

New infraspecific nomenclatural combinations in twelve American species of *Drymocallis* and *Potentilla* (Rosaceae)

(Notes on *Potentilla* XVII.)

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Abstract: Eleven American subspecies are transferred from *Potentilla* into *Drymocallis*. Thirteen nomenclatural combinations in the rank of variety in ten American species of *Potentilla* are proposed.

Keywords: nomenclatural combinations, *Drymocallis*, *Potentilla*, N. America

Basing on the morphological differences in the structure of anthers (SOJÁK 1989, 2006) and on the results of molecular methods (ERIKSSON et al. 1998, 2003), it has been found out that the *Potentilla rupestris* L. group does not belong to the genus *Potentilla* L., but that it represents a separate genus *Drymocallis* FOURR. ex RYDB. related to *Fragaria* L. and *Sibbaldia* L.

The Eurasian taxa from the *Potentilla rupestris* group I transferred into *Drymocallis* a time ago (SOJÁK 1989). However, there remain a rather amount of American taxa (subspecies), which still are waiting to be transferred from *Potentilla* into *Drymocallis*. In their list I start from the thorough and trustworthy study of the monographer KECK (1940) and from my studies of numerous specimens preserved in New York (NY).

Drymocallis FOURR. ex RYDB.

D. arguta (PURSH) RYDB. subsp. *convallaria* (RYDB.) SOJÁK comb. nova; bas. *Potentilla convallaria* RYDB. in Bull. Torrey Bot. Club 24: 249. 1897 (T.: RYDBERG 604 NY !).

D. glandulosa (LINDL.) RYDB.:

D. g. subsp. *arizonica* (RYDB.) SOJÁK comb. nova; bas. *Drymocallis arizonica* RYDB., N. Amer. Fl. 22(4): 373. 1908 (T.: MACDOUGAL 64 NY !).

D. g. subsp. *ashlandica* (GREENE) SOJÁK comb. nova; bas. *Potentilla ashlandica* GREENE in Pittonia 3: 248. 1898 (T.: HOWELL s.n. NY !).

D. g. subsp. *ewanii* (KECK) SOJÁK comb. nova; bas. *Potentilla glandulosa* subsp. *ewanii* KECK in Publ. Carnegie Inst. Wash. 520: 47. 1940 (T.: EWAN 2674 CAS !).

D. g. subsp. *glabrata* (RYDB.) SOJÁK comb. nova; bas. *Drymocallis glabrata* RYDB. in Mem. Dept. Bot. Columbia Coll. 2: 200. 1898 (T.: ELMER 412 NY !).

D. g. subsp. *globosa* (KECK) SOJÁK comb. nova; bas. *Potentilla glandulosa* subsp. *globosa* KECK in Publ. Carnegie Inst. Wash. 520: 46. 1940 (T.: KECK 4841 UC !).

D. g. subsp. *hansenii* (GREENE) SOJÁK comb. nova; bas. *Potentilla hansenii* GREENE in Pittonia 3: 20. 1896 (T.: GREENE s.n. ND !).

D. g. subsp. *micropetala* (RYDB.) SOJÁK comb. nova; bas. *Drymocallis micropetala* RYDB., N. Amer. Fl. 22(4): 375. 1908 (T.: RYDBERG 6153 NY !).

D. g. subsp. *nevadensis* (S. WATS.) SOJÁK comb. nova; bas. *Potentilla glandulosa* var. *nevadensis* S. WATS. in BREWER & S. WATS. in S. WATS., Bot. California 1: 178. 1876 (T.: ROTHROCK 376 NY !).

D. g. subsp. *pseudorupestris* (RYDB.) SOJÁK comb. nova; bas. *Potentilla pseudorupestris* RYDB. in Bull. Torrey Bot. Club 24: 250. 1897 (T.: RYDBERG 598 NY !).

D. g. subsp. *reflexa* (GREENE) SOJÁK comb. nova; bas. *Potentilla glandulosa* var. *reflexa* GREENE, Fl. Francisc. 1: 65. 1891 (T.: GREENE s.n. ND !).

In the studies of American species I drew some conclusions different from the opinions of recent American authors. For example, I principally dissent from HITCHCOCK & CRONQUIST (1961) who classified into the synonymy of *P. pensylvanica* L. even such clear and doubtless species as *P. bipinnatifida* DOUGL. ex HOOK. nom. cons. propos. (*P. missourica* HORNEM. ex LINDL.) and *P. virgulata* A. NELS. (correct name is *P. litoralis* Rydb.). These species in no case are closely related to *P. pensylvanica* and, according to KURBATSKIY's dividing of the genus *Potentilla* into sections, belong even to various sections (*Multifidae* and *Adenocarpae*). As a separate species I regard also *P. lasiodonta* RYDB. (HOHLI & PACKER 1976 described it repeatedly as *P. finitima*).

The very complicated *P. gracilis* complex I recommend (basing mainly on the differences in the dentation of leaflets and indumentum of leaves) to divide in six species, viz. *P. gracilis* LINDL. s. str., *P. filipes* RYDB., *P. flabelliformis* LEHM., *P. fastigiata* NUTT. ex TORR. & A. GRAY, *P. pectinisecta* RYDB. and *P. nuttallii* LEHM. To all seeming, frequently a hybridization occurs among them, their dividing lines

sometimes are unclear, and therefore the opinions of various authors are different.

In my opinion, *P. pulcherrima* LEHM. is derived from *P. filipes* × *P. hippiana* LEHM. *P. diversifolia* LEHM. I regard as a hybrid derivative of the combination *P. glaucophylla* LEHM. × *P. hippiana*. The names *P. quinquefolia* RYDB. and *P. furcata* PORSILD must be replaced by the name *P. rubricaulis* LEHM. s. orig. (the last-mentioned name was incorrectly used for the arctic *P. pedersenii* RYDB.).

The following *Potentillas* described originally mostly as species I recommend evaluate as varieties.

Potentilla L.

P. concinna RICH. var. *leonina* (STANDL.) SOJÁK comb. nova; bas. *P. leonina* STANDL. in Publ. Field Mus. Nat. Hist., Bot. Ser., 22: 76. 1940.

P. concinna RICH. var. *oblanceolata* (RYDB.) SOJÁK comb. nova; bas. *P. oblanceolata* RYDB. in Mem. Dept. Bot. Columbia Coll. 2:53. 1898.

P. diversifolia LEHM. var. *proxima* (RYDB.) SOJÁK comb. nova; bas. *P. proxima* RYDB., N. Amer. Fl. 22: 339. 1908.

P. effusa DOUGL. ex LEHM. var. *argyrea* (RYDB.) SOJÁK comb. nova; bas. *P. argyrea* RYDB., N. Amer. Fl. 22: 341. 1908.

P. fastigiata NUTT. ex TORREY & A. GRAY var. *jucunda* (A. NELSON) SOJÁK comb. nova; bas. *P. jucunda* A. NELSON in Bull. Torrey Bot. Club 27: 32. 1900.

P. fastigiata NUTT. ex TORREY & A. GRAY var. *permollis* (RYDB.) SOJÁK comb. nova; bas. *P. permollis* RYDB. in Bull. Torrey Bot. Club 28: 175. 1901.

P. glaucophylla LEHM. var. *perdissecta* (RYDB.) SOJÁK comb. nova; bas. *P. perdissecta* RYDB., N. Amer. Fl. 22: 327. 1908.

P. glaucophylla LEHM. var. *pinetorum* (WIGGINS) SOJÁK comb. nova; bas. *P. pinetorum* WIGGINS in Contr. Dudley Herb. 1: 169. 1933.

P. litoralis RYDB. var. *ovium* (JEPS.) SOJÁK comb. nova; bas. *P. pensylvanica* L. var. *ovium* JEPS., Fl. Calif. 2: 184. 1936.

P. pectinisecta RYDB. var. *comosa* (RYDB.) SOJÁK comb. nova; bas. *P. comosa* RYDB., N. Amer. Fl. 22: 316. 1908.

P. pulcherrima LEHM. var. *wardii* (GREENE) SOJÁK comb. nova; bas. *P. wardii* GREENE in Leafl. Bot. Obs. Crit. 2: 138. 1911.

P. rubricaulis LEHM. var. *paucijuga* (RYDB.) SOJÁK comb. nova; bas. *P. paucijuga* RYDB., N. Amer. Fl. 22: 348. 1908.

P. saximontana RYDB. var. *dissecta* (S. WATSON) SOJÁK comb. nova; bas. *P. nivea* var. *dissecta* S. WATSON Proc. Amer. Acad. Arts 8: 559. 1873.

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