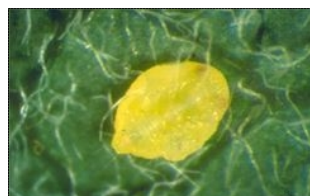




Tobacco whitefly on cotton

Bemisia tabaci

	Prevention	Monitoring	Direct Control
 <p>whitefly larva (W. Billen, Weil am Rhein, Bugwood.org)</p>  <p>Adult (Husken-Thimm, Bugwood.org)</p>  <p>Whitefly infestation on a leaf (David Riley, University of Georgia, Bugwood.org)</p>	<ul style="list-style-type: none"> • Avoid cultivation of alternate host crops within the area such as okra, potato, groundnut etc. • Practice crop rotation with resistant crops such as maize and sorghum. • Remove weeds from the field and surrounding area to reduce suitable habitat for whiteflies. • Sowing date of cotton should be altered based on the season's weather conditions. Use local sowing dates to avoid pest productivity in young plants. • Avoid late sowing of crops as well as extended growth beyond normal duration. • Use of smooth leaf varieties as these are more resistant to whitefly damage. • Avoid the use of wide spectrum insecticides to promote conservation of natural enemies, including lady birds, lacewings and parasitoids. 	<ul style="list-style-type: none"> • Monitor crops for whitefly presence and activity, notable around the middle area of cotton plants. • Symptoms of whitefly activity include: <ul style="list-style-type: none"> • Black sooty mould on leaves due to honeydew secretions from adult whiteflies. • Yellowing and curling of leaves, this is a sign of heavy whitefly infestation. • Eggs are small (0.2 mm) and pear shaped. Larvae are yellow/white scales roughly 0.3-0.6 mm long. • Adults are 1 mm long white-bodied flies with a yellow waxy cover. • Brush hands through plants, any whiteflies present will fly around and then resettle on the plant. • Sampling and evaluation should be carried out across 10 sample locations per hectare. Consider direct control actions if 20 adults are found per plant, with a maximum of 5 adults/ plant at early crop stages. 	<ul style="list-style-type: none"> • Actively remove infested plant parts and destroy by burning. • Use of neem seed extract 5% (50 ml/ L of water) or neem oil 3% (30 ml/L of water). Products should be applied following manufacturer and crop agronomist recommendations. • Use of liquid soap spray (3 tablespoons of soap per litre of water).

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.