Evaluation of Some Concomitant Yield Variable in Some Improved Soybean

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Abstract: In this study, ten newly developed early maturing soybean varieties were considered. Among all the agronomic parameters of a leguminous crop, eight were considered and they are the following: days to flowering, days to maturity, height at harvest, height at lowest pod, number of plant harvested, dry fodder weight, 300 seed weight and nodulation count. Their effect on plant yield were evaluated and the result showed that among all the tested parameters, number of plant harvested and dry fodder weight are the parameters that are significantly and linearly related to the plant yield with correlation coefficient (r), r = 0.902 and 0.834 and are significant at 0.1% and 1% levels of significant respectively. To critically examine the effect of these agronomic parameters on the yield variable, analysis of variance and analysis of covariance were carried out separately on them and it was found out that the varietal effect on the adjusted yield (the yield adjusted with related covariates) was not significantly different, unlike the unadjusted yield or the yield adjusted with non-related covariates.