The value of silage –

How to improve the profit in baled silage with premium bale wrap



TRIOWRAP®
The original





Silage is the base feed for milk and meat production in agricultural businesses. It's a cost-efficient feed in comparison to other alternatives. Thus, for the cost efficiency, the silage value is of great importance in the value chain in order to achieve a profitable business.

Silage quality tested products

Since the 1990s Trioplast has developed and tested products in cooperation with SLU (Swedish University of Agricultural Sciences). The cooperation has led to new products that increase the efficiency and silage quality in baled silage. After these years of continuous development of our recipes and production processes we are now on top level of performance, which the tests confirm.

Study of silage quality with Triowrap and Trioplus

SLU has performed a study where Triowrap (25μ) and Trioplus ($21\mu \& 19\mu$) was evaluated regarding silage quality and losses in round bales (more details concerning the test can be viewed in our flyer "Thickness vs. layers"). In the study it was confirmed that Triowrap and Trioplus give high airtightness, great silage quality and low DM-losses.

DM-losses were down to 1% which is very low compared to earlier independent market studies. Compared with the market standard which is assumed to be between 3% to 5% you get a greater output with Triowrap and/or Trioplus products.









To exemplify what these low losses mean in the end, we have done some calculations for different cases below. Case 1 is based on test results from SLU with Triowrap and Trioplus products. Case 2 & 3 are setup as market reference with expected DM-losses of 3% resp. 5%.

As table 1 explains, you can for example see that 1% in DM-losses compared to 3% or 5% are equal to savings of 0,9 EUR respectively 2,10 EUR per bale of silage. A calculation based on a 1500 meter reel of bale wrap, when applying 6 layers of film, ends up in a saving of 19,60 EUR respectively 42,80 EUR per reel.

Parameters/benefits	Case 1 – Triowrap/Trioplus	Case 2 – 3% DM-losses	Case 3 – 5% DM-losses
DM-losses %	1,3%	3,0%	5,0%
Bale weight kg	670,0	670,0	670,0
DM-level	41,4%	41,4%	41,4%
DM-losses kg	3,6	8,3	13,9
Difference kg DM	Reference	-4,7	-10,3
Value silage DM/bale EUR	Reference	-0,9	-2,1
Value silage DM/reel 6 layers EUR	Reference	-19,6	-42,8
Value silage DM/reel 8 layers EUR	Reference	-14,7	-32,0

Table 1

Another way of looking at this, is to calculate the impact on the milk output. Table 2 below calculates with DM-losses in above study and what the saving would be in liters of milk. In this calculation 1 kg of DM silage equals to 11 MJ and for the cow to produce 1 liter of milk 9 MJ is needed*. 1% in DM-losses compared to 3% or 5 % in losses equals to 5,8 liters respectively 12,5 liters of milk.

^{*}Source: Rolf Spörndly, Swedish University of Agricultural Sciences, Dept. of Animal Nutrition and Management

Parameters/benefits	Case 1 – Triowrap/Trioplus	Case 2 – 3% DM-losses	Case 3 – 5% DM-losses
Energy per Kg DM MJ	11,0	11,0	11,0
Energy losses in total MJ	39,7	91,5	152,6
Energy needed for 1l milk*	9,0	9,0	9,0
Liter milk/bale	4,4	10,2	17,0
Difference liter milk	Reference	-5,8	-12,5

Table 2

Short facts

With Triowrap and Trioplus compared to market standard, you can:

- Get a silage quality tested product
- Produce baled silage with DM-losses of 1%
- Save between 1-2 EUR per bale
- Save between 20-43 EUR per reel of bale wrap, when applying 6 layers
- Decrease losses equal to 6-13 liters of milk per bale



Trioplast - We keep our promises!

Reliable

Long-term

Solid | Durable | Experienced Team | Long-term Part-

Active

Constant dialogue with Customers & Partners | Leading Innovator | Continuous Process Development | Silage Service & Support

Trioplast is an industrial group with a little over 1,000 employees and a turnover of EUR 430 million. The Group is one of Europe's leading players in innovative and cost-efficient packaging solutions based on polyethylene film. The company's registered office is in Smålandsstenar in Sweden. It operates production facilities in Sweden, Denmark and France and sells its products to a global market. The principal owner of Trioplast is Altor Funds.



WE DESIGN FOR THE FUTURE

As a leading producer of polyethylene film, at Trioplast we take responsibility for the environment in everything we do. We strive to reduce the amount of material in our products, we recycle and reuse waste materials, and we continuously develop our expertise so as to decrease our use of non-renewable raw materials.

In short: We design sustainable solutions for the future.



