



Flora of North America

Lagotis (Plantaginaceae)
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X. LAGOTIS Gaertner, *Novi Comment. Acad. Sci. Imp. Petrop.* 14(1): 533, plate 18, fig. 2.

1770 * Weasel snout [Greek *lagos*, hare, and *otos*, ear, alluding to calyx of some species]

David F. Murray

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Gymnandra Pallas

Herbs, perennial; rhizomatous. **Stems** erect or ascending, glabrous. **Leaves** basal and cauline, opposite, leathery; petiole present or absent; blade margins entire, crenulate, dentate, or serrate. **Inflorescences** compact, terminal spikes; bracts present. **Pedicels** absent; bracteoles absent. **Flowers** bisexual; sepals 2, basally connate, calyx bilaterally symmetric, tubular, abaxial lobe enclosed by spathe-like adaxial lobe; petals 3, corolla blue, bilaterally symmetric, bilabiate, ligulate, spurs absent, abaxial lobes 2, adaxial lobe 1; stamens 2, adnate to throat of corolla, equal, filaments glabrous, staminode absent; ovary 2-locular, placentation axile; stigma capitate. **Fruits** drupelike, symmetric. **Seeds** 2, tan, globular, not winged. $x = 11$.

Species ca. 30 (1 in the flora): nw North America, Eurasia.

SELECTED REFERENCES Deuyuan, H. and M. A. Fischer. 1998. *Lagotis*. In: Z. Wu and P. H. Raven, eds. *Flora of China*. Science Press (Beijing) and Missouri Botanical Garden Press (St. Louis), Vol. 18, pp. 80--84. Ohwi, J. 1965. *Flora of Japan*. Smithsonian Institution, Washington, D.C.

1. *Lagotis glauca* Gaertner, *Novi Comment. Acad. Sci. Imp. Petrop.* 14(1): 534, plate 18, fig. 2. 1770 F

Plants 6--35 cm. **Roots**: rhizomes short, stout. **Stems** 1--2(--3), unbranched, fleshy. **Leaves** glabrous; basal leaves with long petioles; cauline leaves short-petiolate or sessile. **Spikes** capitate to cylindrical, 1.5--7.7 cm, elongating in fruit to 4--14 cm; bracts subtending flowers enlarging post anthesis. **Flowers**: calyx lobe margins entire or ciliate; styles exserted.

Subspecies 3 (2 in the flora): nw North America, Asia (Russian Far East, Siberia).

Subspecies *minor* (Willdenow) Hultén occurs in Eurasia.

1. Basal leaf blades broadly obovate-oblancoelate, apex rounded or obtuse, sometimes subacute, margins crenate-dentate; filaments 1.5 mm or shorter 1a. *Lagotis glauca* subsp. *glauca*
1. Basal leaf blades narrowly oblanceolate, apex obtuse or subacute, sometimes acute, margins entire or widely dentate to serrate; filaments 2 mm or longer 1b. *Lagotis glauca* subsp. *lanceolata*

1a. *Lagotis glauca* Gaertner subsp. *glauca* F

Basal leaves 6--16 cm; blade broadly obovate-oblancoelate, 3.5--8 x 2--6.5 cm, base truncate, margins crenate-dentate, apex rounded or obtuse, sometimes subacute. **Cauline leaves** ovate to triangular, margins crenate-dentate. **Flowers**: filaments 1.5 mm or shorter, often shorter than to as long as anthers. $2n = 22$.

Flowering summer. Coastal tundra meadows; 0--1100 m; Alaska; e Asia (Russian Far East).

Subspecies *glauca* occurs along the coastline of the Alaska Peninsula, Aleutian Islands, Kodiak Island, the Pribilof Islands, and intermittently along the coast northward to Teller on the Seward Peninsula. Transitional basal leaf forms occur along the sea coast where subsp. *glauca* is sympatric with subsp. *lanceolata*; subsp. *glauca* is then distinguished in most cases by having shorter stamen filaments. Some specimens are difficult to place in either subspecies in this zone of contact.

1b. *Lagotis glauca* subsp. *lanceolata* (Hultén) D. F. Murray & Elven, *J. Bot. Res. Inst. Texas* 4: 220. 2010 F

Lagotis glauca var. *lanceolata* Hultén, *Fl. Kamtchatka* 4: 105. 1930

Basal leaves 2--17 cm; blade narrowly oblanceolate, 1.2--7 x 1.2--3 cm, base cuneate, margins entire or widely dentate to serrate, apex obtuse or subacute, sometimes acute. **Cauline leaves** lanceolate, margins entire or widely dentate to serrate. **Flowers:** filaments 2 mm or longer, longer than anthers. $2n = 22$.

Flowering summer. Tundra meadows, tussock tundra, seeps, moist screes, margins of shallow tundra pools of coastal areas and tundra of mountains; 0--1800 m; N.W.T., Yukon; Alaska; Asia (Russian Far East, Siberia).

Where subsp. *glauca* and subsp. *lanceolata* are sympatric along the Alaskan coast, there is local separation by habitat preferences. Subspecies *lanceolata* occurs farther north and eastward along the Arctic coastal plain, Arctic foothills, and Brooks Range southward to the mountain ranges of interior Alaska, arctic and interior Yukon, and westernmost Northwest Territories; throughout this vast range, the species is a distinct element.

W. J. Cody (1966), E. Hultén (1968), and V. V. Petrovsky (1980) all misapplied the name subsp. *minor* (Willdenow) Hultén to plants of subsp. *lanceolata*. Subspecies *minor* is typified on tetraploid ($2n = 44$) plants, ones probably from the lower Lena River, which are otherwise found in northeastern Europe, European Russia, and Siberia, but do not reach the Russian Far East or North America.

O. Gjaerevoll proposed, but did not validly publish, "*Lagotis glauca* subsp. *stelleri*" in 1967, based on *Gymnandra stelleri*, a name itself published twice and which cannot be clearly linked to this taxon (D. F. Murray et al. 2010). Hultén's legitimate var. *lanceolata* has a diagnosis that refers unambiguously to a northern amphiberingian plant.