

PP19: Evaluation of faba bean accessions for earliness and heat tolerance

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Faba bean (*Vicia faba* L.) is an important cool season food legume grown worldwide. Heat is a major abiotic stress that reduces faba bean productivity. Heat stress is increasing in terms of intensity and frequency due to the climatic change and variability. This study aimed to evaluate faba bean accessions under heat prone conditions. A set of 176 accessions from 21 countries were tested in alpha lattice design with two replications at ICARDA Terbol, Lebanon during the summer 2015. The maximum air temperature varied from 32°C to 40.5 °C during the flowering time. The heat tolerance score varied from 2 to 5. Days to flowering, plant height and seeds per plant varied significantly among genotypes. DFLR varied from 35 to 120 days. About 36 accessions flowered at 35 days after sowing (DAS) and 75 at 45 DAS. Plant height varied from 37 to 79 cm, and Seeds per pod ranged from 0 to 129. Lines with 20 seeds per plant were considered heat tolerant. Twenty two accessions originating from Egypt, Iran, Iraq, Turkey, Sudan, and Spain and 14 ICARDA improved lines were identified as extra early lines while three accessions originating from Sudan and Egypt and 5 improved lines were considered as heat tolerant.