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摘要: 以黑龙江省三江平原大豆主栽品种合丰48为试验材料,研究不同时期叶面施氮量对大豆叶片叶绿素含量及干物质积累的影响。结果表明:叶面施氮可以提高叶片叶绿素含量及干物质积累量, V5期叶面施氮有利于叶绿素含量及茎干物质积累量增加, R5期叶面施氮有利于籽粒干物质积累, 本试验范围内, 以V5期施氮5 kg hm⁻² 叶绿素含量最高, 为49.8 SPAD; R5期施氮5 kg hm⁻² 籽粒干物重最高, 为26.38 g。

Abstract: Using Hefeng 48, the popular planted soybean cultivar in Sanjiang Plain, as tested material, nitrogen amount of 4.0 , 4.5, 5.0 and 5.5 kg·ha⁻¹ were leaf sprayed at V5, R2 and R5 stage, and the chlorophyll content and dry matter accumulation were determined. Leaf nitrogen application could increase chlorophyll content and dry matter accumulation. Nitrogen applied at V5 promoted chlorophyll content and stem dry matter accumulation, and enhanced seed dry matter accumulation when applied at R5. Highest chlorophyll content (49.8 SPAD) and seed yield(26.38 g per plant) was obtained under 5 kg·ha⁻¹ nitrogen applied at V5 and R5, respectively.

参考文献/References:

- [1] 李燕婷, 李秀英, 肖艳, 等.叶面肥的营养机理及应用研究进展[J].中国农业科学, 2009, 42 (1):162-172. (Li Y T,Li X Y,Xiao Y,et al.Advance in study on mechanism of foliar nutrition and development of foliar fertilizer application[J].Scientia Agricultura Sinica, 2009, 42(1):162-172.)
- [2] 刘志全, 马淑时.大豆喷施叶面肥后产量及其性状的比较[J].吉林农业科学, 1997(2):43-45. (Liu Z Q,Ma S S.Comparison of yield and characters after foliar fertilizer on soybean[J].Jilin Agricultural Sciences, 1997(2):43-45.)
- [3] 赵开兵, 李传军.叶面肥及生长调节剂对大豆的增产效果[J].安徽农学通报, 2001, 7(4):58. Zhao K B,Li C J.Effect of foliar fertilizer and plant growth regulators on the yield of soybean[J].Anhui Agricultural Science Bulletin,2001, 7(4):58.)
- [4] 姚文秋, 于海杰, 胡国华, 等.叶面喷施氮磷钾混合肥对大豆品质及产量的影响[J].种子世界, 2004(9):23-24. (Yao W Q,Yu H J,Hu G H,et al.Effects of nitrogen phosphorus potassium mixed spraying foliar fertilizer on the quality and yield of soybean[J].Seed World, 2004(9):23-24.)
- [5] 张勇.叶面喷施氮肥对大豆丰收24号产量及品质的影响[J].农业科技通讯, 2008(9):43-44. (Zhang Y.Effects of foliar application of nitrogen yield and quality of Fengshou 24[J].Bulletin of Agricultural Science and Technology, 2008 (9):43-44.)

- [6] 曹娟华, 楚国忠. 不同施肥方式对大豆产量的影响[J]. 现代化农业, 2011(8):11-12. (Cao J H, Chu G Z. Effects of soybean yield in different fertilization[J]. The Modernization of Agriculture, 2011(8):11-12.)
- [7] 丁洪, 郭庆元. 氮肥对不同品种大豆积累和产量品质的影响[J]. 土壤通报, 1995, 26(1): 18-21. (Ding H, Guo Q Y. Effects of yield and quality and nitrogen accumulation on nitrogen fertilizer of different soybean varieties [J]. Chinese Journal of Soil Science, 1995, 26(1): 18-21.)
- [8] Osborne S L, Riedell W E. Starter nitrogen fertilizer impact on soybean yield and quality in the Northern Great Plains[J]. Agronomy Journal, 2006, 98:1569-1574.
- [9] 甘银波, 陈静, 邱正明, 等. 不同阶段施用氮肥对大豆氮吸收及固氮的影响[J]. 中国油料作物学报, 1996, 18(4): 45-48. (Gan Y B, Chen J, Qiu Z M, et al. Effects of nitrogen absorption and nitrogen fixation in different stage of nitrogen fertilizer on soybean[J]. Chinese Journal of Oil Crop Sciences, 1996, 18(4):45-48.)
- [10] 董守坤, 龚振平, 祖伟, 等. 氮素营养水平对大豆氮素积累及产量的影响[J]. 植物营养与肥料学报, 2010, 16(1):65-70. (Dong S K, Gong Z P, Zu W, et al. Effect of nitrogen nutrition on nitrogen accumulation and yield of soybean [J]. Journal of Plant Nutrition and Fertilizer, 2010, 16(1):65-70.)
- [11] 金喜军, 马春梅, 龚振平, 等. 大豆鼓粒期对肥料氮的吸收与分配研究[J]. 植物营养与肥料学报, 2010, 16(2): 395-399. (Jin X J, Ma C M, Gong Z P, et al. Absorption and distribution of nitrogen fertilizer on soybean[J]. Journal of Plant Nutrition and Fertilizer, 2010, 16(2):395-399.)
- [12] 郭海龙, 马春梅, 董守坤, 等. 春大豆生长中对不同氮源的吸收利用[J]. 核农学报, 2008, 22(3):338-341. (Guo H L, Ma C M, Dong S K, et al. Absorption and utilization of different nitrogen sources during the growth of soybean plant [J]. Journal of Nuclear Agricultural Sciences, 2008, 22(3):338-341.)

相似文献/References:

- [1] 刘章雄, 李玉东, 孙石, 等. 1983~2010年北京大豆育品种的亲本地理来源及其遗传贡献[J]. (darticle.aspx?type=view&id=201301001) 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(01):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]. (darticle.aspx?type=view&id=201301002) 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-qi, et al. Characteristics of a Lipid-transfer Protein Gene GmLTP3 in Glycine max[J]. Soybean Science, 2013, 32(01):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]. (darticle.aspx?type=view&id=201301003) 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(01):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]. (darticle.aspx?type=view&id=201301005) 大豆科学, 2013, 32(01):19. [doi:10.3969/j.issn.1000-9841.2013.01.005]
- ZHAN 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(01):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]. (darticle.aspx?type=view&id=201301006) 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(01):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]. (darticle.aspx?type=view&id=201301007) 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(01):28. [doi:10.3969/j.issn.1000-9841.2013.01.007]
- [7] 张力伟, 焦颖伦, 牛腾飞, 等. 大豆“冀黄13”突变体筛选及突变体库的建立[J]. (darticle.aspx?type=view&id=201301008) 大豆科学, 2013, 32(01):33. [doi:10.3969/j.issn.1000-9841.2013.01.008]
- ZHANG Li-wei, JIAO Ying-lun, NIU Teng-fei, et al. Screening of Mutants and Construction of Mutant Population for Soybean Cultivar "Jihuang13" [J]. Soybean Science, 2013, 32(01):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]. (darticle.aspx?type=view&id=201301009) 大豆科学, 2013, 32(01):38. [doi:10.3969/j.issn.1000-9841.2013.01.009]
- GAN 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(01):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]. (darticle.aspx?type=view&id=201301010) 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(01):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]. (darticle.aspx?type=view&id=201301011) 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(01):46. [doi:10.3969/j.issn.1000-9841.2013.01.011]

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