# Ranunculus callianthus

#### Distribution:

Endemic. South Island, Canterbury, (South Canterbury: Tengawai River, near Albury)

### Habitat:

Confined to limestone outcrops.

#### Features\*:

Rosettes single or forming compact patches comprising several tightly placed rosettes, appressed to the ground in exposed sites but taller in the shelter of rocks and other vegetation. Lamina  $10-28 \times 8-26$  mm, broadrhomboid, rhomboid or orbicular-deltoid, glossy, coriaceous, stiff, dark green, black-brown on proximal veins and at sinus lobe; 3(-5)-lobed, often to about halfway across lamina, adaxial and abaxial surfaces sparsely to moderately hairy with shaggy, loosely appressed white hairs, hairs up to 1.8 mm long; base cuneate to obtuse; margin crenate or serrate, sparsely to moderately hairy; apex of main and lateral lobes subacute, with white hydathode an abaxial surface. Petioles 10-70 mm long, green, dark-mottled hairs patent and sparse to dense; basal sheath broad, membranous, glabrous to sparsely hairy, entire, margin sometimes sparsely hairy. Peduncle 15-140 mm long, up to 3 mm diameter, spreading to ascending, strongly recurved in fruit; dark green and dark-mottled throughout, hairs moderate to dense, patent, white; bracts usually absent, sometimes or 1-2 simple narrow bracts. Flowers 1(-2), 21-30 mm diam. Sepals 5, 5.5-10.0 × 2.5-4.0 mm, yellow-green, caducous, abaxial surface sparsely to moderately hairy, adaxial surface glabrous, margin translucent, apex obtuse. Petals 5,  $11.0-15.0 \times 5.0-7.5$  mm, obovate-oblong, glossy, yellow with yellow-brown basal blotch above, pale vellow below. Nectary c. 1.0 mm from base of petal; scale c. 1.0 mm long, oblong or broad-oblong, apex bifid. Stamens 28-38; filaments 2.0-4.0 mm long, white; anthers 1.3-1.8 mm long, yellow; receptacle sparsely to moderately hairy; carpels 11-20, 3.0-4.0 mm long. Achenes 11-20, yellow-brown with red to redblack blotches, 4.5-6.5 mm long, ellipsoid, lateral faces compressed; body  $3.0-3.5 \times 2.0-2.7$  mm; beak strongly curved, 1.6-3.0 mm long.

#### Flowering: Fruiting:

Unknown Unknown

### Threats:

As Ranunculus aff. stylosus (CHR 515131; Manahune), R. callianthus has been assessed as 'Threatened /Nationally Critical' (Criteria A1 (< 250 mature individuals)) by de Lange et al. (2018), with the qualifier OL (one location). The one location refers to the prominent limestone scarp that runs parallel to the Tengawai River from Manahune to near Albury, from where four subpopulations have been recorded (Heenan & Molloy 2019). Heenan & Molloy (2019) note that the total number of plants has declined by about 74% in twelve years. The decline they attribute to competition with exotic weeds, degradation of associated indigenous vegetation, poor growth, and changed farm practices.

### \*Attribution:

Fact sheet prepared by P.J. de Lange (5 September 2019). Description from Heenan & Molloy (2019).

#### References and further reading:

de Lange, P.J., Rolfe, J.R., Barkla, J.W., Courtney, S.P., Champion, P.D., Perrie, L.R., Beadel, S.M., Ford, K.A., Breitwieser, I., Schonberger, I., Hindmarsh-Walls, R., Heenan, P.B. & Ladley, K. (2018) Conservation status of New Zealand indigenous vascular plants, 2017. New Zealand Threat Classification Series 22. Department of Conservation, Wellington, 82 pp

Heenan, P.B.; Molloy, B.P.J. 2019: Five new and Nationally Threatened taxa of *Brachyscome*, *Cardamine*, *Convolvulus*, *Geranium* and *Ranunculus* obligate to vulnerable limestone habitats, eastern South Island, New Zealand. *Phytotaxa* 415(1): 32-48.

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http://nzpcn.org.nz/flora\_details.asp?ID=15735