

Plantaginaceae

plantain family

The three genera comprising this herbaceous family, are typified by having simple leaves, either basal or cauline, and oppositely arranged. Their veins are mostly parallel. Flowers are perfect, regular and four-merous. Calyx is sometimes irregular. Stamens reduced to 1–3, alternating with lobes of the corolla. Fruits may be capsules, achenes or nuts.

Key to genera

Flowers solitary or in threes; fruit indehiscent, single seeded. *Littorella*

Flowers arranged in spikes or heads, numerous; fruit a capsule of 2 or more seeds. *Plantago*

***Littorella* P. Bergius**

Limited to the Americas and Europe, *Littorella* includes only three species. A single aquatic herb is found in Nova Scotia. A stemless plant, the leaves arise directly from the base arranged in a whorl. Unisexual flowers are clustered in threes, their scape arising from the base. The central flower is staminate, on a long pedicel. It also bears a tiny bract midway along its length. Pistillate flowers are sessile. Achenes are enclosed by a persistent calyx.

***Littorella uniflora* (L.) Asch. (=*Littorella americana* Fern.)**



An aquatic plant, it rarely exceeds 5cm in height. Flowers are borne on long peduncles, slightly shorter than the leaves. Leaves are succulent and linear.

Flowers mid-July until mid-September.



Photos by Sean Blaney

Usually in lakes, rooting on the gravelly or sandy substrate in sheltered locations. Occasionally seen exposed.

Most frequently collected in southern Cape Breton, although it has been found scattered about the mainland.

Ranges from NF to ON, south to MN and NY.

***Plantago* L.** **plantains**

Cosmopolitan, the plantains number 200 species, with six reaching Nova Scotia. Ours are herbaceous, annual or perennial, all are acaulescent but one. Flowers are sessile, borne in the axils of bracts, but carried in spikes or heads on long scapes. Calyx is divided into two pairs of sepals, each pair differing from the other. Corollas are long-persistent. Capsules are circumscissile.

Key to species

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|-------------------------------------------------------------------------------------|--------------------------|
| A. Leaves cauline and opposite; flower heads axillary on long peduncles. | <i>Plantago psyllium</i> |
| aa. Leaves basal; flowers terminal on long scapes. | B |
| B. Bracts and sepals with long distinct pubescence. | <i>P. aristata</i> |
| bb. Bracts and sepals glabrous, or puberulent. | C |
| C. Plants maritime; leaves linear and succulent; corolla tube pubescent externally. | <i>P. maritima</i> |
| cc. Plants not maritime; leaves wide, not linear; corolla tube glabrous. | D |
| D. Bracts and sepals with faint keels; seeds 2–4. | <i>P. lanceolata</i> |
| dd. Bracts and sepals prominently keeled, with raised nerves; seeds 4–30. | E |
| E. Fruit dehiscent near the middle; bracts ovate. | <i>P. major</i> |
| ee. Fruit dehiscent well below the middle; bracts narrowly deltate. | <i>P. rugelli</i> |

***Plantago aristata* Michx.**
Buckhorn; plantain aristé

A short-lived annual, this species is marked by almost linear leaves. It differs from *P. maritima* in not being restricted to coastal habitats. Corollas are smooth on the exterior. Linear bracts within the inflorescence soon become bristly, another distinctive character unique to this species.

Flowers from June through November.

Dry open substrate in disturbed and weedy sites.

So far known only from Halifax, although there are no extant collections.

Introduced in Canada. Extends from NS; ON, south to TX and FL; YT and along the west coast.

***Plantago lanceolata* L.**
Ribgrass; Narrow-leaved Plantain; plantain lancéolé



Photo by Andy Dean

Leaves are oblanceolate or narrowly so, nearly 30cm in length. Flower spikes are borne on long scapes exceeding the height of the leaves. Pubescence is variable but usually present. Spikes are short, no more than 3cm long and 1cm wide.

Flowers from May through October.

Usually seen in fallow fields and roadsides.



Photo by Sean Blaney

Common throughout the province.

Across Canada and southward; introduced from Europe.

***Plantago major* L.**

Common Plantain; Englishman's Footprint; plantain majeure



Photo by Marian Munro

Leaves arranged in a basal rosette, each leaf is broadly elliptic, abruptly tapered to a fleshy petiole. Succulent, the leaves are also marked by strong veins. Flowers are borne in 2–5 spikes, covered in tightly packed flowers. Capsules are 2–4mm long, ellipsoid and circumscissile. Plants are more or less puberulent.

Flowering May until killing frost late in November.

Compacted soils and disturbed sites as in lawns and along paths and roads.

Very common throughout.

European introduction and found throughout the continent but for the high Arctic.

***Plantago maritima* L.**

Seashore Plantain; Goose Tongue; plantain maritime



Photo by Martin Thomas



Photo by Marian Munro

A perennial species, this plantain has narrow linear leaves. The flowers are terminal on the scapes, exceeding the leaves in height. Frequently, the inflorescence is interrupted at the base. Corolla tubes bear hairs. Ours is referenced as var. *juncoides* (Lam.) A. Gray.

Flowers June to September.

Salt marshes, dykelands, cliffs and rock crevices in the salt-spray zone above the water; tidal flats.

Very common around the entire coast.

Greenland to AK; south to CA and VA; South America and Eurasia.

***Plantago psyllium* L.**

plantain des sables

A short-lived annual, it has a sticky texture. Coarsely pubescent it bears linear cauline leaves.

Flowers from July to October.

Usually in fallow soils and disturbed sites as along roads.

Once-collected in Halifax (1950). A recent collection was made from Amherst, near the train station.

Introduced to North America from Eurasia. NS; QC to ON, south to MO and NC; west coast.

***Plantago rugelli* Decne**
plantain de Rugel



Photo by David Mazerolle

Resembling *P. major* in most respects, but the leaves are a lighter green and borne on reddish petioles in this plant. Capsules are ovoid and 3–6mm long, dehiscent near the base.

Flowers in July and August.

A perennial weed in compacted soils such as lawns, pastures and along roads and paths.

Scattered and less frequent than *P. major*: Kings, Halifax and Colchester counties.

Ranges from NS to ON, south to MT, TX and FL. Introduced into Canada from south.