EFFECTS OF SOWING DATE AND INTRA ROW SPACING ON SEED, ESSENTIAL OIL AND CARVONE YIELD OF DILL (*Anethum graveolens* L.) AT NORTH-WEST OF IRAN

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**ABSTRACT**

Field trials conducted to evaluate the effects of sowing date and intra row spacing on seed, essential oil and carvone production at North-west of Iran. Four sowing dates (early April, late April, early May and late May) and five intra row spacing (5, 10, 15, 20 and 25 cm) were studied. The highest yield in both years was obtained from early April sowing with 10 cm intra row spacing. Delay in sowing negatively affected the seed yield, thousand seed weight and carvone yield of dill. Therefore, for successful seed and carvone production dill must be sown from early to late April at north-west of Iran.

**Key Words**: *Anethum graveolens*, dill, sowing date, intra row spacing, essential oil, carvone, seed yield.