Agronomy Profile



Hail Damage

Overview

Summer hailstorms regularly strike growing corn fields. To evaluate corn yield loss due to hail, give plants time to exhibit signs of regrowth. Then, identify growth stage of the plant and estimate yield loss by combining losses from stand reduction, leaf defoliation and direct kernel damage.

What you should know

- Agronomy professionals count using the leaf collar method, but crop insurers use the droopy leaf method, which counts all leaves. Begin with the lowermost rounded tip leaf and continue through the stage indicator leaf, which is at least 40–50% exposed and usually the uppermost leaf pointing downward.
- Between planting and 3 weeks post-emergence, a plant's growing point is still at or below the soil surface. Through V5 stage, regrowth is normal and yield loss should be minimal.
- Once corn is in V6 stage, the growing point is above the soil surface. To
 estimate stand loss, survey 3 different sections and project the percentage
 over the entire field.
- Find the growing point by splitting stems. A healthy growing point is creamy white in color. If it's watery and brownish, the plant may be dying.
- Leaf defoliation due to hail damage limits yield by reducing the amount of leaf area left for photosynthesis. Hail occurring after ears are formed can damage kernels developing within husks.

Action steps

- 1. **Allow recovery time:** Wait 3–5 days after a hailstorm to determine if corn plants will resume normal growth.
- 2. **Assess defoliation:** Evaluate leaf defoliation and use the resulting percentage of live leaves to determine lost production.
- 3. Calculate kernel losses: Harmed kernels should be calculated as a percentage of total kernels per ear and considered a direct yield loss.
- 4. **Consider harvesting early:** Fields with stalk damage should be considered for early harvest.

For more information, contact:



www.nutechseed.com 1-888-647-3478



Once a plant passes V5 growth stage, the growing point rises above the soil, increasing susceptibility to hail damage.



- Wait 3-5 days after a hailstorm to give plants a chance to resume normal growth.
- Evaluate defoliation and kernel losses.
- Before making any decisions, consult with your crop insurance representative to determine the best course of action.

NOTES: