

## TOBACCO CATERPILLAR,

Spodoptera litura (Fabricius) (Noctuidae: Lepidoptera)















अंडा समूह Egg mass



कंकालन पत्तिय Skeletonised leaves



कोषस्थ कीट Pupa.





वयस्क कीट Adult moth



मूँगफली पर टोबाको केटर पिलर का जीवन-चक्र और क्षति के लक्षण Life cycle of tobacco caterpillar [Spodoptera litura (F.)] and damage symptoms on groundnut

The first instar larvae feed by scrapping under the surface of the leaves leaving only veins and veinlet. Affected leaves appear skeletonized. A full grown larva completely defoliates plants. Occasionally they also feed on the flower and bore the tender groundnut pods, which are just below the soil surface. More than 65% of the foliage damage is done during night time.

## **Management:**

- Deep ploughing during April-May to expose the pupae to sunlight and predatory birds.
- Clean cultivation, by rouging out weed hosts and self-sown plants.
- Intercropping with Castor
- Set up the Petromax light traps @ 1-2/ha to attract and kill the moths during June-August.
- Install pheromone traps @ 10 traps/ha and erect bird perches @ 10-12/ha.
- Collection and destruction of egg masses and gregarious larva.
- Release *Trichogramma chilonis* @ 50000/ha, two times at 7-10 days interval followed by release of *Bracon hebetor* @ 5000/ha two times at 7-10 days.
- Economic threshold level 20-25% defoliation at 40 days of crop age for taking up pesticide spray.
- Spray commercial formulation of nuclear polyhedrosis virus @ 250 LE (6x10° LE/ha) or *Bacillus thuringiensis* @ 1-1.5 kg/ha or *Metarhizium rileyi* or *Beauveria bassiana* @ 2g/L of water.
- Spray neem oil @5ml/Lwith soap powder 1g/L or NSKE 5% it acts as an oviposition deterrent.

## Label claim chemical pesticides

	Name of the pesticide	Dosage/ha			Waiting
SNo		a.i. (g)	Formulation (g or mL)	Dilution in water (L)	period (days)
1.	Flubendiamide 20% WG	60	300	500	31
2.	Methomyl 40% SP	300 to 350	750 to 850	500	07
3.	Methoxyfenozide 21.8% SC	210	875	500	26
4.	Quinalphos 20% AF	250 to 375	1250 to 1775	750 to 1000	30
5.	Flubendiamide 03.50% + Hexaconazole 05% WG	52.5 + 75	1500	500	31
6.	Novaluron 05.25% + Indoxacarb 04.50% SC	45.94 + 39.38	875	500	34
7.	Thiamethoxam 12.60% + Lambda-cyhalothrin 09.50% ZC	27.5	150	500	28
6.	Hexaconazole 05% WG  Novaluron 05.25% + Indoxacarb 04.50% SC  Thiamethoxam 12.60% +	52.5 + 75 45.94 + 39.38	875	500	34

Compiled By: Harish G, Nataraja M V and Bera S K

Published by: Director, ICAR- Directorate of Groundnut Research (An ISO 9001- 2015 Certified

Institute), Ivnagar Road, PO Box No 5, Junagadh- 362001, Gujarat, India.