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摘要: 以大豆品种黑农48为材料,在大田条件下控制中微肥施用量,研究中微肥对大豆农艺性状、产量及品质的影响。结果表明:中微肥施用能够提高大豆不同生育时期的株高、干物质积累量和叶绿素含量(SPAD),显著提高结荚期到鼓粒期大豆叶面积指数(LAI)。中微肥施用大豆产量较不施肥和常规施肥处理,分别增产10.6%~14.5%($P<0.01$)和1.2%~4.7%($P<0.05$),且以常规施肥+80 kg/ha²中微肥产量最高(3 763.6±55.49 kg/ha²)。中微肥能够改善大豆品质,与不施肥和常规施肥处理比较,蛋白质含量分别增加0.60%~1.10%($P<0.01$)和0.12%~0.62%($P<0.05$);脂肪含量分别降低0.37%~0.78%($P<0.05$)和0.08%~0.49%。综合以上分析,常规施肥结合80 kg/ha²中微肥处理效果最好。

Abstract: In this paper, under the condition of field control medium and micro fertilizers application rate, the effect of medium and micro fertilizers on soybean's agronomic characters, yield and quality was studied with soybean Heinoong 48 (Glycine max) as material. The results showed that the medium and micro fertilizers application could improve the soybean plant height, dry matter accumulation and chlorophyll content (SPAD) at the different development stages, significantly increased drum grain stage leaf area index (LAI) of soybean at the podding stage. The yield of medium and micro fertilizers applied in soybean was higher than that of no fertilizer and conventional fertilizer, the yield increased by 10.6%-14.5% ($P<0.01$) and 1.2%-4.7% ($P<0.05$), and conventional fertilization+80 kg/ha² medium and micro fertilizers yield was the highest (3 763.6±55.49 kg/ha²). The medium and micro fertilizers could improve the quality of soybean, compared with no fertilizer and conventional treatment, protein content increased by 0.60%-1.10% ($P<0.01$) and 0.12%-0.62% ($P<0.05$); the fat content was reduced by 0.37%-0.78% ($P<0.05$) and 0.08%-0.49%, respectively. On the basis of the above analysis, the conventional fertilization combined with 80 kg/ha² medium and micro fertilizers effect was the best.

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