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## ***Brinjal Pest Management by using New Generation Pesticides***

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The Present study conducted at Vegetable Research Station, Cuddalore District during 2019-20 by using new generation pesticides molecules in brinjal pest management in seed production field. Brinjal variety used for seed production plot is PLR 1. Nursery was raised in raised bed and sowing was done after seed treatment by Pseudomonas @ 10 g per 1.0 kg of seeds. During 15 Days after Sowing, at nursery bed, hoppers (white and Green) were noticed, to manage the hoppers damage, Neem Oil (Azadirachtin EC 300 ppm) was sprayed @ 3.0 ml/litre of water. During 25 days old seedling, again one spray of Neem Oil (Azadirachtin EC 300 ppm) was sprayed @ 40 ml for 10 litre of water to manage the sucking pest problems. After 30 days, the brinjal seedlings were transplanted at main field. At 25 days after planting, white fly and hoppers were noticed, for these problem, Flonicamid 50%WG (Ulala) was sprayed @ 60g/ acre. At 45 days after planting, the shoot and fruit borer damage was noticed, to manage this, Thiocloprid 21.7%SC was sprayed @ 250 ml per acre. After 10 days intervals, Chlorantraniliprole 18.5% SC was sprayed. During 75 days, the fruit borer damage was observed, for this problem, Spinosad 45%SC was sprayed to manage the fruit borer damage. After Spinosad spraying, 10 to 15 days, the fruit borer damage was drastically reduced. Again sucking pest problems were noticed, to minimize the white fly and hoppers damage, Diafenthuron 50%WP was sprayed @12.5g per 10 litre of water. During fruit harvesting stage (after 100 days), Chlorantraniliprole 18.5%SC and Spinosad 45%SC was sprayed repeatedly in 10 to 15 days intervals to minimize the fruit borer damage.

## INTRODUCTION

Brinjal is one of the most commonly cultivated tropical vegetable crop grown in India. In brinjal cultivation, insect pests especially shoot and fruit borer, is the major pest problem facing the farmers. In India, It is estimated that the damage caused by the shoot and fruit borer and other major pest ranges from 50 to 70 per cent. Often, farmers are using 10 - 30 sprays per season per crop to save the crop. Over use of synthetic pesticides increase the cost of production at farmer level and increase the environmental hazards and health problems in the consumer level. Keeping in this view, we are used environment safer new generation pesticides molecules for brinjal pest management in seed production plots at Vegetable Research Station, Tamil Nadu Agricultural University (TNAU), Palur, Tamil Nadu during 2019-20.

Brinjal variety used for seed production plot is PLR 1. Nursery was raised in raised bed and sowing was done after seed treatment by *Pseudomonas* @ 10 g per 1.0 kg of seeds. During 15 Days after Sowing, at nursery bed, hoppers (white and Green) were noticed, to manage the hoppers damage, Neem Oil (Azadirachtin EC 300 ppm) was sprayed @ 3.0 ml/litre of water. During 25 days old seedling, again one spray of Neem Oil (Azadirachtin EC 300 ppm) was sprayed @ 40 ml for 10 litre of water to manage the sucking pest problems. After 30 days, the brinjal seedlings were transplanted at main field. At 25 days after planting, white fly and hoppers were noticed, for these problem, Flonicamid 50%WG (Ulala) was sprayed @ 60g/acre. At 45 days after planting, the shoot and fruit borer damage was noticed, to manage this, Thiacloprid 21.7%SC was sprayed @ 250 ml per acre. After 10 days intervals, Chlorantraniliprole 18.5% SC was sprayed. During 75 days, the fruit borer damage was observed, for this problem, Spinosad 45%SC was sprayed to manage the fruit borer damage. After Spinosad spraying, 10 to 15 days, the fruit borer damage was drastically reduced. Again sucking pest problems were noticed, to minimize the white fly and hoppers damage, Diafenturon 50%WP was sprayed @12.5g per 10 litre of water. During fruit harvesting stage (after 100 days), Chlorantraniliprole 18.5%SC and Spinosad 45%SC was sprayed repeatedly in 10 to 15 days intervals to minimize the fruit borer damage.

## CONCLUSION

By using these types of new generation safer (Green triangle) pesticides for brinjal cultivation, not only safe to environment and human hazards and also minimize the spraying frequencies and reduce the cost of cultivation. In addition, these types of practices, also leads to popularize the new generation pesticides among farmers (farming community).