Agrotechnol 2014, 2:4
http://dx.doi.org/10.4172/2168-9881.S1.008

OMICS Group Conferences
Accelerating Scientific Discovery

2nd International Conference on
Agricultural & Horticultural Sciences
Radisson Blu Plaza Hotel, Hyderabad, India February 03-05, 2014

Identification of superior parents and cross combinations by using line × tester analysis in finger millet (*Eleusine coracana* L.)

Parashuram Patroti
Acharya N. G. Ranga Agricultural University, India

Field experiment was conducted at Zonal Agricultural Research Station, University of Agricultural Sciences, Gandhi Krishi Vignana Kendra, Bengaluru during. The experimental material consisted of four lines viz., GE 4596, GE 6216, GE 4906 and GPU 28 and four testers viz., L 5, GE 5095, GPU 69 and GPU 48. The crosses were affected in a Line × Tester fashion. The results revealed that among the lines GE 4596 and GPU 28 and among the testers L 5 and GPU 69 had recorded high *per se* and *gca* for yield and most of the yield contributing characters. Among the hybrid combinations GE 4596 x L 5 and GE 4596 × GPU 69 had significant and superior *per se* performance for grain yield per plant, straw yield per plant, finger length, peduncle length, number of fingers per ear, culm thickness and number of productive tillers per plant. Results from specific combining ability study, revealed that the crosses viz., GE 4596 × L 5, GE 6216 × GPU 48 and GE 4906 × GPU 48 had significant *sca* effects for most of the characters. The hybrids, GE 4596 × L 5, GE 4596 × GPU 69 and GPU 28 × L 5 were from parents with high × high *gca* and GE 4596 × GE 5095, GE 6216 × GPU 69, GE 4906 × GPU 69 and GPU 28 × GE 5095 were from parents with high × low *gca* combinations. Thus, six crosses are suggested for realization of transgressive segregants in F2 and subsequent generations.

Biography

Parashuram Patroti has completed his graduation in Agriculture from UAS, Dharwad and Master's degree in Genetics and Plant breeding from UAS, GKVK, Bengaluru. He is presently receiving ICAR-SRF and Rajiv Gandhi National Fellowship for pursuing his Ph.D. degree in Acharya N. G. Ranga Agricultural University, Hyderabad since 2011.

parashu.patroti@rediffmail.com

Influence of spacing and different levels of fertilizers on growth and yield parameters of bell pepper under shade net condition

Shivakumar[1], Abbas Hussain[2] and K V Santhosha[1]
[1]KRC College of Horticulture, India
[2]University of Agricultural Sciences, India

The bell pepper (*Capsicum annum* L. Var. Grossum Sendt.; 2n=24) is commonly known as sweet pepper, bell pepper, Capsicum or green pepper. Bell pepper is an important commercial vegetable that gives maximum profit to farmers. Plant density and nutrient management play an important role in growth and development of any crop including bell pepper. Therefore an experiment was conducted to find the effect of spacings and different levels of fertilizers on growth and yield of bell pepper under shade net condition. The experiment was conducted at Horticulture garden, RARS, Raichur during *kharif*, 2008. The experiment was analyzed by split plot design. There was increase in leaf area index with advancing age of crop and reached the highest value at 90 day after transplanting. Higher chlorophyll content of leaves was noticed in medium spacing S2. Lower chlorophyll content of leaves was recorded in the treatment F_1. Higher fruit weight was recorded in wider spacing (45 cmx45 cm) because of translocation of available photosynthates to the sink which has increased the weight of individual fruit. Average weight of fruit was maximum in wider spacing S_1 at all the stages. Among levels of fertilizer least average weight of fruit was noticed in F1 treatment. Average weight of fruits was maximum at initial stage. Maximum weight of fruit was in F_6 treatment. Among interactions, S_1 at F_6 recorded higher average weight of fruits.

sbgajre@gmail.com