

Effect of sowing date on grain yield and yield components of four grasspea Ecotypes

Fereshteh Behnamfar, Majid AghaAlikhani and Seyed Ali Mohamad Modarres Sanavy

In order to evaluate the effects of sowing date on grain yield and yield components of grasspea (*Lathyrus sativus* L.) an experiment was conducted at the research field of Tarbiat Modares University during 2008-2009 growing season. Treatments were established in a randomized complete blocks design in factorial arrangement with three repetitions. The first factor was sowing dates consisted of March 15, April 6, April 29 and May 23. The second factor was four grasspea geographic ecotypes known as Syria, Etiopy, Oshnaviye and Mashhad. Results indicated that sowing date and ecotype have significant effects on grain yield and yield components (pod number/m², grain number/pod and 1000-grain weight) in such a manner the highest amount of above mentioned traits were obtained from the first sowing date and they have been reduced by delayed sowing dates. Among ecotypes, Mashhad has the highest pod number/m² (522.6) and grain number/pod (2.96) whereas the highest 1000-grain weight (155.4 g) obtained from Etiopy ecotype. The stepwise regression showed that pod number/m² with $r^2=0.82$ was the most important yield components. The grain yield in different ecotypes depended on each sowing date treatments. The highest grain yield in first, second and third sowing date were obtained from Mashhad (431), Syria (400) and Etiopy (281) ecotypes respectively. Moreover, the forth sowing date (May 23) never suggested due to less grain yield.

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