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## 中微量元素对优质大豆产量品质的影响

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摘要: 2001~2007年在吉林省中部黑土区进行了施用中微量元素对高脂肪和高蛋白大豆产量、品质影响及适宜用量研究。结果表明:施用硫、镁、硼和铜对高脂肪大豆的增产作用比较明显,增产幅度为9.1%~16.6%;镁和铜对高蛋白大豆有增产趋势。中微量元素硫、镁、铜、锌、硼和锰均能提高高脂肪大豆的脂肪含量,提高幅度为0.21%~0.35%;锌和锰可增加高蛋白大豆的蛋白质含量,增加幅度为0.15%~0.44%。在吉林省中部黑土区,无论是高脂肪品种还是高蛋白品种,锌肥(硫酸锌)、锰肥(硫酸锰)的适宜用量分别为15和15~30 kg·hm<sup>-2</sup>。高脂肪和高蛋白品种硫肥(Sulfur95)的适宜用量分别为45和15~30 kg·hm<sup>-2</sup>。

Abstract: Field trail were conducted to investigate the effect and rational dosage of medium trace element on quality and yield of soybean with high oil and high protein in black soil area of central Jilin province from 2001 to 2007. The yield of high oil soybean was significantly increased 9.1%~16.6% with the application of S, Mg, B and Mo fertilizer. The yield of high protein soybean had an increasing trend with the application of Mg and Cu fertilizer. The oil content of high oil soybean increased 0.21%~0.35% with the application of medium trace element such as S, Mg, Cu, Zn, B and Mn. The protein content of high protein soybean increased 0.15%~0.44% with the application of Zn and Mn fertilizer. Rational dosage of Zn (ZnSO<sub>4</sub>) and Mn (MnSO<sub>4</sub>) was 15 and 15~30 kg·hm<sup>-2</sup> for both high oil and high protein soybean cultivars. Rational dosage of S fertilizer (Sulfur95) was 45 and 15~30 kg·hm<sup>-2</sup> for high oil and high protein soybean cultivars, respectively.

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