

تأثير تحميل بعض النباتات الطبية والعطرية ومسافات الزراعة في مكافحة أكاروس  
العنكبوت الأحمر ذو البقعتين على نبات الفاصوليا

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**EFFECT OF INTERCROPPING OF SOME MEDICAL AND  
AROMATIC PLANTS AS WELL AS SOW SPACING IN KIDNEY  
BEAN TO CONTROL THE TWO SPOTTED SPIDER MITE,  
TETRANYCHUS URTICAE KOCH.**

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**ABSTRACT:** An experiment was conducted in a field at Menoufiya Governorate to estimate the effect of intercropping of certain medical and or aromatic plants; as well as sow spacing on kidney bean plantation on the population of the two spotted spider mite, *Tetranychus urticae* Koch in spring period during the two successive seasons (2010 and 2011). Kidney bean plant was cultivated as a control, each plant species of mint, fennel and black cummin was intercropped with the bean plant, and four sow spacing of kidney bean were chosen 10, 20, 30 and 40cm.

The obtained results indicated that the population average numbers of the two spotted spider mite, *T. urticae* was a significantly different among the four different treatments in the both seasons (LSD;  $P < 0.05$ ). The fennel intercropped on bean plant showed the lowest spider mite population, followed by the mint and black cummin whereas; the bean plant alone had the highest spider mite population during the two seasons.

Results showed that there was a significant difference among the population average numbers of the two spotted spider mite, *T. urticae* infesting kidney bean in different spaces in each treatment (LSD;  $P < 0.05$ ). Generally, the functional relationship between sow spacing and infesting was decreasing relationship (as the spacing increases, infesting decreases) so the forty cm spacing was the best spacing treated in reducing the population of the spider mite, *T. urticae*.

In conclusion, the discussion of the experiment suggested that intercropping fennel plants and cultivating in bean at spacing of 40cm are the best for suppression of spider mite which are important tools in integrated control program.

**Key words:** Two-spotted spider mite, *Tetranychus urticae*, *intercropping*, medical and aromatic plants, *Nigella Sativa* L., *Foeniculum vulgare* Miller, *Mentha Viridis* Hort kidney bean, *Phaseolus vulgaris* L.