

Comments on the Red Data Book of endangered plant species of Mongolia

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Abstract

A more detailed categorization is proposed for the future Red Data Book of endangered plant species of Mongolia. While the most recent Red Data Book for Mongolia has its own scale, a future edition should adopt the international categorisation of the International Union for the Conservation of Nature (IUCN). As a basis for a more detailed assessment of the degree to which plants are endangered, research on the flora of Mongolia should be intensified by elaborating monographs of all 16 phyto-geographical regions. So far, such monographs have been published for four phyto-geographical regions: Khovsgol, Khentii, Khangai, and Eastern Mongolia. The responsibility of Mongolia for the global conservation of a given species should be assessed. Mongolia is responsible for those species which have their main distribution in Mongolia or for which Mongolia is part of the range center.

Key words: conservation, endangered plant species, Mongolia, Red Data Book,

Introduction

The Red Data Book is an important instrument for the protection of species and their habitats (Collar, 1996). To obtain a Red Data Book that is comparable with those of other countries it is essential to use well-defined criteria for the inclusion of species. Compiling a Red Data Book of endangered plant species is particularly difficult for Mongolia because the country has a huge geographical diversity. Furthermore, the large area of Mongolia makes it difficult to get a complete picture of threats to the native flora and their distribution and frequency (Gubanov, 1996; Grubov, 2001). Despite these difficulties, Red Data Books of endangered species of Mongolia have been produced (Mongolian Red Data Book, 1987; Shiirevdamba *et al.*, 1997). Though the second edition has been considerably improved in comparison with the first one, further improvements are necessary to meet the standard of countries with a more extensive knowledge of their flora and a longer tradition of compiling Red Data Books.

More densely populated countries, such as Germany, started compiling Red Data Books of endangered species earlier than Mongolia because the higher human population and earlier industrialization resulted in more drastic environmental changes, compared to sparsely populated countries such as Mongolia (Rauschert *et al.*, 1978; Korneck & Sukopp, 1988). While the first German Red Data Book

included well-known groups of organisms, such as vascular plants, birds or mammals, nowadays such lists are available for numerous groups including fungi, lichens and bryophytes, as well as selected groups of algae or invertebrates (BfN, 1996, 1998). Furthermore, Red Data Books of habitat types and plant associations have been published (Preising, 1990–2003; Von Drachenfels, 1996).

Though the German Red Data Books contain much more detailed information than the Mongolian Red Data Book, it is questionable whether the German system for compiling these books should be applied to Mongolia. This is because categories used in these Red Data Books are unique to Germany and are different from those used in most other countries. A unique system of estimating the degree of threat may be justified in a country with a long-lasting tradition in nature conservation, such as Germany. However, in Shiirevdamba *et al.*'s (1997) Mongolian Red Data Book categories used differed from the international system employed by most other countries of the world (IUCN, 2001). It is doubtful whether this is advantageous. Therefore, we compare the categories presently used in Mongolia with the international system proposed by the International Union for the Conservation of Nature (IUCN) and offer suggestions how a future Red List of Mongolia's endangered plant species could be improved.