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摘要： 于2008～2009年利用大豆品种合丰55采用盆栽试验，研究了不同浓度锰溶液浸种配合叶面喷施不同浓度锰肥对大豆产量的影响，结果表明：锰浸种或叶面喷施均使株高、主茎节数表现先增后减的趋势，底荚高度随浸种浓度增加而呈现升高趋势，分枝数不施锰的处理最多。一粒荚、四粒荚、瘪荚和百粒重随浸种浓度增加呈先增后减的趋势，单株粒数随锰浸种浓度增加而增加。一粒荚、二粒荚、瘪荚和百粒重均有随喷锰浓度增高而增加的趋势；四粒荚、单株粒数随喷锰浓度增加而先增后降。在不喷施锰的情况下，锰浸种对大豆产量有正效应；高浓度浸种处理，不喷施或低浓度喷施锰均可获得较高产量，而在浸种浓度一定时，高浓度叶面喷施使产量有下降趋势。综合来看，A2B2组合（0.02 g·kg^{-1}Mn浸种后再用0.87 g·kg^{-1}Mn叶面喷施处理）产量最高。

Abstract: Manganese is an important element in soybean growth, in order to research the effect of Mn fertilizer on soybean in meadow chernozemic soil of Sanjiang plain, a pot experiment was conducted from 2008 to 2009.Hefeng 55 was treated by seed soaking and leaf spraying with different concentrations of Mn fertilizer during soybean growth stage and determined plant height, branch number, seed weight and other traits in soybean maturity.The results showed that plant height and nodes on main stem were first increased and then decreased and the bottom pod height was increased with the Mn concentration increase no matter seed soaking or leaf spraying, and branch number of treatment without Mn fertilizer was the maximum.When Mn concentrations in seed soaking increased, the number of one seed pod, four seeds pod, flat pods and 100-seed weight were first increased and then decreased, and seeds number per plant was increased.One seed pod, two seeds pod, flat pod and 100-seed weight were increased, and four seeds pod, seeds per plant were first increased and then decreased with the increase of Mn concentration in leaf spraying.Seed soaking with Mn had positive effect on soybean yield when without Mn spraying.The combination of seed soaking with 0.02 g·kg^{-1}Mn and leaf spraying with 0.87 g·kg^{-1}Mn had the highest yield.

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