Paclobutrazol and bulb size effect on onion seed production

ABSTRACT

Field experimentation was done at Bangladesh Agricultural University, Mymensingh during, 2005-2006 to evaluate doses of paclobutrazol (PBZ) and bulb size of onion for their effect on growth and seed production of onion. Onion variety "Taherpuri" with three-bulb sizes viz., small, medium and large was used. Doses of PBZ were 20, 40, 80 ppm and no PBZ was used as control. A two-factor experiment was laid out in a randomized complete block design with three replications. PBZ application significantly reduced plant height, number of tillers per bulb, number of leaves per plant and length of scape. Number of flowers, umbels per bulb, umbel diameter, 1000-seed weight and seed yield were not influenced by PBZ concentrations used. Plant height, number of leaves per plant, length of scape, effective fruits per umbel, percentage of fruit set and seed yield were positively influenced by bulb size of onion. Variable interactive effects of PBZ dose and bulb size for different traits were recorded.

Keyword: Bulb size, Onion, Paclobutrazol, Yield, yield attributes, Allium cepa