



قسم المحاصيل



جامعة الفيوم
كلية الزراعة

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Seventh Article:

Article title	Effectiveness of sowing dates and N rates on productivity of two flax (<i>Linum usitatissimum</i> L.) cultivars.
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At Dar-Ramad experimental farm, Faculty of Agriculture, Fayoum University, Egypt, two field experiments were done during 2016/2017 and 2017/2018 seasons to investigate the effect of date of sowing and N rates on straw and seed yields of two *Linum usitatissimum* L cultivars. The arrangement was done in split split-plot in RCBD with three replications. Date of sowing (i.e. November 10th, November 25th and December 10th) were allocated in the main plots. Flax cultivars (Sakha-1 and Sakha-2) occupied in the sub-plots. Whereas, N rates (i.e., 35, 70, 105 and 140 kg N ha⁻¹) were distributed in the sub sub-plots. The obtained results showed that earlier sowing date in November 10th significantly overtop middle and late sowing dates for straw and seed yield and related traits. Sakha-1 significantly surpassed Sakha-2 in studied straw yield traits, while, Sakha-2 exceeded Sakha-1 in seed yield traits. Nitrogen rate at 140 kg ha⁻¹ gave significantly higher straw and seed yields than other N rates which significantly vary from each other and this is true in both seasons. The regression analysis of seed yield specified that there are three traits i.e. seed index, number of capsules plant⁻¹ and seed yield plant⁻¹ in 1st season and two ones i.e. seed index and number of capsules plant⁻¹ in 2nd season were significantly participated ($P \leq 0.001$) in variation of seed yield ha⁻¹.

