

The olives of Mt Richmond, Otahuhu

Mike D. Wilcox

There are three forms of olive (*Olea europaea*) found in the Auckland area. The first is the cultivated olive, represented by various named commercial clones and grown for its fruit, with several orchards on Waiheke Island and at Matakana. The trees are grown as grafted stock. These cultigens all typically have silver-backed leaves and large fruits, and are derived from *Olea europaea* subsp. *europaea*. The second is the wild version of *Olea europaea* subsp. *europaea* or oleaster (sometimes recognised as var. *sylvestris*), introduced as seed and grown as seedlings in such places as Cornwall Park (the "Olive Grove"), Motuihe Island, and Mt Richmond. These trees have silvery-backed adult leaves, a spinose juvenile stage with small ovate leaves, and fruits that are very variable in size, but mostly small and of no commercial value. The



Fig. 1. Spinose bush stage, wild olive, Mt Richmond, 1 April 2000 (Mike Wilcox)

natural range of oleaster is the Mediterranean region and SW Asia. Oleaster olives have gone wild at Motuihe Island, in Cornwall Park, and most abundantly on Mt Richmond, Otahuhu. The third is the African olive (*Olea europaea* subsp. *cuspidata*) with narrow, golden-backed leaves and small globose fruit. It is not spinescent at any stage. Cultivated examples of African olive can be found in the Winfred Huggins Woodland on Mt Wellington, and there are some recent plantings in Cornwall Park. The African olive has become a serious environmental weed in Hawaii, New South Wales in Australia (Cuneo & Leishman 2006), on Norfolk Island (Green 1994), and was also a nuisance on Raoul Island (Sykes 1977). Its natural range extends from southern Africa to eastern Asia.

Mt Richmond Domain in Otahuhu, Auckland, has a varied assortment of exotic and native trees,

prominent among which are olives (*Olea europaea* subsp. *europaea*) which are common growing over the grass slopes and on steep volcanic banks.



Fig. 2. *Olea europaea* subsp. *cuspidata*, Winfred Huggins Woodland, April 2007 (Mike Wilcox)

Whilst the original olives were undoubtedly planted on Mt Richmond, the predominant population has the appearance of being wild as there is a range of size classes from small bushes < 1 m height to taller shrubs or small trees up to 12 m tall and with trunks 50-60 cm in diameter. Since I first starting observing these olives in 1999 their numbers and density has noticeably increased. The Mt Richmond olives have the silvery-backed adult leaves and the spinose juvenile stage typical of the wild, oleaster form of *Olea europaea* subsp. *europaea*. The fruits are generally small on these trees, and the whole population looks to be of wild olives or oleaster of seedling origin, rather than cultivated olives. Throughout the Mediterranean Basin, oleaster olives differ from the cultivated clones by the presence of spinescent juvenile shoots, smaller fruits characterised by less fleshy mesocarp and lower oil content, as well as by a long juvenile stage that may last for several decades in some individuals.

As pointed out by Heenan et al. (1999), wild olives in Auckland and the Hauraki Gulf islands are the European olive (*Olea europaea* subsp. *europaea*), which corrects the impression given in Webb *et al.* (1988) that wild olives in New Zealand are African olive, *Olea europaea* subsp. *cuspidata*. African olive does not appear to have become naturalised in Auckland, though cultivated trees on Mt Wellington produce abundant crops of fruit.

Acknowledgements

Thanks to Jonathan Boow and Peter de Lange for directing me to the *Olea europaea* subsp. *europaea* item in Heenan et al. (1999), and to Peter Cuneo of the Department of Environment and Conservation, New South Wales, Australia, for assistance.

References

- Cuneo, P.; Leishman, M.R. 2006: African olive (*Olea europaea* subsp. *cuspidata*) as an environmental weed in eastern Australia: a review. *Cunninghamia* 9: 545-577.
- Green, P.S. 1994: Oleaceae, *Flora of Australia* 49:327-334. Australian Government Printing Service, Canberra.
- Heenan, P.B.; de Lange, P.J.; Glenny, D.S.; Breitwieser, I.; Brownsey, P.J.; Ogle, C.C. 1999: Checklist of dicotyledons, gymnosperms, and pteridophytes naturalised or casual in New Zealand: additional records 1997-1998. *New Zealand Journal of Botany* 37: 629-642.
- Webb, C.J.; Sykes, W.R.; Garnock-Jones, P.J. 1988: Flora of New Zealand. Vol. IV. Botany Division, DSIR, Christchurch.
- Sykes, W.R. 1977: Kermadec Islands Flora. An annotated checklist. *New Zealand DSIR Bulletin* 219.

Living with hairy-legs groundsel (*Senecio esleri*)

Alan E. Esler

A neighbour called out over the back fence "Come and see this thing. Mary says it is a thistle". I had to explain that it was a special plant and not a thing, and should be treated with the greatest of respect because it shares my surname – *Senecio esleri* (Fig. 1). To find a bit of common ground I said it was related to ragwort. That, to him, gave it little standing in the plant world. It was just another weed.

The conversation would have ended there but I felt a duty to tell him how plants get their particular name. In this case I related, tongue in cheek, that the name was very apt as new guidelines allow matching a botanist with some similar features in appearance and behaviour. To start with the generic name comes from the Latin *senex*, an old man, either from the white pappus (seed parachute) like an old man's hair, or from the naked receptacle (place of seed attachment), after the seeds are shed, like a bald head. It seems that the word senile comes from the same Latin root.

With a little disbelief he listened to the rest of the story as I explained that the *esleri* part of the name came about through the likeness to me – tall, gangling, hairy-legged, unattractive, goes to seed early, thin on top and is good for nothing. He was not convinced and the conversation finished there without hearing the more credible parts of the story.

Hairy-legs groundsel crept into botanical history at Whangaruru North Head, south of the Bay of Islands. On 23 Jan 1972 when Cyclone Charlotta had spent its fury on our first night camping there the family emerged from very wet tents to explore the new country. My mission was to report to Lands and Survey Department on the plant life of the farmed and forested headland. My attention was soon attracted to a plant differing from others going by the name *Erechtites* in those days. It was like the Australian fireweed *E. atkinsoniae* but the leaves were not so finely divided and the stems were bristly hairy. It was not fussy about where it grew on bared ground. Unlike Australian fireweed, it was in more open places, in this case on the edge of a small quarry that provided local road gravel. At the time David Drury at Botany

Division, Lincoln, was working on the erectitoid *Senecio* group and we convinced ourselves that it was a hybrid. Over the next many years we searched for a possible hairy parent. Suspicions were aroused when Colin Webb showed that it came true from seed. When *Flora of New Zealand IV* went to press the Whangaruru plant was recognised as a "second entity" of *Senecio bipinnatisectus* (Australian fireweed with a new name). Single leaves of each were illustrated together. Some differences in detail of the seeds were noted.

Colin Webb in *New Zealand Journal of Botany* in 1989 put hairy-legs groundsel on record as a specific entity calling it *Senecio esleri* and suggesting an Australian origin. Since then it has been seen in many more localities in the upper half of the North Island. It is obviously an alien species on the make and not a persistent native in refuges. It would not be the first time that an unclaimed Australian species was described from plants elsewhere e.g. *Acacia mearnsii* (South Africa) and *Senecio diaschides* (New Zealand). However, this one is yet to be recognised in Australia where it likely evolved with *S. bipinnatisectus*, its apparent nearest relative.

Colin's description was based on an Auckland plant (the type specimen) collected from 7 Stilwell Rd, Mt Albert (the type locality). This gave my property a botanical status. So, I live with hairy-legs groundsel but still am not sure of my responsibilities as custodian of a type locality of a plant that isn't even indigenous. I am virtually guarding a weed. Should it be protected and be a potential contaminant of native vegetation? I weed out the superfluous seedlings and take the opportunity to detail a plant in my back yard hitherto unknown to science. Interest at the moment centres around the kind of places where it grows and the forms it takes in different environments.

Hairy-legs groundsel is well adapted as a street plant by taking root in narrow spaces in pavements, commonly at the junction of the pavement and a solid wall. The stem is often prostrated at the base. This allows the root-sprouting proliferous lower stem to explore the crack and benefit from the debris that