

CHEMICAL CONTROL OF RICE BLUE BEETLE *Leptispa pygmaea* (Baly.) ON SUGARCANE

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ABSTRACT

The plant protection practices plays an important role for high yield and quality of sugarcane. Keeping these views in consideration, a series of field experiments were conducted at Chhata farm house in Mathura district during three consecutive years 1999 to 2002 on sugar cane variety CoS767. Heavy as well as light insecticides were used to control blue beetle in cultivated farm. In all insecticides treatments lime sulphur was found to be very effective to control all stages of leaf miner hispa.

Key words : Sugarcane, *Leptispa pygmaea*, Chemical Control.

Rice blue beetle (leaf miner hispa) *Leptispa pygmaea* (Baly.) primarily is a Rice pest and native pest of Srilanka, Japan, China, Burma and other asian countries. In India, it is mainly found in Southern parts, Karnataka, Maharashtra, Tamil Nadu, Kerala. Patel and Shah (1985) worked on biology of chrysomelid *Leptispa pygmaea* (Baly.). They observed all stages of life cycle of above pest in sugarcane fields causing damage to host plant. A great loss to sugarcane crop was observed due to notorious chrysomelid. Migration of this pest was observed by some workers in sugarcane fields.

MATERIALS AND METHODS

A series of experiments were conducted in Chhata fields of Mathura district to find out chemical control of some pesticide Experiments were conducted during 3 consecutive years from 1999 to 2002 at farmers field in

Mathura district to find out effective chemicals for the control of leaf miner in randomized block design replicated three times in plot size 10 x 2.7 m. The variety under test was CoS767 Irrigation, cultural practices and fertilizer application were given as per research recommendation. The treatments applied were as under :

- T₁ - Dieldrin 0.5% Solution
- T₂ - B.H.C. 8.0% Solution
- T₃ - Endosulfan 35 E.C. @ 1.15 Lit/ha.
- T₄ - Lime Sulphur wash @ 1.10 Lit/ha.

The affected leaves of sugarcane were counted and percentage of infested leaves were recorded. This percentage was again recorded after 15 days. In each treatment cane yield was recorded.

RESULTS AND DISCUSSION

A comparative effect of pesticides showed different sugarcane yield at different chemical application.

Treatments	% of mortality after 15 days			Yield t/ha at harvest		
	1999-2000	2000-2001	2001-2002	1999-2000	2000-2001	2001-2002
T ₁ Spraying with Dieldrin 0.5% Sol.	12	18	20	40.0	43.0	45.0
T ₂ Spraying with B.H.C. 8.0% Sol.	10	15	19	42.0	43.0	45.0
T ₃ Spraying with Endosulfan 35EC @ 1.2 Lit/ha	25	35	28	80.0	81.0	83.0
T ₄ Spraying of lime sulphur wash @ 1.20 Lit/ha	60	68	70	90.2	93.0	94.5