

## Effects of Drought Stress on Morphological, Physiological Traits of Wheat (*Triticum aestivum* L.) Cultivars in Pakistan

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### Abstract

Drought is major abiotic stress affecting the morphological, physiological and biochemical processes. Genetic improvement for drought tolerance in wheat could be possible to develop new genotypes through conventional breeding. To investigate drought resistance under water stress condition, a trial was conducted in split block design, using eight genotypes, i.e., Inqlab-91, PBGST-03, PBGST-01, PBGST-02, SKD-1, Hero, Sunder, and Sassari along with two treatments (non-stress and water stress at anthesis stage). The experiment was carried out in the field of Botanical Garden, Sindh Agriculture University, Tandojam, and Sindh, Pakistan. A significant reduction appeared in morphological traits at the anthesis stage due to the reduction of irrigation. The mean squares from analysis of variance due to genotypes, treatment, and treatments x genotypes interactions were significant at  $P \leq 0.05$  for all the traits, indicating that the genotypes performed variably under stress conditions.

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