




# Black cutworm on cotton

*Agrotis ipsilon* dark sword-grass, black cutworm, greasy cutworm, floodplain cutworm

	Prevention	Monitoring	Direct Control
 <p><i>A. ipsilon</i> larvae (Adam Sisson, Iowa State University, Bugwood.org)</p>  <p>Cutworm caterpillar found at the base of a plant amongst the soil (Francis Nduati, Kenya)</p>  <p>Adult moth (Adam Sisson, Iowa State University, Bugwood.org)</p>	<ul style="list-style-type: none"> <li>• Avoid planting cotton in fields previously used to grow alternate host crops, such as chickpea, groundnut and onion.</li> <li>• Avoid planting cotton in areas which were previously meadow or pasture land.</li> <li>• Use certified, disinfected seeds to avoid introduction of the pest into your field.</li> <li>• Remove weeds to reduce egg presence during the growing season.</li> <li>• Flood the field for 6 hours during the seeding stage (after germination) to drown any caterpillars, wait 2-4 days before soil preparation when the soil has dried. Subsequent irrigation (3-6 hours) will vary based on soil type and climate.</li> <li>• Kill and burn post-harvest plant material and wait at least 2 months before further use to kill any pupae or other insect stages.</li> <li>• Avoid intercropping/growing near to host crops such as maize.</li> <li>• Plough in the Autumn and use shallow tillage to reduce late autumn/early spring plant growth.</li> <li>• Avoid use of broad spectrum insecticides to conserve natural enemies such as spiders, minute pirate bugs, damselflies and lacewing larvae.</li> <li>• Consult and follow local dates for sowing, killing/burning, phytosanitary control and weed control.</li> </ul>	<ul style="list-style-type: none"> <li>• Cutworms are small (1-2 cm long), grey caterpillars which primarily feed on seedlings and young plants during the night. In the day they are found burrowed in the soil or plant stems.</li> <li>• Observe seedlings for shotholes caused by young larvae.</li> <li>• Later stage instars become active only at night. Observe the base of plants and surrounding soil for cutworm presence.</li> <li>• During plant growth stages, note that cutworm larvae can burrow into stems, so observe for boreholes.</li> <li>• Cutworm caterpillars are light/dark grey with no other markings and can grow up to 1-2 cm long.</li> <li>• Adult moths have a black dagger shape on the outer margins of the wings.</li> <li>• If 5-10 caterpillars are identified per 10 plants then consider undertaking direct control actions.</li> </ul>	<ul style="list-style-type: none"> <li>• Actively remove weeds in fields to reduce available space for egg laying. Destroy by burning.</li> <li>• Irrigate land for short periods (3-6 hours) to kill pupae and reduce cutworm larvae feeding activity.</li> <li>• Search the undergrowth of fields and soil around the base of seedlings. Actively remove and destroy larvae.</li> <li>• Use of <i>Bacillus thuringiensis</i> to reduce populations of larvae.</li> <li>• Use yellow blacklight traps (during summer) and pheromone traps to control adult populations.</li> </ul>

Note: Pesticides may be available to control this pest. Please check with the Ministry of Agriculture in your country to find out which pesticides are registered in your country and the local restrictions for their use.