

CONTRIBUTIONS TOWARD A
FLORA OF NEVADA. NO. 4.

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BETULACEAE OF NEVADA

by

C. H. MULLER

November 1, 1940.

Issued by

The Division of Plant Exploration and Introduction,
Bureau of Plant Industry,
U. S. Department of Agriculture,
Washington, D. C.

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Work Projects Administration of Nevada,
Projects, O. P. 65-2-04-13, W. P. 658;
O. P. 165-2-04-21, W. P. 752.

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Collaborator

University of Nevada.

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BETULACEAE OF NEVADA

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Trees or shrubs with simple alternate leaves and caducous stipules; flowers monoecious, the staminate in scaly catkins, the pistillate in clusters, spikes, or scaly catkins; styles 2; ovary 2-celled, with 2 ovules in each cell; fruit apparently 1-celled.

KEY TO GENERA

- Bracts of the pistillate catkin membranous, deciduous with the
fruit - - - - - 1. Betula.
- Bracts of the pistillate catkin thickened, woody, persistent
after the fall of the fruit - - - - - 2. Alnus.

1. BETULA L. Birch.

Bark with usually prominent transversely elongated lenticels; staminate aments slender, pendulous; calyx 2- or 4-lobed; stamens 2; filaments very short, branched near the apex, the anther sacs single on each branch; pistillate catkins solitary; bracts 3-lobed, each bearing 3 flowers; fruit a samara or samara-like with a thin margin; seeds solitary.

KEY TO SPECIES

1. Leaves obovate, crenate; fruiting catkins 1 to 1.5 cm. long.
1. B. glandulosa.

1. Leaves ovate, serrate; fruiting catkins 2.5 to 3 cm. long.
2. Leaves 2 to 3 cm. broad - - - - - 2. B. fontinalis.
2. Leaves 4 to 6 cm. broad - 3. B. papyrifera var. occidentalis.

1. BETULA GLANDULOSA Michx., Fl. Bor. Amer. 2: 180. 1803.

Shrubs 0.3 to 2 m. tall; twigs reddish-brown and densely glandular-dotted; leaves 1 to 2.5 cm. long, rounded at both ends or basally cuneate; pistillate aments 1 to 2.5 cm. long and 4 or 5 mm. thick; fruiting scales with the lateral lobes spreading, ascending, and curved upward; samara wing very narrow.

Northern Nevada?: Common in Oregon, etc.

2. BETULA FONTINALIS Sarg., Bot. Gaz. 31: 239. 1901.

B. utahensis Britton, Bull. Torr. Bot. Club 31: 165.
1904.

Tree to 10 or 12 m. with twigs glandular; leaf blades sharply serrate, entire toward the base, ovate, the apex acute or acuminate, 2 to 5 cm. long.

Central Nevada: Lander County; probably scattered through northwestern Nevada.

3. BETULA PAPYRIFERA VAR. OCCIDENTALIS (Hook.) Sargent, Journ.

Arn. Arb. 1: 63. 1919.

B. occidentalis Hook., Fl. Bor. Am. 2: 155. 1839.

Tree 10 or 12 m. tall; twigs sparsely glandular; leaf

blades broadly ovate to subcordate, the apex short-pointed, doubly acute-serrate except at the entire truncate base, usually 5 to 6 cm. long; petioles 1 to 2.5 cm. long.

Central Nevada: Known only from Lander County but probably also in the northern counties.

2. ALNUS HILL. Alder.

Stamens 1 to 2, subtended by 2 to 4 bractlets; anthers introrse; pistillate catkins cone-like, 2 or several on a branched peduncle; bracts not distinctly lobed or only at the apex, woody and indurated, each bearing 2 flowers; fruit a samara with a narrow wing.

KEY TO SPECIES

- Staminate catkins flaccid and pendulous, the rachis elongating during anthesis; the staminate flowers deciduous before the bracts - - - - - 1. A. tenuifolia.
- Staminate catkins not pendulous, the rachis stiff and indurated and not elongating during anthesis; the bracts deciduous with the staminate flowers attached - - - - - 2. A. densiflora.

1. ALNUS TENUIFOLIA Nutt., N. Amer. Sylv. 1: 32. 1842.

Shrub or small tree to 4 m. tall; leaves ovate, cuneate to subcordate (usually rounded), coarsely toothed and again finely serrate, 3 to 7 cm. long; staminate catkins 7 or 8 cm. long, loosely flowered by the elongation of the rachis upon

maturation; pistillate catkins several in a cluster, sessile or inconspicuously stalked on the common peduncle, 8 to 14 mm. long.

Northern and western Nevada: Ormsby, Washoe, and Humboldt Counties.

2. *ALNUS DENSIFLORA* C. H. Mull., Madroño 5: 152. 1940.

Habit and leaves very like the preceding species; staminate catkins about 2.5 cm. long at maturity, the rachis not elongating at anthesis, becoming stiff, and the whole catkin stout.

Known only from Storey County, Nev., "southwest of Virginia City on the Jumbo Canyon Road".

