

子查询返回的值不止一个。当子查询跟随在 =、!=、<、<=、>、>= 之后，或子查询用作表达式时，这种情况是不允许的。

全国中文核心期刊
中国科技核心期刊
中国农业核心期刊
RCCSE中国核心学术期刊
中国科学引文数据库（CSCD）期刊
CAB International 收录期刊
美国《生物学文摘》收录期刊
美国《化学文摘》（CA）收录期刊

[首页](#) [期刊介绍](#)

[编委会](#)

[投稿须知](#)

[期刊订阅](#)

[广告合作](#)

[联系我们](#)

[返回主站](#)

[«上一篇](#) [下一篇»](#)



[PDF下载](#)

[+分享](#)



微信公众号：大豆科学

[1] 王连铮, 罗庚彤, 王 岚, 等. 北疆春大豆中黄35公顷产量超6 吨的栽培技术创建[J]. 大豆科学, 2012, 31(02):217-223.

[doi:10.3969/j.issn.1000-9841.2012.02.012]

WANG Lian-zheng, LUO Geng-tong, WANG Lan, et al. Development of Soybean Cultivation Technology with the Yield over 6 Tonnes per Hectare for Soybean Cultivar Zhonghuang 35 in Northern Xinjiang Province[J]. Soybean Science, 2012, 31(02):217-223. [doi:10.3969/j.issn.1000-9841.2012.02.012]

[点击复制](#)

北疆春大豆中黄35公顷产量超6 吨的栽培技术创建

《大豆科学》 [ISSN:1000-9841 /CN:23-1227/S] 卷: 第31卷 期数: 2012年02期 页码: 217-223 栏目: 出版日期: 2012-04-25

Title: Development of Soybean Cultivation Technology with the Yield over 6 Tonnes per Hectare for Soybean Cultivar Zhonghuang 35 in Northern Xinjiang Province

文章编号: 1000-9841 (2012) 02-0217-07

作者: 王连铮¹; 罗庚彤^{1, 2}; 王 岚¹; 孙君明¹; 战 勇²

1. 中国农业科学院 作物科学研究所, 农业部北京大豆生物学重点实验室, 北京 100081;

2. 新疆农垦科学院 作物研究所, 新疆 石河子 832000

Author(s): WANG Lian-zheng¹; LUO Geng-tong^{1, 2}; WANG Lan¹; SUN Jun-ming¹; ZHAN Yong²

1. Institute of Crop Science, CAAS/MOA Key Laboratory of Soybean Biology, Beijing 100081;

2. Crop Research Institute, Xinjiang Reclamation Academy of Agricultural Sciences, Shihezi 832000, Xinjiang, China

关键词: 大豆; 中黄35; 高产栽培

Keywords: Soybean; Zhonghuang 35; High yield cultivation

分类号: S565.1

DOI: 10.3969/j.issn.1000-9841.2012.02.012

文献标志码: A

摘要: 2008~2010年连续3 a在新疆石河子地区以高产高油早熟大豆新品种“中黄35”为载体, 采用大豆覆膜滴灌结合水肥同步的高产栽培技术, 创造了小面积产量超6 000 kg·hm⁻², 大面积产量超4 500 kg·hm⁻²的全国大豆高产纪录; 通过将肥料精确地随水滴入大豆根系区域, 减少了肥料的挥发和渗漏损失, 将水肥比提高至1:1.25~1:1.32; 氮肥利用率提高至20%~25%, 磷肥利用率提高至5%~10%, 实现了大豆田水肥耦合关键技术的突破; 另外, 通过化学调控技术的运用, 实现了光、热、水、土资源的有效利用, 达到高产高效和优质的目的。该项技术对提高我国的大豆单产和增加总产, 起到了有力的科技支撑和示范作用。

Abstract: Based on the soybean cv. Zhonghuang 35 as the material, the soybean yield records with 4.5 tonnes per hectare in the great area and 6.0 tonnes per hectare in the small area were developed by the cultivation technology with plastic-mulched culture, drip irrigation and synchronous supply of water and fertilizer in 2008-2010 at Shihezi of Xinjiang province in China. In this method, the fertilizer was accurately released to the soybean roots with the water, so the loss of fertilizer was decreased, the ratio of water to product reached at 1:1.25-1.32, the utilization ratio of nitrogen and phosphate fertilizer were increased to 20%-25% and 5%-10%, respectively. It concluded that a novel breakthrough for the water-fertilizer coupling technique was achieved. Otherwise, in this study the resources including light, temperature, water and soil were utilized effectively using the chemical control and the purposes of high yield, high efficiency and good quality was also reached in soybean production. This soybean cultivation method can provide a powerful technical support for the yield and total production of soybean in China.

参考文献/References:

- [1] 林汉明, 常汝镇, 邵桂花, 等. 中国大豆耐逆研究[M]. 北京: 中国农业出版社, 2009. (Lam H M, Chang R Z, Shao G H, et al. Research on tolerance to stresses in Chinese soybean [M]. Beijing: China Agriculture Press, 2009.)
- [2] 罗庚彤, 王连铮, 高扬, 等. 北疆春大豆亩产320公斤覆膜滴灌栽培技术模式[J]. 大豆科技, 2010(2):46-49. (Luo G T, Wang L Z, Gao Y, et al. Development of the soybean cultivation technology with the yield of 4800 kg/ha for soybean cultivar Zhonghuang 35 in the northern Xinjiang province[J]. Soybean Science and Technology, 2010(2):46-49.)
- [3] 孙寰. 世界大豆高产新纪录: 10414公斤/公顷—访高产纪录创造者Kip Cullers[J]. 大豆科技, 2010(2):1-4. (Sun H. The novel world record of soybean yield:10414 kg/ha—Interview of the soybean high yield recorder Kip Cullers[J]. Soybean Science and Technology, 2010(2):1-4.)
- [4] 董钻, 祁明楣, 罗文春, 等. 大豆亩产450斤的生理参数及栽培措施初探[J]. 大豆科学, 1982, 1(2):131-140. (Dong Z, Qi M M, Luo W C, et al. Preliminary studies on the physiological parameters and cultural measures for soybean varieties yielding 225 kg per mu[J]. Soybean Science, 1982, 1(2):131-140.)
- [5] 刘晓英, 林而达. 气候变化对华北地区主要作物需水量的影响[J]. 水利学报, 2004(2):77-87. (Liu X Y, Lin E D. Impact of climate change on water requirement of main crops in north China[J]. Journal of Hydraulic Engineering, 2001(2):77-87.)
- [6] 王芳, 康英, 刘思. 滴灌灌溉频率对土壤水分状况和土豆生长的影响[J]. 耕作制度与农业生态学报, 2005, 21(2):131-135. (Wang F, Kang Y, Liu S. Effects of drip irrigation frequency on soil wetting pattern and potato growth in north China plain[J]. Agricultural

Water Management, 2006, 79:248–264.

相似文献/References:

- [1] 刘章雄, 李卫东, 孙石, 等. 1983~2010年北京大豆育成品种的亲本地理来源及其遗传贡献[J]. 大豆科学, 2013, 32(01):1. [doi:10.3969/j.issn.1000-9841.2013.01.002]
- LIU Zhang-xiong, LI Wei-dong, SUN Shi, et al. Geographical Sources of Germplasm and Their Nuclear Contribution to Soybean Cultivars Released during 1983 to 2010 in Beijing[J]. Soybean Science, 2013, 32(02):1. [doi:10.3969/j.issn.1000-9841.2013.01.002]
- [2] 李彩云, 余永亮, 杨红旗, 等. 大豆脂质转运蛋白基因GmLTP3的特征分析[J]. 大豆科学, 2013, 32(01):8. [doi:10.3969/j.issn.1000-9841.2013.01.003]
- LI Cai-yun, YU Yong-liang, YANG Hong-qい, et al. Characteristics of a Lipid-transfer Protein Gene GmLTP3 in Glycine max[J]. Soybean Science, 2013, 32(02):8. [doi:10.3969/j.issn.1000-9841.2013.01.003]
- [3] 王明霞, 崔晓霞, 薛晨晨, 等. 大豆耐盐基因GmHAL3a的克隆及RNAi载体的构建[J]. 大豆科学, 2013, 32(01):12. [doi:10.3969/j.issn.1000-9841.2013.01.004]
- WANG Ming-xia, CUI Xiao-xia, XUE Chen-chen, et al. Cloning of Halotolerance 3 Gene and Construction of Its RNAi Vector in Soybean (Glycine max)[J]. Soybean Science, 2013, 32(02):12. [doi:10.3969/j.issn.1000-9841.2013.01.004]
- [4] 张春宝, 李玉秋, 彭宝, 等. 线粒体ISSR与SCAR标记鉴定大豆细胞质雄性不育系与保持系[J]. 大豆科学, 2013, 32(01):19. [doi:10.3969/j.issn.1000-9841.2013.01.005]
- ZHANG Chun-bao, LI Yu-qiu, PENG Bao, et al. Identification of Soybean Cytoplasmic Male Sterile Line and Maintainer Line with Mitochondrial ISSR and SCAR Markers[J]. Soybean Science, 2013, 32(02):19. [doi:10.3969/j.issn.1000-9841.2013.01.005]
- [5] 卢清瑶, 赵琳, 李冬梅, 等. RAV基因对拟南芥和大豆不定芽再生的影响[J]. 大豆科学, 2013, 32(01):23. [doi:10.3969/j.issn.1000-9841.2013.01.006]
- LU Qing-yao, ZHAO Lin, LI Dong-mei, et al. Effects of RAV gene on Shoot Regeneration of Arabidopsis and Soybean [J]. Soybean Science, 2013, 32(02):23. [doi:10.3969/j.issn.1000-9841.2013.01.006]
- [6] 杜景红, 刘丽君. 大豆fad3c基因沉默载体的构建[J]. 大豆科学, 2013, 32(01):28. [doi:10.3969/j.issn.1000-9841.2013.01.007]
- DU Jing-hong, LIU Li-jun. Construction of fad3c Gene Silencing Vector in Soybean[J]. Soybean Science, 2013, 32(02):28. [doi:10.3969/j.issn.1000-9841.2013.01.007]
- [7] 张力伟, 燮颖伦, 牛腾飞, 等. 大豆“冀黄13”突变体筛选及突变体库的建立[J]. 大豆科学, 2013, 32(01):33. [doi:10.3969/j.issn.1000-9841.2013.01.008]
- ZHANG Li-wei, FAN Ying-lun, NIU Teng-fei, et al. Screening of Mutants and Construction of Mutant Population for Soybean Cultivar “Jihuang13”[J]. Soybean Science, 2013, 32(02):33. [doi:10.3969/j.issn.1000-9841.2013.01.008]
- [8] 盖江南, 张彬彬, 吴瑶, 等. 大豆不定胚悬浮培养基因型筛选及基因枪遗传转化的研究[J]. 大豆科学, 2013, 32(01):38. [doi:10.3969/j.issn.1000-9841.2013.01.009]
- GAI Jiang-nan, ZHANG Bin-bin, WU Yao, et al. Screening of Soybean Genotypes Suitable for Suspension Culture with Adventitious Embryos and Genetic Transformation by Particle Bombardment[J]. Soybean Science, 2013, 32(02):38. [doi:10.3969/j.issn.1000-9841.2013.01.009]
- [9] 王鹏飞, 刘丽君, 唐晓飞, 等. 适于体细胞胚发生的大豆基因型筛选[J]. 大豆科学, 2013, 32(01):43. [doi:10.3969/j.issn.1000-9841.2013.01.010]
- WANG Peng-fei, LIU Li-jun, TANG Xiao-fei, et al. Screening of Soybean Genotypes Suitable for Somatic Embryogenesis [J]. Soybean Science, 2013, 32(02):43. [doi:10.3969/j.issn.1000-9841.2013.01.010]
- [10] 刘德兴, 年海, 杨存义, 等. 耐酸铝大豆品种资源的筛选与鉴定[J]. 大豆科学, 2013, 32(01):46. [doi:10.3969/j.issn.1000-9841.2013.01.011]
- LIU De-xing, NIAN Hai, YANG Cun-yi, et al. Screening and Identifying Soybean Germplasm Tolerant to Acid Aluminum [J]. Soybean Science, 2013, 32(02):46. [doi:10.3969/j.issn.1000-9841.2013.01.011]
- [11] 王岚, 王连铮, 赵荣娟, 等. 高产高油早熟广适应性大豆新品种中黄35的选育[J]. 大豆科学, 2009, 28(02):360. [doi:10.11861/j.issn.1000-9841.2009.02.0360]
- WANG Lan, WANG Lian-zheng, ZHAO Rong-juan, et al. Development of New Soybean Cultivar Zhonghuang 35 with High Yielding, High Oil, Early Maturity and Broad Adaptability[J]. Soybean Science, 2009, 28(02):360. [doi:10.11861/j.issn.1000-9841.2009.02.0360]

备注/Memo

基金项目：中国农业科学院作物科学研究所中央级公益性科研院所基本科研业务费专项；国家科技计划（2011BAD35B06-3）；农业科技成果转化资金项目（2008GB23260383）。

第一作者简介：王连铮（1930-），男，博士，研究员，从事大豆遗传育种与栽培研究。E-mail:wanglz@mail.caas.net.cn。
通讯作者：孙君明（1972-），男，博士，研究员，从事大豆遗传育种与栽培研究。E-mail:sunjm@mail.caas.net.cn。

更新日期/Last Update: 2014-08-15

版权所有 © 2012 黑龙江省农科院信息中心
黑ICP备11000329号-2