

## ABSTRACT

**Maha Ahmed Mahmoud Ahmed Tantawy. Certain Approaches to control the key pests infesting some sweetpea cultivars.**

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Field studies were conducted throughout two seasons at Qalubiya Governorate to survey of pests and natural enemies of sweetpea plants, *Pisum sativum* var. *macrocarpon*, and studied the effect of weather factors, planting date and space, sweetpea cultivars (6 cultivars), biofertilizer compounds and biochemical and chemical compounds on the population densities of thrips, aphids, whitefly (eggs and nymphs) and leafminers (larvae + pupae). The obtained results clearly showed that 48 species belonging to 42 genera and 31 families of eleven orders occurred on sweetpea plants. The population densities of the considered insects were greatly influenced according to the changes in weather factors (maximum and minimum temperature and relative humidity). Sweetpea plants which planted at the earliest planting date (Oct. 30<sup>th</sup>) and largest distance (40 cm) had less infestation with the various considered insects. Dregon cultivar was the most susceptible one to the infestation with the various considered insects. Sweetpea plants treated with biofertilizer compounds, Activator and Stimoful harboured the least number of these insect pests. The biocompound, Spinosad gave good reduction percentages of thrips, aphids and leafminers while *B. thuringiensis*, *B. bassiana* and Soybean oil gave considerable reductions more than 50 % after 3 days.

**Key words:** Sweetpea plants, *Pisum sativum* var. *Macrocarpon*, Thrips, Aphids, Whitefly, Leafminers, Planting date, Planting space, Susceptibility of sweetpea cultivars, Biofertilizers, Biocompounds.

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