KEMIN InfoLink

farmers depot

Making Quality Silage – Pre-Season Checklist

OVERVIEW

Production of high-quality forage involves executing multiple small steps correctly and consistently. However, because silage-making involves multiple small steps by multiple people, if one person misses a checkpoint, the quality of forage will suffer. Every player on the team must know their role and complete their assigned tasks to ensure the highest quality forage.

The purpose of this checklist is to offer guidance for improving planning and communication before, during and after silage season. This checklist is not intended to apply to every situation and certainly does not include every consideration. Rather, this checklist is intended as a guide to help with your planning and development of a customized SOP (standard operating procedure) for your farm. This checklist covers the key steps of silage making and can serve to guide your planning process.

PREPARATION

Is the storage facility prepared:

- Are bunker silos clean from the last crop?
- Are the bunker silos large enough for the crop? What is plan B if the crop is too small? Too large?
- Are cracks sealed and chipped concrete removed?
- Have you purchased enough plastic to cover the silage?
- Do you have enough tire-sidewalls to hold down the plastic cover?
- For silage bags, do you have enough for the crop?
- Is the bagger well maintained?
- Is the area for the bags clean and dry?

If you are using a custom chopper, are you on the schedule?

- Have you had a pre-harvest meeting with the customer harvester?
- Has the customer harvester agreed to your requirements for chop length and kernel processing score?

If you are using your own chopper, is maintenance completed?

- Are tires in good condition and properly inflated?
- Check the feed rolls for damage?
- Are dull knives replaced?
- Is the kernel processor gap adjusted correctly? Is the processor belt damaged?

Are trucks or silage wagons clean?

- Are the yearly safety and maintenance repairs complete?
- Do you have enough trucks or wagons to hold and transport silage without stopping the chopper?
- Do you have adequate personnel to drive?
- Are all personnel trained to ensure safe silage transportation and delivery?

Do you have enough packing tractors of sufficient weight?

- Do you have adequate personnel to pack?
- Are operators trained to ensure uniform packing?

- What plans are in place to rotate packing crew members to avoid fatigue errors?

Are you routinely checking the crop moisture?

- Optimum moisture (dry matter) varies based on crop and storage. Use university extension manuals for guidance.
- Invest in a high-quality moisture tester to target harvest windows.
- Moisture test at least weekly to target harvest windows.

PRESERVATIVES

Will you apply an inoculant?

- Do you need a single strain inoculant? Select a high-quality inoculant with verified efficacy.
- Has wild yeast been a concern in the past? Consider an inoculant with a combination of *Lactobacillus plantarum* and *Lactobacillus buchneri*. Select only products with verified efficacy.
- Is an oxygen scavenging inoculant needed?

Is the inoculant applicator clean, maintained, and calibrated?

- Use clean water to verify application rate matches the inoculant concentration and the tons per hour (or minute) chopped.
- Use distilled water to dissolve the inoculant. Only mix enough inoculant for chopping time.
- Ensure inoculant cooler is far away from any heat source such as the engine and exhaust.
- Check application rate every 24-hours.

Are you using a silage acid?

- Is the acid applicator clean, maintained and calibrated?
- Use clean water to verify application rate matches the acid concentration and the tons per hour (or minute) chopped.
- Check application rate every 24-hours.

CHOPPING DAY

Is chop length and kernel processing score as expected?

- Check frequently to ensure good silage.

Is the harvest rate matching the plan for tons per hour?

- Are modifications required?

Is the amount of silage delivered per hour matching your plans?

- Is an additional packing tractor required?
- Any signs of fatigue? Are workers requiring fewer or more frequent breaks?

COVERING THE SILAGE

Use 6–10-millimeter polyethylene plastic with a black and white side. The white side faces out to reflect sunlight and prevent excess silage heating and the black side facing in retains silage heat.

- Before covering, apply 500 mL of acid to each square meter of silage surface. This will reduce the growth of surface mold.
- After applying the silage cover, weigh down the cover with numerous tires. Ensure all sides are covered to prevent oxygen and moisture infiltration.
- Repair any holes immediately. Holes can cause massive spoilage if left unaddressed.