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## 植物生长调节剂对大豆根建成期部分根系特性及同化物的影响

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摘要: 以垦农4号大豆 (Glycine max) 为材料, 通过植物生长调节剂DTA-6(2-N, N-二乙胺基乙基己酸酯)和S<sub>3307</sub>(烯效唑)对大豆进行浸种处理, 研究了2种调节剂在不同浓度条件下对大豆根系特性及根系同化物的影响。结果表明: D50和S0.4提高了根系中可溶性糖含量, 硝态氮含量, 有效的提高了根建成前期的根系活力, 而D50和S0.1提高了后期的根系活力。D25和S0.4明显提高了可溶性蛋白含量。可见D50和S0.4处理浸种效果最佳, 有效地提高了根系活力, 增加了根系同化物的含量。

Abstract: A soybean (Glycine max) cultivar, Kennong 4 with seed soaking treatments by different concentration of plant growth regulator Diethyl aminoethyl hexanoate (DTA-6) and Uniconazole (S<sub>3307</sub>) were employed to compare root activity, content of soluble sugar, soluble protein and nitrate in early stage of root formation. The results showed that, compared with CK, 50 mg L<sup>-1</sup> DTA-6 and 0.4 mg L<sup>-1</sup> S<sub>3307</sub> treatment increased the root soluble sugar and nitrate content, effectively increased root activity in early stage of root formation; while 50 mg L<sup>-1</sup> DTA-6 and 0.1 mg L<sup>-1</sup> S<sub>3307</sub> treatment effectively increased root activity in later stage of root formation; 25 mg L<sup>-1</sup> DTA6 and 0.4 mg L<sup>-1</sup> S<sub>3307</sub> treatment effectively increased root soluble protein content in later stage of root formation. The results above indicated that 50 mg L<sup>-1</sup> DTA-6 and 0.4 mg L<sup>-1</sup> S<sub>3307</sub> seed soaking treatment is effective to increase root activity and assimilate accumulation in root formation of soybean.

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