

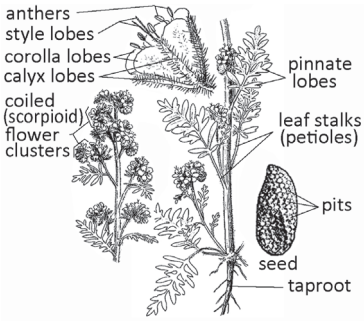
AN ILLUSTRATED KEY TO THE HYDROPHYLLACEAE OF ALBERTA

Compiled and written by
Lorna Allen & Linda Kershaw

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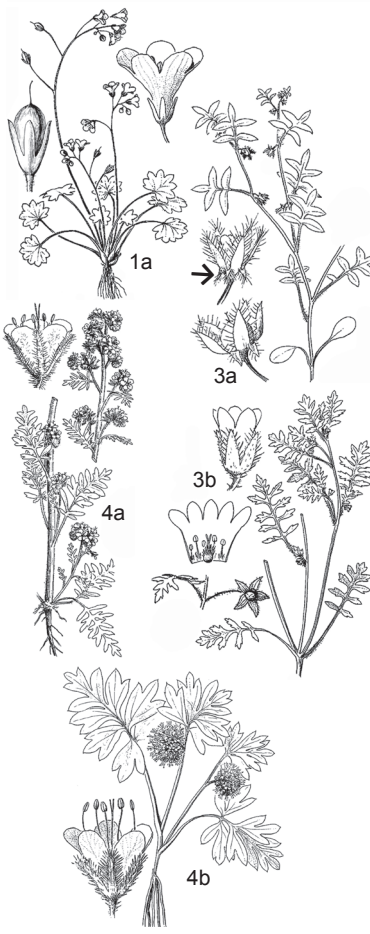
This key was compiled using information primarily from Moss (1983), Douglas et. al. (1999), and Lesica (2012). Taxonomy follows VASCAN (Brouillet, 2019). The main references are listed at the end of the key. Please let us know if there are ways in which the keys can be improved. The 2018 S-ranks of rare species (S1; S1S2; S2; S2S3; SH; SU, according to ACIMS, 2018) are noted in superscript (^{S1;S2;SU}) after the species names. For more details go to the ACIMS web site. Similarly, exotic species are followed by a superscript X, XX if noxious and XXX if prohibited noxious (^{X;XX;XXX}) according to the Alberta Weed Control Act (2016).



Phacelia

HYDROPHYLLACEAE Waterleaf Family

Key to Genera



- 01a Leaves mostly basal, kidney-shaped to rounded, shallowly lobed to deeply toothed (resembling some *Micranthes* species); plants ± hairless ***Romanzoffia sitchensis*** ^{S2}
- 01b Stem and basal leaves present (or only stem leaves), mostly egg- to lance-shaped in outline (egg-shaped to round in *Phacelia campanularia*), smooth-edged to coarsely toothed or pinnately lobed; plants variously hairy **02**
- 02a Flowers mostly solitary in leaf axils; uncommon, in swAB. **03**
- 02b Flowers in few- to many-flowered clusters (cymes) in leaf axils and/or at stem tips; variously distributed **04**
- 03a Leaf lobes 3-5, smooth-edged; 2 persistent cotyledon leaves at the stem base, green, elliptic to spoon-shaped; flower stalks nodding; calyx with tiny (<1 mm long) appendages bent-back between the sepals (→); stems with tiny, downward-pointing prickles ***Nemophila breviflora*** ^{S3}
- 03b Leaf lobes 7-13, coarsely toothed; persistent cotyledon leaves absent; flower stalks erect to ascending; calyx without appendages between sepals; stems with coarse, stiff hairs ***Ellisia nyctelea*** ^{S3}
- 04a Flowers in elongating clusters that uncoil to one side (scorpioid), over-topping the leaves ***Phacelia***
- 04b Flowers in loose, ± head-like clusters, not strongly scorpioid, over-topped by the leaves ***Hydrophyllum capitatum***



PHACELIA Scorpionweed

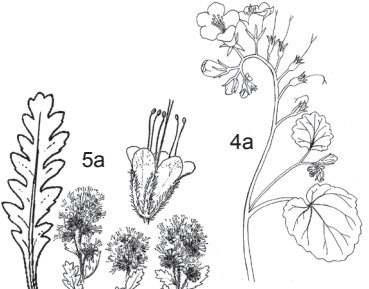
01a Leaves smooth-edged (sometimes 1(3) slender lobe below the middle) **02**

01b Leaves coarsely toothed to deeply divided. **03**

02a Annuals, with slender taproots; leaves linear; corollas 8-18 mm wide; stamens only slightly projecting from the corolla tube

. **Phacelia linearis** ^{s3}

02b Perennials with persistent thickened bases, often tufted; leaves lance-shaped to oval; corollas 4-7 mm wide; stamens projecting well beyond the corolla tube . . . **Phacelia hastata**



03a Stems uniformly leafy throughout; corollas hairless inside; plants annual or biennial, from taproots. **04**

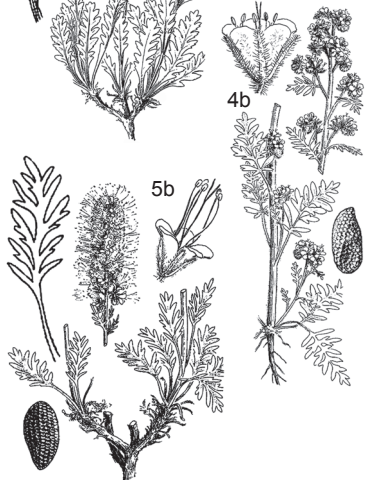
03b Stems with middle and upper leaves reduced; corollas hairy within; plants perennial, from stout, persistent, branched bases. **05**

04a Leaves egg-shaped to ± round, toothed; plants annual; corollas bright blue, up to 40 mm long; rare garden escape in cAB

. **Phacelia campanularia** ^x

04b Leaves lance-shaped in outline, 1-2X deeply pinnately divided into slender lobes; plants biennial or winter annual; corollas pale blue or whitish, 6-9 mm long; widespread, on dry, open sites from sw to neAB

. **Phacelia franklinii**



05a Leaves green, divided ≈ half-way to the midveins into triangular to broadly lance-shaped segments; corollas soon shed; plants long-hairy in the flower clusters only, usually with glandular hairs. **Phacelia lyallii** ^{s2}

05b Leaves silky with a covering of short, soft hairs, divided to the midvein into slender segments; corollas persistent; plants long-hairy throughout, with or without glandular hairs **Phacelia sericea**

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List of Species and Illustration Sources

Scientific Name	Illus. Source
<i>Ellisia nyctelea</i>	H&C
<i>Hydrophyllum capitatum</i>	H&C
<i>Nemophila breviflora</i>	H&C
<i>Phacelia campanularia</i>	LK
<i>Phacelia franklinii</i>	H&C
<i>Phacelia hastata</i>	H&C
<i>Phacelia linearis</i>	H&C
<i>Phacelia lyallii</i>	H&C
<i>Phacelia sericea</i>	H&C
<i>Romanzoffia sitchensis</i>	H&C; JM

Key to Illustration Sources

H&C = Hitchcock, C. L., A. Cronquist, M. Ownbey, and J. W. Thompson (1955-69)

JM = John Maywood.

LK - Linda Kershaw

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