

A New Species of *Ainsliaea* (Asteraceae) from Northeastern Jiangxi (Postprint)

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Date: 2019-11-15T00:00:00+00:00

Abstract

A new species of the genus *Ainsliaea* (Asteraceae) from northeastern Jiangxi, *Ainsliaea wuyuanensis* Z. H. Chen, Y. L. Xu et X. F. Jin, is described, accompanied by line drawings and color photographs. *Ainsliaea wuyuanensis* represents a highly distinctive species within Section *Aggregatae* Beauv., showing considerable differences from other members of this section. Based on leaf venation patterns, it is relatively similar to *A. grossedenta* Franch.; however, it can be distinguished by its larger leaf blades that are rhombic or rhombic-ovate, 11–17 cm in length, acuminate at the apex, cuneate at the base, with 1–2 pairs of lobed coarse teeth on the middle to upper leaf margins, and glabrous on both surfaces; petioles 2–14 cm long; involucre bracts acute at the apex; cypselae relatively long, densely covered with dirty yellow strigose hairs.

Full Text

A New Species of *Ainsliaea* (Asteraceae) from Northeastern Jiangxi

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Abstract

Ainsliaea wuyuanensis Z. H. Chen, Y. L. Xu & X. F. Jin, a new species from northeastern Jiangxi, is described with illustrations and color photographs. This

new species is highly distinctive within Sect. *Aggregatae* Beauv. and differs substantially from other members of the section. Based on venation patterns, it is most similar to *A. grossedenta* Franch., but can be distinguished by its larger leaf blades that are rhombic or rhombic-ovate, 11–17 cm long, with acuminate apices, cuneate bases, and 1–2 pairs of lobed, coarse serrations on the upper middle margins; glabrous surfaces; petioles 2–14 cm long; phyllaries with acute apices; and longer achenes densely covered with dirty yellow, coarse hairs.

Keywords: new species, *Ainsliaea*, Asteraceae, Jiangxi

The genus *Ainsliaea* DC. belongs to the family Asteraceae and comprises approximately 50 species distributed exclusively in Asia. China represents the center of diversity for the genus, with 40 species, of which 28 are endemic (Gao et al., 2011). The genus is primarily distributed across the Yangtze River basin and provinces to its south (Cheng, 1996).

During a field survey of wild plant resources in Wuyuan County, Jiangxi Province in 2018, we encountered an unfamiliar *Ainsliaea* species. Following detailed examination of specimens and consultation of relevant literature (Cheng, 1996; Gao et al., 2011; Freire, 2007; Xu and Lu, 2019), we confirmed it as a new species, which we describe herein.

Taxonomic Treatment

Ainsliaea wuyuanensis Z. H. Chen, Y. L. Xu & X. F. Jin, sp. nov.
(Plate , Plate)

Latin Diagnosis. This new species is similar to *A. grossedenta* Franch., but differs in having larger leaf blades that are rhombic or rhombic-ovate, 11–17 cm long, with acuminate apices and cuneate bases; the upper middle portion of the leaf margin bears 1–2 pairs of lobed, coarse serrations, and both surfaces are glabrous. The petioles measure 2–14 cm in length. The phyllaries have acute apices. The achenes are longer, approximately 7 mm, and are densely covered with dirty yellow, coarse hairs.

Description. Perennial herbs. Stems erect, simple, unbranched, 35–60 cm tall, glabrous on the lower portion, with axillary dirty-yellow villous hairs; the inflorescence axes and peduncles above the leaf cluster are puberulous. Leaves are congested at the middle of the stem, 5–27 cm above the base; lower leaves are remote, while upper ones are densely clustered. Leaf blades are papery, rhombic or rhombic-ovate; lower blades larger, 11–17 × 4–7 cm, upper blades gradually smaller, 4–10 × 2–4 cm; apex acuminate, base cuneate; margin sparsely callous-denticulate with 1–2 pairs of lobed, coarse serrations on the upper middle portion; basal veins 3, prominently raised adaxially, with the midvein extending to the apex and the lateral pair extending to the tips of the coarse serrations; a pair of distinct lateral veins arises from the lower middle portion of the midvein,

arching upward to the apex with branch ends connecting to the marginal callosities. All leaf surfaces are green, glossy, and glabrous on both sides. Petioles 2–14 cm long, wingless, glabrous.

Capitula contain 3 florets each, shortly pedunculate, 1–3 congested together, arranged in a raceme 15–28 cm long on the upper portion of the stem. The lowermost capitula bear 2–4 foliaceous bracts 1–3 cm long, lanceolate, subsessile, glabrous. Involucre cylindrical, 2–3 mm in diameter; phyllaries ca. 5-seriate, apex acute, abaxially striate, glabrous; outer phyllaries ovate, ca. 2 mm long, ca. 1 mm wide, green; median phyllaries ovate-lanceolate to oblong, 5–8 mm long, ca. 2 mm wide, green, with membranous margins; inner phyllaries narrowly oblong, ca. 1.2 cm long, ca. 1.2 mm wide, base attenuate, pale green, purple on the upper portion, with membranous margins; receptacle flat, glabrous.

Florets bisexual; corolla white, tubular, ca. 1.1 cm long, limb slightly expanded, 5-lobed, lobes deflexed to one side, linear-lanceolate, nearly equal in length to the corolla tube; anthers exerted from the corolla tube, ca. 3.5 mm long, apex truncate, tail gradually narrowed at base, ca. 1/4 as long as the anthers; style linear, exerted from the corolla tube, 2-cleft, spreading, apex obtuse. Achenes fusiform, ca. 7 mm long, 10-ribbed, densely covered with dirty yellow hispid hairs; pappus 1-seriate, dirty yellow, ca. 6 mm long. Flowering and fruiting period: September–October.

Comparison. This species is most similar to *Ainsliaea grossedenta* Franch., but differs in the following characters: *A. grossedenta* has smaller leaf blades, ovate or ovate-lanceolate, 3–7 cm long, with acute apices and truncate, obtuse, or shortly attenuate bases; leaf margin coarsely dentate or sinuate, abaxially sparsely villous and adaxially sparsely strigose; petioles 3–7 cm long; outer and median phyllaries with obtuse apices; achenes ca. 4 mm long, nearly glabrous.

Specimens Examined. China. Jiangxi Province, Wuyuan County, Wolonggu, shaded wet grass at forest edge of valley, alt. 610 m, 11 Oct. 2018, Z. H. Chen, F. Chen & Y. H. Hong JX.WY18101102 (holotype: ZM; isotype: ZM). Same locality and date, Z. H. Chen, F. Chen, B. Y. Cha & C. M. Tan 18101886 (JJF).

Plate Captions

Plate . *Ainsliaea wuyuanensis* (line drawing).

A. Habit; B. Capitulum; C. Phyllary; D. Floret; E. Achene. (Drawn by Liuqun Zhong)

Plate . *Ainsliaea wuyuanensis* (photographs).

A. Habitat; B. Habit; C. Capitula. (Photographed by Zhenghai Chen)

Acknowledgments

We thank Professor Bingyang Ding of Wenzhou University for reviewing the

manuscript and Ms. Liuqun Zhong, senior teacher at the High School Affiliated to Zhejiang University, for preparing the line drawing.

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