SUNN PEST (Dolycoris penicillatus)

Adult Shield Bug

Nymphs with egg cases on a tomato leaf

Stink bug damage to pears

Sunn Pest on Wheat
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

<table>
<thead>
<tr>
<th>Insect instar</th>
<th>Plant stage</th>
<th>Economic threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults</td>
<td>Until the end of tillering</td>
<td>&gt;2/m²</td>
</tr>
<tr>
<td>Nymphs</td>
<td>Flowering until grain filling</td>
<td>5-10/m²</td>
</tr>
<tr>
<td>Nymphs and adults</td>
<td>Milk stage and later</td>
<td>5-6 nymphs/m²</td>
</tr>
</tbody>
</table>

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.