

VARIETAL DEVELOPMENT, CONSERVATION AND PRODUCTION OF PLANTING MATERIALS OF STRAWBERRY (*Fragaria spp.*)

Dr. Md. Ismail Hossain¹

Extended Summary

The present trial was performed in the field of Horticulture farm, Sher-e-Bangla Agricultural University, Dhaka during 2010-2011. Ten genotypes of strawberry were collected from different nurseries of Bangladesh from where six genotypes were put under field trial. It was observed that the genotypes FA 01 (8.25 t/ha), FA 02 (7.95 t/ha) and FA 06 (7.71 t/ha) showed better performance in yield contributing characters and also yield under trial. It is therefore, revealed from the overall results that there is ample scope of release as variety(s) of strawberry after further studies for the standardization of their production practices. Correlations and their paths of contribution were estimated using morphological characters of six strawberry genotypes. For most of the cases, correlation coefficient values were higher, indicating strong inherent relationship among the traits. Number of flower bud per plant, length of fruit and breadth of fruit had positive and significant correlation with yield. Highly significant and positive correlations were observed for crown height, number of flower per plant and number of fruit per plant with yield. Path analysis also revealed the importance of these three characters and would be considered for effective selection. Randomly Amplified Polymorphic DNA (RAPD) markers were used to evaluate genetic diversity of 10 strawberry genotypes. Among 29 arbitrary primers screened, five primers generated 44 amplified products, of which 32 fragments (72.73%) were found polymorphic. The results indicated that RAPD markers are the potential sources to differentiate strawberry genotypes and for estimation of genetic diversity. These results will be useful to establish and maintain germplasm of strawberry and may guide us in designing strategies to maximize the utility of genetic resources.

¹ Professor, Dept. of Horticulture, Sher-e-Bangla Agricultural University, Dhaka