

## RESEARCH ARTICLE

# Effect of zinc and boron on seed yield and quality of onion (*Allium cepa* L.)

■ S. H. Arunkumar, Jitendra Kumar S. Hilli and D. S. Uppar

### SUMMARY

The field experiment was carried out in the olericulture unit, MARS, University of Agricultural Sciences, Dharwad during 2019-2020 to study the effect of zinc and boron on seed yield and quality of onion on variety cv. Bhima super at different levels of both basal and foliar application. The treatments consists of soil application of zinc sulphate (5 kg/ha and 10 kg/ha), Borax (4 kg/ha and 6 kg/ha) and foliar application of zinc sulphate (0.25 % and 0.5 %), Borax (0.1 % and 0.2 %) and control without micronutrient application replicated thrice in a Randomized Block Design. The foliar application was given at 45 days after bulb planting. From the present investigation, a significant increase in seed yield and quality parameters were recorded with foliar spray of zinc sulphate (0.5 %) and borox (0.2 %) viz., seed yield per plant (4.29 g), seed yield per plot (214.13 g) and seed yield per hectare (9.91q/ha). The germination percentage was found maximum from the treatment foliar application of zinc sulphate (0.5 %) (84.8%) and the other seed quality parameters was found best from the treatment foliar spray of ZnSO<sub>4</sub> (0.5%) and B (0.2 %) i.e., higher shoot length (8.83 cm), root length (7.21 cm), seedling vigour index (1352) and test weight (3.75 g). The non-significant differences were observed due to influence of soil and foliar application of zinc and boron on electrical conductivity and seedling dry weight.

**Key Words :** Onion, *Allium cepa* L. Zinc, Boron

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