# Ear Mold Identification

<table>
<thead>
<tr>
<th>Ear Mold</th>
<th>Color</th>
<th>Identification</th>
<th>Conducive Conditions</th>
<th>Mycotoxin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspergillus</td>
<td>Gray-green, olive green</td>
<td>Powdery mold starting at tip of ear</td>
<td>Common in dry/drought years. Damaged silks or kernels from insects or hail</td>
<td>Aflatoxin, toxic to livestock and humans</td>
</tr>
<tr>
<td>Diplodia</td>
<td>White to gray, severe infections can cause entire ear to be white or brown</td>
<td>Normally starts at the base of the ear and moves toward the tip. Grows in between kernels, speck sized black, fungal, fruiting bodies can form on the husk and kernels</td>
<td>Residue left over from previous corn crop. Rain within two weeks of silking, insect and bird damage to ears. Conservation tillage and corn after corn</td>
<td>Not known to produce mycotoxins, but caution feeding to cattle and sheep</td>
</tr>
<tr>
<td>Fusarium</td>
<td>White to pink</td>
<td>White streaks in kernel resembling a star-burst pattern, individual kernels scattered across the ear.</td>
<td>Hot, dry weather near flowering, damaged kernels from cracks, insects,</td>
<td>Fumonisin, toxic to livestock</td>
</tr>
<tr>
<td>Gibberella</td>
<td>Reddish to pink mold</td>
<td>Often begins near the tip and grows down the ear.</td>
<td>Infections favored by wet, cool weather right after silking. Corn after Corn or after wheat</td>
<td>Vomotoxin, can be toxic to humans and livestock, especially swine</td>
</tr>
<tr>
<td>Penicillum</td>
<td>Blue-Green</td>
<td>Powdery mold between kernels and starts at the ear tip</td>
<td>Damaged kernels from insects, hail, frost</td>
<td>No known mycotoxins</td>
</tr>
<tr>
<td>Trichoderma</td>
<td>Dark Green</td>
<td>Grows on husk and between kernels.</td>
<td>Insect damage to kernels</td>
<td>No known mycotoxins</td>
</tr>
</tbody>
</table>
IF YOU HAVE EAR MOLDS, PROPER DRYING AND STORAGE IS EXTREMELY IMPORTANT.

Steps to reduce the spread of molds in a grain bin:

1. Harvest corn early around 22 to 25 percent moisture.
2. Adjust your combine to maximize cleaning, more fan speed can “blow” out damaged kernels.
3. Corn should be dried to less than 15 percent moisture within 48 hours of harvest
4. Long term storage of grain should be dried to 13.5 percent moisture
5. Corn should be stored at 35 to 45 degrees F after drying
6. Check grain in bins often, stirring and aerating if needed.

Prevention strategies for next year:

1. Crop Rotation
2. Heavy tillage
3. Proper fertilization for the corn crop
4. Plant traited corn with above ground insect protection
5. Change hybrids in corn after corn fields
6. Plant a range of maturities of corn to spread out pollination

VISUAL IDENTIFICATION: COMMON EAR MOLDS

1. Dipodia
2. Fusarium
3. Gibberella
4. Trichoderma

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