

The Effect of Different Nitrogen Application Levels on the Growth and Yield of Adzuki Bean Inoculated with *Rhizobia*

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Abstract

The main purpose of this research was to study the effect of different nitrogen application levels on the growth and yield of adzuki bean inoculated with *Rhizobia*. The levels of nitrogen application were 0, 30, 60, 90 and 120kg/ha. Among the different treatments of nitrogen levels, the plant height and branch number of adzuki bean had no significant differences. The node numbers of adzuki bean were significantly influenced by the nitrogen levels. When the plant treated with 120kg/ha of nitrogen, it had the most node number. The treatments of 0kg/ha and 120kg/ha nitrogen application were better than those of 90kg/ha treatment in pod number. Different nitrogen application levels had no effect on the seed number. The harvest index range of adzuki bean was from 60.38% to 65.06%. The nitrogen level of 30kg/ha had the best harvest index compared with other treatments. When the plant treated with 60kg/ha or 120kg/ha of nitrogen, it got the worst harvest index. The nitrogen had no effect on the hundred grains weight and yield of adzuki bean.

Key words : Adzuki Bean, Nitrogen, *Rhizobia*

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