

Parmelia skultii New to the Lower 48 States

BRUCE MCCUNE

Department of Botany and Plant Pathology, Oregon State University, Corvallis, OR, U.S.A. 97331; email: Bruce.McCune@science.oregonstate.edu

Abstract. A disjunct occurrence of *Parmelia skultii* Hale has been found on a subalpine granitic promontory in Montana, extending the range about 2500 km to the south of the closest known sites in Alaska.

Mason Hale described *Parmelia skultii* as a segregate from *Parmelia omphalodes*. Originally described at the subspecies level as *Parmelia omphalodes* subsp. *glacialis* Skult (Skult 1985), Hale considered the presence of norstictic acid, the pruinosity, and the virtual absence of laminal pseudocyphellae as being sufficient to separate it at the species level (Hale 1987). Since then, it has hardly appeared in the North American literature.

Parmelia skultii has previously been reported from mostly oceanic to suboceanic areas of the high Arctic, extending south to southern Alaska near the Pacific coast (Hale 1987; Skult 1987, as *P. omphalodes* ssp. *glacialis*). In western North America it has not been reported from south of Alaska. In eastern North America it is known south to about 60°N.

Surprisingly, a collection from the Bitterroot Range in Rocky Mountains of Montana matches perfectly the typical characteristics of *P. skultii* (Skult 1985, Hale 1987). The thallus completely lacks laminal pseudocyphellae and contains norstictic acid (diagnostic in this subspecies), salacinic acid, galbinic acid, and atranorin by TLC. The concentration of norstictic acid appears to be less than the salacinic acid in this specimen, judging by the intensity of the spots in TLC. The upper surface is finely pruinose nearly throughout, though as Skult (1987) points out, this is a variable character in the *P. omphalodes* group.

The disjunct location reported here extends the range of *Parmelia skultii* about 2500 km to the south of the closest known sites. The Bitterroot Range in Idaho and Montana has a suboceanic climate, owing to the penetration of oceanic influence across northern Idaho and northwestern Montana (McCune 1984). Although most of the interesting alpine lichens of the Bitterroot Range occur on the high

peaks (McCune 1998), this locality is instead at the top of a subalpine windswept knob (2165 m) overlooking a deep glaciated canyon.

Specimen examined.— USA: Montana: Ravalli Co., upper Bear Creek Canyon overlook, 46° 23'N 114° 17'W, 2165 m, 11 July 1980, *McCune 10770* (herb. McCune).

ACKNOWLEDGEMENTS

Thanks to Teuvo Ahti for alerting me to the existence of *Parmelia skultii*, to Katie Glew for suggestions on the manuscript, and to Myrica McCune for assistance with TLC.

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