PERFORMANCE OF INDIAN MUSTARD (BRASSICA JUNCEA L.) GENOTYPES ON PLANT GEOMETRY

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Abstract: A field experiment was conducted during winter (*rabi*) season of 2015-16 at Banaras Hindu University, Varanasi to assess the effect of planting geometry on growth and yield of Indian mustard (*Brassica juncea* L.) genotypes. The treatments were comprised of three genotypes (NRCHB-101, Kranti and RGN-73) and four levels of planting geometry (30 cm x 10 cm, 30 x 20 cm, 45 cm x 15 cm and 45 cm x 30 cm). Mustard genotype 'RGN-73' showed its distinct superiority over 'Kranti' and 'NRCHB-101' and proved to be the most suitable genotype, and planting geometry of 45 cm x 15 cm was observed to be the optimum plant geometry as this treatment was superior over other corresponding treatments of plant geometries, *viz.*, 30 cm x 10 cm, 30 cm x 20 cm and 45 cm x 30 cm. This was corroborated from the similar significantly higher values of plant height, dry matter accumulation/plant, primary and secondary branches/plant, yields and other quality components recorded under the best treatments (genotype 'RGN-73' and geometry of 45 cm x 15 cm). The highest net profit could be realized with the plant geometry of 45 cm x 15 cm of Indian mustard genotype 'RGN-73'.

Keywords: Genotype, Plant Geometry, Indian mustard, Yield

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