



Tropentag, September 18-20, 2019, Kassel

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## Effect of some Botanical Oils on the Control of the Cotton Jassid on Eggplant, Sudan

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### Abstract

Eggplant, *Solanum melongena* L., is one of the major vegetable crops in the Sudan. Eggplant is infested by species of insect pests. However, the cotton jassid (*Jacobiasca lybica*) is the major one. This study was conducted to investigate the effects of botanical oils, castor bean seed oil, cotton seed oil and sunflower seed oil on the population of the cotton jassid in eggplant, cultivar Wizzo. Two field experiments were executed during season 2015/16 at two sites, the experimental farm in the Faculty of Agricultural Sciences, University of Gezira, and at Elalafoon on the eastern Bank of the Blue Nile, in Khartoum state. The experiments in both sites were arranged in Randomised Complete Block Design (RCBD) with four replications. The botanical seed oils at a concentration of 5% were applied at 7 days interval with four sprays. Post-treatment observations on number of jassid were taken after 2 days from the application. The results indicated that all oil treatments were apparently effective against the cotton Jassid compared to the untreated control. The study found that the cotton seed oil was more effective in reducing the number of jassid on eggplant ( 64 insects/100 leaves) followed by sunflower seed oil (132 insects/100 leaves), castor bean seed oil (140 insects/100 leaves) and the untreated control (312 insects/ 100 leaves) at Wad Medani site while, at Khartoum Site the cotton seed oil recorded high reduction of jassid population (92 insects/100 leaves) followed by castor bean seed oil (140 insects/100 leaves), sunflower oil (208 insects/100 leaves) and the untreated control (608 insects/ 100 leaves). This study suggests that, cotton seed oil can be used to reduce cotton jassid infestation on eggplant crop.

**Keywords:** Biological pest control, eggplant, insect pest, plant oils