

## RESEARCH ARTICLE:

## Effect of organic manures and biostimulants on growth and seed yield of multiplier onion (*Allium cepa* var. *aggregatum*) cv. Co (On 5)

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ARTICLE CHRONICLE:

**Received:** 20.07.2017; **Accepted:** 16.08.2017

KEY WORDS:

Multiplier onion, Organic manures, Bio stimulants, Growth, Bulb yield, Seed yield **SUMMARY:** Onion is one of the important bulbous vegetable crop occupies prime position in every kitchen. Onion is being used as salad as well as cooked vegetable. Since onion is used as fresh vegetable as salad and in ayurvedic system of medicine the residual effect due to chemical fertilizer is highly harmful to human being. Hence, development of organic cultivation practices is essential. The present experiment on "Effect of organic manures and biostimulants on growth and seed yield of multiplier onion (Allium cepa var. aggregatum) cv. Co (On 5)" was carried out to find out suitable organic inputs for higher yield. The The experiment was laid out in a Factorial Randomized Block Design with two factor viz., factor I-Organic manures including M<sub>1</sub>, Control, M<sub>2</sub>-FYM (12.5 tha<sup>-1</sup>), M<sub>2</sub>-Neem cake (2 tha-1) and M<sub>4</sub>- Vermicompost (2 tha-1) and factor II-Biostimulants comprising S<sub>1</sub>-Control (water spray), S<sub>2</sub>, Humic acid (0.2 %), S<sub>3</sub>, Panchagavya (2%), S<sub>4</sub>. Vermiwash (2%) and S<sub>5</sub>, Seaweed extract (2%). Totally 20 treatments were replicated in thrice. The results showed that organic manures and bio stimulants had significant influence on all the growth characters viz., plant height, leaf length, leaf breadth and number of leaves, yield traits viz., bulb length, bulb girth, number of bulblets and bulb weight, bulb yield per plot and bulb yield per hectare and seed yield traits viz., number of umbels per hill, seed yield per plot and seed yield per hectare. Soil application of FYM @ 12.5 tha-1 and foliar application of seaweed extract @ 2 per cent significantly increased plant height, leaf length, leaf breadth and number of leaves, bulb length, bulb girth, number of bulblets and bulb weight, bulb yield per plot, bulb yield per hectare, number of umbels per hill, seed yield per plot and seed yield per hectare.

**How to cite this article:** Sundharaiya, K., Renganayaki, P.R., Sujatha, K. and Sathish, G. (2017). Effect of organic manures and biostimulants on growth and seed yield of multiplier onion (*Allium cepa* var. *aggregatum*) cv. Co (On 5). *Agric. Update*, **12** (TECHSEAR-8): 2239-2245.

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