

Efficiency of integration of intercropping culture of potato varieties (Spunta & Nikola) and sticky traps in controlling some sucking insect pests in the field of fruit seedlings.

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Abstract : A various of field experiments were conducted to study the role of the sticky colored traps with intercropping of potato varieties (Spunta & Nikola) with Garlic plants existing in interspaces of peach - pear and citrus seedlings against the green peach aphid, *Myzus persicae* (Suzler), the cotton white fly, *Bemisia tabaci* (Genn.) and leafhoppers, *Empoasca discipiens* (Paoli) at Noubareya province, Egypt.

The results showed that the population of insects caught by the sticky traps was higher in the field of individual mono culture of potato varieties than those cultivated in multi culture system. The level of injury of potato plants with piercing sucking insects was low in the field of multi-culture of potatoes with garlic plants in the fruit gardens compared to that individual cultivation, which indicates that the the garlic plants have a role in the expulsion of sucking insects and protect potato plants against injury with piercing insects (Aphids, Whitefly and Leafhoppers). Highly significant difference between the average number of captured aphids in the field of Spunta and Nikola varieties mixed with garlic plants ($F = 6.81$ & 7.35). and between the average number of *B. tabaci* occurred on individually cultivated of Nikola variety ($f = 14.23$), while the difference was significant in intercropped with garlic under fruit trees ($f = 3.61$). The differences between the average number of *E. discipiens* located on a single cultivation of Spunta variety was insignificant ($f = 0.34$) and in the case of Nikola variety ($f = 2.31$). Production of the potato varieties (Spunta & Nicola) cultivated in the garden of citrus and pear was higher than those cultivated in the garden of peach. productivity of Nikola variety was higher than the productivity of spunta variety. The results show that the lower of the losses caused by insects and mechanical practices during harvest of potatoes due to higher increase in net productivity of potato tubers per acre. It can be concluded from this study that the exploiting the interspaces between the seedlings of fruit trees and intercropping cultivation of potatoes with Garlic plants plus use the Sticky colored traps with care in harvesting leads to a net increase the productivity per acre of perfect potato tubers and increase farmer income.

Key words: Potato, sucking insect pests, seedlings, intercropping culture.