عنوان مقاله:

مقاله کوتاه علمی: مطالعه تغییر محتوی پرولین، خسارت غشا سلولی و تحمل به تنش خشکی در ژنوتیپ های گندم دوروم (Triticum turgidum var. durum) در شرایط کنترل شده

محل انتشار:

مجله به زراعی نهال و بذر, دوره 25, شماره 3 (سال: 1388)

تعداد صفحات اصل مقاله: 8

نویسندگان:

مصطفی آقایی سربرزه
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خلاصه مقاله:

This study was conducted to evaluate the effect of drought stress on ۲۲ durum wheat genotypes. Different characteristics such as grain weight per spike, plant biomass, ۱۰۰ grain weight, free proline content in leaves, and percentage of cell membrane damage were studied in greenhouse and laboratory conditions. Genotypes were sown under normal irrigation and moisture stress conditions. In stress experiment irrigation was applied until spike emergence stage. Leaf samples were taken from flag leaf under stress and non-stress conditions at flowering stage. Genotypes were then compared by calculating stress tolerance index (STI). Results indicated that genotypes, ۱۲, ۲۱ and ۱۳ (Marvoid , Saymareh, and G۱۳, respectively) performed better as compared to the others for drought stress tolerance, proline content, cell membrane stability, and grain weight/spike. These genotypes were selected as tolerant to drought. On the other hand, the genotypes ۱۱, ۳, and ۹ (Garagilchik, ۲۰۱۹/۰۱/۲۳, and ۱۱-۱۱-۱-۳, respectively) were susceptible with lower proline content in leaves and higher cell membrane damage. It was also shown that there was a highly positive relation among grain weight/spike, STI, proline content and cell wall stability, therefore, these attributes .can be used as selection criteria in the breeding programs

کلمات کلیدی: