Abstract:

In previous study conducted in neighboring province (Sohag) it has been noticed that "El-Zarka" (C. maxima) Damietta landrace did not flowered, "Connecticut Field cv" (C. pepo) flowered but there was no fruit set, while pumpkin landraces (C. moschata) produced markedly reduced fruit yield. These results were obtained when planting was done at the regular season dates (middle April). Our current study was carried out at the Experimental Farm of Faculty of Agriculture, Assiut University, Assiut, Egypt, during 2008 and 2009 seasons. Seeds of the aforementioned 3 pumpkin entries were imbibed in tap water for 24 or 36 h and chilled at 4-5 oC for 10 or 12 d. Results showed that shorter plants with higher sex ratio (female/male) were obtained from seeds imbibed for 36 h and chilled for 12 d. These plants produced greater number of smaller-sized fruits with high TSS % and dry matter in the fruit as compared to fruits of plants from untreated seeds. Such plants gave higher total fruit yield. The overall results substantiate that seed chilling prior to sowing is recommended to produce higher fruit yield and quality in pumpkin under Assiut and/or similar conditions.

Keywords:

Connecticut Field pumpkin, Dry matter, Flowering, Landrace, Sex ratio, TSS, Yield.

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