

Acrocarps Workshop

Preston Montford

8-10 February 2013

Fifteen members of the BBS met in Shropshire over a wet weekend to study acrocarpous mosses and practice identification techniques.

The workshop was organised by Sharon Pilkington

This training course was meant to complement the very successful pleurocarps workshop organised by Martin Godfrey in November 2012. That there is considerable demand for such broad-based courses was demonstrated when all fifteen places were filled within weeks of the workshop being announced in *Field Bryology*.

Our setting was the congenial surroundings of the Preston Montford Field Centre, near Shrewsbury, where the helpful staff of the Field Studies Council had set out a laboratory of microscopes for us. Participants had travelled from the four corners of the kingdom, so after a hearty meal PM-style on Friday evening we spent the next few hours getting to know one another, setting up equipment and browsing through useful books and keys.

When putting the course together, I thought it



△Above: This sloping tree trunk offered a great opportunity to compare epiphytes *in situ*. Below: Looking at pioneers of barish ground near the kitchens: *Funaria hygrometrica*, *Bryum rubens* and *Ceratodon purpureus*. J Allinson

really important that it should be flexible enough to accommodate the needs of bryologists with differing levels of expertise and from different parts of the country. I also wanted everyone to go away from the course feeling confident about the distinguishing features of the major and/or commoner genera of British bryophytes.

On Saturday morning, replete after one of PM's legendary breakfasts, we kicked off with a talk demonstrating some of the field and microscope characters which distinguish genera such as *Polytrichastrum* from *Atrichum* and *Schistidium* from *Racomitrium*. A set of suggested practical exercises followed, applied to samples of nearly 100 species that I'd collected from a range of habitats around the country. Most of these were common and widespread but I had included small collections of a few rarer species e.g. *Syntrichia virescens*, *Didymodon acutus* and *Gymnostomum calcareum* for those who wanted



△Above left: Spinose double leaf teeth of *Mnium hornum*. △Above right: A thin band of stereids seen in cross-section of the costa differentiates *Syntrichia virescens* from several similar species. S Pilkington



a bit of a challenge. The practical exercises were designed to introduce and fine-tune the techniques that are needed to identify bryophytes through the keys in, for example, Smith's flora. So, while some people practised their leaf sectioning skills to compare the lamellae of *Polytrichastrum formosum* and *Atrichum undulatum* (declared reasonably straightforward), others attempted to mount exothecial cells of *Schistidium maritimum* and *S. crassipilum* on a slide (pronounced very fiddly).

Before lunch another talk covered *Fissidens* and many of the acrocarp genera which have long thin leaves, such as *Dicranum*, *Dicranella* and *Bartramia*. Subsequently, everyone experienced the elation of successfully cutting, staining and mounting on a slide a nerve section of *Campylopus* – no mean feat. Again, there was plenty of opportunity for 'personal study', through practical exercises tailored to various species from *Fissidens gracilifolius* to *Dicranum majus*.

We took advantage of a window of dry weather in the afternoon to go acrocarp-spotting in the grounds of the centre. Trees provided an opportunity to compare species of *Orthotrichum*, *Ulota* and *Zygodon* whilst mossy tarmac and soil offered opportunities to learn about habitats and ecological contexts of species of *Didymodon*, *Barbula* and *Syntrichia*. At Preston Montford *Syntrichia*

latifolia is not only frequent on trees in the flood-zone of the river, but is also a frequent colonist of tarmac paths and car-parks, where it was duly admired. Back in the lab, a lively discussion ensued when we attempted to get to grips with the finer points of identification of *Ceratodon purpureus* without capsules – I think that by the end of the weekend everyone felt able to pass the 'Ceratodon test'!

On Sunday the day followed a similar alternating talk-practical format as we studied numerous other genera. Unfortunately the weather deteriorated so most of us were content to carry on working in the warm and dry of the lab. Several participants had also brought moss samples from home and used their new-found skills to identify these.

As tutor, I was anxious that the workshop should live up to the individual expectations of everyone who had paid good money to attend. However, as the weekend drew to a close I felt that all participants had worked incredibly hard and it was really rewarding to be on the receiving end of all that new-found confidence.

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