

Nov. Gen. & Spec. iii. 386; Bot. Mag. 4223. *Æginetia longiflora*, Cav. Ic. vi. 51, t. 257, f. 1.

H. (MACROHOUSTONIA) TRIFLORA, Gray, l. c., Hemsl. l. c., is a good *Bouvardia*.

From the technical characters of complete specimens of the last two species, now at hand, there seems no reason for retaining them in the genus *Houstonia*.

II. KEY TO THE MEXICAN SPECIES OF LIABUM.

* Leaves ovate or ovate-deltoid: heads radiate.

+ Leaves ovate-deltoid, more or less deeply sinuate-dentate and mucronate-denticulate: heads few, large (3 to 5 cm. in diameter), terminating the stem.

L. *Andrieuxii*, Benth. & Hook. f. Gen. ii. 437. *Vernonia Andrieuxii*, DC. Prodr. v. 16.

+ + Leaves ovate, entire or mucronate-denticulate: heads disposed in terminal panicles.

+ + Pappus of slender unequal setæ, not biseriate.

= Involucral scales lance-attenuate: petioles winged and often dilated about the stem: ligules narrow: achenes pubescent.

L. *asclepiadeum*, Schz. Bip. Linnæa, xx. 521.

= = Involucral scales oblong, obtuse: ligules ovate: achenes glabrous.

L. *polyanthum*, Klatt, Bull. Soc. Bot. Belg. xxxi. (1892), 209.

+ + Pappus distinctly biseriate, outer series short, paleaceous.

= Achenes pubescent.

L. *andromachioides*, Benth. & Hook. f. Gen. ii. 436. *Vernonia andromachioides*, Less. Linnæa, vi. 397, 645.

L. *Deppeanum*, Hemsl. Biol. Centr.-Am. Bot. ii. 232. *Andromachia Deppeana*, Less. Linnæa, vi. 401.

= = Achenes glabrous.

L. *platylepis*, Schz. Bip. Flora, 1856, 160; Klatt, Leopoldina, xxiii. (reprint, p. 7).

L. *discolor*, Benth. & Hook. f. Gen. ii. 436. *Sinclairia discolor*, Hook. & Arn. Bot. Beech. 433; Hook. Ic. Pl. v. t. 451.

* * Leaves ovate or ovate-lanceolate: heads discoid.

+ Inflorescence in loose terminal pyramidal panicles: involucre 3-5-seriate: pappus biseriate.

+ + Immature achenes stipitate-glandular: involucral scales obtuse.

L. *glabrum*, Hemsl. l. c.

Var. hypoleucum. Leaves ovate-oblong, acuminate, glabrous above, white-tomentose beneath, more or less glabrescent. — Collected by C. G. Pringle, in cañons near Guadalajara, 8 December, 1888, no. 2169, and on rocky banks of river below the Falls of Juanacatlan near Guadalajara, 25 October, 1889, no. 2372, the latter distributed as *Liabum discolor*, Benth. & Hook. f.

The companion number cited by Hemsley, Bourgeau, no. 1401, as represented in the Gray Herbarium, shows an arachnoid pubescence still adhering to the under surface of the leaves. Pringle's no. 2169 shows the tomentum on the lower surface of the leaves to be evanescent; this number, however, certainly represents the same species as Pringle's no. 2372, which has a dense tomentum on the lower surface of the leaves. It seems best therefore to regard these two specimens collected by Mr. Pringle as a tomentose variety of *Liabum glabrum*, Hemsl. Mr. Pringle's no. 6182, collected in the type locality, is probably more typical of the species proper.

++ ++ Involucral bracts acute: immature achenes setulose at the apex.

L. sericolepis, Hemsl. l. c.

+ + Inflorescence in thyrsoid panicles, terminating the stems and branches: involucral scales lance-attenuate: pappus of unequal setæ, not biseriate.

L. Klattii, Rob. & Greenm. Am. Jour. Sci. ser. 3, L. 156.

+ + + Heads few, large, 2 cm. or more in diameter: involucre multiseriate; scales lanceolate, acute: petioles short, about 4 mm. in length.

L. Pringlei, Rob. & Greenm. Proc. Am. Acad. xxxii. 49.

* * * Leaves sessile, linear or palmately lobed: heads discoid, few, on long peduncles: involucral scales linear-attenuate: achenes sericeous.

+ Leaves amplexicaul, palmately lobed.

L. cervinum, Rob. Proc. Am. Acad. xxix. 317.

L. Palmeri, Gray, Proc. Am. Acad. xxii. 432.

+ + Leaves linear, subverticillate.

L. angustissimum, Gray, l. c.

* * * * Species of doubtful affinity.

L. Liebmannii, Klatt, Leopoldina, xxiii. (reprint, p. 7). From the very meagre characterization of this species it is impossible to give its exact affinity without seeing Liebmann's specimen.



Greenman, J. M. 1897. "Key to the Mexican species of *Liabum*." *Contributions from the Gray Herbarium of Harvard University* (11), 293–294.

<https://doi.org/10.5962/p.335898>.

View This Item Online: <https://www.biodiversitylibrary.org/item/123666>

DOI: <https://doi.org/10.5962/p.335898>

Permalink: <https://www.biodiversitylibrary.org/partpdf/335898>

Holding Institution

Missouri Botanical Garden, Peter H. Raven Library

Sponsored by

Missouri Botanical Garden

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

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>.