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黎平玉山竹，贵州竹亚科一新种

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摘要：描述了产自贵州的竹亚科一新种：黎平玉山竹(*Yushania lipingensis* Z. X. Zhang, Y. H. Tong & Z. Yang)。本种形态上与显耳玉山竹(*Y. auctiaurita* T. P. Yi)接近，但区别在于该种箨鞘背面密被向上的黄褐色或紫色疣基刺毛，箨耳及叶耳明显弯曲呈镰刀形，鞘口繸毛发达，通常呈放射状，箨舌先端截平，不圆拱，边缘密生短纤毛，箨片腹面被微柔毛，叶片次脉通常5~6 对。

关键词：黎平玉山竹；新种；玉山竹属；黎平县

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Yushania lipingensis (Poaceae: Bambusoideae), A New Species from Guizhou, China

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Abstract: *Yushania lipingensis* (Poaceae: Bambusoideae), a new species from Guizhou, China, is described and illustrated. The new species is morphologically similar to *Y. auctiaurita*, but differs in its culm leaf sheath abaxially densely yellow-brown or purple antrorsely setose, both culm leaf auricles and foliage leaf auricles strongly curved falcate with well developed and usually radiating oral setae, culm leaf ligule with a truncate and densely ciliolate apex, culm leaf blades adaxially puberulent, and foliage leaf blades with 5–6 pairs of secondary veins.

Key words: *Yushania lipingensis*; New species; *Yushania*; Liping County

玉山竹属(*Yushania* P. C. Keng)隶属于禾本科(Poaceae)竹亚科(Bambusoideae)青篱竹族(Arundinarieae)青篱竹亚族(Arundinariinae)[1]，约有 87 种[1–3]，主要分布于我国，是亚热带高山区域所特有的一群竹类，分布海拔 1 300~3 500 m。我国玉山竹属约有 79 种[4–6]，主要分布于云南、四川、贵州、福建等南方亚热带高山区域，西藏及台湾亦有分布。贵州省平均海拔约可达 1 100 m，地貌以山地、丘陵为主，适合竹类生长，据统计该省有玉山竹属 12 种[7]。玉山竹属的主要特征为：灌木状竹类；根状茎粗短型，秆柄细长，节间通常实心；箨痕明显隆起，秆环在具分枝的节上微隆起，秆每节一分枝或数分枝；叶片小到中型，小横脉明显；花序呈总状或圆锥状，生于具叶小枝顶端，花序分枝和小穗柄的腋间通常具

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小瘤状腺体；真小穗，颖 2 枚；鳞被 3；雄蕊 3；柱头 2 或稀可 3[5,8–9]。

2019 年，我们在贵州省黎平县老山界进行植物考察的过程中，发现了一种未知的小灌木状竹类植物。该种的根状茎为长颈粗短型，鞘鞘宿存，显系玉山竹属的植物。此外，该种的鞘鞘外面密被黄褐色或紫色疣基刺毛，鞘耳和叶耳弯曲呈镰刀状，且具发达的长鞘口緣毛，而显得尤为特别。经查阅相关文献和比对相近种类的标本之后[2,9–12]，我们发现该种实为玉山竹属的一个新种，因此在这里予以发表。

黎平玉山竹 新种 图 1

Yushania lipingensis Z. Yang, Z. X. Zhang & Y. H. Tong, sp. nov. (Fig. 1)

Diagnosis: *Yushania lipingensis* is morphologically similar to *Y. auctiaurita* T. P. Yi, but differs in its culm leaf sheath densely yellow-brown or purple antrorsely setose (vs. yellow-brown retrorsely setose) abaxially, auricles strongly curved to falcate (slightly curved to oblong-falcate) with 3–9 mm (vs. 3–6 mm) long radiating oral setae (vs. straight forward), ligule with a truncate and densely ciliolate apex (vs. with an arcuate and glabrous apex), blades adaxially puberulent (vs. glabrous), foliage leaf auricles strongly falcate with 3–11 mm (vs. 2–7 mm) long radiating oral setae (vs. straight forward) and blades with 5–6 pairs (vs. 5–9 pairs) of secondary veins.

Type: CHINA. Guizhou, Qiandongnan Miao and Dong Autonomous Prefecture, Liping County, Dehua Town, Wumeng Village, Laoshanjie, 26°29′13″ N, 108°39′5″ E, alt. 1 540 m, 19 May 2020, Y. H. Tong & F. L. Chen TYH-2478 (holotype: IBSC).

Description: Shrubby bamboos. Rhizome pachymorph, long-necked; neck 16–22 cm long, 2–3 mm in diam.; internodes ca. 5 mm long, 3–6 mm in diam., solid. Culms 50–90 cm tall; internodes 6–12 cm long, 2–6 mm in diam., terete or proximally flattened above branches, not ribbed, initially purple spotted, glabrous, solid, thickly white powdery below nodes; supra-nodal ridges level or slightly prominent when branching, sheath scar prominent, glabrous; intranode 3–6 mm high, glabrous. Culm buds oblong, upper margins densely ciliate. Branches often 1 at lower nodes to 3 at middle or upper nodes, slightly ascending, central branch subequal or equal to culm. Culm leaf: sheaths persistent, thinly leathery, 1/3–1/2 as long as internodes, abaxially densely yellow-brown or purple antrorsely setose especially toward base, setae 0.5–2.5 mm long, longitudinal ribs conspicuous, margins densely brown ciliate, cilia 0.5–1.5 mm long; auricles developed, strongly curved falcate, 3–5 mm×1–4 mm; oral setae 8–14, 3–9 mm, yellow-brown to purple, erect or curly, radiating, scabrid; ligule 0.6–1 mm high, apex truncate, densely white ciliolate, ciliola ca. 0.3 mm long; blades narrowly lanceolate or triangular-lanceolate, erect at lower nodes and reflexed at upper nodes, abaxially nearly glabrous, adaxially scabrid and puberulent, margins serrulate, sometimes sinuous, usually involute. Ultimate branch robust, 2–8-foliate. Foliage leaf: sheaths 2.5–5.5 cm long, nearly glabrous, longitudinal ribs conspicuous, margins yellow-brown or purple long ciliate especially toward base, cilia ca. 1 mm long; auricles developed, brown to purple, curved falcate, 1–3 mm×0.5–2 mm, easily deciduous when old; oral setae 5–11, 3–11 mm long, yellow-brown to purple, erect to curly, radiating, scabrid, usually deciduous when old; ligule 1–2 mm high, apex truncate to slightly arcuate, sometimes ciliolate, ciliola easily deciduous; outer ligule developed, apex ciliolate; blades lanceolate, 3–9 cm×1–3 cm, initially abaxially pubescent, glabrescent when old, margins initially serrulate, entire when old, rugose when dry, secondary veins 5–6-paired, transverse veins distinct, apex acuminate, base truncate to cuneate. Inflorescence unknown.

小灌木状竹类。根状茎长颈粗短型；秆柄长 16~22 cm，直径 2~3 mm，节间长约 5 mm，实心。秆高 50~90 cm；节间长 6~12 cm，直径 2~6 mm，圆筒形或在具分枝一侧基部略扁平，不具肋纹，幼时具紫色斑点，无毛，实心，节下方被一层厚白粉；秆环平或稍隆起，尤其在具分枝节上肿胀，鞘痕明显隆起，无毛；节内长 3~6 mm，无毛。秆芽长圆形，上部边缘密生纤毛。秆基部单分枝，中上部可达 3 分枝，略向上斜举，中央一枚与秆近等粗。鞘鞘宿存，薄革质，长度为节间的 1/3~1/2，背面具

图 1 黎平玉山竹。A: 根状茎; B: 幼叶; C: 秆态; D: 秆局部，示分枝; E: 秆芽; F: 箨鞘基部; G: 箨鞘局部，示黄褐色及紫色向上倒伏的疣基刺毛及边缘长纤毛; H: 箨耳、鞘口縫毛、反折箨片及节下白粉; I: 箨舌; J: 箨耳及鞘口縫毛; K: 叶耳及鞘口縫毛; L: 叶鞘基部; M: 叶舌及外叶舌; N: 叶舌. (A~C, H: 童毅华摄; D~G, I~N: 张智娴摄)

Fig. 1. *Yushania lipingensis* Z. Yang, Z. X. Zhang & Y. H. Tong. A: Rhizome; B: Young foliage leaves; C: Habit; D: Portion of culm, showing branchment; E: Culm bud; F: Base of culm sheath; G: Culm sheath in detail, showing brown and purple antrorse setae and long cilia on the margin; H: Culm leaf auricle with oral setae, reflexed culm leaf blade and white powdery upper-half internode; I: Culm leaf ligule; J: Culm leaf ligule with oral setae; K: Foliage leaf auricle with oral setae; L: Base of foliage leaf sheath; M: Foliage leaf ligule and outer ligule; N: Foliage leaf ligule. (Photos A–C, H by Y. H. Tong, Photos D–G, I–N by Z. X. Zhang)

向上的黄褐色或紫色的疣基刺毛，毛长 0.5~2.5 mm，向上部渐稀疏，纵肋明显，边缘密生 0.5~1.5 mm 的褐色长纤毛；箨耳发达，明显弯曲呈镰刀状，长 3~5 mm，宽 1~4 mm，边缘具 8~14 条黄褐色至紫色的劲直或弯曲的放射状繸毛，繸毛长 3~9 mm，粗糙；箨舌高 0.6~1 mm，先端截平，边缘密生白色的短纤毛，纤毛长约 0.3 mm；箨片狭披针形或三角状披针形，秆基部的直立，秆上部的外翻，背面近无毛，腹面被微柔毛，粗糙，边缘具小锯齿，有时呈波曲状，常内卷。末级小枝较坚硬粗壮，具叶 2~8；叶鞘长 2.5~5.5 cm，近无毛，纵肋明显，边缘具长约 1 mm 的褐色或紫色长纤毛，基部尤甚；叶耳发达，褐色至紫色，弯曲呈镰形，长 1~3 mm，宽 0.5~2 mm，边缘具 5~11 条黄褐色至紫色的劲直或弯曲的放射状繸毛，繸毛长 3~11 mm，粗糙，老后易脱落；叶舌高约 1~2 mm，先端截平至微圆拱，有时边缘具易脱落的短纤毛；外叶舌明显，顶部具极短纤毛；叶柄长 2~4 mm；叶片披针形，长 3~9 cm，宽 1~3 cm，幼时下表面被柔毛，后变无毛，边缘幼时有小锯齿，后变全缘，干后皱缩，次脉 5~6 对，小横脉明显，叶尖渐尖，叶基截平至楔形。花序未见。

模式标本：贵州省黔东南苗族侗族自治州黎平县德化乡乌孟村，老山界山顶，26°29′13″ N，108°39′5″ E，海拔 1 540 m，2020 年 5 月 19 日，童毅华、陈丰林 TYH-2478 (主模式：IBSC)。

分布及生境：目前仅见于贵州省黎平县老山界。生于海拔约 1 540 m 的山顶灌丛中，伴生种主要有新木姜子[*Neolitsea aurata* (Hay.) Koidz.]、幌菊[*Ellisiophyllum pinnatum* (Wall.) Makino]、黄毛草莓(*Fragaria nilgerrensis* Schlecht. ex Gay)、矩叶卫矛(*Euonymus nitidus* Benth.)等。

词源：种加词源自模式产地“黎平”的汉语拼音，中文名称为“黎平玉山竹”。

讨论：目前玉山竹属依据秆每节分枝数目可分为玉山竹组 sect. Yushania 和短锥玉山竹组 sect. Brevipaniculatae T. P. Yi，前者秆每节分枝较少，仅具 1 分枝或中上部分具 3~5(8)分枝[11]，约有 32 种；后者秆每节具 5~9 或更多分枝，约有 47 种。该新种秆下部具 1 分枝，中上部具 3(4)分枝，因此应隶属于玉山竹组，其形态上与同组的显耳玉山竹(*Yushania auctiaurita* T. P. Yi)相似，两者均为小灌木状，秆较细，幼秆无毛，有紫色斑点，在节下方有一圈厚白粉；秆下部的节具 1 分枝而中上部每节具 3 或 4 分枝；箨鞘背面被刺毛，边缘密生长纤毛；箨片反折，长三角形或披针形；末级小枝具叶 3~8，叶鞘边缘具短纤毛；叶片披针形，干后常皱缩，老后两面均无毛。但本种箨舌先端截平，边缘密生短纤毛，箨鞘背面密被向上的黄褐色或紫色疣基刺毛；箨耳和叶耳均弯曲呈镰刀状，鞘口繸毛较长，呈放射状。而显耳玉山竹箨舌先端近圆拱形，无毛；箨鞘背面被向下的黄褐色疣基刺毛；箨耳和叶耳长圆形，稍弯曲，鞘口繸毛较短，直立，前伸，不呈放射状。两者详细的形态性状对比见表 1。

表 1 黎平玉山竹与显耳玉山竹的形态比较

Table 1 A morphological comparison of *Yushania lipingensis* and *Y. auctiaurita*

形态 Morphology	黎平玉山竹 *Y. lipingensis*	显耳玉山竹 *Y. auctiaurita*
秆箨 Culm leaf		
箨鞘毛被 Sheath indumentum	背面被黄褐色或紫色向上长刺毛 Yellow-brown or purple antrorsely setose abaxially	背面被黄褐色向下长刺毛 Yellow-brown retrorsely setose abaxially
箨片毛被 Blade indumentum	腹面粗糙，被微柔毛 Scabrid and puberulent adaxially	无毛 Glabrous
箨耳形状 Auricle shape	明显弯曲呈镰刀状 Strongly curved falcate	宽大，长圆状镰形 Broad, oblong-falcate
鞘口繸毛 Oral setae	劲直或弯曲，长 3~9 mm Erect or curly, 3–9 mm	直立，较短，长度仅为 3~6 mm Erect, shorter, 3–6 mm
箨舌先端 Inner ligule apex	截平，密被短纤毛 Truncate, densely ciliolate	圆拱形，无毛 Arcuate, glabrous
叶 Foliage leaf		
叶耳形状 Auricle shape	明显弯曲呈镰刀状 Strongly curved falcate	长圆状镰形，不明显弯曲 Oblong-falcate, not strongly curved
叶耳繸毛长度 Oral setae length (mm)	3~11	2~7
次脉对数 Pairs of secondary veins	5~6	5~9

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