



RESEARCH PAPER

Performance of pearl millet genotypes under drought and terminal stress condition for their suitability under arid and semi arid regions

R.C. Meena*, Moola Ram¹, Manoj Kumar, Supriya Ambawat and C. Tara Satyavathi
DAICRP-Pearl millet, Agriculture University, Mandor, Jodhpur (Rajasthan) India
(Email: meenarc2004@yahoo.co.in)

Abstract : The field experiment was conducted at ICAR-AICRP on Pearl Millet Farm, Mandor, Jodhpur during summer season of 2015-16 in Randomized Block Design (RBD) with three replications. Twenty two genotypes were evaluated under normal as well as terminal stress condition. The suitability of genotypes was identified on the basis of physiological parameters like drought tolerance index (DSI), drought tolerance efficiency (DTE), grain reduction percentage (GRP), threshing percentage (TP) and harvest index (HI) in addition to 50% flowering, productive tillers, grain yield, stove yield, days to maturity. Among different genotypes, J-2510, MIR-1252, 06555B, J-2551 and MIR 1252 produced comparatively higher grain yield under both the conditions. The lowest drought resistance index (DSI) was observed in MIR 1252, 6555B and J-2510 which indicated their better suitability under terminal stress and heat stress conditions.

Key Words : Drought, Pearl millet, Stress, Drought tolerance efficiency, DSI, GRP

View Point Article : Meena, R.C., Ram, Moola, Kumar, Manoj, Ambawat, Supriya and Tara Satyavathi, C. (2022). Performance of pearl millet genotypes under drought and terminal stress condition for their suitability under arid and semi arid regions. *Internat. J. agric. Sci.*, **18** (1): 249-253, DOI:10.15740/HAS/IJAS/18.1/249-253. Copyright@ 2022: Hind Agri-Horticultural Society.

Article History : Received : 27.08.2021; Revised : 29.09.2021; Accepted : 23.10.2021

*Author for correspondence:

¹Agricultural Research Station, Mandor, Agriculture University Jodhpur (Rajasthan) India