Sunflower Harvesting

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Tips for a Successful Harvest
• Keep seed-moisture content below 10 percent unless drying is an option.
• Harvest slowly.
  • Slow cylinder/rotor speed to 250 to 400 rpm.
  • Set the concave spacing almost wide open.
  • Set the fan so only enough air flow is created to keep trash floating across the sieve.
  • Set the upper sieve at 1/2 to 5/8 inch wide.
  • Set the lower sieve at 3/8 inch wide.

Combine Adjustment Indicators

The goal is to get a completely threshed head onto the straw walker in one piece. This is done by keeping cylinder speed slow and concave spacing wide and harvesting at a reasonable speed when seed moisture is in the low teens.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
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<tbody>
<tr>
<td>Partially threshed heads</td>
<td>concave spacing too wide</td>
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<tr>
<td>on the ground</td>
<td></td>
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<tr>
<td>Excessive tailings</td>
<td>air flow too low, overthreshing at cylinder/rotor or chaffer openings too narrow</td>
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<tr>
<td>Trash in bin</td>
<td>overthreshing, cylinder/rotor speed too high, concave too tight, fan too low, or sieve too wide</td>
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<tr>
<td>Broken or crushed heads</td>
<td>high cylinder/rotor speeds or narrow concave spacing</td>
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<tr>
<td>Crushed seed with hull intact</td>
<td>concave spacing too tight</td>
</tr>
<tr>
<td>Dehulled or broken seeds</td>
<td>high cylinder/rotor speeds or excessive returns</td>
</tr>
<tr>
<td>Unthreshed heads on the ground</td>
<td>poor gathering at the header</td>
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</table>
Checking Losses

Preharvest losses and harvesting losses can be estimated by making counts of seeds on the ground. The most effective way to estimate losses is counting the number of seeds in a square-foot area. Make sure that you are counting seeds. Sometimes hulls may not have a seed in them. The rule of thumb is that 10 seeds per square foot represents a loss of 100 pounds per acre. Do not forget heads that have seed left in them.

Adjust seed counts taken directly behind the combine discharge for the concentrating effect from the width of cut down to the separator width. Do this by dividing the number of seeds found by 4. In other words, in the discharge area, 40 seeds per square foot represent a loss of 100 pounds per acre.

Checking Harvest Losses

Check separator loss here.
Check header loss here.
Check preharvest loss here.

National Sunflower Association

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