

Need/issue: Forage feed value

Aim: To present key management decisions required to produce high feed value silage

### How to implement:

The following are key factors in the production of high feed value grass silage:



- apply 120 and 100 kg
  nitrogen per hectare for first and second harvest
- base phosphorus and potassium application on soil analysis and crop requirement. Up to 26 kg potassium is removed per tonne of herbage DM harvested.

#### 2. Date of harvest:

- digestibility declines by 3.3% units for each oneweek delay in harvest
- harvest swards prior to seed head emergence and prior to accumulation of dead material at the base of sward canopy

## **Description:**

Silage feed value is a combination of **nutritive value** (e.g. energy concentration) and **intake potential**, both of which are impacted by digestibility

Silage feed value is a key factor influencing the profitability of many systems of sheep production because of its **impact on**:

- forage and thus nutrient intake
- ewe body weight gain and condition score
- lamb birth weight
- lamb body weight gain
- level of concentrate supplementation required to achieve a given level of animal performance

**For sheep**, targets are: dry matter (DM) digestibility > 75%; digestible organic matter in the dry matter > 71%; metabolisable energy concentration > 11.4 MJ/kg DM











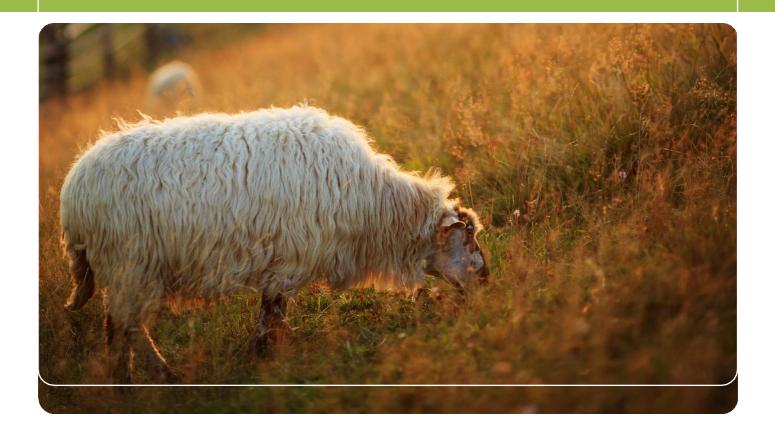












#### 3) Wilt

- target DM concentration of at least 25% for clamp silage and 30% for baled silage
- rapid wilt is essential, the key factors affecting drying rate are solar radiation, wind speed and spreading herbage evenly on the ground
- spread herbage after mowing
- 4) **Reduce forage chop** length but digestibility is the key factor influencing feed value
- 5) Ensile, consolidate and seal rapidly

## Prerequisites and/or limits

To achieve high feed value silage crops may be lighter than normal at harvest but a second harvest from some of the area will ensure adequate feed supplies

**Country: Ireland** 

Dairy and meat sheep

Category of Animal: ewe, replacement, lamb

# Topic:

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Health

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Nutrition

Management

#### Level of solution:

X

Knowledge



Practical

### Source of information:

https://www.teagasc.ie/news-events/daily/sheep/high-feed-value-grasssilage-.php

odcast: https://share.transistor.fm/s/f85c9464

https://www.researchgate.net/publication/283658009\_Silage\_production\_-

\_factors\_affecting\_the\_utilization\_of\_ensiled\_fc rages\_by\_beef\_cattle\_dairy\_cows\_pregnant\_e wes\_and\_finishing\_lambs\_A\_review

https://www.teagasc.ie/media/website/publications/2012/IGA-

Focus\_on\_digestibility\_for\_high\_levels\_of\_an.p df

https://www.teagasc.ie/media/website/publications/2018/Segment-003-of-TF-Jan-Feb-18-FeedingEwesCropped.pdf

