For the production of high-quality and high-quantity bale silage, the time of cutting the crop is a key factor to maximise annual yield. Delays lead to decreased energy in the fodder, directly affecting milk production. Below are some hints and tips from Dow, manufacturer of DOWLEX™ Polyethylene Resins, designed to make sure you get the best results in bale silage production.

When should you cut your crop?

For high-quantity bale silage, the time of cutting depends on plant development. The energy contents are the highest between stem elongation and the emergence of ear or panicle of the dominating plant species. Cutting at the right time ensures that plants can rapidly re-grow, maximising annual yield.

At the latest, the crop should be cut when the plants are beginning to bloom. If the grass is too old and starts becoming woody, the crude fibre content increases and it becomes more difficult to compress the fodder.

The following table shows that delayed cutting results in a loss of energy in the fodder and a direct impact on the performance of dairy cows and feeding cattle.
### Delayed cutting and resulting consequences for milk production

<table>
<thead>
<tr>
<th>Delay of optimum time for cutting</th>
<th>Loss of energy density MJ NEL/kg dry matter</th>
<th>Reduction of potential milk production in kg/ha per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 days</td>
<td>-0.3</td>
<td>-850</td>
</tr>
<tr>
<td>7 days</td>
<td>-0.5</td>
<td>-1,420</td>
</tr>
<tr>
<td>10 days</td>
<td>-0.8</td>
<td>-2,271</td>
</tr>
</tbody>
</table>

MJ = Mega-Joule  
NEL = Netto Energy Lactation  
Source: Hoffmann, A. and Grote, D.: Management of Fodder Harvest, Claas Academy

### What is the ideal cutting height?

The cutting height should be tailored to soil conditions and presence of potential contaminants. To reduce the risk of contamination, the cutting height should be between 5 cm and 10 cm.

Mowers that are able to closely follow ground contours are best.

If the cut is made too deep (‘razor cut’), any equipment used to collect the fodder will need to be adjusted accordingly and set to low working height levels.

In any case, be aware that contaminants will get into the fodder more easily, causing malfermentation of the fodder and potential health threats to the livestock.

Furthermore, if cutting is too deep, the crop will not be able to quickly re-grow as the remaining surface for assimilation is too small.