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Zhiwu Shengtai Xuebao

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目　　次

综述

1193　被子植物蜜距的多样性及进化生态学研究
杨明威　金晓芳

研究论文

1211　CMIP6模式对中国西南部地区植被碳利用率模拟能力综合评估
李伯新　姜　超　孙建新

1225　昼夜不对称增温对长白山阔叶红松林碳汇能力的影响
李伟斌　张红霞　张玉书　陈妮娜

1234　氮沉降下西南山地针叶林根际和非根际土壤固碳贡献差异
张　英　张常洪　汪其同　朱晓敏　尹华军

1245　内蒙古温带草地土壤有机碳组分含量和分解速率的空间格局及其影响因素
陈颖洁　房　凯　秦书琪　郭彦军　杨元合

1256　放牧对内蒙古草地植物群落特征影响的meta分析
李　娜　唐士明　郭建英　田　茹　王　姗　胡　冰　罗永红　徐柱文

1270　基于功能性状的锐齿槲栎林共存树种生态策略差异
袁雅妮　周　哲　陈彬洲　郭垚鑫　岳　明

1278　广西天然红鳞蒲桃种群幼苗数量特征及动态分析
王燕玲　招礼军　朱栗琼　莫若果　林　婷　赵小雨

1287　水曲柳雌雄株复叶类型及光合功能对不同生境的响应
马常钦　黄海龙　彭政淋　吴纯泽　韦庆钰　贾红涛　卫　星

1298　不同生长期樟子松外生菌根真菌群落物种组成及其驱动因素
任　悦　高广磊　丁国栋　张　英　赵珮杉　柳　叶

1310　降水量变化下荒漠草原土壤呼吸及其影响因素
李　冰　朱湾湾　韩　翠　余海龙　黄菊莹

资料论文

1322　2012–2016年宁夏盐池毛乌素沙地黑沙蒿灌丛生态系统通量观测数据集
韩　聪　母艳梅　查天山　秦树高　刘　鹏　田　赟　贾　昕

封面说明: 被子植物蜜距的多样性(金晓芳摄)。从左到右: 上: 二叶舌唇兰(兰科), 木鱼坪淫羊藿(小檗科), 中甸乌头(毛茛科), 华北耧斗菜(毛茛科)。中: 早开堇菜(堇菜科), 囊距紫堇(罂粟科), 大花花锚(龙胆科), 摩洛哥柳穿鱼(车前科)。下: 黄花狸藻(狸藻科), 凤仙花属(凤仙花科), 油点草(百合科), 旱金莲(旱金莲科)。杨明威和金晓芳基于国内外相关数据库和文献, 总结了蜜距的发育来源及其系统分布、蜜距的形态多样性及其适应意义, 分析了不同科植物蜜距长度的差异, 介绍了蜜距植物的主要传粉者和盗蜜者类群, 以及调节蜜距长度的进化机制, 展示了被子植物蜜距的多样性和复杂性, 并提出了未来需要解决的科学问题(本期1193-1210页)。

Chinese Journal of Plant Ecology

September 2023 Vol. 47 No. 9

CONTENTS

Review

1193 Diversity and evolutionary ecology of nectar spurs in angiosperms
YANG Ming-Wei and JIN Xiao-Fang

Research Articles

1211 Comprehensive assessment of vegetation carbon use efficiency in southwestern China simulated by CMIP6 models
LI Bo-Xin, JIANG Chao, and SUN Osbert Jianxin

1225 Influence of diurnal asymmetric warming on carbon sink capacity in a broadleaf Korean pine forest in Changbai Mountains, China
LI Wei-Bin, ZHANG Hong-Xia, ZHANG Yu-Shu, and CHEN Ni-Na

1234 Difference of soil carbon sequestration between rhizosphere and bulk soil in a mountain coniferous forest in southwestern China under nitrogen deposition
ZHANG Ying, ZHANG Chang-Hong, WANG Qi-Tong, ZHU Xiao-Min, and YIN Hua-Jun

1245 Spatial patterns and determinants of soil organic carbon component contents and decomposition rate in temperate grasslands of Nei Mongol, China
CHEN Ying-Jie, FANG Kai, QIN Shu-Qi, GUO Yan-Jun, and YANG Yuan-He

1256 Meta-analysis of effects of grazing on plant community properties in Nei Mongol grassland
LI Na, TANG Shi-Ming, GUO Jian-Ying, TIAN Ru, WANG Shan, HU Bing, LUO Yong-Hong, and XU Zhu-Wen

1270 Differential ecological strategies in functional traits among coexisting tree species in a *Quercus aliena* var. *acuteserrata* forest
YUAN Ya-Ni, ZHOU Zhe, CHEN Bin-Zhou, GUO Yao-Xin, and YUE Ming

1278 Seedling quantitative characteristics and dynamics of *Syzygium hancei* populations in Guangxi, China
WANG Yan-Ling, ZHAO Li-Jun, ZHU Li-Qiong, MO Ruo-Guo, LIN Ting, and ZHAO Xiao-Yu

1287 Response of compound leaf types and photosynthetic function of male and female *Fraxinus mandschurica* to different habitats
MA Chang-Qin, HUANG Hai-Long, PENG Zheng-Lin, WU Chun-Ze, WEI Qing-Yu, JIA Hong-Tao, and WEI Xing

1298 Species composition and driving factors of the ectomycorrhizal fungal community associated with *Pinus sylvestris* var. *mongolica* at different growth periods
REN Yue, GAO Guang-Lei, DING Guo-Dong, ZHANG Ying, ZHAO Pei-Shan, and LIU Ye

1310 Soil respiration and its influencing factors in a desert steppe in northwestern China under changing precipitation regimes
LI Bing, ZHU Wan-Wan, HAN Cui, YU Hai-Long, and HUANG Ju-Ying

Data Paper

1322 A dataset of ecosystem fluxes in a shrubland ecosystem of Mau Us Sandy Land in Yanchi, Ningxia, China (2012–2016)
HAN Cong, MU Yan-Mei, ZHA Tian-Shan, QIN Shu-Gao, LIU Peng, TIAN Yun, and JIA Xin

Cover illustration: Photos of nectar spurs show the diversity of nectar spurs in angiosperm (Photographed by JIN Xiao-Fang). From left to right in the first row: *Platanthera chlorantha* (Orchidaceae), *Epimedium franchetii* (Berberidaceae), *Aconitum piepunense* (Ranunculaceae), *Aquilegia yabeana* (Ranunculaceae). In the second row: *Viola prionantha* (Violaceae), *Corydalis benecincta* (Papaveraceae), *Halenia elliptica* var. *grandiflora* (Gentianaceae), *Linaria maroccana* (Plantaginaceae). In the third row: *Utricularia aurea* (Lentibulariaceae), *Impatiens* sp. (Balsaminaceae), *Tricyrtis macropoda* (Liliaceae), *Tropaeolum majus* (Tropaeolaceae). Based on the domestic and foreign related databases and articles, Yang and Jin summarized the morphological diversity and adaptive significance, analyzed the differences in spur lengths among nectar spur plants from different families, introduced the main pollinators and nectar robber species, discussed the evolutionary mechanisms governing nectar spur length, and identified the scientific questions that need to be addressed in the future (Pages 1193-1210 in this issue).