**Grimmia hartmanii**

Hartman's Grimmia

Identification  
*G. hartmanii* forms green to yellow-green tufts or patches, varying from 1 to 4 cm deep, with individual shoots easily breaking apart when removed from the substrate. Leaves are 3–4 mm long. Dry leaves are held straight and appressed to the stem, the upper leaves slightly wavy and sometimes all tending to turn to one side. The leaves spread widely when moist, often bending backwards, and again the upper leaves may point to one side. The best field character is the clusters of brownish, raspberry-shaped gemmae on the tip of the upper leaves. These are not always present, however, and should be searched for carefully with a hand lens when moist. The leaf margins are recurved, the leaves keeled and the leaf blade gradually tapers into a usually short hair point. Capsules are unknown in the British Isles.

Similar species  
Superficially resembles a number of other species, including *G. trichophylla* (p. 529) and *G. lisa* (Smith, p. 452), so microscopical examination is advisable. However, these two species lack the clusters of brownish gemmae on the leaf tip (but they do occasionally have gemmae in the leaf axils), and dry leaves are slightly wavy compared to the rather straight leaves of *G. hartmanii*. *G. anomala* was found in Ireland in 2009; it has yellowish (rather than brownish) gemmae, and shorter, broader leaves; apparent *G. hartmanii* with straight leaves, rather than leaves that tend to turn to one side, should be collected for checking with a microscope.

Habitat  
*G. hartmanii* grows on moist or periodically irrigated, base-rich to mildly acidic rocks, usually but not always near water, and either in shade or exposed. A typical habitat is on boulders in lightly shaded, wooded ravines where humidity is high, a niche not normally occupied by other *Grimmia* species.

*Photos Graham Motley & Michael Lüth (inset) Text Ron Porley*