

Forage Plants in Mongolia

Sodnomdarjaa Jigjidsuren and Douglas A. Johnson, 563 pages, 308 colour plates, 6 maps, 6 black and white plates and drawings and landscape pictures. Ulaanbaatar, 2003.

Sodnomdarjaa Jigjidsuren and Douglas A. Johnson's *Forage plants in Mongolia*, 1st edition, is among the most complete and modern guides to forage plants in Mongolia. There are 6 colour habitat/scenery photos, which include some commonly distributed habitat types. The text is written in Mongolian and English languages and should be a useful aid for foreign and Mongolian researchers, botanists, students, herders and those interested in natural forage plants.

The book has seven chapters. The first two chapters are an especially valuable source of background information about geographic features, biological and ecological peculiarities of pasture vegetation. The remaining chapters describe forage plant species belonging to different families. For example chapter three describes all forage species belonging to Poaceae (grasses) family. The text includes scientific name, local name, morphological features, development cycle, distribution, site preference, palatability, nutrient value and significance. Index 1 consists of over

100 pages with 267 colour photographs and illustrations of species mentioned in the text. About 323 species of forage plant are described. The book also contains information about seed features of forage plants. Forage plants in this book occur in the main pasture regions of Mongolia such as high mountain pasture, mountain taiga pasture, mountain forest steppe, grassland and desert pasture. Most of the photographs were taken when the plant was blooming, therefore the book is a very useful identification key. Index 2 shows photographic plates of reindeer forage plants, the first photos showing reindeer pasture vegetation. Index 3 is a table of Latin, Mongolian and local names referenced to the associated colour plates. Species are listed alphabetically by Latin name. It is a useful table making the book a quick and easy guide to use. The final Index 4 is an alphabetical list of Mongolian names with page and plate number. In summary, I would say that the book is an informative and well illustrated guide to the forage plants of Mongolia.

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Mongolia is a country in central Asia bordering China and Russia with a broad range of plant species. The country's plants provide food and habitats for many different animals and are used for decorations, while some have medicinal value as well. Mongolia shares much of its native flora with Russia, China, and the Korean Peninsula. The whole of Mongolian region is a convergence and coexistence of plants which originated from the great Siberian Taiga and central Asia Steppe and desert. Around 975 species out of the 3,000 flowering plant species found there are utilized for traditional medicine in the country. Most of these plants are wild and are adapted to the extreme weather conditions in the country. Local Mongolian Use of Forage Wild Plants Statistics. Latin Name Mongolia Name Animals and methods of feeding. *Allium ramosum* herin-gogod Fda. (rich nutrient). *Allium senescens* mangir Fda. (rich nutrient). Handbook of Seed Plants in Inner Mongolia. Hohhot: Inner Mongolia Education Press, 2010. The Editorial Committee of Inner Mongolia Plant Annals. Inner Mongolia Plant Annals. 2nd Ed. Hohhot: Inner Mongolia Peoples Publishing House, 1998. V. 1. The Editorial Committee of Inner Mongolia Plant Annals. Inner Mongolia Plant Annals. 2nd Ed. Hohhot: Inner Mongolia Peoples Publishing House, 1990. V. 2. The Editorial Committee of Inner Mongolia Plant Annals. Inner Mongolia Plant Annals. 2nd Ed. Hohhot: Inner Mongolia Peoples Publishing House, 1989. Where tree planting takes place in town or city centers it is often with larch, which is bare in winter. Mining is the cause of a considerable amount of land degradation and little has been done in most cases to rehabilitate land destroyed by mining or oil drilling operations. Information on current livestock numbers and estimates of forage availability and an indicative feed balance have been made for all provinces of Mongolia. These show that many provinces are overstocked and those provinces with an apparent surplus of forage are usually those where water supply limits grazing. Forage plants of Mongolia. Ulaanbaatar, Mongolia: ADMON Press. Google Scholar. Morinaga, Y., Chuluun, J., & Takatsuki, S. (2016). Effects of grazing forms on seasonal body weight changes of sheep and goats in north-central Mongolia: a comparison of traditional nomadic grazing and experimental sedentary grazing. *International Journal of Pure and Applied Zoology*, 4, 124–126. Google Scholar. Jigjidsuren S, Johnson DA (2003) Forage Plants of Mongolia. Admon, Ulan Bator. Google Scholar. Li SG, Asanuma J, Eugster W, Kotani A, Liu JJ, Urano T, Okikawa T, Davaa G, Oyunbaatar D, Sugita M (2005) Net ecosystem carbon dioxide exchange over grazed steppe in central Mongolia. *Global Change Biol* 11: 1941–1955. CrossRef Google Scholar. Pyankov, VI, Gunin, PD, Tsoog, S, Black, CC (2000) C4 plants in the vegetation of Mongolia: their natural occurrence and geographical distribution in relation to climate. *Oecologia (Berl)* 123: 15–31. CrossRef Google Scholar. Rogosic J, Pfister JA, Provenza FD, Grvesa D (2006) Sheep and goat preference for and nutritional value of Mediterranean maquis shrubs.