

# EFFECTS OF PLANT DENSITY ON GROWTH, YIELD OF KOREA MELON CULTIVAR “GEUM JE” IN THAI NGUYEN PROVINCE

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## Summary

The effect of planting densities on growth and yield of Korean variety "*Geum Je*" was conducted in 2 seasons of spring - summer and autumn - winter, year 2018 at Thai Nguyen University of Agriculture and Forestry (Thai Nguyen city, Vietnam). The experiment included 4 treatments as 4 planting densities: 13,333 plants ha<sup>-1</sup> (spacing: 0.5 x 1.5 m), 11,111 plant ha<sup>-1</sup> (spacing: 0.6 x 1.5 m), 9,523 plants ha<sup>-1</sup> (spacing: 0.7 x 1.5 m), 8,333 plants ha<sup>-1</sup> (spacing: 0.8 x 1.5 m) and was arranged in a randomized block design (RCBD) with 3 replicates. The results shown that plant densities had no significant influence on number of marketable fruit per plant, fruit weight and fruit quality but significantly affect fruit yield. The optimum of plant density in spring - summer was seen at 11,111 plants ha<sup>-1</sup> (spacing 0.6 x 1.5 m), producing: 4.86 fruits/plant, fruit weight: 500 g/fruit, fruit yield: 25.34 tons/ha, and achieving net profit at 232.267 million VNĐ/ha/crop. In autumn-winter season the best planting density was found at 13.333 plant ha<sup>-1</sup> (spacing 0.5 x 1.5 m), giving 4.4 fruits/plant, fruit weight: 381.5 g/fruit, fruit yield: 20.50 tons/ha and gaining net profit at 255.501 million VNĐ/ha/season

**Keywords:** *Growth, Korean melon, planting densities, yield, Thai Nguyen.*