

## Faktorer som påvirker clostridiepopulationen og dermed kvaliteten af mejeriprodukter gennem ensileringsprocessen

*Factors which have an influence on the population of clostridia and thereby on the quality of dairy products through the process of ensiling*

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### Resumé

Ved ensilering af italiensk rajgræs ved 1. slæt og vårbyghelsød under forskellige forhold undersøgte den kemiske og mikrobiologiske kvalitet af ensilagerne.

Iltning i forbindelse med nedlægningen forringede græssets ensilagekvalitet og øgede indholdet af clostridiesporer, også selv om afgrøden var fortørret.

**Nøgleord:** Ensilage, mikrobiologisk kvalitet, clostridier, clostridiesporer, smørsyre, byghelsød, italiensk rajgræs, iltning, nedlægning, optagning, fortørring, temperatur.

### Summary

First cut grass and whole crop spring barley was ensiled in order to examine the chemical and microbiological quality – especially the content of clostridial spores – of silage made under various conditions.

Oxidation of Italian ryegrass before sealing the siloes gave silage of less good quality. There was an increased content of clostridial spores in these silages even when the crop was wilted.

**Key words:** Silage, microbiological quality, clostridia, clostridial spores, butyric acid, whole crop barley, italian ryegrass, oxidation, filling, opening, pre-wilting, temperature.

Helsædensilagen blev af ret dårlig kvalitet med højt smørsyreindhold. I denne undersøgelse medførte iltning af helsædensilage inden udtagning ingen stigning i indholdet af clostridiesporer.

Et forsøg med ændringer af temperaturen under ensileringen viste, at temperaturændringer bevirkede et øget antal clostridiesporer. Ændringerne var mest udtalt ved temperaturfald.

Ensiling whole crop barley resulted in silage of bad quality with high content of butyric acid. In these experiments oxidation of the silage when opening the siloes showed no increase in the number of clostridial spores.

An experiment with changes of the temperature during the ensiling showed that the changes of temperature caused an increased number of clostridie spores. The changes were most distinct when there was a fall in temperature.