

Cistaceae (Rockrose Family) Traits, Keys, & Comparison Charts

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Cistaceae Traits (for species in NL)

- Perennial erect herbs, or low colonial, many-branched shrubs.
- **Stems and leaves pubescent**, bearing hairs that are short and silky (sericeous), shaggy (villous), or woolly (tomentose) (*Hudsonia*; older stems are woody and glabrous); or hairs \pm appressed (*Lechea*).
- **Leaves cauline, simple, usually alternate**; well-spaced or crowded and overlapping; blades with entire margins, \pm pubescent; stipules are absent.
- **Flowers solitary and axillary** (*Hudsonia*), or several flowers in terminal racemes or panicles (*Lechea*).
- Flowers are **bisexual** with **regular (actinomorphic) symmetry**.
- **Sepals 5, unequal in size**; the outer 2 sepals small, narrow, and bract-like; the 3 inner sepals broader.
- **Petals 5, yellow** (*Hudsonia*), or **3, small, reddish, and soon withering** (*Lechea*).
- **Stamens 8–18** (*Hudsonia*), or **usually 5–15** (*Lechea*).
- Pistil with a **superior ovary of 3 fused carpels**; style 1 or absent; **stigma spherical and tufted** (*Lechea*), or **minute** (*Hudsonia*).
- Fruit a small, **loculicidal capsule** (splitting open through the locules of the carpels); seeds 4–6 (*Lechea*) or 1–2 (*Hudsonia*) per capsule.

Key to the Cistaceae (Rockrose Family) of Newfoundland and Labrador

- 1a. Perennial herbs with 1-several flowering shoots to 6 dm tall, produced early in the season; leaves usually alternate and deciduous; blades narrowly elliptic to oblanceolate, 1–2.5 cm long × 1.5–5 mm wide; tapering at the base, apex acute; margins entire; somewhat pubescent beneath with ± appressed hairs on the midrib and margins; inflorescence a narrow raceme or panicle; flowers small; the outer 2 narrow sepals shorter than the 3 broadly ovate, inner sepals, 1.9–2.3 mm long and nearly as wide; petals 3, reddish, obovate, soon withering; stamens 3–15, longer than the petals; style ± absent; the pinkish stigma spherical and tufted (pom-pom like); fruit an ovoid to globose capsule 1.8–2 mm long, surrounded by the persistent calyx; seeds 4–6; later in the season, prostrate, vegetative, basal shoot to 7 cm long develop; rare plants reported only from the Grand Falls area, cNfld. ***Lechea intermedia*** (largepod pinweed)
- 1b. Low, evergreen shrubs to 2 or 3 dm tall, often forming large mats or extensive colonies; leaves alternate and sessile, very crowded and overlapping; blades small, scale-like to lanceolate, 1–7 mm long, pubescent with silky (sericeous), shaggy (villous), or woolly (tomentose) hairs; flowers solitary, axillary; petals 5, yellow, oblanceolate; stamens 8–18, longer than the petals; style 1, slender, stigma minute; fruit a cylindrical capsule, 2.5–3 mm long; seeds 1–2 per capsule (*Hudsonia*). 2
- 2a. Leaves scale-like, lanceolate, 1–3 mm long × 0.5 mm wide, young stems and leaves hoary-pubescent with shaggy (villous) or woolly (tomentose) hairs; flowers on pedicels 1.5–7 mm long; stamens 9–18; disjunct plants of aeolian sand dunes and blowouts along the Lower Churchill River, central Labrador.
..... ***Hudsonia tomentosa*** (woolly heather)
- 2b. Leaves subulate (needle-like), 2–7 mm long × 0.5 mm wide; young stems and leaves pubescent with silky (sericeous) hairs; pedicels 4–10 mm long; stamens 12–18; plants of coastal beaches and barrens, and acid alpine barrens in southern Nfld. (rare in neNfld.). ***Hudsonia ericoides*** (golden heather)

Cistaceae (Rockrose Family) Comparison Chart			
Species:	<i>Lechea intermedia</i>	<i>Hudsonia ericoides</i>	<i>Hudsonia tomentosa</i>
	largepod pinweed	golden heather	woolly heather
Height	0.5–6 dm tall	0.5–2 dm tall, rarely taller	0.5–3 dm tall, rarely taller
Plants	perennial herbs ; flowering stems erect to decumbent; pubescent with appressed, silky (sericeous) hairs	evergreen shrubs , forming extensive mats; older stems are woody, glabrous	evergreen shrubs , forming clumps or extensive colonies; older stems are woody, glabrous
Leaves	± alternate, sessile or nearly so; not overlapping ; blades elliptic to oblanceolate, 10–25 mm long × 1.5–5 mm wide ; glabrous above, lower surface with appressed hairs on the margins and midrib; prostrate basal shoots have smaller leaves, 3–7 mm long × 1–2 mm wide	alternate, crowded, and overlapping (appearing spirally arranged), sessile, scale-like; blades needle-like or awl-shaped (subulate), 2–7 mm long , ascending to somewhat spreading; surfaces somewhat pubescent with shaggy (villous) hairs or nearly glabrous	alternate, crowded, and overlapping (appearing spirally arranged), sessile, scale-like; blades linear-lanceolate, 1–3 mm long, appressed to the stem; surfaces densely pubescent with short, shaggy (villous) or woolly (tomentose) hairs
Flowers	in ± cylindric racemes or panicles, usually branching from above the middle ; pedicels 1–3 mm long	solitary and axillary, pedicels 4–10 mm long	solitary and axillary, pedicels 1.5–7 mm long
Sepals	5 , with 2 small, narrow, outer sepals and 3 inner sepals, ovate, 1.5–2 mm long, with a rounded apex	5 , the 2 outer sepals smaller; the 3 inner sepals lanceolate, apices acute to acuminate	5 , the 2 outer sepals smaller; the 3 inner sepals ovate, apices rounded or often bifid (2-toothed)
Petals	3, red, obovate	5, yellow, oblanceolate	
Stamens	3–15 , longer than the petals	usually 12–18 , shorter than the petals	usually 9–18 , shorter than the petals
Pistil	ovary superior, style absent; stigma relatively large, spherical, and feathery (pom-pom-like)	ovary superior, style 1, slender , about as long as the stamens; stigma minute	
Capsule	broadly ovoid to ± globose, 1.8–2 mm long	capsules cylindric, 2.5–3 mm long , surrounded by the persistent calyx	

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