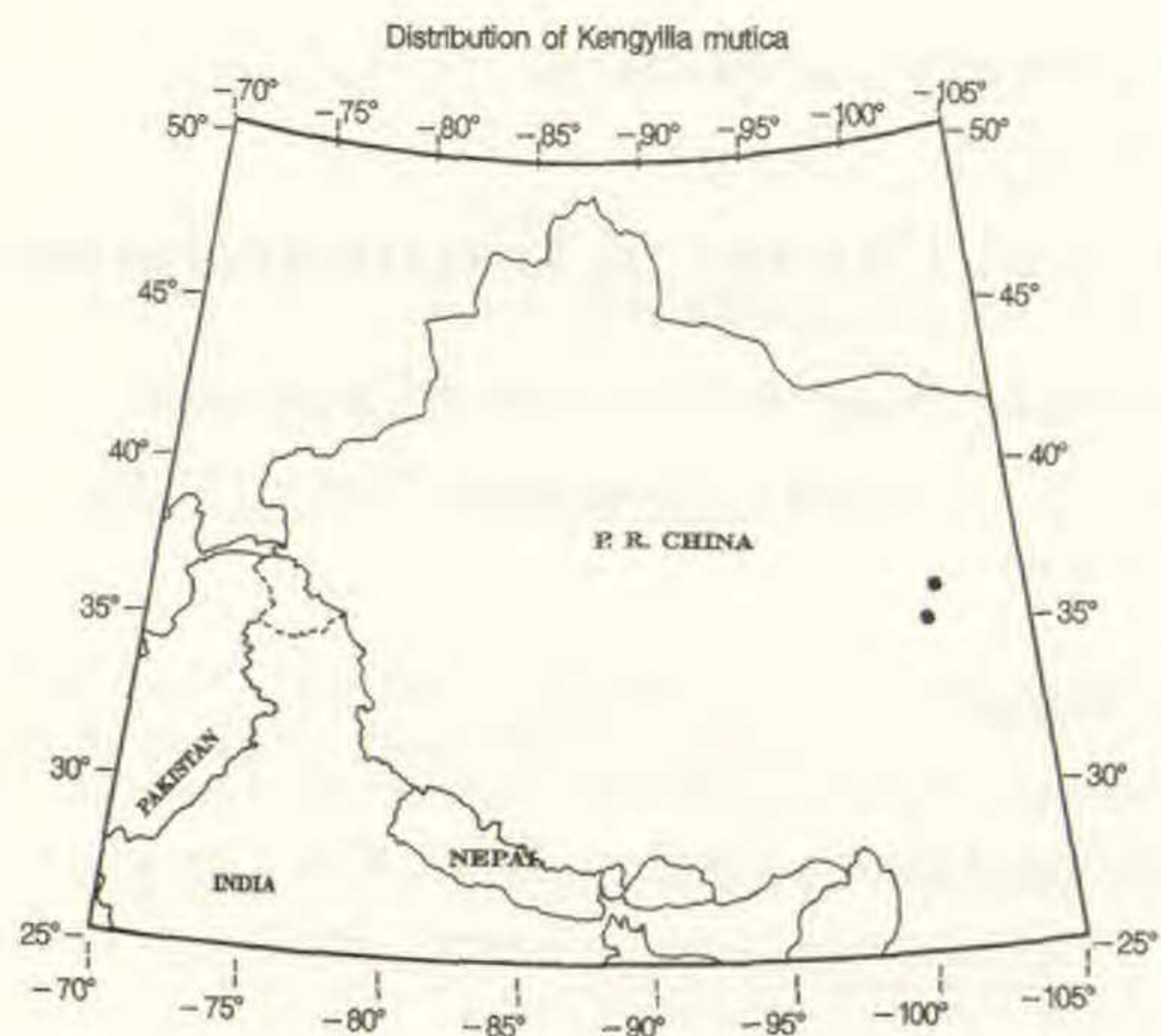


Figure 1. Distribution of *Kengyilia mutica* (Keng ex Keng & S. L. Chen) J. L. Yang, Yen & Baum.

tall, puberulent below the spikes; 3-noded, geniculate at the lowest node (Fig. 3A). Leaf sheath smooth, glabrous or puberulent; ligules scabrous, ca. 1 mm long; leaf blades flat or involute, glabrous or puberulent, 4–6 mm wide; tillers with narrow leaf blades, usually up to 19 cm long. Spikes erect or slightly curved, 5–9 cm long, 8 mm wide (Fig. 3A); rachis internodes puberulent, the upper ones 3–4 mm long, the lower ones 8–9 mm long. Spikelets yellow-green, 12 mm long, with 4–6 florets (Fig. 3I), the uppermost not well developed; rachilla internodes puberulent, ca. 1.5 mm long; glumes oblong ovate, 5–6 mm long, smoothly glabrous, acute, usually 3-nerved with the midnerve prominent (Fig. 3F, G); lemmas 5-nerved, densely hirsute (Fig. 3H), with rounded back, tips acute, mucronate (Fig. 3B) or ending in an awn 1.5–5 mm long (Fig. 3H); 1st lemma ca. 9.5 mm long; palea equal to or shorter than lemma, with an obtuse to slightly emarginate apex, ciliate toward tip on the two keels (Fig. 3C); anthers yellow or black, ca. 3 mm long. Caryopsis tip hirsute (Fig. 3E).

*Distribution in China.* Qinghai Province, Guide County (Fig. 1), endemic.

*Specimens examined.* All collected in 1993: CHINA. **Qinghai Province:** Guide County, Lajishan Mountain, alt. 3200 m, in *Stipa* steppe, J. L. Yang & R. von Bothmer 860020, 860021, 930002, 930007 (all SAUTI, DAO).



圖337 無芒鵝觀草

Figure 337 *Roegneria mutica* Keng sp. nov.

- |                 |                                     |
|-----------------|-------------------------------------|
| 1. Adult plant; | 2. Spikelet;                        |
| 3. Floret;      | 4. Dorsal view of palea;            |
| 5. Caryopsis;   | 6. Lodicules, anthers with filament |
|                 | ovary with stigmata.                |

(No. 4, Guide Military Ranch, Qinghai, Holotype)

Figure 2. Illustration of the lectotype of *Kengyilia mutica* (Keng ex Keng & S. L. Chen) J. L. Yang, Yen & Baum.

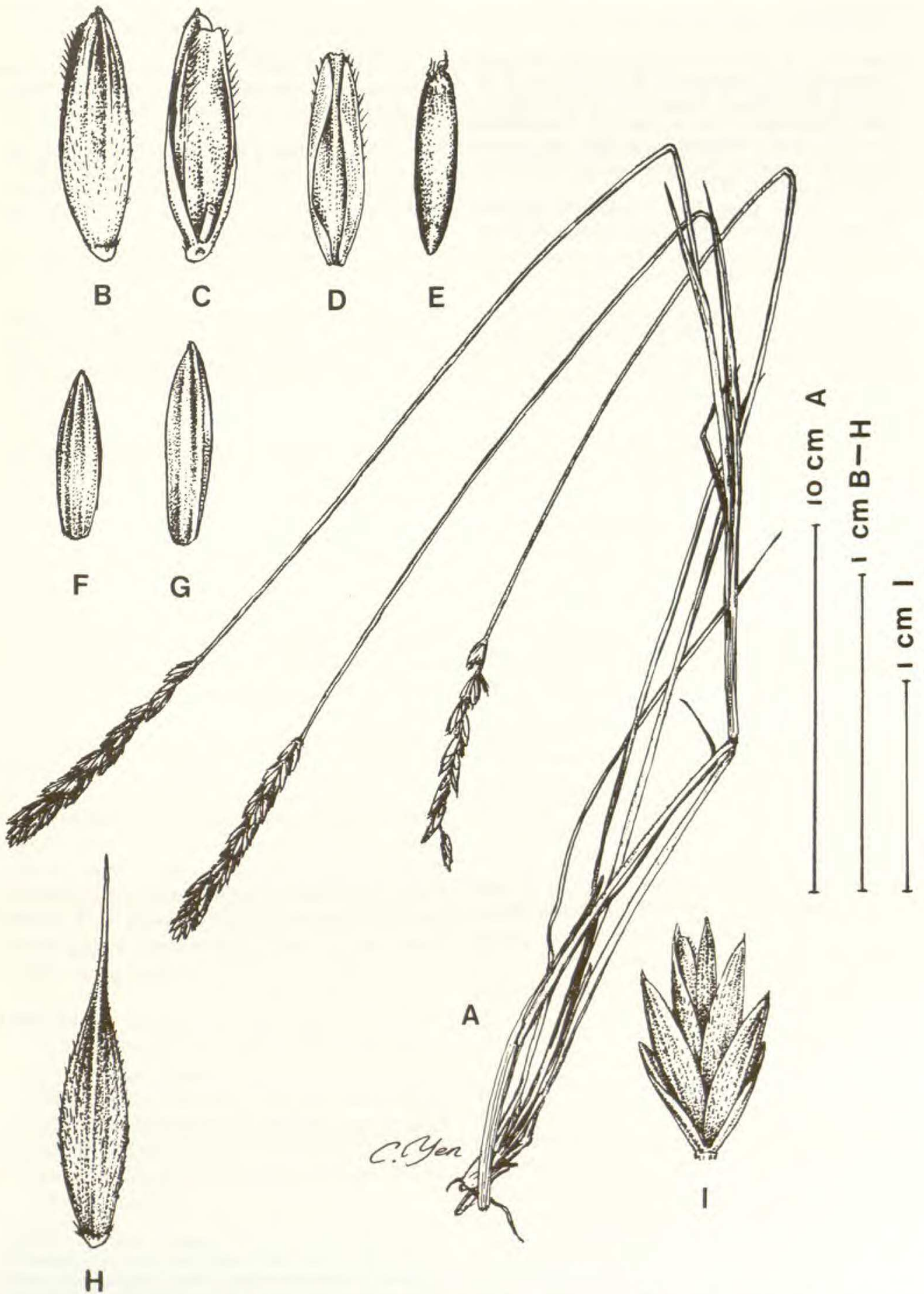


Figure 3. Detailed drawing of *Kengyilia mutica* (Keng ex Keng & S. L. Chen) J. L. Yang, Yen & Baum. —A. Mature plant. —B. Dorsal view of floret, showing an awnless lemma. —C. Ventral view of floret. —D. Ventral view of palea. —E. Caryopsis. —F. Lower glume. —G. Upper glume. —H. Dorsal view of an awned lemma. —I. Spikelet.

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