

Distribution of the Central Asian Genus *Dontostemon* Andr. ex. C. A. Mey (Brassicaceae Burnett)

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Abstract

This paper presents distributional data of eleven species of the genus *Dontostemon* Andr. ex. C.A.Mey. (Brassicaceae Burnett.), all of which are restricted in dispersal to the Central Asian mountain steppe, steppe, desert steppe and desert zones. The genus *Dontostemon* can be reliably considered as typical Central Asian plants and the center of origin of the genus is connected to the Mongolian and Gobi Altai mountains.

Key words: biogeography, distribution, *Dontostemon*, Central Asia.

Introduction

There are 11 species of *Dontostemon* (including *Dimorphostemon pectinatus* and *Nasturtium tibeticum*), mostly growing in the Central Asian mountain steppe, steppe, desert steppe and desert zones (Al-Shehbaz & Ohba, 2000; Zhou *et al.*, 2000).

All of these species occur in China, but 9 species in Russia, 7 species in Mongolia, 2 species in India, and 1 species in Japan, Korea, Kazakhstan, Tajikistan and Nepal (Nakai, 1911; Zhou *et al.*, 2000; Bush, 1939; Golubkova, 1950; Gubanov, 1996; Hana-Hatazao, 1984; Janarthanam, 1993). Their distribution in the above named countries can be seen in Table 1.

Dontostemon species grow in the forest and forest-steppe as well as in the steppe, desert-steppe and desert zones. Based on the biotopic distribution, it is clear that the species prefer steppe habitats. For example, 6 species occur in the forest-steppe, 5 species in the mountain steppe, 4 species in the steppe, 2 species in the alpine belt, 4 species in the forest and 3 species in the desert zone.

To show the distribution of *Dontostemon* species in botanical-geographical regions of Mongolia (Table 2), we examined the data in the works by Yunatov (1950), Grubov (1955), Ulziikhutag (1989) and Gubanov (1996).

Among these regions, the Gobi Altai mountain desert-steppe where all species of the genus occur, the Depression of the Great Lakes and the Val-

Table 1. Distribution of species of the genus *Dontostemon*

№	Species name	Countries									Total number of occurrences
		China	Russia	Mongolia	India	Japan	Korea	Kazakhstan	Tajikistan	Nepal	
1	<i>D. glandulosus</i>	+	+		+			+	+	+	6
2	<i>D. dentatus</i>	+	+			+	+				4
3	<i>D. pinnatifidus</i>	+	+	+	+						4
4	<i>D. crassifolius</i>	+	+	+							3
5	<i>D. integrifolius</i>	+	+	+							3
6	<i>D. micranthus</i>	+	+	+							3
7	<i>D. perennis</i>	+	+	+							3
8	<i>D. senilis</i>	+	+	+							3
9	<i>D. hispidus</i>	+	+								2
10	<i>D. elegans</i>	+		+							2
11	<i>D. tibeticus</i>	+									1
Total number of species		11	9	7	2	1	1	1	1	1	
Percentage		100	81.8	63.6	18.2	9.1	9.1	9.1	9.1	9.1	