



RESEARCH ARTICLE :

Effect of organic manures and biofertilizers on vegetative and floral traits at different stages of Carnation (*Dianthus caryophyllus* L.) cv. Soto in hill zone of Karnataka under protected cultivation

■ **BASAVARAJ DALAWAI AND B. HEMLA NAIK**

ARTICLE CHRONICLE :

Received :

20.07.2017;

Accepted :

16.08.2017

KEY WORDS:

Organic and inorganic fertilizers, Carnation, Biofertilizers, Yield

SUMMARY : Eleven treatments with different combinations of organic, biofertilizers and inorganic fertilizers were tested for growth, flowering, flower yield and vase life parameters to identify best combination of fertilizers for cultivation of Carnation (*Dianthus caryophyllus* L.) flower under naturally ventilated polyhouse in Mudigere condition. T₁₁ (*Azospirillum* + PSB + FYM + VC + 75% RDF) and T₁₀ (*Azospirillum* + PSB + VC + 75 % RDF) proved to have better results in vegetative growth at all the stages and flowering parameters. Maximum plant height (113.21 cm), Number of branches (8.13), number of leaves (202.30), leaf length (19.54 cm), Leaf width (1.04 cm), Internodal length (7.60 cm) and Number of nodes/ branch (30.37) were observed in T₁₁ at all the stages of plant growth and recorded good height at 180 days after pinching. These combinations lead early to initiate full flower (133.78 DAP). Flower quality parameters like flower diameter (6.49 cm) recorded highest in T₁₁. Longevity (12.52 days) and highest yield per m² per year (428.34) were recorded in T₁₁ (*Azospirillum* + PSB + FYM + VC + 75% RDF) followed by T₁₀ (12.01 days and 414.04, respectively). Thus, this combination of different fertilizers may effective for good plant growth and more production of Carnation cut flower.

How to cite this article : Dalawai, Basavaraj and Naik, B. Hemla (2017). Effect of organic manures and biofertilizers on vegetative and floral traits at different stages of Carnation (*Dianthus caryophyllus* L.) cv. Soto in hill zone of Karnataka under protected cultivation. *Agric. Update*, **12** (TECHSEAR-8) : 2085-2090.

Author for correspondence :

BASAVARAJ DALAWAI

Department of
Floriculture and
Landscape Architecture,
College of Horticulture,
MUDIGERE (KARNATAKA)
INDIA

Email : dalawaiagri
@gmail.com

See end of the article for
authors' affiliations