

# Armyworms on maize

*Spodoptera exempta* Sankobi (Akan)

 <p>Adult female armyworm (©Georg Goergen/IITA Insect Museum, Cotonou, Benin)</p>  <p>Larva of armyworm feeding on maize leaves (©Rikus Kloppers/PANNAR Seed (Pty) Ltd, Greytown, South Africa)</p>	Prevention	Monitoring	Direct Control	Direct Control	Restrictions
	<ul style="list-style-type: none"> <li>Remove weeds such as Amaranthus and wild grass species that harbour armyworm larvae</li> <li>Avoid planting close to overgrazed grasslands which provide food and refuge for caterpillars</li> <li>Grow low value grain crops such as finger millet as trap crops to attract armyworms</li> <li>Remove alternate host plants such as millet, sorghum, rice, leafy vegetables etc.</li> </ul>	<ul style="list-style-type: none"> <li>Start monitoring immediately after germination.</li> <li>Visit farm daily to inspect for defoliation (chewed leaves), feeding frass and caterpillars (which are grey-green with yellow stripes along the back). Examine soft stems, and developing shoots for hidden caterpillars</li> <li>Take direct control action when eggs are present on 2 to 5% of seedlings or when 10 to 25% of plants show signs of feeding damage</li> <li>Set pheromone traps (placed 20m apart) and examine pheromone traps weekly</li> </ul>	<ul style="list-style-type: none"> <li>Pick egg masses when you see them on the underside of the leaves, and destroy them</li> <li>Pick and destroy colonies of widely dispersed caterpillars if possible.</li> <li>Plough deep trench around field and fill with water to stop the movement of the armyworms from field to field</li> </ul>	<ul style="list-style-type: none"> <li>When using a pesticide or botanical, always wear protective clothing and follow the instructions on the product label.</li> <li>Do not use chemicals with the same mode of action year after year as this can lead to resistance; always consult the most recent list of registered pesticides of MOFA, Ghana</li> <li>Spray crop with Lambda-cyhalothrin product (eg.Pawa 2.5 EC at 40mls/15L of water). It is a synthetic Pyrethroid (IRAC, 3A). It is a contact insecticide</li> <li>Spray with Cymethoate (Cypermethrin (36g/l) + Dimethoate (400g/l). 1-1.5Lit/ha. Cypermethrin is a synthetic Pyrethroid (IRAC,3A). It is contact. Dimethoate is an Organophosphate (IRAC,1B).</li> </ul>	<ul style="list-style-type: none"> <li>WHO Class II (Moderately hazardous); Maximum 3 applications per season in the morning and later in the day. PHI 3 days. REI 24 hours. Eye and skin irritant. Highly toxic to bees and other non target arthropods. Toxic to aquatic organisms. Avoid using near water ways.</li> <li>WHO Class II (Moderately hazardous); Maximum 3 applications per season in the morning and later in the day. PHI 7-14 days. REI 24 hours. Eye and skin irritant. Highly toxic to bees and other non target arthropods. Toxic to aquatic organisms. Avoid using near water ways.</li> </ul>



## Ghana

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AUTHOR(S): Fridah K Chipambala, Ministry of Agriculture and Livestock, Chongwe, Zambia, Email: fchipambala@gmail.com - Zambia. Modified for Ghana by Benjamin K. Badii (University for Development Studies), Hannah Nuamah (PPRSD, MOFA) and Harunah Braimah (CSIR-Crops Research Institute)

EDITED BY: Plantwise