

ECOFRIENDLY MANAGEMENT OF MUSTARD APHID FOR QUALITY SEED PRODUCTION

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Executive Summary

The study was conducted in the experimental field of Sher-e-Bangla Agricultural University, Dhaka during the Rabi season 2017-18 using BARI Sarisha-15 to evaluate the effectiveness of some promising bio-pesticides on aphid population abundance in field and laboratory condition. The treatments for the management were T₁: neem Oil, T₂: Bioneemplus 1 EC, T₃: Neem seed kernel extract, T₄: Spinosad 45 EC, T₅: Detergent, T₆: Field sanitation and T₇: untreated control. Among the treatments, Spinosad 45 EC performed as the most effective insecticide in reducing the highest percent of aphid population on leaves (60.00%) whereas Detergent showed the least performance (39.54%). In inflorescence, Spinosad 45 EC performed as the most effective bio-insecticide in reducing the highest percent of aphid population (68.06%) whereas detergent showed the least performance (53.57%). The maximum quality seed of BARI Sarisha-15 obtained from treatment Spinosad 45 EC (1.62 mt ha⁻¹) due to lower aphid abundance. On the other hand, lower quality yield performance obtained from the T₇ treatment due to an untreated control (1.29 mt ha⁻¹). After harvesting of seed, height germination (95.33%) was found in (T₄ Spinosad 45 EC), on the other hand lowest germination (77.67%) was found in T₇ (Control plot).

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