

Lettuce XXVII-3

Loopers

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Cabbage Looper (from USDA Bull. 1271)
Cabbage Looper

Identification (and life cycle/seasonal history)

Cabbage looper, celery looper and other species can feed on lettuce. Adult moths emerge and mate in late spring, soon after laying eggs on plant leaves. Early instars feed on outer leaves, but then move toward the head as they grow. Two or three generations may be produced during the growing season.

Plant Response and Damage.

Defoliation is generally not sufficient to cause plant stress. However, the marketed head can be damaged by late instar loopers burrowing. Populations of loopers generally are highest late in the season.

Management approaches

Cultural Controls

Row covers are effective in excluding loopers and preventing egg laying.

Biological Control

Loopers are preyed upon by several generalist predators, such as wasps and spider. Parasites and viral diseases also commonly kill loopers. *Bacillus thuringiensis* is effective in killing larval stages.

Chemical control

Since damage is caused by large larva feeding and burrowing into the head, control should be employed when larvae are small and exposed on the wrapper leaves.

Product List for Loopers:

Insecticide	Product per Acre	Preharvest Interval, remarks
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Dipel 2X, Biobit W	0.5-2.0 lb	(0 days) <i>Bacillus thuringiensis</i> under current regulations for activity.
Dipel 4L, Biobit F	0.5-2 pt	Labeled for application through sprinkler systems. Certified Organic produce. Stomach poison product. Most formulations are acceptable.
Javelin WG	0.25-1.0 lb	
Ambush 25W ^R , Pounce 25W ^R	6.4-12.8 fl oz	(1 day)
Pounce 3.2E ^R	4-8 fl oz	Pounce and Ambush are pyrethroid insecticides (permethrin).
Ambush 2E ^R	6.4-12.8 oz	Extremely toxic to fish and other aquatic organisms.
Ammo 2.5E ^R	1.28-5.0 fl oz	(5 days) Labeled for chemigation. Cymbush and Ammo are pyrethroid insecticides (cypermethrin).
Cymbush 3E ^R	1.1-4.5 fl oz	Highly toxic to aquatic organisms.
Lannate 90S ^R	0.25-1 lb	(7-10 days)
Lannate L ^R	1-4pt	Carbamate insecticide (methomyl). 48 hour reentry interval proposed. Not registered for chemigation.
Thiodan 50W	1.5-2 lb	(14 days) Remove wrapper leaves at harvest. 48 hour reentry proposed. Some rotational restrictions with certain root crops. Chlorinated hydrocarbon.
Thiodan 3E, Endocide 3E	1-1.3 qt	
Orthene 75S	0.7-1.3 lb	(21 days) Organophosphate insecticide (acephate). Has systemic activity. Do not feed trimmings to livestock.

Ammo WSB ^{R1}	1-2 bags/acre (WSB)	5 days. Pyrethroid insecticide. Maximum 0.6 lb (AI)/acre per season. Registered for head lettuce only.
Ammo 2.5EC ^{R1}	3.75-5.0 fl oz (2.5EC)	
Asana XL ^{R1}	4.8-9.6 fl oz	7 days. Registered for head lettuce only. Pyrethroid insecticide. Maximum 0.35 lb ai/A may be applied in season.
Kryocide 96W	8-20	
Larvine 3.2 ¹	16-30 fl oz	14 days. Inorganic insecticide (sodium aluminoflouride) with stomach poison activity.
		14 days. Carbamate insecticide. Do not exceed 1.5 lb (AI)/acre per season. Registered for head and leaf lettuce, along with other leafy vegetables. Has some ovicidal activity.
Mustang 1.5EW ^{R1}	2.39-4.26 fl oz	5 days. Pyrethroid insecticide. Maximum 0.3 lb (AI)/acre per season. Head lettuce only.
Warrior ^{R1}	1.92-3.84 fl oz	
		1 day. Pyrethroid insecticide. Maximum 0.3 lb (AI)/acre per season. Head lettuce only.

^RRestricted Use Product. ¹Labeled for chemigation.

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Categories: Lettuce, Insects, Loopers

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