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TWO NEW SPECIES OF *GROSVENORIA* FROM ECUADOR AND PERU (EUPATORIEAE: ASTERACEAE)

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ABSTRACT

Grosvenoria lopezii from northern Peru and *G. zamorensis* from southern Ecuador are described as new. A key is provided for the six species of the genus.

KEY WORDS: *Grosvenoria*, new species, Peru, Eupatorieae, Asteraceae.

The genus *Grosvenoria* was described by King and Robinson (1975) to include two Ecuadorian species, *G. hypargyra* (B.L. Rob.) R.M. King & H. Rob. and *G. rimbachii* (B.L. Rob.) R.M. King & H. Rob. and a species from northern Peru, *G. coelocaulis* (B.,L. Rob.) R.M. King & H. Rob. King and Robinson (1978) later described *G. campii* from Ecuador, and an older name has been recognized for *G. coelocaulis*, *G. jelskii* (Hieron.) R.M. King & H. Rob., Phytologia 76: 18 (1994)[1995], based on *Oliganthes jelskii* Hieron., Bot. Jahrb. Syst. 36: 461 (1905). The genus seems most distinctive among the Critoniinae genera of the Andes by the veins of the involucral bracts dissected into numerous longitudinal veins that appear as striations. The bristles of the pappus also tend to broaden and partially fuse near their bases. The style branches are not all as long or broad as originally described for the genus. All the species appear to have glandular dots on the undersurfaces of the leaves, but these are often poorly developed or covered with pubescence.

A review of accumulated material put aside during general identifications and efforts on the Flora of Ecuador have resulted in discovery of the following two additional new species.

Fig. 1. *Grosvenoria lopezii* H. Robinson, holotype, United States National Herbarium (US).

Grosvenoria lopezii H. Rob., **sp. nov.** Type: **Peru**. **Piura:** Huancabamba, Rumitana (Turmalina – Cuello del Indio), 2700 m, ladera boscosa, arbusto de capítulos blancos, 13 Sep 1981, *A. López M., A. Sagástegui, J. Mostacero & S. López 8853* (holotype US, isotypes F, HUT). (Fig. 1).

Ad Grosvenoriam hypargyram valde affinis sed in foliis minoribus apice brevioribus et floibus in capitulo ca. 20 distincta.

Shrubs 1 or more m tall, often with numerous branches from distal nodes; stems terete, covered with sordid whitish tomentum, not fistulose, internodes 1-2 cm long. Leaves opposite, petioles 0.2-0.4 cm long; blades ovate, mostly 2.0-3.8 cm long, 0.8-2.2 cm wide, base obtuse to short-acute, margins subserrulate with blunt teeth, apex short-acute, upper surface dark green, mostly glabrous with few scattered appressed hairs, lower surface densely pale-tomentose with appressed hairs; venation pinnate with two pairs of widely separated secondary veins ascending at ca. 35-40° angles. Inflorescence terminal, immediately subtended by scarcely reduced leaves, rounded corymbiform; branches ascending, pale tomentose; peduncles 0-3 mm long. Heads campanulate, 12-14 mm high, 4-7 mm wide; involucral bracts ca. 20, in ca. 4 series, 1.5-7.0 mm long, 1.0-2.5 mm wide, broadly ovate to oblong, apices rounded, outer surface striated with many longitudinal veins, often with long marginal hairs. Florets ca. 20 in a head; corollas white, narrowly funnelform, ca. 6 mm long, basal tube 2.0-2.5 mm long, throat ca. 2.5 mm long, lobes triangular, 0.7-0.9 mm long, with some glandular dots outside; anther collars ca. 0.35 mm long; thecae pale, ca. 2 mm long; apical appendage oblong-ovate, ca. 0.3 mm long, 0.2 mm wide; style branches not as long as the corolla, slightly broadened distally. Achenes ca. 4 mm long, with glandular dots sparse below, denser distally; carpopodium small, annuliform, symmetrical; pappus of ca. 30 whitish bristles, ca. 6.5 mm long, somewhat fused at base, not broadened distally. Pollen grains ca. 27µm in diam.

Grosvenoria lopezii is known only from the type collection. The species has more of the look of a *Cronquistianthus*, especially with the rather small leaves and the broadly rounded tips of the involucral

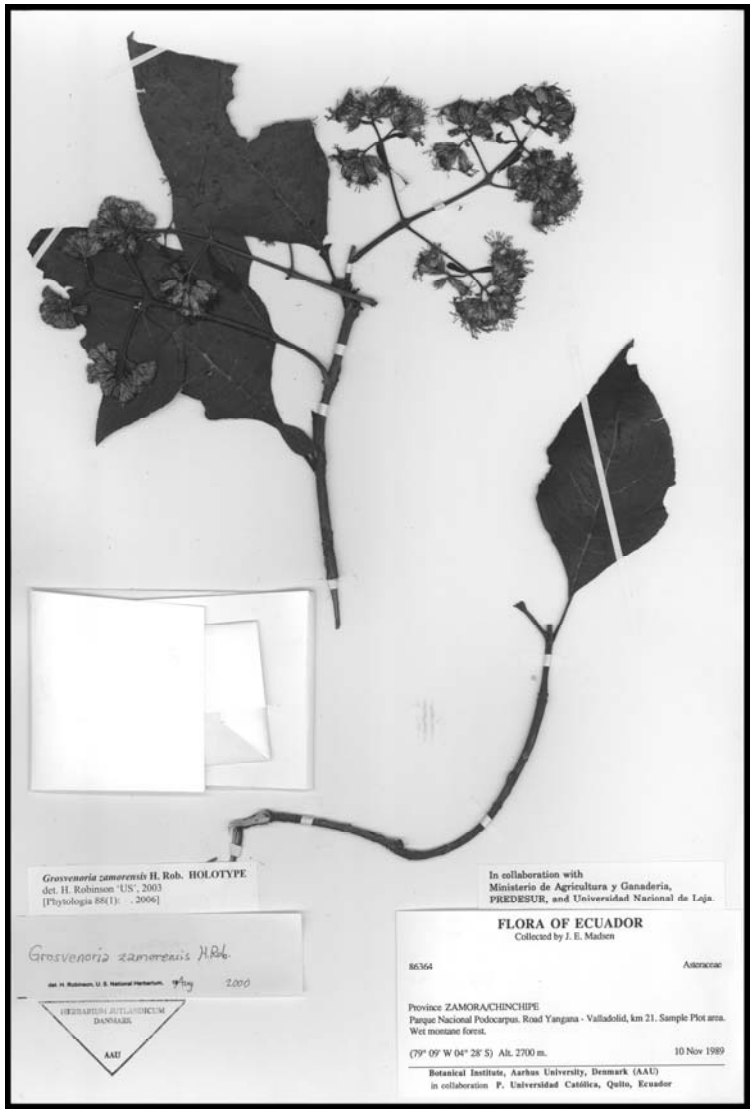

Fig. 2. *Grosvenoria zamorensis* H. Robinson, holotype, Botanical Institute, Aarhus University, Denmark (AAU).

bracts. Nevertheless, relationship to *Grosvenoria hypagyra* seems rather close, and the carpopodia are symmetrical. The hairs on the undersides of the leaves have the same weak hairs with flattened cells seen in the latter species, and the pappus bristles show the same kind of broadening and fusion at the base. Differences include the larger number of florets in the heads and shorter branches of the styles.

Grosvenoria zamorensis H. Rob., **sp. nov.** Type: **Ecuador. Zamora/Chinchipe:** Parque Nacional Podocarpus, road Yangana – Valladolid, km 21, sample plot area, wet montane forest, 04°28'S 79°09'W, 2700 m, 10 Nov 1989, *Madsen 86364* (holotype AAU, isotypes LOJA, QCNE). (Fig. 2).

Ab speciebus ceteris Grosvenorae in ramis et nervis secundariis basilaribus foliorum late patentibus et in inflorescentibus pyramidaliter paniculatis differt.

Shrubs ca. 1 m tall?, moderately branching; stems brownish, densely puberulous with minute often reddish hairs, not fistulose; internodes mostly 2-3 cm long. Leaves opposite, petioles ca. 1.5 cm long; blades ovate, mostly 10-12 cm long, 5-6 cm wide, base and apex short-acuminate, margins beyond lower 1/3 serrulate with rather remote denticulations, upper surface minutely hispidulous, lower surface minutely puberulous mostly on veins and veinlets, with small glandular dots; venation pinnate, with lowest 2 or 3 secondary pairs closer and weaker and spreading ca. 80° angles, upper 3 or 4 secondary pairs more widely separated, longer and arched. Inflorescence pyramidal, with branches and branchlets spreading at 75-90° angles, puberulous with reddish hairs; peduncles 0-2 mm long. Heads ca. 8 mm high, 3-4 mm wide; involucral bracts ca. 20, in ca. 4 series, 1.5-4.0 mm long, 0.8-1.3 mm wide, all acute, margins minutely fimbriate, outside reddish on exposed parts, outer bracts puberulous, with numerous longitudinal veins; inner bracts somewhat deciduous. Florets ca. 9 in a head; corollas reddish lavender, ca. 6 mm long, glabrous, basal tube ca. 2.5 mm long, throat ca. 2.5 mm long, lobes ca. 1 mm long, 0.5 mm wide, with few minute hairs outside. Achenes ca. 1.5 mm long, with few glandular hairs distally; pappus bristles ca. 35, ca. 5.5 mm long,

crowded at base, distally more tenuous, none obviously widened at tip. Pollen grains ca. 25 µm in diam.

Grosvenoria zamorensis is presently known only from the type specimen, collected in southern Ecuador at 2700 m in wet montane forest. The species seems most unusual in the genus by the pyramidal inflorescence with widely spreading branches, and by the smaller, spreading, lower, secondary veins of the leaf blades that are not parallel to the leaf margin. The leaves differ from others in the genus by being hispidulous or puberulous, neither glabrous nor tomentose.

The six species of *Grosvenoria* can be distinguished by the following key:

1a. Lower secondary veins of leaf blade spreading at 80-90° angles, directed toward leaf margin; inflorescence pyramidal with branches and branchlets spreading at 80-90° angles; involucral bracts acute. ***G. zamorensis***
1b. Lower secondary veins of leaf blade ascending, mostly subparallel with lower margins of blade; inflorescence corymbiform with branches usually ascending at 35-45° angles; involucral bracts mostly blunt or rounded at tip. 2

2a. Lower surface of leaf blade glabrous or sparsely pubescent. 3
2b. Lower surface of leaf blade densely covered with appressed tomentum. 4

3a. Stems partially fistulose. ***G. jelskii***
3b. Stems not fistulose. ***G. campii***.

4a. Leaf blades mostly 2.5-3.5 cm long, with apices short-acute; ca. 20 florets in each head. ***G. lopezii***
4b. Leaf blades mostly 5-14 cm long, with apices narrowly acute to acuminate; 8-10 florets in a head. 5

5a. Corollas reddish; stems usually with many flexuous lateral brnches; pubescence on leaf undersurface densely overlapping in centers of areoles. ***G. hypargyra***

5b. Corollas whitish; stems without numerous flexuous lateral branches from successive nodes. ***G. rimbachii***

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