



Photo by Bruce Ford

## CORDILLERAN SEDGE

*Carex cordillerana* Saarela & B.A. Ford

SEDGE FAMILY (CYPERACEAE)

**Plants:** Densely caespitose, with persistent old leaves. **Culms** 6.8 – 40 cm long.

**Leaves:** Dull green to yellow green with pale to medium brown basal sheaths; 1.5 – 5.9 mm wide; the **margins densely covered in green papillae**; longer than the inflorescence.

**Flower clusters:** Lateral spikes on erect peduncles 0-3 with 3-5 perigynia; terminal spike androgynous; staminate flowers 2-3; pistillate flowers 3-5;

**Pistillate scales distinctive, leaf-like**, tightly enclosing the perigynia, yellowish green to dull olive green

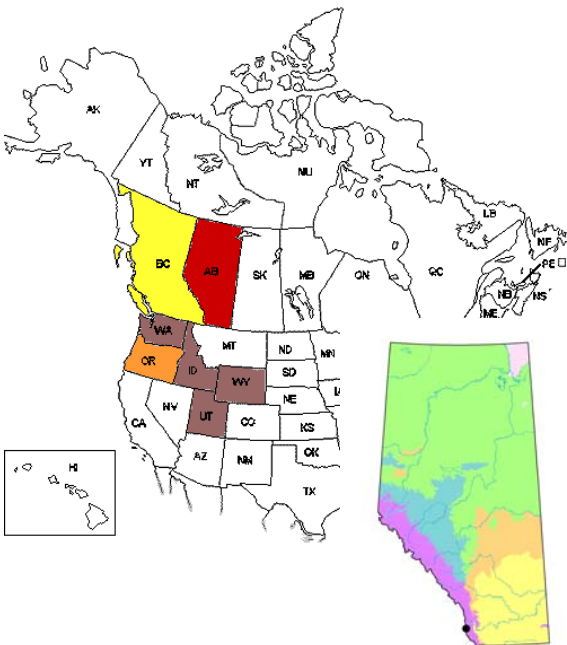
**Stigmas:** 3

**Fruits:** **Perigynia** yellowish green to dull olive green, smooth, 3.9 - 5.4 mm, beak smooth 0.6 – 1.2 mm **Achenes** brown, obpyriform, **tightly enclosed** by the perigynia

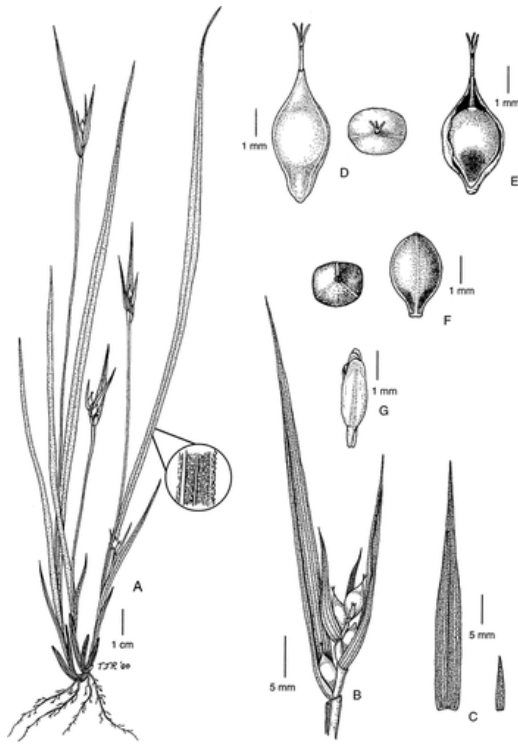
**Habitat:** Montane grassland slopes on black chernozemic soils in the Crowsnest Pass region (ANHIC 2009). Elsewhere on disturbed rocky soils with organic layers, both on grasslands and in mesic forest. Growth stimulated by fire in other regions (NE Oregon).

**Status:** S1 G3G4

**Notes:** *Carex cordillerana* is a newly described species. It can be confused with *C. backii* and *C. saximontana*, also present in Alberta (see conspectus table below).



The distribution of *C. saximontana* is the plains and further east. The range of *C. backii* overlaps with that of *C. saximontana* and *C. cordillerana*, which occurs in the Rocky Mountains and further west.



*Carex cordillerana* (drawing of the holotype: Ford 00136 & Saarela WIN). A. Habit. B. Inflorescence. C. Basal pistillate scale (right), upper pistillate scale (left). D. Perigynium, side view

(left), top view (right). E. Perigynium with side removed to show achene. F. Achene, top view (right), side view (left). G. Staminate portion of inflorescence

#### References:

Alberta Natural Heritage Information Centre, Parks Division, Alberta Tourism, Parks and Recreation, ANHIC Database – Element Occurrence Report. Data accessed March 13, 2009.

Flora of North America {ed.}. 2002. Flora of North America – North of Mexico. Volume 23: Magnoliophyta, Commelinidae {in part}, Cyperaceae. Oxford University Press. New York, New York.

Saarela, J.M. and B.A. Ford. 2001. Taxonomy of the *Carex backii* Complex (Section Phyllostachyae, Cyperaceae). Systematic Botany 26(4):704-721. 2001

Wilson, B.A., R. Brainerd, D. Lytjen, B. Newhouse, & N. Otting (Carex Working Group). 2008. Field Guide to the Sedges of the Pacific Northwest. Oregon State University Press. Portland Oregon.

Conspectus Table *	<i>Carex cordillerana</i>	<i>Carex backii</i>	<i>Carex saximontana</i>
<b>Perigynia</b>	smooth epidermal cells w/ convex bulges (µscope), 3.9 - 5.4 mm	smooth surfaced, 4.8-6.6 mm	upper 1/2 papillose, lower 1/2 smooth, 3.2 - 4.9 mm
<b>Beak</b>	shorter, 0.6 - 1.2 mm	long, 1.9-2.9 mm	shorter, 0.6 - 1.2 mm
<b>Leaves</b>	dull green to yellow green	dull green to yellow green	greenish glaucous to dark green
<b>Leaf margins</b>	dense cover of papillae, green	crenate, green	distinctly hyaline
<b>Distribution</b>	mountains and west, BC to Utah	widespread	Great plains S and E of AB

\* Source: Saarela, J.M. and B.A. Ford. 2001