

Elymus lancangensis (Gramineae) – a New Species from Qinghai, China

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A new species, *Elymus lancangensis* S. L. Lu & Y. H. Wu (Gramineae), is described and illustrated. The new species is related to *E. debilis* (L. B. Cai) S. L. Chen & G. Zhu. However, the former is distinguished from the latter by having glabrous culm nodes, auriculate sheath, generally secund spike, glabrous rachis internodes 8–15(–40) mm long, 5–7-flowered spikelets 15–22 mm long, awned lemmas 10–24 mm long and yellowish green or dark green anthers 1.5–1.8 mm long.

Key words: China, *Elymus*, *Elymus lancangensis*, new species, Qinghai.

During the period from July to August, 2005, while we went on a botanical expedition to the source area of Lancang Jiang River, a large number of specimens of Gramineae were collected from Zadoi County, Qinghai Province, China. These specimens were all determined based on literature, and some new species were discovered. In this paper, a species, *Elymus lancangensis* S. L. Lu & Y. H. Wu is described.

Elymus lancangensis S. L. Lu & Y. H. Wu, sp. nov. [Figs. 1–2]

Species nova affinis *Elymo debili* (L. B. Cai) S. L. Chen & G. Zhu, sed nodis glabris, apice vaginae auriculis manifestis, spicis saepe secundi, rhachidibus glabris, internodiis 8–15 mm longis ad basi ca. 30–40 mm longis, spiculis 15–22 mm longis, 5–7-floribus, aristis lemmatis 10–24 mm longis, antheris flavovirentis vel atrovirentis, 1.5–1.8 mm longis differt.

Herba perennis, rhizomate brevi. Culmi solitarii, erecti, 30–55 cm alti, 2 mm diam, 2–3-nodes nigeri, glabri. Vaginae foliorum glabrae, internodiis breviores, non nisi basi

vaginae saepe pubescentes; auriculae manifestae, lanceolatae; laminae complanatae vel margine involutae, utrinque dense puberulae, margine saepe longi-hispida, 8–15 cm longae, 2–4 mm latae. Spica laxa, flexus et pendula, 10–15 cm longa, 0.7–1.6 cm lata; rhachis glabris, internodiis 8–15 mm longis ad bases 30–40 mm longis, basin vagina saepe amplectens. Spiculae pedicellus 1–2 mm longae, solitariae in quoque nodo, saepe secundus, 15–22(–24) mm longae (arista exclusa), viridulae vel flavidae, floeulis 5–7-instructae. Glumae lanceolatae, glabrae, apice pungentes, gluma prima 4–6 mm longa, 3-nerves, secunda 6–8.5 mm longa, 5-nerves. Lemmata oblongo-lanceolata, 5-nerves, supra medium glabra vel sparse spinulosa, utroque infra brevispinulosa, apice aristata, aristis 10–24 mm longis, scabrosi, reflexi, primo 9 mm longo. Palea lemmatem subaequans, 2-carinatus, carina brevibus spinosae, supra medium sparse spinulosa, apice obtusum, ciliatae. Antherae flavovirentes vel atrovirentes 1.5–1.8 mm longae.

Type: CHINA; Qinghai; Zadoi County, Jieduo Xiang. In rocky crevice, in alpine



Fig. 1. *Elymus lancangensis* S. L. Lu & Y. H. Wu (Holotype, QTPMB).

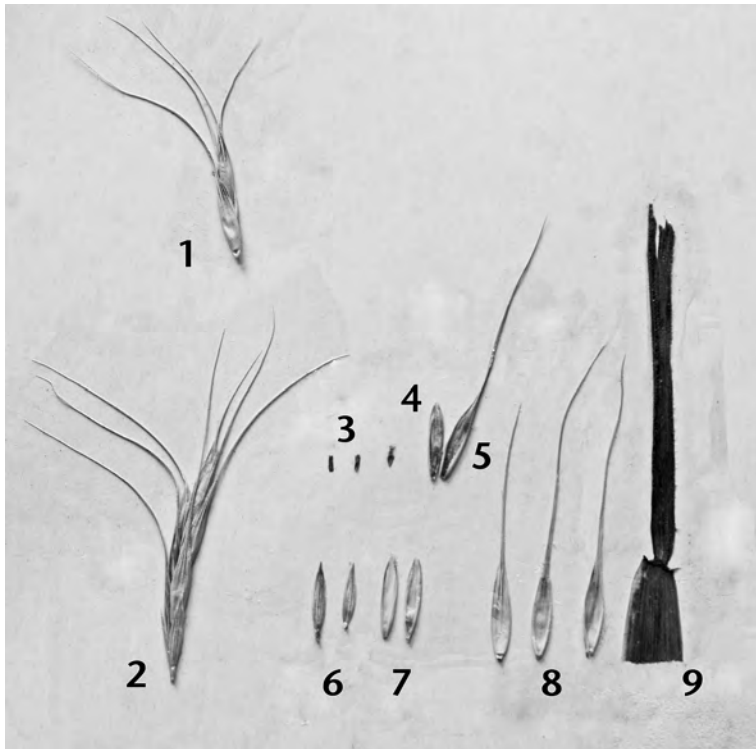


Fig. 2. Spikelet and flower of *Elymus lancangensis* S. L. Lu & Y. H. Wu. 1. A part of spikelet. 2. Whole spikelet. 3. Anther. 4, 7. Palea. 5, 8. Lemma. 6. Glume. 9. Part of leaf sheath, showing auricles.

shrubby meadow, alt. 4200–4450 m, 21 July 2005, Wu Yuhu 34 618 (holotype–QTPMB) (Qinghai-Tibetan Plateau Museum of Biology, the Chinese Academy of Sciences = HNWP).

Perennial, with short rhizome. Culm solitary, erect, 30–55 cm tall, 2 mm in diam., 2–3-noded, nodes black, smooth, glabrous. Leaf sheath usually shorter than internode, usually puberulent at base; with 2 clear falciforme auricles at two sides of the tips, leaf blade flat or involute at margins, both surfaces densely pubescent, long-hirsute on margins, 8–15 cm × 0.2–0.44 cm. Spike lax, drooping, 10–15 cm × 0.7–1.6 cm; rachis glabrous, base usually embraced by leaf sheath; internodes 8–15 mm or up to 40 mm at base of the spike. Spikelet solitary per

node, with pedicel 1–2 mm long, second, 15–22(–24) mm excluding awn, green to straw-colored, with 5–7 florets. Glumes lanceolate, glabrous, apex acuminate; proximal glume 4–6 mm, 3-veined; distal glume 6–8.5 mm, 5-veined. Lemma oblong-lanceolate, 5-veined, glabrous or sparingly hispid at distal, shortly hispid bilaterally in the lower part; apex awned, 10–24 mm long, scabrous, recurved; first lemma 9 mm long. Palea subequal to lemma, 2-keeled, white hispid along keels, between keels laxly hispidulous distally; apex round, ciliate. Anthers yellowish green or dark green, 1.5–1.8 mm long. Flowers in July.

The new species is related to *E. debilis* (L. B. Cai) S. L. Chen & G. Zhu (Keng 1959, Yang and Wang 1987, Cai 1997, 1999, Wu

and Wang 1999, Chen and Zhu 2006). However, the former is distinguished from the latter by having glabrous culm nodes, auriculate sheath, generally secund spike, glabrous rachis internodes 8–15(–40) mm long, 5–7-flowered spikelets 15–22 mm long, awned lemmas 10–24 mm long and yellowish green or dark green anthers 1.5–1.8 mm long.

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呉 玉虎：中国青海省産のイネ科エゾムギ属の1新種, *Elymus lancangensis*

中国青海省からイネ科エゾムギ属の新種, *Elymus lancangensis* S. L. Lu & Y. H. Wu を記載した。本種は同じく青海省から報告された *E. debilis* (L. B. Cai) S. L. Chen & G. Zhu に似るが、稈の節部が無毛で、葉鞘に耳状の構造物があり、小穂が普通偏側性を示すこと、花序中軸の節間が無毛で

長さ 8–15(–40) mm となること、小穂は長さ 15–22 mm で 5–7 花から成ること、護穎は長さ 10–24 mm で芒があること、葯は長さ 1.5–1.8 mm で黄緑色ないし濃緑色であることで区別される。

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