

EARLAGE

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Earlage

Earlage is ensiled corn, cobs, and in most cases husk, it is higher in energy than corn silage with similar protein content. It is commonly lower in energy than corn grain, because it does not include husk and cob, but works very successfully in a variety of feed diets, including growing and finishing diets for beef cattle and feed for lactating dairy cows.



Photo 1. Corn cob mix

Generally a yield of 10-12t of grain per hectare will relate to a yield of 21-25t per hectare of Earlage.

Photo 2. Harvest



The advantage of Corn Cob Mix really comes with:

1. Later harvest than whole plant silage – yet earlier than High Moisture Grain or Dry Grain.
2. Higher Fibre content than High Moisture Grain.
3. A energy yield/hectare almost double that of Grain.
4. The return of nutrient and organic matter to your soil.
5. Ideal rotation with a legume crop and a crop of whole plant maize silage.
6. Raw fibre content can be as high as 25 % of total dry matter if harvested at the correct stage.
7. Due to the concentration of energy in earlage you are able to have a broad harvest window:
 - a) From 60% DM to 75% DM
 - b) Ideal is 65% DM or 35% Moisture in the cob

There can be significant differences in DM content due to:

1. Varieties
2. Paddock soil variation
3. The amount of husk cover retained during harvesting

An example of yield breakdown is provided in table 1.

Table 1. Earlage yield breakdown

Harvest Moisture	Grain % of Total Earlage DM	Cob & Husk % of Total Earlage DM
35 - 65% DM	75 – 80%	20 – 25%

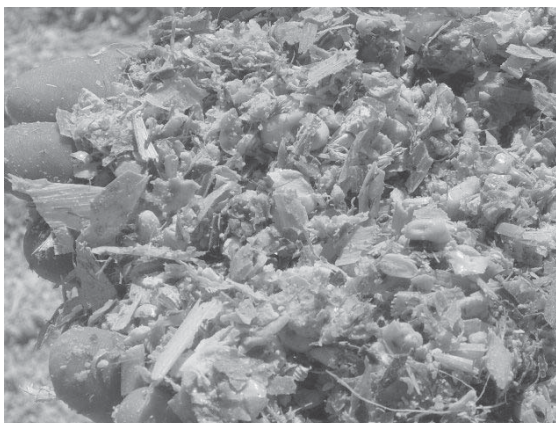
The dry matter content of the grain should be 38%. The dry matter content of the cob and husk should be 25%.

You will get some variation between varieties (with stay green) and how well the crop is grown. Earlage is a high value crop and should be treated as such.

1. Harvest moisture needs to be in the range of 25 – 40%, best at 35% - do frequent testing.
2. Ensure equipment is adequate to do the job.
3. All grain should be marked (damaged) by the harvester to ensure good fermentation.
4. A kernel processor (or equivalent) should be installed in the machine.
5. Compaction and cleanliness is paramount.
6. Inoculation is important – it is a high value crop.
7. If stored in a bunker or pit, covering correctly is essential.
8. Cover with a good quality plastic.

Photo 3. Earlage bunker



Photo 4. Consistency of chop

Harvest

1. A self propelled silage chopper is always used with a conventional maize snapper front, this allows for clean extraction of the ears from the plant.
2. A chop length of 10-12mm dependent on moisture content is ideal.
3. A kernel processor is essential to maintaining a high quality product and enhancing the ensiling process.
4. A harvest rate of 60-100 tonnes green chop per hour is generally achieved.
5. The harvest cost is approximately twice that of whole plant maize silage.
6. Higher input irrigated crops will yield up to 35 tonnes per hectare (green chop).

Table 2. Earlage feed test analysis^A.

Test	Units	Method
Moisture %	53.2	Wet
Dry Matter%	46.8	Wet
Ash %	2.4	Wet
Crude Protein (N x 6.25) % of dry matter	8.6	Wet
Neutral Detergent Fibre % of dry matter	27.6	Wet
Digestibility	83.7	Wet
Metabolisable Energy MJ/kg DM	12.4	Wet

^A Feed test results from trials conducted at Hells Gate Feedlot.
Harvested early due to adverse weather conditions and ensiled using a fresh bacterial inoculant.