MANAGEMENT OF FRUIT FLY, BACTROCERACUCURBITAE (COQUILLET) IN RIDGE GOURD THROUGH BOTANICALS AND NEWER INSECTICIDES

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ABSTRACT

Field experiment was conducted at Kittur Rani Channamma College of Horticulture, Arnhavgi, Karnataka during kharif season of 2016 and 2017 to evaluate the bioefficacy of botanicals and insecticides viz., NSKE 5%, azadirachtin 1500ppm, profenofos 50 EC, buprofezin 25 SC, spinosad 45 SC, deltamethrin 2.8 EC, chlorantraniliprole 18.5 SC, difenthiuron 50 WP, and malathion 50 EC mixed with 1 percent jiggery against fruit fly, Bactrocera cucurbitae (Coquillett) in ridge gourd. The results of pooled data on percent fruit damage revealed that the minimum percent fruit damage of 14.27 was recorded in spinosad 45 SC @ 0.3 ml/l treated plot, making it most effective treatment followed by chlorantraniliprole 18.5 SC @ 0.2 ml/l (16.97%) which was at par with deltamethrin 2.8 EC @ 0.5 ml/l (20.35%). Spinosad 45 SC @ 0.3 ml/l treated plot registered highest fruit yield (22.08 t/ha) which was at par with chlorantraniliprole 18.5 SC @ 0.2 ml/l (20.16 t/ha) and significantly superior than deltamethrin 2.8 EC @ 0.5 ml/l (18.86 t/ha). The yield obtained from NSKE 5% (16.86 t/ha) and azadirachtin 1500 ppm @ 5 ml/l (16.95 t/ha) were also found at par with deltamethrin 2.8 EC @ 0.5 ml/l and significantly higher than the untreated control (13.51 t/ha). The highest cost-benefit ratio of 1: 2.64 was obtained in spinosad 45 SC treated plot.

KEYWORDS: Fruit Fly, Insecticides, NSKE, Azadirachtin & Ridge Gourd

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