### SILAGE OF CORN EAR OR MOISTURE KERNEL



If you want to make silage from corn ear or moisture kernel, then the harvest should take place immediately after the appearance of the so cold black drop or black covering.

The black drop is such a covering. It is a tissue which blocks the storage of nutrients in the kernel and by this the water starts, and the kernel is physiologically mature.



### So, we'll find the black drop or covering?

Deplume from the ear some corn kernels. At the place where the kernel is protected in the cone, it should be picked up with nails and if it is physiologically mature, the black drop is easy to be found.







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Kosovo Cluster and Business Support Project

## FACTORS THAT HAVE AN IMPACT IN CORN SILAGE

**QUALITY AND YIELD** 



HYBRID SELECTION

- **Ideal hybrid**: should reach 30-35% dry matter before autumn frost comes.
- **Too early hybrid**: according to the rule, a lower mass yield for silage.
- **Too late hybrid**: a small involvement of corn kernel, a poor quality of mass for silage.

#### SEEDER THICKNESS

- **Optimal:** 5-10% more than this that is cultivated for kernel
- Frequent: corn ear don't grow up fully, a small involvement of kernel in the mass, the quality of silage decreased.
- Rare: mass yield for small silage.

#### PICKING ACTIVITY

- At optimal time: kernel involvement in the silage mass and sugar content, excellent dissolubility.
- **Premature:** less kernels, less energy, loss of nursing matters.
- Delayed: a small quantity of water and hampers flattening of silage mass.

### THE HEIGHT OF OPTIMAL HARVEST

### The height of optimal harvest is about 25cm

- **Too high:** in the height above 40 cm dissolubility is increased for 1, 5-2%, but at the same time the yield decreases for 5%.
- **Too low:** in the height lower than 15 cm, there is increased the risk from harmful fermentations of plants and also in silos is the possibility of damages.

#### **OPTIMAL HEIGHT**

### The optimal height of the piece is in a mass of 9-12mm.

- **Too high:** poor compression of silage
- **Too short:** a non rational of equipments.

#### **GOOD COMPRESSION**

In the compressed silage there should be about 200 kg dry matters in 1m<sup>3</sup>

# THE DEFINITION OF OPTIMAL TIME OF CORN HARVEST FOR SILAGE

1. Corn silage from all the plant

The moment to start making the silage of the plant in general is when the content of dry matters in the silage mass contains 30-35%.

How to determine the moment, at which silage mass contains 30-35% organic matters?

The content of dry matters in silage mass is determined by **milk line.** 

Milk Maturity >



Full Maturity

**ACTION:** for this it is taken corn ear, which is divided (chopped) and searching in the kernel for border of crossing ullage part in that of milk.

If the so cold Milk Line is in the half or two of three of the kernel, then the content of dry matter of silage mass contains 30-35%.

If the Milk Line drops in 1/3 of kernel, then the content of dry matters is 24-27%.

**NOTICE:** Milk Line in 1/3 of kernel means that it is 1/3 of kernel's hard part or 2/3 means 2/3 of kernel is endosperm's hard part.