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Effect of growth regulator, sowing method and seed rate on germination and biomass production of *Eryngium foetidium*

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Abstract

The effects of different sowing method, seed rate and growth regulator treatment on germination and biomass production of *Eryngium foetidum* was studied at Bangabandhu Sheikh Mujibur Rahman Agricultural University during December 2007 to July 2008 to standardize the seed rate, sowing density with growth regulator treatment. All the factors influenced seed germination, flowering and biomass production. Broadcasting or line sowing in closer spacing (10 cm) with hormone treatment (500 ppm GA_3 + 50 ppm kinetin) increased germination, number of harvested plants, fresh weight and biomass. The highest number of seedlings (1891/m^2), harvested plant (1212/m^2) and fresh plant weight (55.73 t/ha) were obtained from broadcasting sowing of growth regulator treated 30 kg seeds/ha. The maximum biomass (6.38 t/ha) was produced when 30 kg/ha growth regulator treated seeds were sown in line sowing 10 cm apart.

Keywords: Biomass, Eryngium, germination, seed rate, sowing method.

Biography

Shailendra Nath Mozumder has completed his Ph. D. at the age of 44 years from BSMR Agricultural University and Postdoctoral studies from the same. He has published more than 60 papers in reputed journals, two books, four abstracts and 13 popular articles in different publications. He developed 6 fruits, 4 vegetables varieties and many sustainable technologies which are being used by the farmers of Bangladesh. Presently, he is serving as a Senior Scientific Officer of RSRC, Bangladesh Agricultural Research Institute (BARI), Gazipur, Bangladesh and doing research on spices crops.