

Ranunculus trilobus

COMMON NAMES

Three-lobed buttercup

BIOSTATUS

Exotic

CONSERVATION STATUS

Not applicable

CATEGORY

Vascular

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

SIMPLIFIED DESCRIPTION

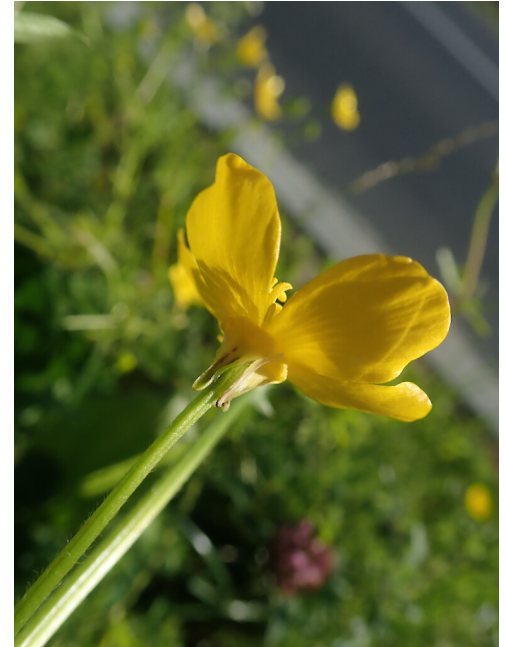
An erect, sparsely hairy annual buttercup, 10–49 cm tall. Its leaves are divided into three stalked, sharply angled leaflets. It has small yellow flowers 9–14 mm across with reflexed sepals. The flattened achenes are covered on their faces with short, blunt tubercles.

FLOWER COLOURS

Yellow

DETAILED DESCRIPTION

Terrestrial herb, annual. Stem solitary or 2–3, erect, terete, branched, 10–49 cm high, 2.0–3.5 mm in diameter, hollow, continuously pubescent with long appressed or spreading trichomes. Basal leaves with petiole 3.5–14 cm long, sulcate along the upper side, continuously hairy with appressed trichomes; lamina cordate–ovate with cordate base, 4.5–9.5 × 4.0–9.0 cm, trifid, middle segment 3-partite or occasionally unequally 2-partite with 0.5–1.0 cm long petiolule, lateral segments 3-partite or irregularly lobed, lobule margins incised dentate, both surfaces pubescent, upper surface with scattered trichomes and lower surface with continuous trichomes, trichomes transparent, appressed; cauline leaves similar to basal ones, petioles shorter, 20–30 mm long. Flowers yellow, 9–14 mm across; pedicel 10–20 mm long, pubescent with appressed hairs. Sepals 5, ovate to obovate, reflexed, 3–3.75 × 1–15 mm, sparsely hairy on lower side. Petals 5, imbricate, ovate with rounded apex, 5–6 × 3–4 mm; nectary pit covered with 0.5–1 × 0.5–1 mm scale; claw 0.5–1 mm. Stamens 25–30, 3–4 mm long; filaments 1.75–2.5 mm; anthers adnate, 1.25–1.5 mm, latrorse. Carpels 25–35, 1–1.5 mm long, glabrous, minutely papillate in the ovary region. Achenes flattened, 25–40 per head, orbicular–obovate, 2.5–3 × 1.75–2.25 mm; faces covered with short blunt tubercles, distinctly marginate, margin smooth; beak small, 0.5–1 mm. Torus club-shaped, 4–5.5 × 1.5–2 mm, sparsely hairy, trichomes 0.5–1 mm.



Local on verge, New Lynn Auckland.
Photographer: Marley Ford, Date taken:
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Local on verge, New Lynn Auckland.
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SIMILAR TAXA

Ranunculus trilobus belongs to sect. *Echinella*, whose achenes have sculptured faces bearing tubercles, spines or recurved trichomes. This separates it from all native New Zealand *Ranunculus*. Several other naturalised members of the section have spiny or hooked achenes rather than blunt tubercles: *R. arvensis*, *R. muricatus*, *R. parviflorus* and *R. sessiliflorus*. *R. parviflorus* and *R. sessiliflorus* also have smaller flowers (< 6 mm diameter) and leaves lobed only to about halfway rather than divided into stalked leaflets. The most similar species is *R. sardous*, one of the most common buttercups in northern New Zealand. *R. sardous* has tubercles restricted to the achene margins rather than scattered across the faces, although these are not always obvious. It is also more or less hirsute, whereas *R. trilobus* has only a few scattered villous hairs, and its leaves are less lobed and more overlapping. *R. bulbosus*, which is uncommon here, has smooth achenes.

Vegetatively, *R. trilobus* resembles the three-lobed buttercups *R. reflexus*, *R. urvilleanus* and *R. repens*. Its young basal leaves are ovate–cordate, becoming trilobed as they mature. It is distinguished by its more sharply angled lobes with straight-edged margins, which lack the rounded serrations typical of the other species, and by its much sparser, pubescent hairs. *R. repens* also differs in its creeping habit and stems that root at the nodes.

DISTRIBUTION

Native to the Mediterranean. It is naturalised in Australia, Europe, India, China, New Caledonia and North America. In New Zealand it was first collected in 1989 on a sandy roadside south of Houhora (Te Aupōuri, Te Tai Tokerau / Northland), but that population has not been relocated. Most records are from urban Tāmaki Makaurau / Auckland, including Waikumete Cemetery (1999), New Lynn, Blockhouse Bay and central Auckland. iNaturalist observations date from 2017. The species was formally reported as naturalised in 2025.

HABITAT

An ephemeral annual of lightly mown lawns on clay or sandy soils, mesic to dryish, in habitats similar to those of *R. sardous*. It is found on urban road verges, in cemetery lawns and on sandy roadsides. It grows with other weeds such as *Allium triquetrum*, *Bellis perennis*, *Cenchrus clandestinus*, *Cerastium glomeratum*, *Erodium moschatum*, *Hypochaeris radicata*, *Lysimachia arvensis*, *Plantago lanceolata*, *Trifolium repens*, *Veronica persica* and *Vulpia* spp.

GENUS

Ranunculus

FAMILY

Ranunculaceae

AUTHORITY

L.

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

FLOWERING

July–December

FRUITING

July–December

LIFE CYCLE AND DISPERSAL

Plants are highly fecund, producing on average about 475 seeds on 8–15 fruiting heads, with 85–94.5% germination. The tuberculate achenes can attach to the hair of cattle and sheep, and wind dispersal is also possible (Lone et al. 2014).

ETYMOLOGY

ranunculus: From the Latin ‘rana’ frog, meaning little frog and probably refers to the plants typical marshy habit where frogs abound

REFERENCES AND FURTHER READING

- Ford, M., Reinders, W.A., Lehnebach, C.A. (2025). *Ranunculus trilobus* Desf. (Ranunculaceae), a newly naturalised species in Aotearoa / New Zealand. *Perspectives in Biosecurity* 10: 10–21. <https://doi.org/10.34074/pibs.01002>
- Garnock-Jones, P.J. (1988). *Ranunculus*. In: Webb, C.J., Sykes, W.R., Garnock-Jones, P.J. (Eds.), *Flora of New Zealand*, vol. IV. Christchurch: DSIR. pp. 1013–1039.
- Lone, F.A., Dar, G.H., Wafai, B.A. (2014). *Ranunculus trilobus* Desfontaines (Ranunculaceae) – a new record for Northwest and Trans-Himalayas. *Pleione* 8: 171–177.

ATTRIBUTION

Fact sheet prepared for NZPCN by M. Ford, October 2026, based on Ford, M., Reinders, W.A., Lehnebach, C.A. (2025). *Ranunculus trilobus* Desf. (Ranunculaceae), a newly naturalised species in Aotearoa / New Zealand. *Perspectives in Biosecurity* 10: 10–21. <https://doi.org/10.34074/pibs.01002>

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/ranunculus-trilobus/>

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