EXPLORING MOST EFFICIENT AND RELIABLE PARAMETERS TO MEASURE EARLINESS IN COTTON (GOSSYPIUM HIRSUTUM)

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ABSTRACT

Earliness is one of the universal objectives in a cotton management scheme. Earliness can be defined as the shortest amount of time to produce profitable cotton. Keeping in mind the above definition, a field experiment was conducted in the year 2009 to compare the reliability and efficiency between two earliness parameters (days taken to appearance of first flower and first sympodial node number) at the early growth stage of 26 cotton genotypes. Results revealed that for both the parameters showed highly significant differences among all the 26 genotypes. Numerically, CRIS-342 and Shahbaz were rated as early maturing genotypes which took 41.7 days to appearance of first flower followed by CRIS-121 and H-151 which took 42.7 days to appearance of first flower. As regards to second earliness parameter (first sympodial node number), it was observed that CRIS-121 was the earliest genotype which gave 4.2 first sympodial node number followed by Shahbaz (4.4) and CRIS-342 (4.5). These three genotypes were also rated earlier ones through the first earliness parameter i.e., days taken to appearance of first flower. Thus, it was concluded that both earliness parameters designated CRIS-342, Shahbaz and CRIS-121 as early maturing genotypes, therefore, both the parameters could reliably and efficiently be considered for measuring earliness in cotton.

Keyword: Days to 1st flowering, early stage, first sympodial node number, maturity.