

# 中国的遗传学研究

遗传学进步推动中国西部经济与社会发展



2011中国遗传学会大会  
论文摘要汇编

中国遗传学会编

中国·乌鲁木齐

□利用辐射诱变创制小麦-偏凸山羊草小片段易位系.....	64
张洁, 邓光兵, 龙海, 潘志芬, 余懋群	
□玉米 ZmCBL5 基因的克隆及功能分析.....	65
淮俊玲, 王国英, 郑军	
□抑制性差减杂交法分离鉴定甜瓜果实呼吸跃变过程中特异表达基因.....	66
高峰, 郝金凤, 巴德仁贵, 姚远, 张立全, 牛一丁, 哈斯阿古拉	
□Aegilops variabilis No.1 抗禾谷孢囊线虫的 RNA-Seq 分析.....	67
徐德林, 龙海, 李嘉, 张洁, 李林, 陈欣, 李景良, 高丽鹃, 潘志芬, 邓光兵, 余懋群	
□拟南芥雄配子特异表达的 WRKY34 基因负调控成熟花粉抗冷性.....	68
邹长松, 江文波, 余迪求	
□新疆小拟南芥 ApNHX1 基因的克隆及生物信息学分析.....	69
院海英, 顾超, 徐芳, 崔百明, 黄先忠	
□杂交粳稻功能叶性状的遗传及与产量性状的相关分析.....	70
赵庆勇 张亚东 朱 镇 赵 凌 陈 涛 周丽慧 姚 妹 王才林*	
□早稻中干旱胁迫诱导蛋白 DIP3 的鉴定.....	71
郭晓丽, 王大伟, 白丽荣, 时丽冉, 王道文, 李慧敏, 赵凤梧	
□漳州水仙单染色体文库的构建及其 AFLP 标记的研究.....	72
陈晓静, 李广莘, 申艳红	
□普通小麦亚种及合成小麦基因组片段渗入系群体的创建与鉴定.....	73
顾丽清, 卫波, 张相岐	
□VEGETABLE PLANT CROPPING DEVELOPING THE UNIVERSITY SEEDBANK.....	74
Mytasheva Z.G., Zhumabayeva B.A., Baiseyitova S.K., Bakhytbek Zh., and Qazhymurat Z.	
□MUTAGENIC EFFECT OF CADMIUM CHLORIDE IN WHEAT BREEDING.....	75
Shulembaeva K.K., Chumetova Zh.Zh., Omirbekova N.Zh., Zhussupova A.I.	
□GENETIC ANALYSIS OF TOLERANCE TO LEAF RUST OF LINES DERIVED VIA CROSSING.....	76
HEXAPLOID AND TETRAPLOID WHEAT	
Tokubaeva A.A., Shulembaeva K.K., Daultbaeva S.B., Zhussupova A.I., Zhunusbaeva Zh.K., Omirbekova N.Zh.	

## 人类和医学遗传学

□2C 型肢带型肌营养不良相关 SGCG 基因致病新突变鉴定.....	77
肖继芳, 赵秀丽, 刘雅萍, 张学	
□两例 3 号染色体末端缺失患儿的临床和遗传学研究.....	78
邢娜, 肖冰, 季星, 蒋雯婷, 张静敏, 胡娟, 陆勇刚, 曹英, 陶炯,	
□17a-羟化酶 / 17, 20 碳链裂解酶缺陷症的分子诊断方法研究.....	79
严爱贞, 吕风华	

## VEGETABLE PLANT CROPPING: DEVELOPING THE UNIVERSITY SEEDBANK

Aytasheva Z.G., Zhumabayeva B.A., Baiseytova S.K. ,

Bakhytbek Zh., and Qazhymurat Z.

I. Department of Genetics and Molecular Biology, al-Farabi Kazakh National University, Almaty, Republic of Kazakhstan E-mail: zaure.aitasheva@kaznu.kz

**Abstract:** Present study is aimed at the enrichment of food and heirloom common bean and pumpkin resources based on unique domestic germplasm completed by the range of other genetic stocks from Russia, Japan, China, USA and EU countries.

In 2008-2010 overall more than 80 common bean (*Phaseolus vulgaris* L.) varieties (e.g. "Ufimskaya", "Bijchanka", "Cornell", "Laura", "Vegetable Sack'es", Russia; "Dove", "Scarlet Emperor", UK; "Pinto", "Red Goya", "Camelia", USA; "Igolinska", "Bomba", "OtreI" and "Malinka", Poland) originating from different countries have been introduced to the mountain area of Almaty Region and partly submitted to the Institute of Potato and Vegetables Research. These cultivars manifested proper seed maturity despite a severe affect of late drought. In addition, eight azuki bean varieties, as well as few broad bean (*Vicia faba* L.) and lentil cultivars (*Lens culinaris* L.), have been trialed under likely water-deficient conditions. Interestingly, comparison of the Russian and the Japanese azuki bean resources has indicated the best accessions with highest yields in the mountain zone. Despite relatively moderate germination rates, some of these cultivars have shown high thermostability and drought tolerance. Azuki harvesting in the same zone has demonstrated belated leaf vegetation and delayed onset of the anthesis and pod formation. This has led to a repeated or "wavy" flowering in hot and dry climate conditions.

Biodiversity and breeding research on food and heirloom pumpkins, *Cucurbita pepo* L. has been initiated at our department in 2010. This vegetable may be used for delicious dishes, roasted seeds, glowing jack-o'-lanterns and soil amelioration. Our collection presently includes local, Chinese, French, Russian and Italian species. Apart from prospective proposing new joint projects on beans and taking into account numerous reports on nutritional value of food and heirloom pumpkins, we may develop related joint pumpkin research as possibly commercial projects.

