

Fall armyworm on maize

Spodoptera frugiperda Fall armyworm



Fall armyworm caterpillar (Russ Ottens, University of Georgia, Bugwood.org)



Fall armyworm damage in whorl of maize (Victor Clottey, CABI)



Egg mass of *S. frugiperda* (Desiree van Heerden, Syngenta)

Prevention

- Avoid late planting or off-season planting and avoid planting new crop near infested fields
- Use a mixture of maize varieties when planting; varieties showing resistance/tolerance, short duration or increased leaf toughness.
- Avoid staggered plantings (plots of different ages)
- Ensure optimum use of fertilizer for strong maize plants able to compensate for damage done and apply at the right time
- Keep the surroundings of the plot free of grass weeds
- Conserve shelters and flowering plants on the edges for beneficial insects such as ground beetles and parasitoids
- Intercrop maize with crops not susceptible to FAW such as cassava or yam, or with less susceptible crops such as cowpeas or beans
- Avoid spraying insecticides early in the crop cycle as this will kill natural enemies that control the pest, and it might not be economical
- Do not move infested plant material from the farm to reduce spread

Monitoring

- Start monitoring as soon as the plant emerges
- Monitor 10 consecutive plants in 10 locations of the field
- Look for creamy/grey egg masses covered in silk located on the underside or top of the leaves and on the stems
- Look for light green/dark brown caterpillars with longitudinal stripes, dark head with an upside down pate Y-shaped. The second-to-last body segment has 4 dark spots forming a square. Do so in early morning or evening hours
- Look for light coloured patches ("window panes") to large ragged and elongated holes in the leaves emerging from the whorl
- Look for caterpillars and accumulation of frass in the whorl or burrowed into the side of the cobs
- At early whorl stage, take action if >20% of plants are damaged or infested with larvae. At late whorl stage, if small larvae can be found then take action if >40% of whorls are damaged. At tassel and silk stage, do not spray anymore

Direct Control

- On small-scale farms, handpick and destroy the egg masses and larvae
- If available, spray young caterpillars with neem-based products before they enter the ears or whorl

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.