## NOTES ON MIKANIA (COMPOSITAE) - III

Walter C. Holmes
Institute for Botanical Exploration
and

Dept. Biological Science, Northwestern State University of Louisiana, Natchitoches, Louisiana

and

Sidney McDaniel
Institute for Botanical Exploration
and
Dept. Botany, Mississippi State University
Mississippi State, Mississippi

Additional studies in the large tropical American genus Mikania (Compositae-Eupatorieae) have resulted in the following new species and a note on the synonomy of another. These notes are preliminary to a general treatment of Mikania in Peru.

MIKANIA CUZCOENSIS Holmes & McDaniel, sp. nov.

Suffrutex procumbens; foliis ovatis, ca 6-10 cm longis, 5-8 cm latis, apice acutis vel attenuatis, basi cordatis, supra glabris, subtus glandulis fuscatis et sessilis; paniculis ca 15 cm longis, 15 cm latis, ad extremum dispositus in racemis; capitulis ca 5-6 mm longis, corollis ca 2.5-3 mm longis, dentibus limbi triangularibus; achaenis ca 2.5 mm longis; pappi setis ca 35-40, ca 4 mm longis.

Somewhat shrubby or procumbent liana, stems terete, costate (after drying), glabrous, internodes to ca 20 cm long. Leaves ovate, ca 6-10 cm long, 5-8 cm wide, margins entire, apices acute to attenuate, bases cordate, upper surfaces glabrous, 5-7 nerved from the base, pale green, lower surfaces with dark globular sessile glands, lighter than above, petiole ca 3-8 cm long, thin, puberulent. Inflorescence a racemosely disposed panicle, ca 15 cm long and 15 cm wide, branchlets slightly angular, puberulent, pedicels ca 5 mm long, puberulent. Heads ca 5-6 mm long, exterior bract linear, ca 2-2.5 mm long, borne at base of pedicel. Involucres oblong, ca 4 mm long, glabrate, entire, apices obtuse, bases slightly narrowed, the center portion of the base of the inner two extended into a small knoblike proturberence. Corolla funnelform to slightly campanulate, ca 2.5-3 mm long, tube ca 1.2-1.5 mm long, throat ca 1.2-1.5 mm long, corolla lobes triangular, ca 0.7 mm long.

Achene ca 2.5 mm long, glabrous, dark brown. Pappus bristles ca 35-40, white, ca 4 mm long, barbellate, slightly thickened toward the tips.

Holotype: PERU: Cuzco: Quispicanchis, entre Inambari y 15 Mil, 500-650 m, September 3, 1965, C. Vargas C. 16521 (US).

Additional specimens: PERU: Cuzco: Quispicanchis, entre Mashiche i Tuanssan, 510 m, September 25, 1965, C. Vargas C. 16450 (US); Huanuco: Tulumayo, cerca Tingo Maria, Carretera Huanuco-Pucallpa, 700-800 m, August 5, 1947, Ramon Ferreyra 2159 (US).

Mikania cuzcoensis is characterized by its large racemosely disposed panicle with the heads loosely arranged on pedicels ca 5 mm long. The leaves have very prominent palmate venation (much as in the genus Dioscorea) with cordate bases. Similar species include M. decora Poepp. and M. haenkeana DC., both of Peru and Bolivia. The former has a similar inflorescence, but has ovate-oblong leaves with rounded bases, easily distinguished from the cordate bases of M. cuzcoensis. Mikania haenkeana, while possessing similar foliage, has its heads arranged in a rather dense, somewhat elongated glomerule, much in the manner of M. congesta DC.

MIKANIA VARGASII Holmes & McDaniel, sp. nov.

Suffrutex volubilis, foliis ovatis, ca 6 cm longis, 4 cm latis, apice attenuatis, basi cordatis, quinquenervis, supra pulverulentis et subtus glabris; paniculis ca 20 cm longis et 10 cm latis, ad extremum dispositus in spicas; capitulis ca 10-12 mm longis; corollis ca 6 mm longis, dentibus limbi triangularibus, achaenius 4-4.5 mm longis; pappi setis ca 80-85, ca 5-6 mm longis.

Twining liana, stems costate to sulcate (when dry), glabrous, internodes ca 6-10 cm long. Leaves ovate to ovate-oblong, to 6 cm long and 4 cm wide, margins entire, apices attenuate, bases cordate, upper surfaces sparcely puberulent, dark green, five-nerved from the base, lower surfaces glabrous, dark punctate with globular sessile glands, lighter than above, petiole to ca 2 cm long, thin, glabrous. Inflorescence paniculate with the ultimate branchlets spicately disposed, ca 20 cm long and 10 cm wide, branchlets angular, pilose. Heads sessile, 10-12 mm long, exterior bract elliptic, ca 3-3.5 mm long, glabrate, apices acute. Involucres oblong to obovate, ca 6 mm long, appressed-puberulent, entire, apices rounded to obtuse, bases slightly gibbous. Corolla semi-salverform,

lightly glandular, ca 6 mm long, tube ca 4 mm long, thin, throat ca 2 mm long, corolla lobes triangular, ca 1 mm long. Achene ca 4-4.5 mm long, dark brown to black. Pappus bristles ca 80-85, white, ca 5-6 mm long, barbellate, gradually narrowed from base to tip.

Holotype: PERU: Cuzco: Quispicanchis, Marcapata, 3250 m, June 10, 1963, C. Vargas C. 14565 (US).

Additional specimen: PERU: Cuzco: Calca, Manfio, K84, 2000-2200 m, June 10, 1964, C. Vargas C. 15634 (US).

Mikania vargasii is easily recognized by its large paniculate inflorescence with the heads spicately disposed. The heads are 10-12 mm long, considerably longer than any known Peruvian Mikania with spicately disposed heads. Also the corolla tube is about twice the length of the throat. Possibly approaching nearest to M. vargasii is M. psilostachya DC. of much of northern South America. However, the latter has very scabrous, elliptic-oblong leaves with rounded or acute bases and pinnate venation and it also has a corolla with the tube about one-fourth the length of the throat. Mikania vargasii is a smooth plant with ovate leaves and palmate venation.

MIKANIA AQUARIA Robinson, Contrib. Gray Herb. 73: 21. 1924.

Type: "La Merced, Junin, Perú", J. F. Macbride 5242 F!

M. klugii Robinson, Contrib. Gray Herb. 104: 38. 1934.

Type: "Florida, Río Putumayo at mouth of Río Zubenita, Loreto, Perú", G. Klug 2134 GH (holotype), F!

Mikania aquaria has a large paniculate inflorescence with spicately disposed heads. Mature cauline leaves are ovate with a narrow cordate base. The stem is reported to be hollow, succulent and water-filled. Comparison of the type of this plant with material of M. klugii has shown that the small differences between the two do not justify the specific status of the latter. Salient differences include length of petioles, prominence of veinlets in the leaves and amount of pubescence. These characters are extremely variable in Mikania and more than often quite useless in specific delimitation. More than likely these differences are due to environmental factors. In all other aspects, especially inflorescence and floral charcters, these two plants are inseparable.



Holmes, Walter C. and McDaniel, Sidney T. 1977. "Notes on Mikania (Compositae) - III." *Phytologia* 35, 329–331.

https://doi.org/10.5962/bhl.part.2617.

View This Item Online: <a href="https://www.biodiversitylibrary.org/item/47393">https://www.biodiversitylibrary.org/item/47393</a>

**DOI:** <a href="https://doi.org/10.5962/bhl.part.2617">https://doi.org/10.5962/bhl.part.2617</a>

Permalink: <a href="https://www.biodiversitylibrary.org/partpdf/2617">https://www.biodiversitylibrary.org/partpdf/2617</a>

## **Holding Institution**

New York Botanical Garden, LuEsther T. Mertz Library

## Sponsored by

The LuEsther T Mertz Library, the New York Botanical Garden

## **Copyright & Reuse**

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Phytologia

License: <a href="http://creativecommons.org/licenses/by-nc-sa/3.0/">http://creativecommons.org/licenses/by-nc-sa/3.0/</a>

Rights: <a href="https://biodiversitylibrary.org/permissions">https://biodiversitylibrary.org/permissions</a>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.