

# 草原与草业

CAOYUAN YU CAOYE

季刊(1987年创刊)

第37卷 第2期(总第161期)

2025年6月出版

主 管 内蒙古自治区林业和草原局

主 办 内蒙古自治区林业和草原  
工作总站

内蒙古自治区草原学会

主 编 韩国栋

编辑出版 《草原与草业》编辑部

地址:呼和浩特市赛罕区昭乌  
达南路内蒙古自治区林  
业和草原工作总站

邮编:010020

电话/传真:0471-3965876

邮箱:cyycyzz@126.com

印 刷 内蒙古自治区党政机关  
文印中心

国内发行 呼和浩特市邮政局

发行范围 国内外公开发行

国内订阅 全国各地邮局(所)

邮发代号 16-198

国内定价 12.00元/册

国 内 统 一

连续出版物号: CN 15-1367/S

国 际 标 准

连续出版物号: ISSN 2095-5952

期刊基本参数: CN 15-1367/S \* 1987

\* q \* A4 \* 64 \* zh \* P

\* ¥ 12.00 \* 1000 \* 12

\* 2025-6

责任编辑 赵怀青 李萍 郭文雨

## 目 次

### 综述

- 荒漠草原土壤生物结皮中藻菌相互关系及其生态功能 .....  
..... 郭子晴,纪艳福,韩国栋(1)

### 试验研究

- 羊草改良黄三角盐碱地的效果评价 .....  
..... 董晓兵,刘辉,王永辉,郑亚鹏,刘公社(9)

### 不同播种方式对退化草原植被修复效果的影响

..... 夏丹,宋晓玲,王鹏,顾新民(14)

### 新麦草种子产量与饲草产量性状的关系

..... 常宇冬,云嵐,高志琦,李博华,周成美,穆乙鑫(19)

### 呼伦贝尔典型草原3种不同生物药剂防治草地蝗虫的药效试验

..... 刘毅,胡晓彬,伟军,呼斯勒,刘昊(25)

### 专题研究

- 科尔沁沙地苜蓿冻害防御的秋冬季管理技术要点 .....  
..... 魏晓斌,樊俊铭,柳茜,李文龙,陶雅(29)

### 草业科学专业《生态学》教学中基于人工智能的人机协同模式构建

..... 包乌云,武倩,王贊博,张峰,朱爱民,石凤翎(32)

### 论《牧草饲料作物栽培学》实践课程的项目化教学

..... 花梅,云嵐,那亚,石文宏,斯琴(38)

### 调查研究

- 内蒙古正镶白旗草地植物区系研究 .....  
..... 余丹丹,刘冠志,王忠武,张恒,王占义(43)

### 关于草原生态保护修复的认识和思考

..... 宁静,陆阿飞(49)

### 青年林草管理人员工作积极性现状与激励措施

..... 夏方山,董秋丽,李钰莹(53)

### 专论

- 苜蓿 RFV 与 RFQ ..... 柳茜,李文龙,陶雅(57)

【封面图片 张有提供】

## GRASSLAND AND PRATACULTURE

No. 2, 2025

Jun. 37

Started in 1987( Quarterly )

### Administration Agency

Forestry and Grassland Administrative Bureau of Inner Mongolia Autonomous Region

### Sponsored by

Inner Mongolia Autonomous Region Forestry and Grassland Administrative Station

Inner Mongolia Autonomous Region Society for Grassland Science

### Editor-in-Chief

HAN Guodong

### Edited and published

Editorial Department of Grassland and Prataculture

### Printed

Party and Government Agencies Document Printing Center, Inner Mongolia Autonomous Region

### Distributed

Hohhot Postal Service

### Distributed scope

Domestic and Abroad

### Domestic

All Local Post Office in China  
( Periodical No. 16-198 )

## CONTENTS

Interactions between algae and microorganisms in soil biological crusts of desert steppe and their ecological functions .....	GUO Ziqing, JI Yanfu, HAN Guodong(1)
Evaluation of the effects of <i>Leymus chinensis</i> on improving saline-alkali soil in the Yellow River Delta .....	DONG Xiaobing, LIU Hui, WANG Yonghui, et al. (9)
Effect of different sowing methods on degraded grassland vegetation restoration .....	XIA Dan, SONG Xiaoling, WANG Peng, et al. (14)
Multivariate analysis of seed yield with forage yield traits in <i>Psathyrostachys juncea</i> .....	CHANG Yudong, YUN Lan, GAO Zhiqi, et al. (19)
Efficacy test of three different biological agents against grasshoppers in Hulunbuir typical grassland .....	LIU Yi, HU Xiaobin, WEI Jun, et al. (25)
Technical points of autumn and winter management for alfalfa frost damage prevention in Horqin sandy land .....	WEI Xiaobin, FAN Junming, LIU Qian, et al. (29)
AI-driven human-computer collaborative model for “Ecology” instruction in grassland science .....	BAO Wuyun, WU Qian, WANG Yunbo, et al. (32)
On project-based teaching of the practical course of “Forage Feed Crop Cultivation” .....	HUA Mei, YUN Lan, Naya, et al. (38)
Flora of grassland in Zhengxiangbai Banner, Inner Mongolia .....	YU Dandan, LIU Guanzhi, WANG Zhongwu, et al. (43)
Understanding and reflection on grassland ecological protection and restoration .....	NING Jing, LU Afei(49)
Current status and incentive measures for the enthusiasm of young forestry and grassland management personnel .....	XIA Fangshan, DONG Qiuli, LI Yuying(53)
Alfalfa RFV and RFQ .....	LIU Qian, LI Wenlong, TAO Ya(57)