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不同氮肥施用量对大豆根际土壤微生物数量及产量的影响

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摘要： 采用田间试验，研究了不同氮肥水平(0,30,60,90 kg·hm^{-2})下大豆VE、R1、R3、R5、R7期根际土壤细菌、放线菌及真菌含量的变化及对大豆产量的影响。结果表明：大豆根际土壤中细菌、真菌和放线菌数量随着施氮量的增加而增加；细菌和真菌数量随生育时期的推进呈先上升后略有下降的趋势，并在R5期达到最大值；大豆产量随施氮量的增加先升高再降低，其中60 kg·hm^{-2}处理效果最好，产量为2 734.2 kg·hm^{-2}，较不施肥增产13.0%。因此，施入适量氮肥有利于提高土壤微生物总量和大豆产量。

Abstract: In field trails,nitrogen amount of 0,30,60 and 90 kg·ha^{-1}were applied,the number of bacteria,actinomycetes and fungus in soybean rhizosphere soil at VE,R1,R3,R5 and R7,as well as soybean yield and yield components were determined.The number of bacteria,actinomycetes and fungus increased with the increasing of N amount.As the growth progresses,the number of bacteria and fungus showed increase and then decrease trend,and maximized at R5.Maximum soybean yield of 2 734.2kg·ha^{-1}was obtained under 60 kg·ha^{-1}N,which was increased by 13.0% than control.Results suggest applying appropriate amount of N would facilitate to increase soil microorganisms and soybean yield.

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