



Best harvesting time and seed storage methods for *Salsola rigida*

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Extended Abstract

Introduction: The times of seed collection and storage have significant impacts on seed viability. This information is vitally needed for the management of seed production stations.

Methods: Effects of two methods of cultivating maternal plants (irrigation or rainfed), five times of seed harvesting (early September, November, October, December, and January), two seed coat treatments (seed coat removal or control), and two types of seed storage (5°C and room temperature) were studied on seed germination of *Salsola rigida*, a semi-shrub species found in Neyshabur Seed Station, Khorasan Razavi Province. In each experiment, four replications of 25 seeds were tested in a germinator 14/10 hours of day/night. The germination test lasted for 20 days, and the total experiment duration lasted about 5 months. Seed germination percent was initially increased by increasing time from September to October. however, it was reduced towards zero in December and January.

Results: it was found that methods of maternal cultivation, time of seed harvesting, and seed storage conditions had significant effects on seed germination of *S. rigida*. The seeds which were collected from the rain fed cultivation and those which were kept in a cold room (4 °C) showed higher germination percentages than those collected from the irrigated cultivation and ambient storage.

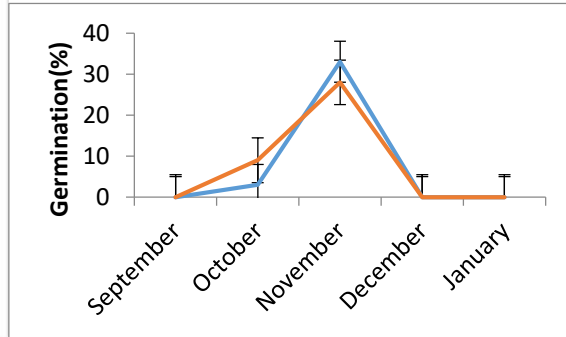
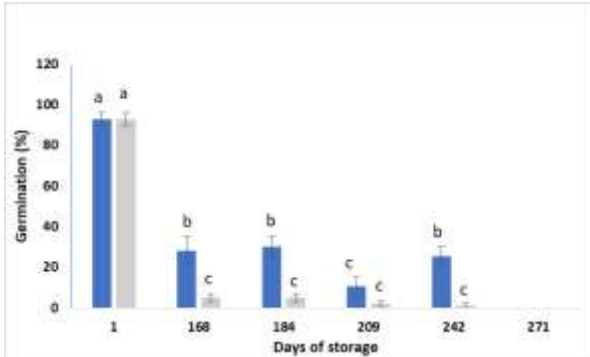
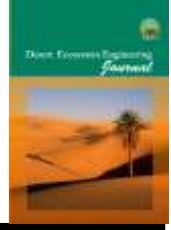
Discussion and Conclusion: According to the results of this study, it is suggested that *Salsola rigida* seed be collected from Ashgabat station in Neyshabur in early November, and if they need to be stored, they should be kept under cold room conditions (4 °C).

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