



Synopsis of tribe Verbenae Dumortier (Verbenaceae) in Peru

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Abstract

In the present work a revision of tribe Verbenae for Peru is presented, descriptions and illustrations for each taxa are presented. In this country this tribe is represented by 16 taxa: four *Glandularia* species, five *Junellia* species, one *Mulguraea* species and four *Verbena* species and two varieties; six of these taxa are endemic to Peru. Three new combinations are presented: *Glandularia cuneifolia*, *Junellia clavata* and *Verbena glabrata* var. *hayekii*. Nine new synonyms are proposed, lectotypes are designated for *Verbena cuneifolia*, *Verbena clavata* and *Verbena villifolia*, and an epitype is designated for *Verbena pogostoma*.

Key words: *Glandularia*, *Junellia*, *Mulguraea*, Peru, *Verbena*, Verbenae, Verbenaceae

Resumen

En este trabajo se presenta una revisión de la tribu Verbenae en Perú, con descripciones e ilustraciones para todos los taxones presentes. En este país la tribu está representada por 16 taxones: cuatro especies de *Glandularia*, cinco especies de *Junellia*, una especie de *Mulguraea* y cuatro especies de *Verbena* y dos variedades; seis de estos taxones son endémicos de Perú. Se proponen tres nuevas combinaciones: *Glandularia cuneifolia*, *Junellia clavata* y *Verbena glabrata* var. *hayekii*. Se presentan nueve nuevos sinónimos, lectotipos son designados para *Verbena cuneifolia*, *Verbena clavata* y *Verbena villifolia*, y un epítipo para *Verbena pogostoma*.

Palabras clave: *Glandularia*, *unellia*, *Mulguraea*, Perú, *Verbena*, Verbenae, Verbenaceae

Introduction

Peru's flora has been studied widely by Macbride in his contributions between years 1936–1964, Verbenaceae being treated in 1960 (Macbride 1960). The author mentions 36 species from the tribe Verbenae Dumortier (1829: 22), 35 of them under genus *Verbena* L. (1753: 18), and monotypic *Hierobotana* Briquet (1895: 148). This last genus was recently demonstrated to be an endemic genus from Ecuador, not present in Peru (O'Leary & Moroni, unpubl. mscr.).

Brako & Zarucchi (1993) in the Catalogue of Peru mention ca. 27 species of *Verbena*, 7 *Glandularia* J. F. Gmel. (1791[1792]: 886, 920), and 6 *Junellia* Moldenke (1940c: 392). Recently, Binder (2002) presented an unpublished floristic revision of several genera of Verbenaceae in Peru, as a dissertation, in which the author recognized 10 *Verbena*, 5 *Glandularia* and 3 *Junellia* species in Peru. However, the taxonomy of Verbenaceae has been recently updated by several significant studies (Marx *et al.* 2010, Yuan *et al.* 2010). Molecular phylogenetic analyses focused on tribe Verbenae (O'Leary *et al.* 2009, Yuan & Olmstead 2008a,b) have resulted in a new circumscription of some genera, and a robust phylogenetic backbone for Verbenae has been estimated. The approximately 175 species belonging to tribe Verbenae have been often combined under *Verbena* in early treatments (Schauer 1847, Briquet 1895, Perry 1933, Troncoso 1974). Currently, tribe Verbenae is integrated by 5 genera, *Glandularia*, *Hierobotana*, *Junellia*, *Mulguraea* N. O'Leary & P. Peralta in O'Leary *et al.* (2009: 782) and

Suffruticose prostrate plant, stems densely villous; rooting at nodes, internodes brief, 0.5–1 cm long. Sessile leaves, blade 0.5–1.5 x 0.3–1 cm, 3-parted, the middle lobe 3-lobed at the apex, lateral lobes 2–3 lobed, acute apex, cuneiform base, deeply dentate margin, villous adaxial surface, abaxial surface densely hispid over venation, villous on the rest of the surface. Inflorescences in monobotrya or frondose pleiobotrya; rachis brief; basal internode 0.5–1 cm long. Floral bracts 4–6 mm long, linear to narrow ovate, densely villous-strigose. Calyx 3.5–4 mm long, brief acute teeth, densely villous-strigose pubescence. Corolla rose, violet or white colored, tube 5–6 mm long, strigose external surface and puberulous fauce. Superior pair of stamens unappendaged, style brief, 3 mm long. Cluses 2.5 mm long, enlarged base with basal and transversal commissural fold, obtuse apex, reticulate dorsal surface, verrucose ventral surface.

Distribution and habitat:—It is endemic to Peru.

Remarks:—This species is distinguished by its prostrate habit, its densely villous pubescence and its long floral bracts.

The holotype of *V. villifolia* was housed at B and is now destroyed, but there exists a photograph of it (F neg. nr. 17458). A lectotype is here designated from an isotype found at . G.

Specimens examined:—PERU. **Ayacucho:** Andes de Huanta, 13–14 February 1867, *Pearce* s.n. (K, SI). **Cajamarca:** Jose C. Mariátegui, 4 June 1984, *Smith & Sanchez Vega 7484* (SI). **Junín:** La Oroya, 1922, *Macbride & Featherstone 942* (GH).

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