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The XXI International Grassland Congress / VIII International Rangeland Congress took place in Hohhot, China from June 29 through July 5, 2008.

Proceedings edited by Organizing Committee of 2008 IGC/IRC Conference

Published by Guangdong People's Publishing House

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## The effects of grazing on the vegetation of typical steppe in Mongolia Plateau

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**Key words :** grazing system ; ecological indicators ; typical steppe

**Introduction** Rotational grazing systems are widely used in Inner Mongolian grasslands . The vegetation characteristics were compared between continuous and rotational grazing systems (Savory 1980) . In this study , we selected the typical steppe in Inner Mongolia and Mongolia to compare the vegetation difference in different grazing systems in order to assess the effect of vegetation on grazing systems .

**Materials and methods** The vegetation characteristics of typical steppes in Dongwu Banner in Inner Mongolia , China ( $45^{\circ}27' N$  ,  $117^{\circ}04' E$ ) and Su He Bate Province in Mongolia ( $45^{\circ}44' N$  ,  $115^{\circ}43' E$ ) were measured at the same time to compare the difference under different grazing systems . We mainly used herder's house as the starting point and located three transects , every transect angle is  $120^{\circ}$  . Three to five quadrats ( $1 \times 1 \text{ m}^2$ ) data were collected and analyzed using SPSS13.0 .

**Results** *Stipa krylovii* is the dominant species and the results showed in Table1 . The result showed that the height and coverage of vegetation in Mongolia *Stipa krylovii* typical steppe (nomadic grazing) were higher than Inner Mongolia (consecutive grazing) .

**Table 1** Vegetation characteristics of *Stipa krylovii* typical steppe in two sites .

Grazing system	Vegetation	Height(cm)	Coverage(%)
Mongolia(nomadic grazing)		$9.0 \pm 3.2^a$	$9.8 \pm 6.7^a$
Inner Mongolia(consecutive grazing)		$5.8 \pm 1.5^b$	$3.8 \pm 1.5^b$

Note : different letters indicate significant differences at  $P < 0.05$  level .

**Conclusions** Nomadic grazing in Mongolia is better than consecutive grazing in Inner Mongolia .

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