RESEARCH ARTICLE

YIELD POTENTIAL ASSESSMENT OF FINGER MILLET GERMPLASM ACCESSIONS IN BASTAR PLATEAU AGROECOLOGICAL ZONE

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Abstract: A preliminary grain yield evaluation trial involving 100 germplasm accessions of finger millet was conducted at Research cum Instructional Farm, SG College of Agriculture and Research Station, Jagdalpur, IGKV, Raipur, Chhattisgarh during *Kharif* 2018-19 crop season. The tillers number per plant arrayed between 1 to 4.4 (adjusted mean of five random plant average) over the test accessions and 1.8 to 2.2 among the check varieties. Genotype GEC147(4.4 tillers) followed by GEC127 (4.3), GEC352 (4.0), IC0477591 (3.7) and IC0477601 (3.5) were identified as high tillering accessions. Length of longest finger varied from 3.52 to 13.27cm among test accessions whereas, its distributed between 7.23 to 11.52cm among check varieties.In pursuance of DUS descriptors, 34% of genotypes exhibited long fingers, 51% medium length fingers and remaining had short finger size. The finger width at widest point had range between 0.41 to 1.33cm among all the test accessions, which were basically germplasm, but in case of established cultivars (or local checks) it was relative stable i.e., 0.96 to 1.07cm. Comparison of percent grain yield superiority over best check revealed that only one genotype GEC132 out yielded (423.5g) the best check variety GPU67 (418.3g), but the value was non-considerable i.e., 1.24%. However, statistical comparison of critical difference (CD = $p \leq 0.05$) showed that seven genotypes had similar performance as that of best check. These were GEC132, GEC11, GEC122, IC0476378, IC0477650, IC0477591 and IC0477406 and therefore, can be concluded as findings of the present work.

Keywords: Upland agriculture,Genotypic effect**,** Grain yield, Finger millet, Germplasm

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