

material, however, has been seen except that of Hartweg's collection, made more than fifty years ago. The attention of Californian botanists is called to the desirability of collecting a full series of this species.

26. *Lomatium oregonum* C. & R.

*Peucedanum oregonum* C. & R. Rev. N. Am. Umbell. 64. 1888.

A very much reduced cespitose plant from a multicipital caudex, pubescent throughout; leaves narrow in outline, once to twice pinnate, alternate segments short, ovate to linear-ovate, apiculate; peduncles slender and weak, longer than the leaves, 2.5 to 10 cm. long; umbels simple, or of two small umbellets (one sessile), with involucels of linear green bractlets; pedicels of sterile flowers 2 to 3 mm. long, fruiting pedicels fewer and shorter; fruit 3 to 4 mm. long, broadly oblong, pubescent, with narrow wings; calyx teeth present.

Type locality, "Alpine rocks, Blue and Eagle Creek Mountains," Oregon; collected by *W. C. Cusick*, no. 1390, August, 1886-1888; type in Herb. Coulter, fragments in U. S. Nat. Herb.

*Specimens examined:*

OREGON: Type specimens as cited under type locality; also cliffs of Blue Mountains, head of Anthonys Creek (said by *Cusick* to be the exact locality of the type specimens), altitude 2,400 meters, *Cusick* 2217, July 19-September 14, 1899.

27. *Lomatium hallii* (Watson) C. & R.

*Peucedanum hallii* Watson, Proc. Am. Acad. 11: 141. 1876.

Short caulescent, with elongated peduncles 1.5 to 4 dm. high, glabrous; leaves pinnate, oblong in outline, the ovate segments about 1 cm. long, deeply toothed or pinnatifid; umbel equally 3 to 6-rayed, with involucels of small bractlets; rays about 2.5 cm. long; pedicels 6 to 8 mm. long; flowers yellow; fruit broadly elliptical, glabrous, 6 mm. long, 4 mm. broad, with filiform dorsal and intermediate ribs; oil tubes 3 in the intervals, 4 to 6 on the commissural side.

Type locality, "northern Oregon;" collected by *Hall*, no. 211; type in Herb. Gray.

Alpine in northern Oregon and Washington.

*Specimens examined:*

OREGON: Mount Hood, about timber line, *Howell* 738, August 9, 1893.

28. *Lomatium leibergeri* C. & R., sp. nov.

Very short caulescent, glabrous throughout, from a caudex which becomes large and multicipital; peduncles 2 to 3 dm. high, exceeding the leaves; leaves bright green, narrow in outline, 1 to 1.5 dm. long, bipinnate; pinnae 6 or 7 pairs, ovate to oblong, lowest pair somewhat elongated; ultimate divisions small, ovate, pinnately lobed or toothed; umbel rather equally few-rayed, with involucels of linear elongated distinct bractlets; rays 12 to 18 mm. long; pedicels 2 to 4 mm. long; flowers deep yellow; fruit (immature) narrowly oblong, 5 mm. long, with narrow wings.

Type locality, Oregon; collected by *Leiberg*, no. 4166, in 1899; type in U. S. Nat. Herb.

Only known from type locality.

*Specimens examined:*

OREGON: Type specimens as cited under type locality.

29. *Lomatium martindalei* C. & R.

*Peucedanum martindalei* C. & R. Bot. Gaz. 13 : 142. 1888.

Resembling *L. hallii* in habit and foliage, but differing in leaves, sometimes bipinnate, with toothed or pinnatifid segments; fruit 8 to 16 mm. long, 7 mm. broad, with wings much broader than body (which is but 2 mm.), and prominent dorsal and intermediate ribs; oil tubes solitary in the intervals, 2 on the commissural side; seed face somewhat concave, with central longitudinal ridge.

Type locality, "rocky places, Cascade Mountains, Oregon;" collected by *Howell*, May-June, 1880; type in Herb. Coulter.

Mountains of Oregon.

*Specimens examined:*

OREGON: Near Corral Spring, Klamath County, altitude 1,630 meters, *Leiberg* 609, August 2, 1894; Crater Lake, altitude 1,900 to 2,200 meters, *Coville & Leiberg* 369, 382, 387, August 13-14, 1896; same station, altitude 2,400 meters, *Gorman* 479, 480, August 20-21, 1896.

*Lomatium martindalei angustatum* C. & R.

*Peucedanum martindalei angustatum* C. & R. Bot. Gaz. 13 : 143. 1888.

Usually more caulescent and sometimes taller, with more dissected leaves, and wings of fruit but 1 mm. wide, making a fruit 4 mm. wide.

Type locality, rocky places, "Cascade Mountains," Oregon; collected by *Howell*, in 1880; type in Herb. Coulter, duplicate in U. S. Nat. Herb.

Mountains of Oregon, Washington, and British Columbia.

*Specimens examined:*

OREGON: Type specimens as cited under type locality; at timber line on Mount Hood, altitude 1,800 to 2,100 meters, *Merriam*, in 1896; Mount Jefferson, altitude 1,800 meters, *Coville & Applegate* 1171, August 25, 1898.

WASHINGTON: Near Ellensburg, Kittitas County, *G. R. Vasey* 392, August, 1889; Olympia Mountains, *Piper* 879, September 30, 1890; Skamania County, *Suksdorf* 2112, May-August, 1892; Cascade Mountains (altitude 990 meters) and Mount Adams (altitude 1,800 meters), *Henderson* 2514, 2575, July-August, 1892; *Sandberg & Leiberg* 745, in 1893; Mount Rainier, altitude 2,100 meters, *Piper* 2008, August, 1895; Goat Mountains (Cascades), altitude 1,500 meters, *Allen* 258, in 1896.

BRITISH COLUMBIA: Mount Mark, Vancouver Island, altitude 900 meters, *Macoun*, July 25, 1887.

Perhaps too near *Lomatium hallii*, but no intergrades have yet been found.

30. *Lomatium laevigatum* (Nutt.) C. & R.

*Peucedanum laevigatum* Nutt. in Torr. & Gray, Fl. 1: 627. 1840.

Resembling *L. triternatum*, but completely glabrous, about 3 dm.