

Allison gives me a poem

*purple, red, green and yellow
in a yellow plastic bag*

*the words are hidden
but she speaks them to me*

*Coe's Golden Drop, Billington, greengage, Cox's Orange,
Spartan, Black Hamburg, redcurrants, see –*

*Her finger rescues a strand of sweet red jewels from behind
a plum, drapes them over an apple –*

*the giant, the king in the middle –
the Right Honorable Peasgood Nonesuch*

Esquire

Buckets full of Beans

Chuck and Carol Landis

By 15 Feb 2006 we had picked a whole bucket full of beans off 3 plants grown from 3 of Audrey Eagle's beans that were planted 2 years ago in Warrington. Can anyone beat that?

Articles

***Aciphylla* research at the Allan Herbarium, Landcare Research, Lincoln: a progress report, 25 March 2006**

David Glenny,

Aciphylla (Apiaceae) is a genus of c. 27 species, found mainly in New Zealand but with two species in Australia. It was last revised completely by Oliver (1956).

Reasons for revising the genus

Aciphylla is an example of a recent species radiation, and as with other such radiations, taxonomically difficult mainly because of geographical variation. Oliver's revision is inadequate. While Oliver described a number of common species (e.g. *Aciphylla aurea*) the revision failed to take account of geographic variation; everything was described as a species, whereas in fact a number of widespread species show a lot of variation and are neither sympatric nor separated by any geographical barriers.

John Dawson started to revise the genus in the 1970s, publishing an overview of the genus (Dawson and Lecomte 1978), and a revision of the small pinnate species that

include *Aciphylla monroi* (Dawson 1979). John Dawson, now retired, was happy to hand further revision of the genus to me.

The revision now in preparation

My revision of the genus will be based almost entirely on morphology, but used the results of a DNA-based phylogeny presented by Radcliffe et al. (2001).

I started making collections for the revision in 1998. Progress so far has been:

- New, more adequate collections made, as *Aciphylla* was not a well-collected group and specimens were often incomplete.
- Data from these fresh specimens has been compiled for analysis and incorporated into descriptions. At least vegetative descriptions for most species are completed.
- Two keys, to fresh and dried material, are done.
- Nearly all types have been examined and the synonymy done, completion pending resolving species complexes.
- Statistical analysis done of the *Aciphylla aurea* and *Aciphylla monroi* species complexes.

What remains to be done is analysis of the various species complexes to decide on how best to deal with geographic variation in these. The species complexes that need this kind of analysis are:

- *Aciphylla ferox* – *aurea*;
- *Aciphylla colensoi* – *scott-thomsonii*;
- *Aciphylla hectorii* – *kirkii* – *poppelwellii*;
- *Aciphylla lyallii* – *montana* – *monroi* – *gracilis* – *similis* – *lecomtei*;
- *Aciphylla multisecta* – *divisa* – *polita* – *dissecta*;
- *Aciphylla squarrosa* in the wide sense (including *A. glaucescens*).

Other species don't need this kind of analysis, only adequate keys and descriptions and up to date distribution and habitat information.

My time on this revision is for the next 5 years quite limited as I'm involved in coauthoring a New Zealand liverwort flora with John Engel of Field Museum, Chicago, which is being done to a very tight schedule. I intend to publish first a revision of the *Aciphylla aurea* group of species and of the *Aciphylla monroi* – *multisecta* group of species, probably as two papers. For these two groups, what remains to do is preparation of figures from the statistical analyses already done, and illustrations showing variation in leaf morphology.

Should you have specimens or require further information we would be interested to know and can be contacted at Allan Herbarium, Landcare Research, Lincoln, P.O. Box 69, ph 03 3256700, email: David Glenny glennyd@landcareresearch.co.nz. I have provided a number of Doc staff with provisional keys to species and descriptions of species, and could provide these to others who need it for their work.

References:

- Dawson, J. W. 1979: *Aciphylla montana* Armstrong, *A. lecomtei* sp. nov. and related species. *New Zealand Journal of Botany* 22: 403–411.
- Dawson, J. W.; Le Comte, J. R. 1978: Research on *Aciphylla* – a progress report. *Tuatara* 23: 49–67.
- Oliver, W. R. B. 1956: The genus *Aciphylla*. *Transactions of the Royal Society of New Zealand* 84: 1–18.
- Radcliffe, E. A.; Watson, M. F.; Preston, J. 2001: Phylogenetic relationships of species of *Aciphylla* (Apiaceae, subfamily Apioideae) and related genera using molecular, morphological, and combined data sets. *New Zealand Journal of Botany* 39: 183–208.

A journey southwards to the subantarctic islands: finding New Zealand's flora in the middle of the Southern Ocean. *Adrienne Markey*

“Considering how many beautiful plants different from those of New Zealand these islands contain, it is obvious that they deserve a very close and careful botanical scrutiny”

Hooker 1864

Why did I go there?

The flora of the subantarctic islands, and its affinities to the flora of New Zealand has always held the interest of botanists, starting from Joseph Dalton Hooker on the Antarctic voyages of the H.M. Discovery Ships *Erebus* and *Terror* (1839 – 1843), to recent research using molecular markers to track the dispersal and evolution of plants in these regions. So, with great boldness, I found myself able to make a direct comparison of these regions. Yes, the origins and evolution of the subantarctic plants fascinate me, and fall neatly within my interests in plant systematics, ecology, biogeography and phylogeography. Plus, it offered a chance to collect both *Coprosma perpusilla* ssp *subantarctica* and *Nertera depressa* from their southernmost distributions and to complement current studies that I, and fellow researchers, had in progress.

Strangely enough, because of the very high level of floristic affinities between these particular subantarctic islands and the montane – alpine regions of New Zealand, I expected to see a scene somewhat like that on Swampy Summit or Maungatua (now Maakatua) – except with copious quantities of megaherbs, an absence of pungent *Aciphylla*, a far greater abundance of seabirds and a different species of *Chionochloa*. Not that there is anything wrong with the montane - alpine tussock grasslands flanking Dunedin, but it may be sacrilegious to some to compare these iconic southern islands with the greater Dunedin metropolitan area! Therefore, when I received the chance to head south and compare the two regions, it was a dream come true! Opportunities to visit the subantarctic islands are, for botanists and botanical enthusiasts, certainly very rare. But two Otago BotSoc members made the journey last year; both me (searching for *Coprosma* and *Nertera*; and Alex Fergus (who was collecting insects).