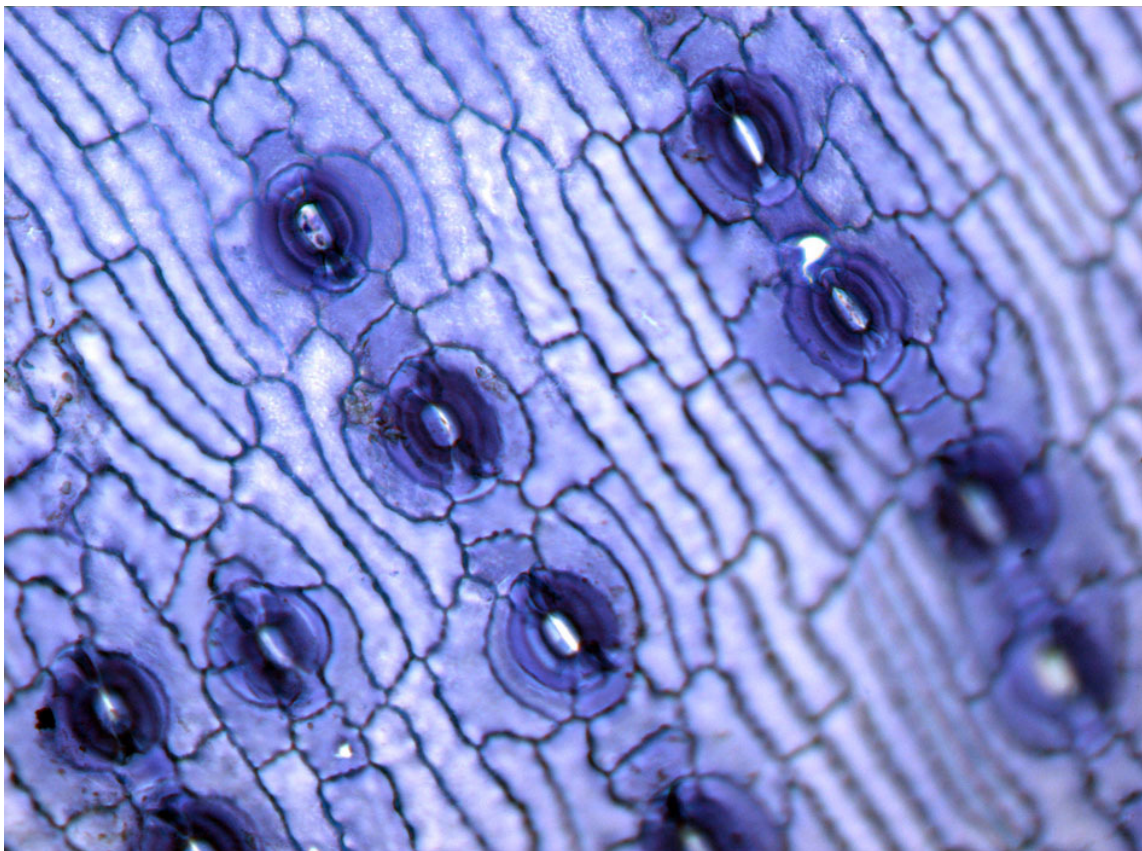


So far, in the leaves, she has found no ferns, 1 conifer, 4 monocots and a variety of dicots, the most prominent being those from the Lauraceae family, which is now represented in New Zealand by *Beilschmiedia* and *Litsea*. There was no evidence of Lauraceae pollen. Other means of identification are the pattern of cells around trichome or hair bases and stomatal arrangements so Jennifer has been recording these as well. The low number of epiphyllus fungi and the presence of sub-tropical trees indicate a low rainfall, warm climate for this era and location.

One could easily appreciate the time and effort involved in the research and clearly it is a journey of immense pleasure for someone as dedicated to detective work and detail as Jennifer.

20 million year old fossil stomata on *Podocarpus* sp. leaf- *Jennifer Bannister*



18th March 2006, **BotSoc foray to Akatore**

Harry Livesey

On a chilly Saturday morning a small number of people gathered outside the Botany building under a sky that threatened rain. Squeezing into three cars we completed the short journey to the Akatore river without losing anybody along the way.

We were visiting a remnant of coastal shrub land that covers the hill slope on one side of the Akatore River. The area is particularly fertile owing to the proximity to the Akatore fault and, hence the broken nature of the rock. The shrub land at Akatore supports a diverse range of species and some particularly rare species among them.

The low tide gave us plenty of room to amble along the river bank where Mike Thorsen pointed out many species of interest. These included marsh ribbonwood – *Plagianthus divaricatus* – a relative of ribbonwood that likes brackish situations and is often confused for a small coprosma; *Korthalsella clavata* – a hemi-parasitic mistletoe; *Meliccytus flexuosus* – a relative of mahoe that is divaricating and has almost no leaves with the stems being the main photosynthetic organ; narrow-leaved lacebark - *Hoheria angustifolia* – rare nationally but common around Otago and Southland; and *Olearia fragrantissima* – a deciduous tree with branches that zigzag between leaves.

Of special interest was the rare and threatened *Coprosma obconica* – so named for the obconic shape of its fruit. Two shrubs were previously known from this area, and on this occasion we managed to add a third.

Once we reached the river mouth there was a brief break for lunch before exploring the rich flora of the coastal platform. Plants of interest were: *Carex litorosa*- a coastal sedge in serious decline, and *Raoulia subsericea* – a species of vegetable sheep belonging to a genus I am more used to associating with alpine environments. We failed to find *Myosotis pygmaea* which had been seen in the area before, but found a healthy population of *Lepidium tenuicaule*, most individuals of which were particularly large and green.

All in all a very pleasing day, the threatened rain never eventuated and we had a fine wander along the scenic Akatore. My day was also completed after a find near the car-park of plentiful juicy *Rubus fruticosus* - delicious in apple crumble.

Akatore Lichen list: Some of the lichens on one short Coprosma twig overhanging the estuary we have identified so far include: *Chrysothrix candelaris*, *Lecanora* sp, *Megalospora gomphaloma*, *Opegrapha agelaeoides*, *Pyrenula deliquescens*, *Ramalina glaucescens*, *Teloschistes chrysophthalmus*, *Thelotrema lepadinum*, and *Usnea* sp. In places the crustose lichen, *Opegrapha diaphoriza* formed a distinct white zone on the bank of the estuary.

Allison Knight and Jennifer Bannister

BSO AGM 5 April 2006

Allison Knight

Didn't take much more than 15 minutes to elect and welcome a new Chairman, Secretary, Event Manager, Web Manager, Communication officer, Talks co-ordinator and 2 new committee members, not forgetting to thank heartily the out-going and the remaining office-bearers. Details on back page and web site. A new botanical photographic competition was announced, see p20, and reminders given for the BSO Audrey Eagle Botanical Drawing competition. Then followed a mistletoe feast – an authoritative talk and an intriguing video.....