

## *Grimmia tergestina*: frequent and fruiting on limestone roof tiles in the Cotswolds

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Following the discovery of *Grimmia tergestina* in Tetbury, Gloucestershire (Martin & Greven 2007), further attempts to find more local colonies of the moss on walls, wall tops and churchyards revealed nothing. However, I recently had access to a neighbour's roof, constructed of Cotswold stone tiles, where I found over 100 cushions of *G. tergestina*. I then examined a large number of such roofs in Tetbury with binoculars and found *G. tergestina* to be present on most of them. It is of course

difficult to be certain of identification with binoculars - but *G. tergestina* is distinctive. When dry (Figures 1 and 2), *G. tergestina* forms flat cracking patches that are greyer in comparison to its usual associates *Schistidium crassipilum*, *Grimmia pulvinata* and *Syntrichia intermedia*. Well-grown plants form taller cushions, but these are still easily distinguished from *G. pulvinata*. When wet (Figures 1 and 2), *G. tergestina* is (as only bryologists would say) – a distinctive green!

Looking further afield (Figure 3), *G. tergestina* was growing on Cotswold roof tiles at Didmarton church porch and from a low roof in Malmesbury (v.-c. 7) both within a 6-mile radius of Tetbury. More distantly, *G. tergestina* was seen on roofs in Burford, Oxfordshire (v.-c. 23) and confirmed from gravestones in the town churchyard. *G. tergestina* also grew on a low bus shelter roof in Painswick, East Gloucestershire (v.-c. 33). In the process of this search new records for *G. orbicularis* and *Schistidium elegantulum* were found on stone tiles. These frustratingly inaccessible roofs might well harbour more records of interesting local species.

*G. tergestina* is present with fruit from roofs in Tetbury, with ripe capsules present in May (Figure 2). This is the second record of fruit in Britain, the first being from Argyll in 1996. We now appear to have a well-established species that is actively spreading by spore. From my limited observations of *G. tergestina* in the Cotswolds,



**Figure 1.** Dry (upper) and wet (lower) cushions of *G. tergestina* on limestone roof tiles, Tetbury, Gloucestershire (with central small cushion of *G. pulvinata*). Photo: P. Martin.



**Figure 2.** Dry (upper) and wet (lower) female cushion of *G. tergestina* with capsules, limestone roof tile, Tetbury, Gloucestershire. Photo: P. Martin.

I have found male colonies to be far more numerous than female. With some hesitation, I suggest that female cushions are distinct from male in forming neat, round, small to medium sized cushions in contrast to the male plants forming flatter, spreading, irregular patches.

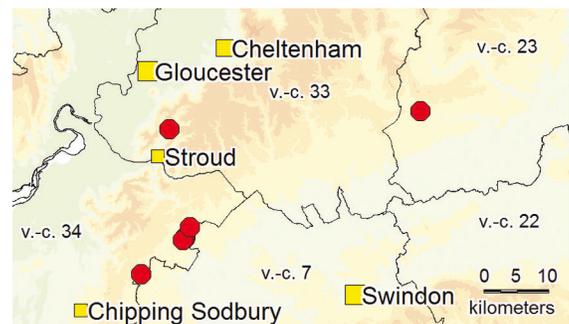
Clifton-Taylor & Ireson (1983) describe how the stones for these roofs are quarried near the surface of the ground - no deeper than 2m. Because of this ease of quarrying, these stones were known as 'presents'. The tiles were originally laid on a bed of moss or at least moss was driven down between the joints. To perform this task, there was a special tool known as a 'mossing iron'.

They also give a list of areas that have limestone tile roofs: "Dorset, S. and E. Somerset, N.W. Wiltshire, the E. half of Gloucestershire, S. E. Worcestershire, W. and N. Oxfordshire, Northamptonshire, Rutland and the Kesteven division of Lincolnshire". It might be worth looking for *G. tergestina* on roofs in these areas, as well as buildings outside these regions, for example the roof of the Holy Sepulchre church at Cambridge, where Cotswold tiles were used for roofing.

Hopefully, the distribution of stone tiles noted by Clifton-Taylor & Ireson will help people to locate more records of *G. tergestina*, though I'm not sure the authors would approve - as they write of the roof tiles: "They are very attractive to mosses and lichens, which in moderation can be a pleasure; in profusion, however, these are not welcome, as they encourage birds to search for insects and, where mortar is exposed, to peck at it for grit: moss also holds the damp".

## References

- Martin P, Greven H. 2007.** *Grimmia tergestina* in Britain. *Field Bryology* **92**: 2-4.  
**Clifton-Taylor A, Ireson A. 1983.** *English stone buildings*. Orion.



**Figure 3.** Records of *Grimmia tergestina* from the Cotswolds.