




Maize streak virus in maize

Maize streak virus (MSV), *Cicadulina* spp. (vectors)

	Prevention	Monitoring	Direct Control
 <p>Plants affected by Maize streak virus (Eric Haraman)</p>	<ul style="list-style-type: none"> Remove and destroy (burn) the remnants of previous crop If available, use a resistant variety of maize Plant early in the season at the onset of rains when leafhopper (MSV vector) populations should be lower Avoid planting crop downwind of infested crop or near it Maintain a barrier of 10 m of bare ground between maize fields and previously infested crops Keep field and neighbouring fields weed free, being particularly careful to remove grassy weeds on which leafhoppers can live Apply fertilizer on time, basal dressing at planting and top dressing on knee high maize. Maize will grow fast and be more resistant to infection Mix-crop maize with non-grassy/ non-cereal crops like cowpea and pumpkin to reduce leaf / plant hoppers. Leave barriers of bare ground or edges of non-grass vegetation between early planted and late planted maize to prevent leafhoppers crossing from late planted to the early planted maize Rotate maize with non-cereals such as legumes e.g. soyabeans and beans. Avoid the overlap of two maize crops 	<ul style="list-style-type: none"> Additional relevant crops: oats, barley, wheat, rye, sugarcane, sorghum Look out for: <ul style="list-style-type: none"> Leaves: pale spots or flecks, 0.5 mm in diameter. Initial pale (white to yellowish) spots may join together to form longer streaks. These streaks are narrow, more or less broken, running parallel along the leaves Leaves: Hopping insects on the underside (leafhoppers). These carry MSV Whole plant: Stunted with small cobs if infection happens before the 4-5 leaf stage Flowers and shoots: Possible abnormal bunching Monitor plants at least weekly from seedling to vegetative stage, particularly when there is high rainfall since this is when leafhopper populations can be high Take action as soon as one plant shows disease symptoms When there are 3 to 10 leaf hoppers on 100 plants it is likely that the disease will spread if existing in the area. If MSV is not in the area, no action is needed against leafhoppers Note the difference between maize lethal necrosis disease (MLND) and MSV. MLND has thicker yellow stripes along leaves than MSV and can cause necrosis. MSV usually does not lead to necrotic dead leaves If yellow-grey angular spots or necrotic grey windows appear on leaves, then this is angular leaf spot disease, not a virus 	<ul style="list-style-type: none"> Remove infected plants at an early stage - uproot and burn or feed to livestock
 <p>Streak virus symptoms on maize leaves (PM Kodwaran, Kenya)</p>			
 <p>Yellow streaks on maize leaf (CABI)</p>			

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.