

## REPORT ON OVICIDAL ACTIVITY OF Patho-Rid

Patho-Rid is a formula which is 100% natural and organic extract as active ingredient works well on controlling the most pest population among various crops. Some of the preliminary examination of this organic pesticide is conducted in our R & D and the same is summarized below.

### Pest collection :

Egg stage of selected four plant pest was obtained from NBAII(National Bureau Of Agriculturally Important Insects) and their gene bank accession number are Spodoptera litura- NBAIR-MP-NOC-02; Plutella xylostella- NBAIR-MP-PLU-01; Corcyra cephalonica- NBAIR-MP-PYR-01; Helicoverpa armigera- NBAIR-MP-NOC-01

### Ovicidal Activity :

The egg masses were counted with the aid of a hand lens (10x). Based on the preliminary screening, the plant extracts were further tested at a concentration of 10ppm. The numbers of eggs hatched in control and treated were recorded and percentage of ovicidal activity was calculated. The experiment was conducted at room temperature  $30 \pm 2^\circ\text{C}$  and  $75 \pm 5$  R.H. A total of five trials were carried out. The data obtained were subjected to angular transformation. The significant difference within various crude extracts were compared with Least significant difference (LSD) test to differentiate individual mean significant difference at 0.05% level.

Per cent ovicidal activity is equal to,

$\% \text{ of eggs hatched in control} - \% \text{ of eggs hatched in treated} \times 100 / \% \text{ of eggs hatched in control}$

### TREATMENT OF EGGS WITH PATHO RID AND AVERAGE EGGS HATCHED

PLANT PESTS	CONTROL			PATHO RID		
	HEXANE	DIETHYL ETHER	ACETONE	HEXANE	DIETHYL ETHER	ACETONE
Spodoptera	40	40	40	9.6	10.6	1.6
Plutella	40	40	40	8.6	12.4	2.5
Corcyra	40	40	40	8.8	13.6	2.3
Helicoverpa	40	40	40	7.6	19.6	1.4

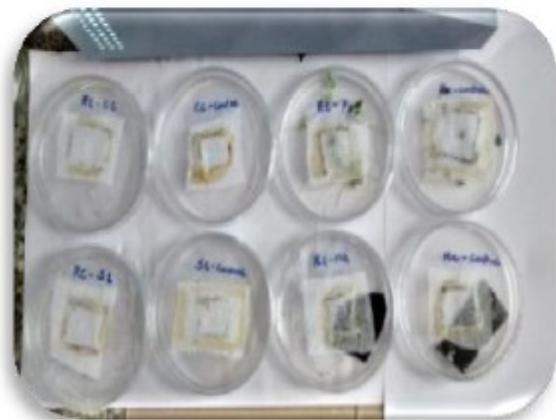


### TREATMENT OF EGGS WITH PATHO RID

#### % Ovicidal activity at 10ppm

PLANT PESTS	CONTROL			PATHO RID		
	HEXAN E	DIETHY L ETHER	ACETON E	HEXAN E	DIETHY L ETHER	ACETON E
Spodoptera	0	0	0	76	73.5	96
Plutella	0	0	0	78.5	69	93.7
Corcyra	0	0	0	78	66	94.2
Helicoverpa	0	0	0	81	51	94

At the end of the experiment, it was proven that acetone is the best solvent in which Patho rid extract can be prepared as number of eggs hatched is lesser than the other 2 solvents and also the ovicidal activity showed best results with all the common plant pests when acetone solvent was used.



TREATMENT OF EGGS USING Patho rid WITH DIFFERENT TRIALS