

Cutting Annual Crops for Livestock Feed

Timing is critical when making greenfeed or silage from drought stressed annual crops. It is better to cut earlier than later. There are a number of reasons not to wait.

1) There is generally no yield increase. As the plant deteriorates, the bottom leaves dry and drop from the plant. This reduces both the amount of protein and energy that is in final silage or greenfeed. Any increase in the amount of weight in the grain head is offset by the leaf losses. For canola salvage crops, the blossoms and leaves are the parts of the plant that are high in energy and protein and are the major contributors to plant quality.

2) Fibre levels increase rapidly as the plant matures. In dry, hot conditions, the plants will mature two to four weeks earlier than in a normal year. Acid detergent fibre (ADF) increases by approximately 2 % per week. This reduces available energy (digestible energy (DE), total digestible nutrients (TDN), or metabolic energy (ME)) by approximately 1 to 1.5 points per week. Neutral detergent fibre (NDF) increases by 2 to 3 % per week. When the neutral detergent fibre content in the final ration exceeds 60%, feed digestion rates decrease and the animal is not able to eat as much as normal.

3) High fibre rates increase the amount of stem rejected (not consumed) by the animals. This increases feed waste. Chopping or tub grinding the long stems can increase intake, but it is an additional expense that can be avoided if the crop was harvested earlier.



4) Moisture content in plants decrease as they mature. If making a chopped silage that requires 60 to 65% moisture, the standing crop may only have 55% moisture or less. The material will need to be cut to a shorter length to improve packing but there is no guarantee that the shorter chopping length will solve the problem.

5) More mature cereal crops end up being a chopped straw and grain combination instead of a true silage. This creates more difficulties in feeding due to animal behavior. It is possible that the cows will sort through the feed, pick the grain and leave the straw behind. Acidosis, grain overload, and bloat can occur if the cows overconsume the grain.

If possible, cut and harvest the salvage crop early. If placing the silage in a bag or pit, have a 20 L pail and lid next to the unload area. Take a hand full of material out of every third or fourth load and place it in the pail. Re-seal the lid. When the pile, pit or bag is completed, mix the material and fill a bread bag one third full. Press out the air, seal the bag and freeze it prior to submitting for analysis. If the material is packed properly, and covered with plastic, the quality of the material going into storage should be as good as the silage coming out. The submitted sample provides a feed test result well before the silage is fed. This allows for rations to be made before the start of the feeding season.

For more information about the timing of salvage crops, call Barry at 403-741-6022 or bjyaremcio@gmail.com