

HYDROCOTYLES IN YOUR GARDEN

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We may not like to think of our native plants as weeds, but there are, nevertheless, a number which can be quite troublesome. Bracken for example, is an aggressive weed in many areas, and not all farmers appreciate the stands of Wild Irishman in their riverbeds. When it comes to garden and lawn weeds New Zealand also has a few of its own.

Hydrocotyle is a genus of about 100 species and is cosmopolitan in its distribution, although it is more common in southern temperate and tropical areas than in northern temperate regions. The genus belongs to the subfamily Hydrocotyloideae of the carrot family, Umbelliferae.

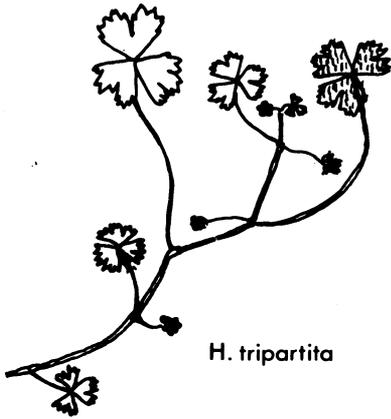
For New Zealand, Allan's Flora lists eight species. Most are plants of damp stream sides, forest margins and clearings, with one or two getting into sand dune, subaquatic, and alpine habitats. They are not easy to identify and the New Zealand species are in need of taxonomic revision; when this is done several more species will undoubtedly be recognised. Here I discuss and provide a key for only those species which occur as lawn and garden weeds in New Zealand: three of these are native and one naturalised.

Key to garden hydrocotyles

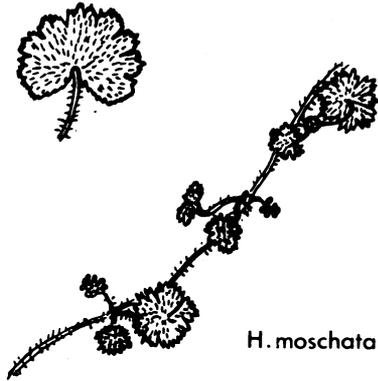
1. Leaves 3-foliolate. TRIPARTITA
 Leaves simple. 2

2. Leaves usually with some deeper incisions,
 and with numerous, distinct, sharp, somewhat
 irregular teeth, moderately to densely hairy
 above and below. MOSCHATA
 Leaves shallowly to moderately lobed and
 with fine sharp teeth or broad crenate teeth,
 glabrous or with a few hairs underneath. 3

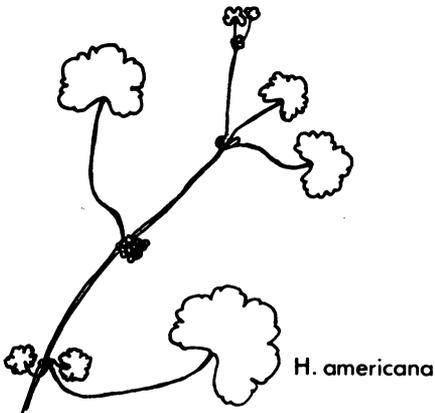
3. Flowering heads mostly more or less sessile
 leaves thin, delicate, light green. AMERICANA
 Flowering heads distinctly pedunculate;
 leaves fleshy, deep green. MICROPHYLLA



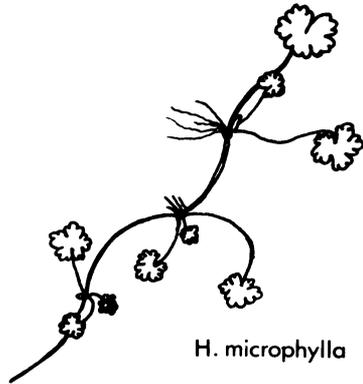
H. tripartita



H. moschata



H. americana



H. microphylla

NOTES.

1. H. tripartita

Easily distinguished from the other garden species by the leaves which comprise 3 individual leaflets. Leaflets are shiny green above, paler underneath with long white hairs.

Some of our native plants are treated under this name in New Zealand floras, but as the species was originally described from Australia, and our native plants differ in several respects from the Australian H. tripartita, a new name is needed for the native New Zealand plants (see Webb and Johnson, N.Z. Journal of Botany, 1982). To confuse things further, we now find that the true east Australian H. tripartita has recently become naturalised in the North Island. It is now well established in lawns and gardens in Auckland City and has been found as far north as Kaitaia and south to Hamilton. It spreads by stolons and forms extensive patches in lawns and also clambers over paths and garden walls.

2. H. moschata

Distinguished by the sharply toothed, moderately to densely hairy, dull green leaves.

Native to New Zealand it occurs in natural habitats of grassland and forest margins in North, South and Stewart Islands as well as on the Kermadecs and Chathams. H. moschata has adapted well to human habitation and is now a common lawn and garden weed. It can form extensive patches by rhizomatous growth and is quite common in Christchurch gardens where it prefers damp shaded corners. I am pleased to be able to report that we have managed to export this hydrocotyle: it is now reported to occur as a weed in Ireland (Flora Europaea, Vol. II, 1968).

3. H. americana

Most easily distinguished from similar species by the

leaf texture (thin and delicate) and the flowering and fruiting heads which are usually almost sessile.

Native to New Zealand but also reported as native to North and South America. The status of New Zealand plants in relation to the American species needs careful consideration. In undisturbed areas it is most often found at forest margins and in forest clearings and is distributed throughout North, South and Stewart Islands. In Canterbury it is largely confined to areas around Christchurch and Banks Peninsula. H. americana has become a very common lawn weed in New Zealand, indeed few Christchurch gardens can be without a little of it somewhere in damp shaded area of the garden. It can be seen at its best under some of the larger trees off Rolleston Avenue in the Christchurch Botanic Gardens where it covers very large areas. It appears to do far better than grass in shaded sites, but will not, unfortunately stand up to mowing or trampling.

4. H. microphylla

The small regularly toothed leaves are deep green and fleshy. Most easily distinguished by the size of the fruits (rather than the leaves which are somewhat variable), about 1.5 mm across both mericarps (the two halves of the fruit).

Native to New Zealand and common in riverbeds, grassy banks and coastal areas in North, South and Stewart Islands. It has been collected in Canterbury from Banks Peninsula to the Southern Alps. I have only a few records of it as a lawn weed, including one recent collection from Ashburton.

I would be interested in any records members have for these, or other hydrocotyles, as garden weeds.