

SHIELD BUGS—SUNN PEST (*Dolycoris penicillatus*)



Adult Shield Bug



Nymphs with egg cases on a tomato leaf



Sunn Pest on Wheat

Stink bug damage to pears



UC Statewide IPM Project
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Description

Shield bugs affect a wide variety of crops. On fruit such as pear or tomato they cause ugly shape defects.

Both nymphs and adults of Sunn Pest cause damage to cereals by feeding on leaves, stems and grains. Yield loss is commonly estimated at 20-30% in barley and 50-90% in wheat. Apart from the direct reduction in yield, the insects also inject chemicals that greatly reduce the baking quality of the dough.

Monitoring

Insect instar	Plant stage	Economic threshold
Adults	Until the end of tillering	>2/m ²
Nymphs	Flowering until grain filling	5-10/m ²
Nymphs and adults	Milk stage and later	5-6 nymphs/m ²

Adults migrate from over-wintering sites to wheat when the temperature is over 15°C. Monitoring of Sunn Pest in growing wheat is by counting numbers per m². It is also important to monitor over-wintering sites to establish when 90% of adults have migrated.

Control

There are no IPM recommendations for Sunn Pest control. Early varieties of wheat are more likely to escape severe attack.

Synthetic pyrethroids (Cypermethrin, Lambda-Cyhalothrin, Bifenthrin) or Chlorpyrifos are used in national pest control programs.

Timing: In Sunn Pest, spraying starts when second instar nymphs are found. For shield bug control in other crops, timing maybe difficult as the bugs enter the field near harvest and it is not safe to spray.