

# Cutworm on tobacco

*Agrotis segetum*



About 2 cm cutworm caterpillar destroys a seedling (Photo by R.J. Reynolds Tobacco Company)



Adult 2 cm cutworm moth (Photo by Agropedia)



Cutworm damaged tobacco seedlings (Photo by Norman Harrell)

Prevention	Monitoring	Direct Control	Direct Control	Restrictions
<ul style="list-style-type: none"> <li>• If weeds and grasses are controlled in and near fields prior to planting, cutworm problems are less.</li> <li>• Flooding of the field for a few days before sowing or transplanting can help kill cutworm caterpillars in the soil.</li> <li>• Delaying transplanting slightly until the stems are too wide for the cutworm to encircle and/or too hard for it to cut can reduce cutworm damage.</li> <li>• Erect mechanical barriers (cut plastic bottle rings and put into soil around stems). This prevents cutworms to move in.</li> <li>• Ploughing just before planting exposes caterpillars to predators and desiccation by the sun.</li> <li>• Rotation does not help much as cutworms feed on most crop plants.</li> </ul>	<ul style="list-style-type: none"> <li>• Cutworms are 2 to 4 cm long larvae, and dark grey-brownish (= soil colour). They are about 0.5 to 1 cm thick and very soft.</li> <li>• Monitor for cutworm caterpillars at dawn, because during the day they are deep in the soil.</li> <li>• Monitor for cutworms around the stalks of the plant or just below the soil surface around stems.</li> <li>• Monitor damage by counting damaged and freshly cut lower base leaves, freshly cut young plant stems. Consider action when 2 to 3 out of 10 young plants are damaged</li> </ul>	<ul style="list-style-type: none"> <li>• Hand pick caterpillars at night using a torch or very early morning before they return into the soil; This is useful at the beginning of the infestation</li> <li>• Spray aqueous neem seed extracts and neem leaf extracts 3 times at weekly intervals around the stem base of young plants, to reduce early infestation</li> <li>• Soak 1kg leaf and/or seed powder in 40 litres, water, stir and leave overnight, then sieve before spraying</li> <li>• Ashes deter cutworms when spread on seedbeds around plants, or mixed with the soil in the planting holes. The ash layer must be renewed every two weeks</li> </ul>	<ul style="list-style-type: none"> <li>• When using a pesticide (even a botanical home-brew), always wear protective clothing. Follow the instructions on the product label, such as dosage, timing of application, pre-harvest interval, max number of sprays, restricted re-entry interval. Do not empty into drains.</li> <li>• WHO class II pesticides might not be allowed in local IPM schemes.</li> <li>• Always consult recent list of registered pesticides (ZEMA).</li> <li>• Make bait traps with pyrethrin (such as Pyrethrum). 1. Mixing 100g bran or maize flour, 10 g sugar (1 small tablespoon), 5 g pesticide powder with 200ml water thoroughly together. 2. Sprinkle mixture closely around the plants in the affected areas. Cutworms eat the bait and die.</li> <li>• Seeds treated with pesticides may be purchased. Treated seeds with carbaryl, or chlorpyrifos –based products may be available. But control effects against cutworms are limited.</li> </ul>	<ul style="list-style-type: none"> <li>• All these pesticides are WHO toxicity class II (moderately acute hazardous). Thus wear protective gear when preparing the traps.</li> <li>• WHO toxicity class II (moderately acute hazardous). Never prepare seed treatments yourself, always by readily treated seeds. Never feed treated seeds to animals, even not if washed.</li> </ul>

## Zambia

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