

TRANSFER OF NORTH AMERICAN *HELIANTHEMUM* TO
CROCANTHEMUM (CISTACEAE): NEW COMBINATIONS

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ABSTRACT

Transfer of *Helianthemum* (Tourn.) P. Mill. to *Crocanthemum* Spach in the Flora of North America project requires three new combinations: *Crocanthemum greenei* (B.L. Robins.) Sorrie, **comb. nov.**; *C. scoparium* (Nutt. ex Torrey & A. Gray) Millsp. var. *vulgare* (Jepson) Sorrie, **comb. nov.**; and *C. suffrutescens* (B. Schreib.) Sorrie, **comb. nov.** *Phytologia* 93(2):270-271 (August 1, 2011)

KEY WORDS: *Helianthemum*, *Crocanthemum*, Cistaceae, Flora of North America.

Recent molecular and morphological analyses of the Cistaceae (Arrington 2004) indicate that *Helianthemum* (Tourn.) P. Mill. as currently circumscribed is polyphyletic. All New World taxa are better placed within *Crocanthemum* Spach. In the forthcoming Volume 6 of Flora of North America (in prep.), I will recognize 15 species of *Crocanthemum* plus one variety. These actions require three new combinations.

1. *Crocanthemum greenei* (B.L. Robins.) Sorrie, **comb. nov.**
Basionym: *Helianthemum greenei* B.L. Robins. Syn. Fl. N. Amer. 1(1): 191. 1895. – TYPE: U.S.A.: California, Santa Barbara County, Island of Santa Cruz, July & August 1886, Greene s.n. (holotype: ND; isotype: NY!). Note that *Crocanthemum occidentale* (Greene) Janchen (Nat. Pflanzenfam. ed 2. 21: 305), published in 1925, is based on *Helianthemum occidentale* Greene (Bull. Calif. Acad. Sci. 2: 144), published in 1886. However, Greene's epithet is a later homonym,

having been preceded by *H. occidentale* Nyman (Consp. Fl. Eur. 72), published in 1878 for a European species.

2. *Crocانthemum scoparium* (Nutt. ex Torrey & A. Gray) Millsp. var. *vulgare* (Jepson) Sorrie, **comb. nov.** Basionym: *Helianthemum scoparium* Nutt. ex Torrey & A. Gray var. *vulgare* Jepson. Man. Fl. Plants of Calif. 641. 1925. – TYPE: U.S.A.: California, Mariposa County, Coulterville, 3 July 1896, Jepson 13953 (lectotype JEPS!).

3. *Crocانthemum suffrutescens* (B. Schreib.) Sorrie, **comb. nov.** Basionym: *Helianthemum suffrutescens* B. Schreib. Madrono 5: 81. 1939. – TYPE: U.S.A.: California, Amador County, 5.5 miles southwest of Bisbee Peak, 23 May 1936, Schreiber 2243 (holotype JEPS!; isotype GH).

LITERATURE CITED

- Arrington, J.M. 2004. Systematics of the Cistaceae. Ph.D. thesis, Duke University, Durham, North Carolina.
- Flora of North America Editorial Committee. in prep. Flora of North America North of Mexico. Vol. 6, Magnoliophyta: Cucurbitaceae to Droseraceae. Oxford University Press, New York.