

A new record of *Grimmia crinita* in England

During a recent churchyard survey in Surrey, Howard Wallis came across an unknown moss which turned out to represent an interesting and unexpected species range extension.

There are two previous records of *Grimmia crinita* in England. It was discovered in 1872 by J.E. Bagnall who found a small patch on an old lime-plastered wall of a bridge near Hatton in Warwickshire, which apparently survived there until 1882. It was not seen again until 1999, when it was found in Cornwall on an unshaded, South-East-facing, vertical concrete wall of settling tank in china-clay works, near Treviscoe by Dr D.T. Holyoak. Further information on the distribution and ecology of this species is given by Greven (2011).

On the 3rd January 2013 I went to record in the churchyard of St Michael's, Betchworth, Surrey. I approached the church from Church Street and started by looking at mosses on the low wall surrounding that part of the churchyard. The first species I looked at consisted of a flat, dark but hoary mat growing vertically on calcareous mortar. The hair points on the leaves were very long, longer than the lamina in many cases and all more or less



△Above: Upper leaf of *Grimmia crinita*. H. Wallis

pointing in the same direction. This was clearly a species I had never seen before, so I removed a small sample including an immature capsule.

On examining the species under a microscope the leaves were mostly obovate, with long slightly denticulate hair points. The hair points were flat at the base and decurrent down the margins. The leaf base narrowed at the point of insertion and was widest above mid-leaf. The basal cells were hyaline, and the basal marginal cells were 2-3 times as long as wide. Cells above were shortly rectangular, incrassate and sinuose. In section the leaf was unistratose throughout except the costa which was mostly two cells wide with a few stereids. The immature capsule, on a short curved seta, was more or less immersed in the hair points of the perichaetial leaves.

The sample was sent to the moss recorder, T.L.



△Above left: Habit. H. Wallis; △Above right: Immature capsule. H. Wallis

Blockeel, who was able to see that a peristome was present even though the operculum was still in place and determined the species as *Grimmia crinita*.

Acknowledgments

I wish to thank the Reverend Carol Coslett, Rector of St Michael's, Betchworth for granting me permission to carry out my survey of the churchyard, and Mr T. L. Blockeel for determining the species as *Grimmia crinita*.

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References

- Greven, H. (2011) Ecology and distribution of *Grimmia crinita* Brid. *Field Bryology* **104**: 18-21.