**Grimmia orbicularis** from China – a species new to East Asia

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*Grimmia orbicularis* (Grimmiaceae) is reported for East Asia from China for the first time. A brief description and digital photographs of the species are provided, and the characters that distinguish it from the similar *G. pulvinata* are discussed.


*Grimmia orbicularis* (Grimmiaceae) wird neu für China und damit auch für Ostasien nachgewiesen. Eine Beschreibung und Abbildungen der Art ergänzen die Arbeit und die Abgrenzung zur ähnlichen Art *G. pulvinata* wird diskutiert.

**Key words:** *Grimmia*, Grimmiaceae, mosses, new record, East Asia, China.

**Introduction**

The genus *Grimmia* Hedw. (Grimmiaceae) is represented worldwide by approximately 100 species (Greven 2003) growing mainly in dry, temperate or cold environments. In China, *Grimmia* is represented by 30 species (Cao & Vitt 1986, Cao et al. 2003, Greven 2003, Jia & He 2013, Feng et al. 2013, 2014, Greven & Feng 2014). During a recent field trip in the Altun Mountains National Nature Reserve, Xinjiang Uyghur Autonomous Region, we collected a special species of *Grimmia* which exhibit unusual features of unistratose leaf margins and laminal cells, characters which are unknown in any of the known Chinese and East Asian species of the genus. After a detailed critical examination of specimen and consulting the relevant literature (Maier 2002, Greven 2003, Ignatova & Muñoz 2004, Hastings & Ochyra 2007, Erzberger 2009), we concluded that the samples correspond to *Grimmia orbicularis* Bruch ex Wilson, representing a new addition to the East Asian moss flora.

**Results**

*Grimmia orbicularis* Bruch ex Wilson (Fig. 1).

**Description.** Plants 1.2–2.0 cm high, grayish green; stems erect, branched, central strand developed; leaves appressed when dry, erect when moist, 1.8–2.3 × 0.5–0.7 mm, broadly lanceolate, broadest at mid-leaf, abruptly narrowed to obtuse apex, keeled above; margins recurved in the middle of the leaf on both sides, unistratose; hair-points short to long, smooth to denticulate; costa weak proximally, projecting on abaxial side; lamina completely unistratose, upper and middle laminal cells 7–12 μm, rounded quadrate to subquadrate, walls incrassate, sinuose, smooth; basal marginal cells short- to long-