EVALUATION OF NON-CONVENTIONAL ACARICIDES AGAINST SPIDER MITE IN COTTON FIELDS IN EGYPT Fadel K. El-Duweini Plant Protection Research Institute, ARC Giza, Egypt

Abstract

Cotton field experiments were conducted in Fayoum Governorate, Egypt, to evaluate some compounds which are gentle and beneficial to the environment, for controlling the two spotted spider mite (green form), Tetranychus arabicus Attiah. A complete random split design with four replicates for each treatment was followed. Samples were taken 3, 7, 11 and 15 days after treatment. Using a single spray of each compound during early season and late season, Vapcomec (Abamectin) 1.8% EC provided the highest levels of control (99.33% & 85.95%) with an average of 92.64%, followed by Challenger (Chlorfenapyr) 36% SC (81.16% & 80.28%) with an average of 80.72%. Nat (Jojoba oil) 96% EC, Acarol (Jojoba oil + mineral oil) 95% EC, Barok (Ethoxazole) 10% SC, Cascade (Flufenoxuron) 10% DC and Ortus (Fenpyroximate) 5% SC, provided acceptable levels of control (77.31% & 78.24%, 77.72% & 77.59%, 72.66% & 78.99%, 79.62% & 71.72% and 73.55% & 76.77%), with averages of 77.78%, 77.66%, 75.83%, 75.67% and 75.16%, respectively. Biofly $3x10^7$ Conidia / ml provided the lowest levels of control (52.82% & 62.24%) with an average of 57.53%.

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