EFFECT OF SOWING DATES AND DEPTHS ON EMERGENCE CHARACTERISTICS AND TUBER PRODUCTION OF MEDICO-INDUSTRIAL *FERULA ASSA-FOETIDA*

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To assessing the effects of sowing dates and depths on emergence and tuber production of endangered medico-industrial *Ferula assa-foetida*, an outdoor pot experiment conducted in Natural Resources and Environment Faculty of Ferdowsi University of Mashhad at 2011. The experiment had done as Factorial in completely randomized design with 10 replications. Treatments contained 5 levels of sowing dates (26 January, 10 March, 25 March, 15 April, 25 April) and 2 levels of sowing depth (2 and 4 cm). Results showed that sowing dates, depths, and their interactions have significant effect on the percentage of seed emergence of *Ferula assa-foetida*. However, emergence rate and tuber production of the plant was affected only by sowing date. So, the highest emergence percentage (68%) and emergence rate achieved at the first sowing date (26 January) and the lowest (less than 2%) observed at two last sowing dates (15 and 25 April). The first sowing date, also, had the highest tuber production of 1.3 tubers in average per pot, while no tubers were produced at the last two sowing dates. In comparison between two depths, higher emergence rate was observed at the 4 cm depth vs. 2 cm. In general, it seems that deep sowing of this plant in mid-winter versus spring sowing is more successful due to the higher emergence and emergence rate and also tuber production.

References