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[1]朱星陶,陈佳琴,谭春燕,等.玉米与大豆“1:2”间作种植的株行距优化配置研究[J].大豆科学,2014,33(01):35-40.
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玉米与大豆“1:2”间作种植的株行距优化配置研究

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摘要: 通过玉米与大豆间作行比优化试验, 筛选出兼顾大豆与玉米产量和产值的行比模式为玉米/大豆1: 2间作, 并在此基础上进行了大豆与玉米的株行距配置试验。结果表明: 大豆株距、大豆行距及大豆与玉米间行距对大豆产量的影响不显著而对玉米产量的影响极显著, 各因素及其互作对大豆与玉米复合产值的影响都达到显著水平; 玉米与大豆1: 2间作种植模式下最佳的株行距配置组合为大豆与大豆行距25 cm, 大豆与玉米行距30 cm, 大豆株距10 cm, 玉米株距25 cm; 在此优化模式下, 玉米和大豆的密度分别为4.71万和23.54万株·hm⁻², 产量分别为10 074.88和 1 168.44 kg·hm⁻², 大豆与玉米复合产值为34 752.84元·hm⁻², 大豆对复合群落产值的贡献率为18.82%。

Abstract: The intercropping of maize and soybean is popular in the mountain area of Southwest China. In this paper, after screening out 1: 2 as the best row ratio of maize to soybean, the detailed plant configuration was investigated. Plant space of soybean, row space between soybeans or between soybean and maize all had no significant effect on soybean yield, but extremely significant on maize yield. The tested factors and their interaction influenced total output of maize and soybean significantly. The optimized plant configuration were 25 cm between soybean rows and 10 cm between soybean plants, 30 cm row space between soybean and maize, and 25 cm between maize plants. Under this planting mode, the planting density of maize and soybean were 4.71×10^4 and 23.54×10^4 plants · ha⁻¹, their yield were 10 074.88 and 1 168.44 kg · ha⁻¹, respectively. The total output of maize and soybean was 34 752.84 yuan · ha⁻¹, and the contribution rate of soybean was 18.82%.

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