It was pointed out that the applications of sprays repeatedly at 15 days intervals was unnecessary and the number of applications could have been reduced since some of these chemicals are effective upto 3 weeks.

Further observations could also have been done on specific pests that occurred on the plants and their reactions to the treatments. It is desirable to study the final quality of the product and also the insecticidal residue left over in the plant parts.

The authors agreed that these aspects will be taken up in subsequent studies.

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5. A NEW AND SAFER INSECTICIDE FOR THE CONTROL OF *Epilachna vigintioctopunctata* F. AND *Leucinodes orbonalis* G. ON BRINJAL

by

A. LEELA DAVID

An experiment was conducted on the summer crop of brinjal during 1962, for the control of the leaf beetle, *Epilachna vigintioctopunctata F.* and fruit borer, *Leucinodes orbonalis* G. with sprays of thiometon (Ekatin) 0.1%, methyl demeton (Meta Systox) 0·1%, methyl naphthyl carbamate (Sevin) 0.1%, dust of Heptachlor 3% and control. The insecticides were applied three times at intervals of about 2 to 3 weeks. The results were highly significant with Sevin proving the best and methyl demeton and thiometon coming next in the order of efficacy. Sevin also gave significantly the highest yield which was double that of the control. It was neither phytotoxic to the plants nor did it give any off-flavour to the brinjal fruits. Sevin is also stated to have low mammalian toxicity with LD_{50} of 540 milligrams per Kilogram body weight in rats and hence can be safely used as an insecticide on this vegetable crop.

* The referee has pointed out that thiometon and methyl demeton being systemic insecticides effective against sucking insects and Heptachlor being an effective soil insecticide it would have been better if Sevin had been compared with DDT, lindane and endrin which are known to be effective against the Epilachna beetle and the borer. Further, the trials should be repeated at least for 3 years before drawing any definite conclusions.

The author replied that in the body of the paper itself it has been explained that experiments for the comparison of DDT and endrin with methyl demeton were conducted during the previous season. It was found that methyl demeton and thiometon were better than others and therefore in the present set of trials sevin has been compared with these two chemicals. Heptachlor was included since it is advocated for other surface eating insects also and because it was reported to give better yields.

A number of other questions, mainly clarificatory in nature, were raised both in the sectional meetings and the plenary session and were suitably answered.