**EUPHORBIA EDGEWORTHII BOISS. (EUPHORBIACEAE), A NOVELTY FOR THE FLORA OF CHINA**

Euphorbia edgeworthii was described from the northwest Himalaya (Boissier, 1862). This description was based on a single herbarium specimen collected by M.P. Edgeworth near Leetee (now India, Uttarakhand State, Kumaon Division). Hooker (1890) accepted this species in his “Flora of British India” but mentioned that it could be only “a state of *E. pilosa*”. Most of Hooker’s records of *E. pilosa* (which is in fact a Siberian species), however, belong to *E. cognata* (Klotzsch & Garcke) Boiss. or *E. cornigera* Boiss. and not to the true *E. pilosa*. According to the most recent classification of *Euphorbia* subgen. *Esula* (Riina et al., submitted) *E. edgeworthii* belongs to sect. *Helioscopia* Dumort.

Euphorbia edgeworthii and *E. cashmeriana*

Euphorbia edgeworthii was accepted by Govaerts et al. (2000), but recently Balakrishnan & Chakrabarty (2007) synonymized it with *E. cashmeriana* Royle, although they did not record the latter for Uttarakhand. In a recent treatment of *Euphorbia* for India, Binojkumar & Balakrishnan (2010) accepted the same delineation but mentioned that they had no access to any specimens of *E. cashmeriana* and made their conclusion only on the description and illustration in Royle (1839).

Unfortunately, the type specimen of *E. cashmeriana* (LIV) is represented only by a few leaf fragments and does not provide necessary data about species habit. However, there is a good illustration of the upper part of the plant (Royle, 1839: tab. 82, fig. 4). Close examination of this illustration shows that *E. cashmeriana* has three subcyathical raylet-leaves, and this feature is also mentioned in the species description — “foliis floralibus tribus” (Royle, 1839: 323). *Euphorbia edgeworthii*, however, has two raylet leaves — this is clear from the examination of the image of the type specimen (http://apps.kew.org/herbcat/getImage.do?imageBarcode=K000246227). According to my experience, this character is usually species-specific for *Euphorbia* sect. *Helioscopia*. So my opinion is that there are no grounds to treat *E. edgeworthii* as a synonym of *E. cashmeriana*. The latter name is likely a prior name for *E. cognata* (Geltman, 2008). However, it is clear that this species complex of perennial high montane Himalayan *Euphorbia* sect. *Helioscopia* (including *E. cashmeriana*, *E. cognata*, *E. cornigera* and *E. khasyana* Boiss.) needs to be more carefully revised.
Fig. 1. Herbarium specimen of Euphorbia egdeworthii from Xinjiang (SHI).
Euphorbia edgeworthii in China

During studies of holdings of the herbarium of the Shihezi University, Xinjiang, China (SHI), I found a specimen which is likely belong to E. edgeworthii: Xinjiang, [Hejing county], Hejing Forest Park, from Lalati to Bayingburuke [Bayangbulak], montane meadow, sunshine slope, alt. 2200 m, 21 VII 1999, Ping Yan, N 19 (Fig. 1). This is only the second known locality of this species and its first record for China; neither E. edgeworthii nor E. cashmeriana were previously listed for China (Ma, Gilbert, 2008; Ma, Tseng, 1997) or Xinjiang (Kuanmien, 2011).

The finding of E. edgeworthii so far from its locus classicus is interesting but not very surprising. There are several examples of the occurrence of Himalayan species in Tian Shan (see Kamelin, 2010). As for the genus Euphorbia, E. tibetica Boiss. and E. kanoria Boiss. also have a similar distribution pattern.

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LITERATURE


