

## 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.

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## 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.

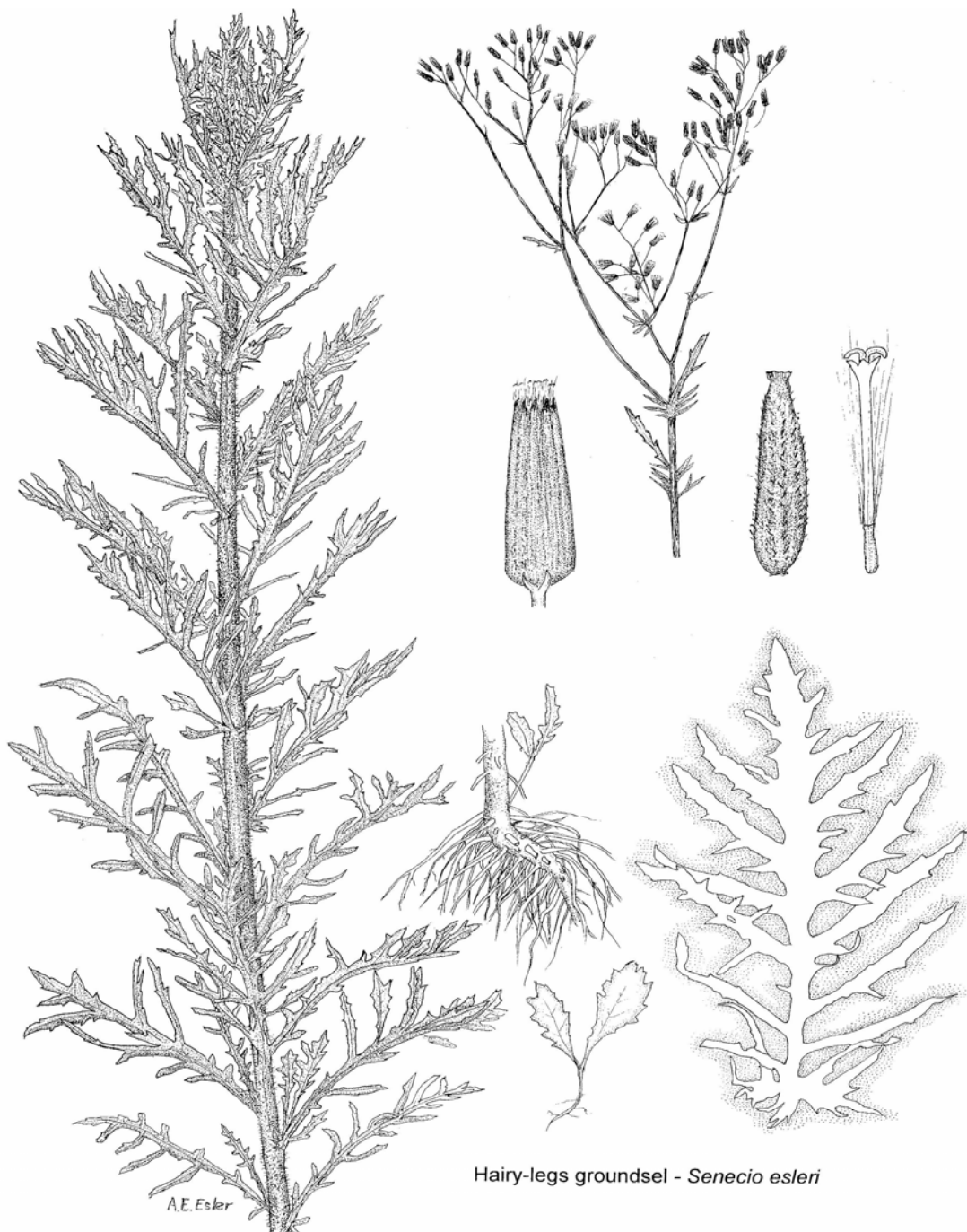
Hairy-legs groundsel crept into botanical history at Whangaruru North Head, south of the Bay of Islands. On 23 Jan 1972 when Cyclone Charlotta had spent its fury on our first night camping there the family emerged from very wet tents to explore the new country. My mission was to report to Lands and Survey 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



Hairy-legs groundsel - *Senecio esleri*

Fig. 1. Hairy-legs groundsel (*Senecio esleri*), by Alan Esler.

gathers there. In this deprived position a single-stemmed plant less than a metre tall may behave as an annual. The upper six or so branches of such a plant are devoted entirely to bearing flowers. They divide one or two times and are tipped with about 800 capitulae (minor heads) each with about 30 seeds. This terminal inflorescence is supplemented with the tips of flowering branches (each like the main stem in miniature) beneath it and reaching the same level. Soon there are 5000 capitulae crowning a plant a few months old.

Further development depends on the supply of shoots and sustenance. There may be several or many stems from the base on a vigorous plant. A single stem 2 m. tall has more than 100 nodes capable of sprouting branches bearing flowers. The primary branches on each stem develop in succession downwards as long as the progression can be sustained. If a stem leans they may sprout simultaneously. Stems may be up to 3 cm. thick at the base. At some stage it is likely that the roots fail when the plant is several years old. The plant body can be 100 times more massive than the puny annual eking out an existence on a footpath.

As a weed hairy-legs groundsel will probably continue to be a poor performer with little adaptability, no cloning ability, and little competitive strength. These deficiencies are offset, in part, by a high seed output. The arrival of the species in many districts suggests an ability to get about. However, its local spread seems limited for a plant with supposedly windborne seeds. The seeds, or the parachutes alone, do not float in the

air like thistledown. Enough seeds are produced at the type locality to stock the district but only occasional seedlings appear in neighbours' gardens.

When will it get to Australia? If the Australians want to claim *Senecio esleri*, they should find it soon. Otherwise, they will never know if it is a recent arrival from across the Tasman.

My thanks to Sylvia Guo for typing this article.

## Australia finally accepts hairy-legs groundsel (*Senecio esleri*) as one of their own

Ewen K. Cameron

On 29 Nov 2004, the morning before the launch of Alan Esler's new book, *Wild plants in Auckland*, Ross Beever in preparation for his afternoon speech enquired if *Senecio esleri* (Webb 1989) "had been recognised in Australia yet?" After checking the recent Australian floras and websites without success I asked Alex Buchanan, an ex kiwi based in the Tasmanian herbarium. Alex replied that he hadn't heard of this plant in Australia and suggested that I contact Ian Thompson at the Melbourne herbarium, who was currently revising the erechthitoid or disciform (= central florets of the capitulum bisexual and tubular, and marginal florets female and tubular (see Thompson 2004)) senecios for Australia. Thompson replied that he wasn't aware of *S. esleri* and to evaluate it he would require seeing some specimens. The few New Zealand duplicates held in Australian herbaria were loaned to him and his immediate response in Jan 2005 was that it was the same as his very recently described Australian endemic, *S. brevitubulus* (Thompson 2004). I also collected several specimens for him from around Auckland. The following year Thompson (2006) published his complete treatment of the tribe Senecioneae for Australia where he formerly recognized *S. esleri* as an earlier valid name for *S. brevitubulus* (without any acknowledgement which led to this discovery).

Hairy-legs groundsel is so far only known from five collections in Australia (SE Queensland & NE New South Wales) suggesting it may be quite rare there. Thompson (2006) argued "...as they predate the New Zealand collections and because some collections appear to be from natural areas, the species appears more likely to be native to Australia." In New Zealand it occurs in disturbed sites and the first definite collection is from Northland at Whangaruru in 1972 (CHR 227523, *AE Esler*). It is also still expanding its range – reaching the more remote areas of Northland

and Auckland regions (pers. ob.), to as far south as Rotorua in 2002 (AK 282853, *PJ de Lange 5524*) and Coromandel township in 2004 (AK 288761, *EK Cameron 12581*).

Alan Esler was the first person to recognise *S. esleri* was different from the rather similar Australian fireweed (*S. bipinnatisectus*); which led to hairy-legs groundsel being described by Colin Webb, and in an indirect way, Alan's book launch led 17 years later to the correct name being finally applied to it in Australia.

As mentioned in Alan's (Esler 2007) previous article, *Senecio diaschides* was another Australian senecio described in New Zealand. It was described by Drury (1975) and as with hairy-legs groundsel, this publication was also missed in Australia and eight years later Belcher (1983) described it as a new species (*S. cahillii*).

Three Australian disciform senecios (*Senecio bipinnatisectus*, *S. diaschides* and *S. esleri*) are currently treated as naturalised in New Zealand (Drury 1975, Webb et al. 1988, Webb 1989, Thompson 2006). In discussion with Peter de Lange, we agree that they must have been introduced to New Zealand, however, it depends on whether humans were involved in their dispersal from Australia as to whether they should be treated as exotic or as additions to the New Zealand native flora (unfortunately this is almost impossible to prove). In favour of a natural vector argument is the fact that five of the erechthitoid senecios currently recognised as native to New Zealand are shared with Australia (i.e. *S. biserratus*, *S. hipidulus*, *S. glomeratus* subsp. *glomeratus*, *S. minimus* and *S. quadridentatus*). So there was a natural vector around at the time when these species crossed the Tasman Sea.

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