

THE CORRECT NAME FOR OUR COMMONEST LAWN HYDROCOTYLE

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In Journal 16, 1982 I suggested that New Zealand plants known as Hydrocotyle americana should be considered in relation to American plants of the same name. The distribution given for H. americana in Allan's flora is New Zealand, and North and South America. However, Lincoln Constance, who has looked at hydrocotyles throughout Central and South America, was able to tell me that nothing like H. americana occurs in those areas. This left me with the rather odd distribution of N.E. North America and New Zealand for H. americana. Although some of our panbiogeographic colleagues might conclude from this that New Zealand and north-eastern North America once formed part of a lost continent, I decided to investigate the alternative hypothesis that plants in the two areas were not the same species. It has even been suggested that the plant might not be native to New Zealand but naturalised here.

In 1982 I was able to look at H. americana in the field at Wellmeadow Head, Concord, Massachusetts, and in 1982 and 1983 examined the extensive collections of the New England Botanical Club held at the Harvard Herbaria. The American plant turns out to be similar to the one found in New Zealand but differs in being generally more robust with larger, (1)-3-5-(6) cm diameter, thicker, fleshy leaves held on longer petioles. It also differs in habitat and habit; it is more aquatic, growing within stream edges in the deciduous forests, and does not form extensive low-growing mats as does the New Zealand plant. Nor does the American plant invade local lawns! The fruit is similar to that of New Zealand material but is slightly larger, always glabrous, and there are more fruits in each umbel. When pressed and mounted on a herbarium sheet the New Zealand and American plants look superficially similar, but there would be no danger of confusing them in the field.

There are no Australian pennyworts which match our plant, and so ours seems to be a distinct species confined to New Zealand. H. americana was described by Linnaeus from American material, so we need a different name for our plant. Fortunately, Achille Richard, in his monograph on Hydrocotyle in 1820, described H. heteromeria from New Zealand material and we can now simply revert to using this name. The specific epithet (literally meaning 'different parts') is particularly appropriate as many

plants, although not all, do produce heteromerous fruits as accurately recorded by Richard in his original description. The fruit of most umbelliferae (called a schizocarp) is made up of two, 1-seeded halves (mericarps) which separate at maturity; in H. heteromeria one mericarp is often clothed in bristly hairs while its other half is quite glabrous (see Figure). The two types of mericarp may be associated with different dispersal mechanisms or even have different germination requirements as has been found in some other heteromerous Umbelliferae.

FRUIT OF HYDROCOTYLE HETEROMERIA

