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RESEARCH ARTICLE

Morpho-physiological studies in *desi* cotton genotypes (*Gossypium arboreum* L.)

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SUMMARY

The present investigation entitled "Morpho-physiological analysis of *desi* cotton genotypes (*Gossypium arboreum* L.)" was carried out to evaluate promising cotton genotypes for morpho-physiological and yield contributing traits at Cotton Research Station, Mahboob baugh farm, VNMKV, Parbhani, during *Kharif* season-2022. The present experiment conducted on fifteen promising genotypes of cotton (*Gossypium arboreum* L.) including two checks. The genotypes tested were PA-904, PA-906, PA-907, PA-927, PA-929, PA-932, PA-936, PA-941, PA-942, PA-945, PA-947, PA-948, PA-950 along with two checks PA-742 (C) and NH-615 (C). The present experiment revealed that, PA-907 and PA-906 were observed as early flowering genotypes whereas, PA-942 was the late desi cotton genotype. PA-904 was highest among rest of the genotypes in term of height and at par with the both upland and lowland cotton checks. Genotype PA-950 produced highest dry matter as compare to desi cotton genotype check PA-402. PA-906 recorded highest ginning out turn than upland cotton check NH-615. Genotype PA-904 had highest leaf area, leaf area index, specific leaf weight, number of bolls and high seed cotton yield among desi cotton genotypes and appeared as a most promising genotype among rest of the *desi* genotypes studied for yield parameter.

Key Words: Ginning outturn, Staple length, Dry matter, Boll weight

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