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New Combinations in *Packera* (Asteraceae) and Lectotypification of *Packera ovina*

John F. Bain

Department of Biological Sciences, University of Lethbridge, Lethbridge, Alberta, Canada T1K 3M4

ABSTRACT. Four new combinations are made for Packera: P. eurycephala var. lewisrosei (J. T. Howell) Bain, P. contermina (Greenman) Bain, P. moresbiensis (Calder & Taylor) Bain, and P. ovina (Greene) Bain. Packera ovina is lectotypfied. The latter is necessary because the holotype is a mixed collection whose disposition affects the naming of Packera contermina.

The segregate genus *Packera*, including those species of *Senecio* previously referred to as members of the aureoid complex of *Senecio*, will be recognized in the upcoming treatment of the Asteraceae for *Flora of North America (North of Mexico)*. Most of the needed combinations have been made by previous authors (Freeman & Barkley, 1995; Löve & Löve, 1976; Jeffrey, 1992; Weber & Löve, 1981), but recent work involving some arctic and Rocky Mountain species of this complex has brought to my attention the necessity of making a few new combinations immediately. They are presented below. In addition, I discuss the type material of *Senecio ovinus* because it has possible implications for naming *Senecio conterminus*.

Packera eurycephala var. lewisrosei (J. T. Howell) Bain, comb. nov. Basionym: Senecio lewisrosei J. T. Howell, Leafl. West. Bot. 3: 141. 1942. Senecio eurycephalus var. lewisrosei (J. T. Howell) T. M. Barkley, Brittonia 20: 283. 1968. TYPE: U.S.A. California: Butte Co., near Pulga, L. Rose 39247 (holotype, CAS).

Packera contermina (Greenman) Bain, comb. nov. Basionym: Senecio conterminus Greenman, Ann. Missouri Bot. Gard. 3: 101. 1916. Based on Senecio Lyallii Klatt, Annal. Naturhist. Hofm. Wien 9: 365. 1894, not Hooker f. TYPE: [Canada.] Summit of the Rocky mountains, D. Lyall s.n. (GH).

Packera moresbiensis (Calder & Taylor) Bain, comb. nov. Basionym: Senecio cymbalarioides Buek subsp. moresbiensis Calder & Taylor, Canad. J. Bot. 43: 1399. 1965. Senecio moresbiensis (Calder & Taylor) Douglas & Douglas, Canad. J. Bot. 56: 1710. 1978. Senecio streptanthifolius var. moresbiensis (Calder & Taylor) Boivin, Naturaliste Canadien 93: 1031. 1966. TYPE: [Canada.] British Columbia: Queen Charlotte Islands, Moresby Island, J. Calder, D. Savile & R. Taylor 23006 (holotype, DAO).

Packera ovina (Greene) Bain, comb. nov. Basionym: Senecio ovinus Greene, Pittonia 4: 110. 1900. TYPE: [Canada.] Alberta: Sheep [= Sofa] Mountain, J. Macoun 11619 (lectotype, selected here, NDG in part, glabrous individuals). Figure 1.

Type Material of Senecio ovinus

Senecio ovinus Greene was described in 1900 from collections made from the Sheep Mountain region of southern Alberta (Macoun 11619). The locality appears on modern maps as Sofa Mountain, situated on the eastern boundary of Waterton Lakes

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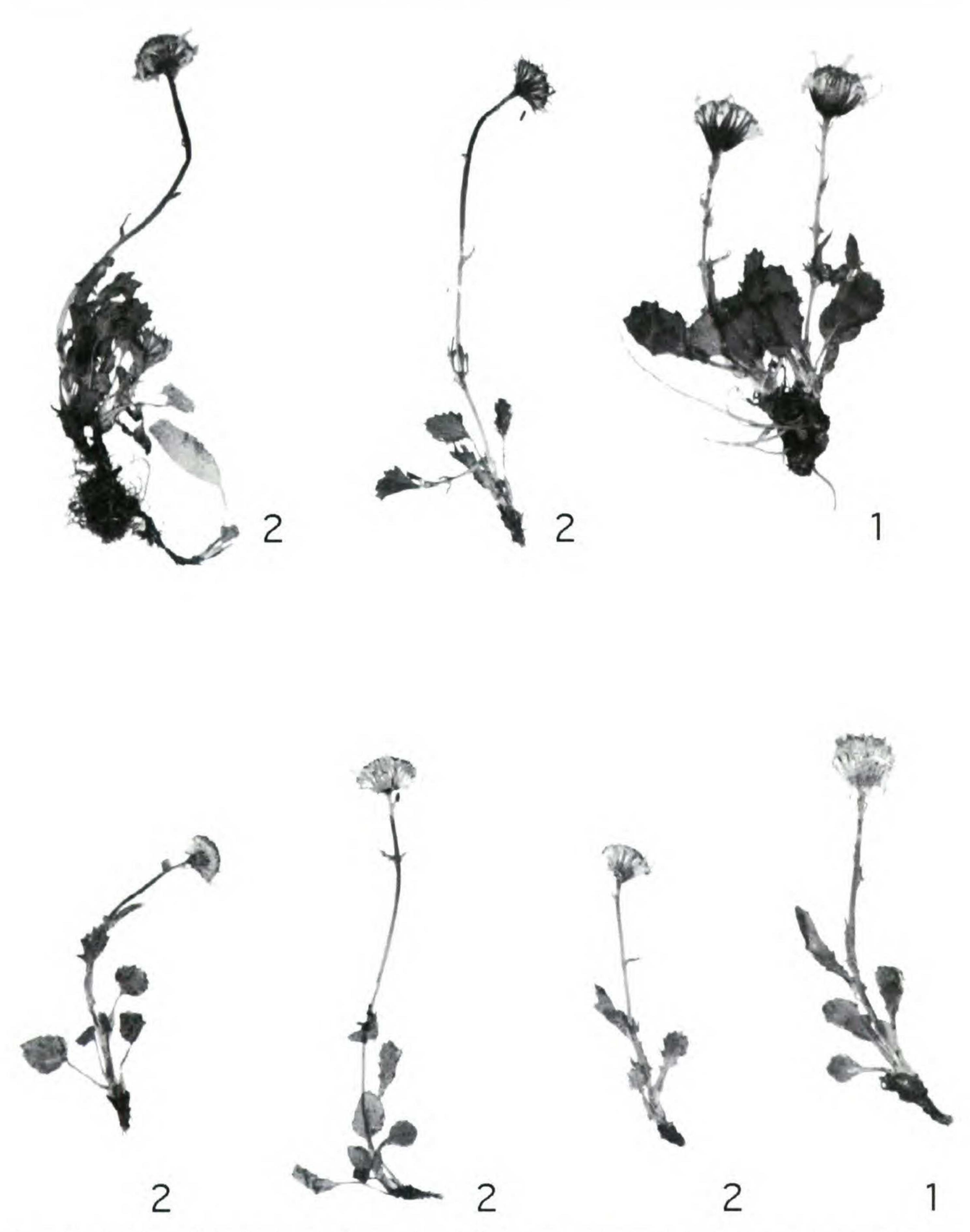


Figure 1. Lectotype of *Packera ovina* (Greene) Bain. —1. *Packera contermina* individuals. —2. *Packera ovina* individuals.

National Park. Senecio ovinus was recognized as distinct from S. cymbalarioides Buek (= S. subnudus DC.) by Greenman (1916), primarily based on its "thickish" rather than thin leaves. The name was considered a synonym of S. cymbalaria Pursh (= S. resedifolius Lessing) in most recent treatments

including those by Barkley (1962, 1978, 1981), Cronquist (1955, 1960), Hultén (1950), and Kowal (1975), all of whom recognized *S. cymbalaria* as distinct from *S. cymbalarioides* Buek and described both as occurring in the southern Rocky Mountains. Packer (1972) also recognized two taxa in the

southern Rocky Mountains, but considered them to be *S. cymbalarioides* Buek and *S. conterminus* Greenman. He did not, however, clearly indicate the relationship of *S. ovinus* to the latter two taxa. Recent treatments following Packer (1972) include those by Moss (1983) and Douglas (1982). The latter author treated *S. ovinus* as a synonym of *S. cymbalarioides* Buek. Thus, all modern treatments recognize two taxa in southern Alberta, and treat *S. ovinus* as a synonym of either *S. cymbalarioides* or *S. conterminus/S. cymbalaria*. The latter taxon is treated as *S. conterminus* in the present discussion.

An examination of the holotype and isotypes of *S. ovinus* has revealed that the type collection (*Macoun 11619*) contains individuals of both *S. conterminus* and *S. cymbalarioides*. The isotypes at NY and US are referable to *S. conterminus*, while those at CAN and GH are *S. cymbalarioides*. The holotype sheet at NDG contains individuals of both *S. cymbalarioides* and *S. conterminus*.

According to Article 9.10 of the Code (Greuter et al., 1994), when a type herbarium sheet contains parts belonging to more than one taxon, the name must remain attached to that part that corresponds most nearly with the original description. In addition, Recommendation 9A.5 indicates that the lectotype should be chosen to preserve current usage. A comparison of Greene's original description with the holotype sheet reveals that it fits all of the individuals relatively well. The presence of floccose tomentum, at least in the leaf axils, is important inasmuch as it is characteristic of S. conterminus, but even with regard to this character, Greene described the petioles of S. ovinus as "flocculent, at least when young," implying that not all of the individuals he observed had flocculent petioles. Since the petioles of individuals of S. cymbalarioides are glabrous, this is not surprising. It should be noted that Greenman did not indicate having seen the holotype of S. ovinus when he recognized it as distinct in his 1916 monograph. He relied on the type material from GH and CAN, which, as previously noted, is comprised entirely of glabrous individuals, here treated as S. cymbalarioides. His presumably later annotation of the holotype indicates clearly that he, too, could see that the specimen is composed of two elements, which he referred to as S. conterminus and S. ovinus.

I lectotypify *S. ovinus* Greene by designating the glabrous individuals on the sheet as the type material, thus treating it in the same manner as Greenman, whose annotation appears on the sheet. The elements selected are consistent with the original description and preserve current usage by allowing

the name to remain in synonymy, albeit with *S. cymbalarioides* not *S. cymbalaria*. Were the floccose individuals (*S. conterminus*) to have been chosen as lectotype, then the name *S. conterminus* Greenman would become a synonym of *S. ovinus* Greene, necessitating a name change for those who, like Packer (1972), recognize two taxa in southern Alberta and surrounding areas, neither of which is *S. cymbalaria*.

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