

An interesting floral mutation has been reported by Stout (1925). *Lythrum Salicaria* is widely naturalized in the northeastern states; it has appeared more recently in Washington (1931) and Utah (1943).

## REFERENCES

- ABRAMS, LEROY. 1951. *Lythrum*. Illustrated Flora of the Pacific States 3: 165-166.  
 FERNALD, MERRITT LYNDON. 1950. *Lythrum*. Gray's Manual of Botany, 8th ed., pp. 1047-1048.  
 GREENE, EDWARD L. 1889. The genus *Lythrum* in California. Pittonia 2: 11-13.  
 HEGI, GUSTAV. *Lythrum*. Illustrierte Flora von Mittel-Europa V pt. 2: 752-761.  
 HOWELL, JOHN THOMAS. [*Lythrum tribracteatum* Salzm. var. *Candollei* Koehne reported from Solano Co., California, in] *Plantae Occidentales* - II. Madroño 2: 20.  
 ———. 1949. *Lythrum*. Marin Flora, p. 196.  
 KOEHNE, AEMILIUS. 1881. *Lythraceae* monographice describuntur. IV. *Lythrum*. Bot. Jahrb. 1: 305-332.  
 ———. 1903. *Lythraceae*, *Lythrum*. Das Pflanzenreich IV. 216: 58-78.  
 NIEUWLAND, J. A. 1914. Some new American *Lythra*. Amer. Midl. Nat. 3: 265-270.  
 STOUT, A. B. 1923. Studies of *Lythrum Salicaria* - I. The efficiency of self-pollination. Amer. Journ. Bot. 10: 440-449.  
 ———. 1925. Studies of *Lythrum Salicaria* - II. A new form of flower in this species. Bull. Torr. Bot. Club 52: 81-85.

## Nomenclature of the Varieties of *Monarda punctata* L. (Labiatae)<sup>1</sup>

Lloyd H. Shinnery

A taxonomic botanist once remarked to me (supporting the practise of another) that there were great advantages to using subspecies in place of varieties. This made it possible to disregard names one did not like, and keep those one preferred, thus circumventing the requirements of strict priority in the varietal category. I do not know that Fernald ever heard of this curious device for shirking obligations; it would have been a pleasure to hear or read his views on it. The geographic varieties of *Monarda punctata* (I subscribe heartily to the use of that category, following Fernald, Fosberg, and Weatherby) include choice examples of evasion and careless error in dealing with nomenclature. Despite a supposedly definitive revision, I found it impossible to determine the correct names of the two varieties found in northern Texas. After botanizing in the "Manual range" in 1952 for the first time in eight years, I discovered that neither of the two named varieties in the new (eighth) edition of Gray's Manual is correctly listed. Following are the legal names of the known varieties as I make them out, with explanation where it seems called for.

<sup>1</sup>Grateful acknowledgment is due Dr. Bernice G. Schubert for notes on specimens in the Gray Herbarium annotated by Gray, and to Dr. Reed C. Rollins for the loan of the type sheet of var. *lasiodonta*.

MONARDA PUNCTATA L., Sp. Pl. 1: 22. 1753.

Var. PUNCTATA. *M. punctata* ssp. *typica* Epling, Madroño 3: 23. 1935.

Var. *arkansana* (McClintock & Epling) Shinnery, comb. nov. *M. punctata* ssp. *arkansana* McClintock & Epling, Univ. Calif. Publ. Bot. 20: 182. 1942.

Var. *villicaulis* (Pennell) Shinnery, comb. nov. *M. punctata* ssp. *villicaulis* Pennell, Bull. Torr. Bot. Club 46: 186. 1919. Epling (1935) proposed "subsp. *villicaulis* (Pennell) comb. nov." on the mistaken assumption that Pennell had published it as variety, and listed it in that rank in synonymy, wrongly credited to Pennell. Later authors (e.g., Palmer & Steyermark, Deam, Fernald) who used the varietal category have repeated the error, sometimes citing the original publication, always misquoting it as to rank used, and never avowedly proposing a transfer or new combination. An error does not cease to be an error merely by being repeated. No such name as "var. *villicaulis* Pennell" has ever been properly published, and the new combination proposed above is necessary to comply with the rules of nomenclature. For emphasis, it may be pointed out that Pennell did not employ an undesignated trinomial. After remarking that "two geographical subspecies ... may be distinguished," he labels the new entity "1a. *Monarda punctata villicaulis* Pennell, subsp. nov." Later publications listing this as "var. *villicaulis* Pennell" are errors pure and simple.

Var. STANFIELDII (Small) Cory, Rhodora 38: 407. 1936. *M. Stanfieldii* Small, Fl. S.E. U.S. 1038 and 1337. 1903. *M. punctata* ssp. *Stanfieldii* (Small) Epling, Madroño 3: 25. 1935.

Var. *Coryi* (McClintock & Epling) Cory ms., comb. nov. *M. punctata* ssp. *Coryi* McClintock & Epling, Univ. Calif. Publ. Bot. 20: 184. 1942.

Var. INTERMEDIA (McClintock & Epling) Waterfall, Rhodora 52: 38. 1950. *M. punctata* ssp. *intermedia* McClintock & Epling, Univ. Calif. Publ. Bot. 20: 184. 1942.

Var. OCCIDENTALIS (Epling) Palmer & Steyermark, Ann. Mo. Bot. Gard. 22: 634. 1935. *M. punctata* ssp. *occidentalis* Epling, Madroño 3: 25. 1935. Included by Gray (1878) under his var. *lasiodonta*, and incorrectly placed in synonymy under that name by Fernald (1950).

Var. *LASIODONTA* Gray, Syn. Fl. N.A. 2 pt. 1: 375. 1878. (Earlier published as a *nomen nudum* in Proc. Amer. Acad. 8: 369, 1872, where the distribution is given as Texas only. In the Synoptical Flora it is cited from "Texas, Drummond. New Mexico and Arizona, Wislizenus, Woodhouse, Rothrock.") *M. punctata* ssp. *immaculata* Pennell, Bull. Torr. Bot. Club 46: 187. 1919. (TYPE from Aloe, Victoria Co., Texas; not examined.) Gray's first mention of this variety, without description, fixes the type locality as in Texas; his later publication indicates a Drummond collection as the actual type. The area in which Drummond collected (Geiser, 1948) is in or very close to the known range of at least four varieties of *Monarda punctata*; Pennell's type came from this same general area. McClintock & Epling conjecture that the Drummond plant may be the same as the later-described var. *maritima* Cory, but list var. *lasiodonta* with query as a synonym of ssp. *villicaulis*, which is not known to grow south of Oklahoma. It does not appear from their remarks that they actually examined the type. The sheet bearing the type has the printed "Syn. Fl. N. Amer." tag in the lower right corner, and immediately below this in Gray's handwriting "M. punctata var. lasiodonta." On the sheet are three stems, of which the one at right is marked "Texas?" and may be disregarded. The center one has "148. Tex. Drummond" written beneath it on the mounting sheet; on this plant the calyx teeth are rather sparsely hairy outside, and the longest leaf blade is 7 cm. long. The left hand one is mounted above a label at the top of which is written "Monarda aristata," followed by the printed legend "Benth. Lab. Gen. et Sp.," and written at bottom "Texas, Drummond." On this label have been added in pencil quotation marks enclosing the first two lines (name and printed legend), with an illegible word (perhaps "Wrong") and initials. This plant has narrowly deltoid, acuminate calyx teeth densely long-hairy outside, and the longest leaf blade is 5 cm. long. Both the center and left-hand plants have stems minutely retrorse-pubescent; leaf blades linear-lanceolate, up to 7 mm. wide, long-hairy beneath, with fewer and shorter hairs above, and with small sharp teeth on the margins; petioles 4-12 mm. long (not "obscurely petioled," as Pennell described ssp. *immaculata*, but within the limits allowed by McClintock & Epling for the same entity). An

exclamation point has been marked in pencil above the label and close to the plant at left. As the one which shows to best degree the feature for which Gray named the variety, this may be considered the type; it is also the one which best fits the description of ssp. *immaculata*, as emended by McClintock & Epling. The corollas of both the center and left-hand specimen are more or less shrivelled and discolored, but as far as can be determined from examination in their present state, they were unspotted.

Var. MARITIMA Cory, Field & Lab. 17: 52. 1949. Previously known from Aransas and Refugio counties, this most restricted of the Texas endemic varieties may be recorded also from adjacent San Patricio County: 4 miles west of Aransas Pass, *Fred B. Jones 648*, October 14, 1951 (SMU).

## REFERENCES

- EPLING, CARL. 1935. Notes on *Monarda*: the subgenus *Cheilyctis*. *Madroño* 3: 20-31.  
 FERNALD, M. L. 1940. [Remarks on the terms subspecies and variety, in] *Some spermatophytes of eastern North America*. *Rhodora* 42: 239-246.  
 ———. 1950. *Monarda*. Gray's Manual, 8th (centennial) ed. pp. 1236-1238.  
 FOSBERG, F. RAYMOND. 1942. Subspecies and variety. *Rhodora* 44: 153-157.  
 GEISER, SAMUEL WOOD. 1948. *Thomas Drummond. Naturalists of the Frontier*, ed. 2, pp. 55-78.  
 GRAY, ASA. 1872. Notes on Labiatae. *Proc. Amer. Acad.* 8: 365-372.  
 ———. 1878. *Monarda*. *Syn. Fl. N.A.* 2 pt. 1: 373-375.  
 MCCLINTOCK, ELIZABETH & CARL EPLING. 1942. A review of the genus *Monarda* (Labiatae). *Univ. Calif. Publ. Bot.* 20 (no. 2): 147-194.  
 WEATHERBY, C. A. 1942. Subspecies. *Rhodora* 44: 157-167.

## Notes

SALVIA FARINACEA Benth. var. *latifolia* Shinnery, var. nov.—A specie differt foliis caulinis inferioribus mediocribusque longe petiolatis (petiolis 2-4 cm. longis) laminis basi abrupte contractis vel truncatis vel subcordatis 4-5.5 cm. latis grosse dentatis vel sublaciniatis superne atroviridibus (siccis) glabratis. TYPE: south of Kenedy along railroad tracks, Karnes Co., Texas, *Eula Whitehouse 18117*, April 15, 1947 (in Herb. Southern Methodist University). Two addition specimens have also been seen, both like the preceding from the Coastal Plain. GOLIAD Co.: 1¼ miles south of Goliad, *V. L. Cory 55128*, March 29, 1949. GUADALUPE Co.: Cibolo, *E. Dapprich*, in 1873. Var. *farinacea*, of the Edwards Plateau and the Black and Grand Prairies, has the principal stem leaves with petioles 0.4-2.4 cm. long and blades 0.4-2.2 cm. wide (measurements from 24 specimens), the latter shallowly toothed or almost entire, and (in the herbarium) gray-green. I have not seen Bentham's type, nor his first description of the species (*Labiatarum Genera et Species*, p. 274, 1833), but in the account written by him for DeCandolle's *Prodromus* (12: 302, 1848), the leaves are described as "basi longe angustatis." He cites collections of Berlandier and Drummond. The first one was selected as type by Epling (*Repert. Sp. Nov. Beih.* 110: 189, 1939), who adds further that it is no. 1654, collected between the Rio Guadalupe and the Rio Colorado. A photograph of the type in the Gray Herbarium (kindly examined for me by Dr. R. C. Foster) was unfortunately made without a scale, but does show that the bases of the leaf-blades are rather gradually narrowed. Intermediate plants with leaves exceptionally broad for var. *farinacea*, but gradually narrowed at base, occur about Austin and New Braunfels, at the edge of the Edwards Plateau.

—Lloyd H. Shinnery.