# Aciphylla lyallii

**FAMILY** Apiaceae

AUTHORITY Aciphylla lyallii Hook.f.

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Herbs - Dicotyledons other than Composites

NVS CODE ACILYA

CHROMOSOME NUMBER 2n = 22

**CURRENT CONSERVATION STATUS** 2017 | Not Threatened | Qualifiers: DP

**PREVIOUS CONSERVATION STATUSES** 

2012 | Not Threatened 2009 | Not Threatened 2004 | Not Threatened

# DISTRIBUTION

Endemic. South Island, throughout wetter mountain regions, common in Fiordland, absent from Nelson.

# HABITAT

Low-alpine (1100-1400 m.a.s.l.) favours permanently wet habitat within tussock-herbfield, often overlooked.

# **DETAILED DESCRIPTION**

Variable sparse-leaved tufted herb, simple to branched leaves. **Leaves** pinnate, up to approximately 30 cm long. **Sheaths** approximately 50 x 10 mm, with pale membranous margins; **stipules** approximately 20 mm x 2 mm, tapering to pungent apex; **petioles** keeled, up to about 100 mm long, lower internodes approximately 30 mm long. **Primary pinnae** 2 pairs, up to 100 mm x 3 mm, sometimes with short accessory pinnule; margins thickened, smooth. Rarely some specimens have simple leaves and sometimes leaves are exstipulate. **Flowering stems** of male plants slender to rather stout, up to approximately 40 cm long including narrow inflorescence up to 20 cm long. **Bract-sheaths** approximately 40mm x 15 mm, thin; stipules up to 15 mm long, linear, pungent; lamina with up to 3 pairs of pinnae up to 15 mm long, terminal leaflet up to 20 mm long. **Umbels** on slender peduncles up to approximately 30 mm long; umbellules several, up to approximately 10 mm diameter, on filiform unequal rays. **Flowering stems** of female plants grooved, up to 90 cm x 5 mm including inflorescence about 20 cm long, **Bracts** erect, concealing umbels; sheaths approximately 40 mm x 10 mm, rather thick; stipules approximately 10 x 2 mm, narrowed to pungent apex; lamina of 1-2 pinnae approximately 30 mm long, terminal leaflet slightly longer. Umbellules few. **Fruit** approximately 5 mm long; mericarps 5-winged; vittae 1-2 per furrow, 2-4 commissural.





Mt Burns, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

# SIMILAR TAXA

Differs from most other similar stature species by the large sheaths that almost entirely envelop the seeds. Mark (2012) suggests when not in fruit the irregular spaced joints on the leaves can be used to confirm an identification. From the *A. montana* group, Dawson (1979), suggests in *A. Iyallii* the petiole is concave compared to convex in the former; petiole margins are acute compared to rounded; leaves of young plants are simple compared to pinnate; adult leaves may remain simple compared to adult leaves never being simple.

#### **FLOWERING**

December - January

FRUITING

December - March

#### LIFE CYCLE

Winged schizocarps are dispersed primarily by wind (Thorsen et al., 2009).

## ETYMOLOGY

**aciphylla**: From the Latin acicula 'needle' and the Greek phyllum 'leaf', meaning needle-leaf. **Iyallii**: Named after David Lyall (1817-1895), 19th century Scottish naturalist and surgeon with the Royal Navy, who explored Antarctica, New Zealand, the Arctic and North America and was a lifelong friend of Sir Joseph Hooker.

## **TAXONOMIC NOTES**

In Allan (1961), it is suggested there is some confusion regarding specimens which have been collected as *A*. *cuthbertiana*, these are the proven to be the same species and then regarded as a synonym. *A. montana* was initially treated as a synonym of *A. lyallii*, until being further researched and thoroughly described by Dawson (1979).

#### **ATTRIBUTION**

Description adapted by M. Ward from Allan (1961).

### **REFERENCES AND FURTHER READING**

Allan, H. H. 1961. Flora of New Zealand. Vol. 1. Wellington: Government Printer. pg. 477.

Dawson, J.W. 1979 Aciphylla montana Armstrong, A. lecomtei sp. nov., and related species. New Zealand Journal of Botany, 17:3, 339-351.

Mark, A. F. 2012. Above the Treeline: A Nature Guide to Alpine New Zealand. Craig Potton Publishing, Nelson. pg.148.

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 2009 Vol. 11 No. 4 pp. 285-309

## **MORE INFORMATION**

https://www.nzpcn.org.nz/flora/species/aciphylla-lyallii/