

# Sorghum midge

*Stenodiplosis sorghicola* (*Contarinia sorghicola*)

	Prevention	Monitoring	Direct Control
 <p>Severe <i>S. sorghicola</i> damage (above) (Keith M. Harris)</p>  <p>Adult on sorghum bloom (Alton N. Sparks, Jr., University of Georgia, Bugwood.org)</p>	<ul style="list-style-type: none"> <li>• <b>Use resistant varieties if they are available in the region</b></li> <li>• <b>Select varieties that flower early or all flower at the same time as a long flowering period can significantly increase the midge population in an area</b></li> <li>• <b>Uniform planting (i.e. planting on the same day and at the same depth) to ensure even flowering, and early planting will reduce the damage caused</b></li> <li>• Remove alternative hosts, such as wild sorghum, Johnson grass and Sudan grass, from in and around the field to prevent midge population build-up early in the season</li> <li>• Plant at a high density to reduce the number of insects per plant or area</li> <li>• Intercropping sorghum with a legume</li> <li>• Destroy crop residues after harvest to prevent the pest from carrying over to the following season</li> <li>• Rotate sorghum with non-host crops or leave the field fallow the next season to break the build-up of the pest in the field</li> <li>• Conserve habitat (e.g. flowering plants on the borders of field) to build-up populations of natural enemies (parasitic wasps of the <i>Eupelmus</i>, <i>Eupelmidae</i>, <i>Tetrastichus</i> and <i>Aprostocetus</i> families)</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor field weekly during the production season and daily during flowering as populations of midge begin to build-up during that period                         <ul style="list-style-type: none"> <li>• Adult: mosquito-like appearance insect of about 3 mm long with a bright orange body, transparent wings and very long antennae. Count adult on flowering heads at about mid-morning</li> <li>• Eggs: very small, cylindrical and transparent light-red colour, and are deposited into the flowering spikelets</li> <li>• Young larvae: colourless, but turn dark-orange as they develop</li> </ul> </li> <li>• Larvae: feed on developing seeds causing malformation of the grain and empty or chaffy heads and blighted or blasted looking panicles (or heads)                         <ul style="list-style-type: none"> <li>• Pupa: a small empty, clear or white pupa casing (or skin) is left attached to the tip of the spikelet and can be seen with the naked eye.</li> </ul> </li> <li>• Squeeze damaged spikelets between fingers to monitor the presence of larvae (they will produce red ooze as the larva or pupa being crushed)</li> <li>• Take control measures when an average of one adult midge per head is observed after 20-30% of the heads begin to bloom</li> </ul>	<ul style="list-style-type: none"> <li>• Remove and destroy chaffy spikelets to stop the spread of the pest</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.