Grass Shortages: *Getting the Most out of your Autumn Grass Silage*

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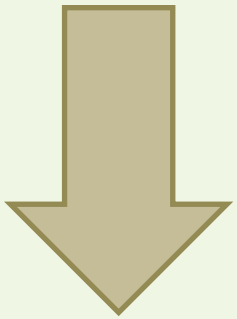
Feed Science Forums –
Coordinated by BSAS and RABDF

About the Silage Advisory Centre (SilAC)

- We promote independent best practice advice to aid UK and Irish livestock farmers improve silage quality, forage utilisation and thus profitability though research, seminars, knowledge transfer and advisory tools
- We are an industry initiative supported by founding members: bpi.agri, BSH, Dow, Dow Agro, Kuhn, IBERS and Mole Valley Farmers
- We focus on exploring ways in which baled silage can fit livestock production systems to improve production efficiency, reduce costs and improve profitability

Obtaining a Good Fermentation is Critical

Good Fermentation = Good Palatability



Increased Intake and Nutrient Quality

What is the Biggest Factor Affecting Autumn Cut Silage Quality?

- Dry matter (DM) content
- Sugar (Water Soluble Carbohydrate) concentration
- Ability to wilt
- Grass quality
- Soil contamination

Obstacles to Making Good Quality Autumn Cut Grass Silage

- Dry Matter – Ability to Wilt
- Available Sugar Content

- Quantity and so Ensiling Method
  - Bale or Clamp

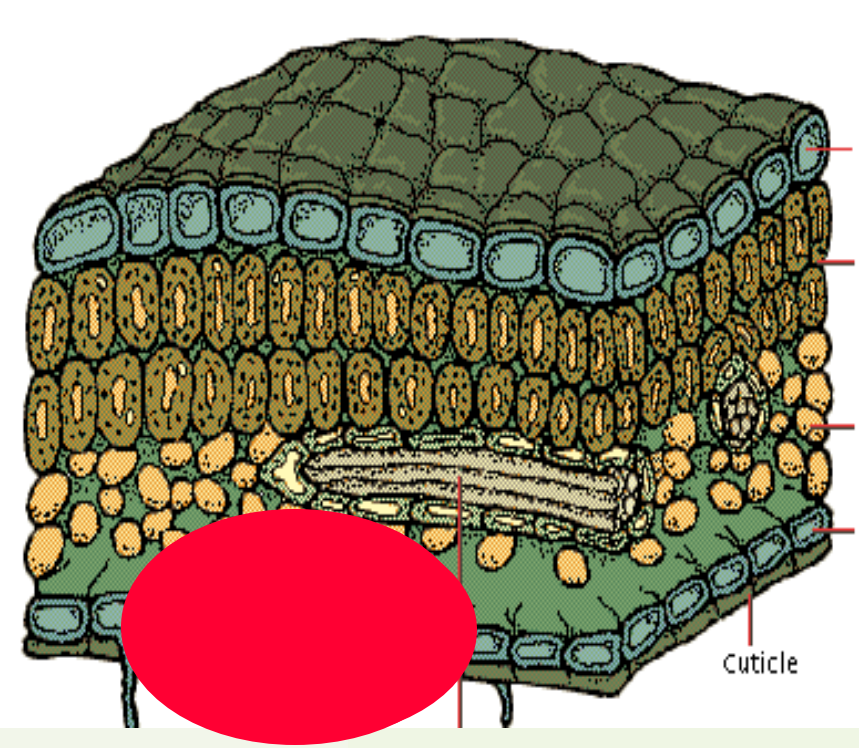
Cutting Grass for Silage

Cutting the Grass for Silage

Cut with mower conditioner

- aim to leave 2½” - 4” stubble
- avoid cutting low - soil
- rapid wilt

Wilting



Water Evaporation

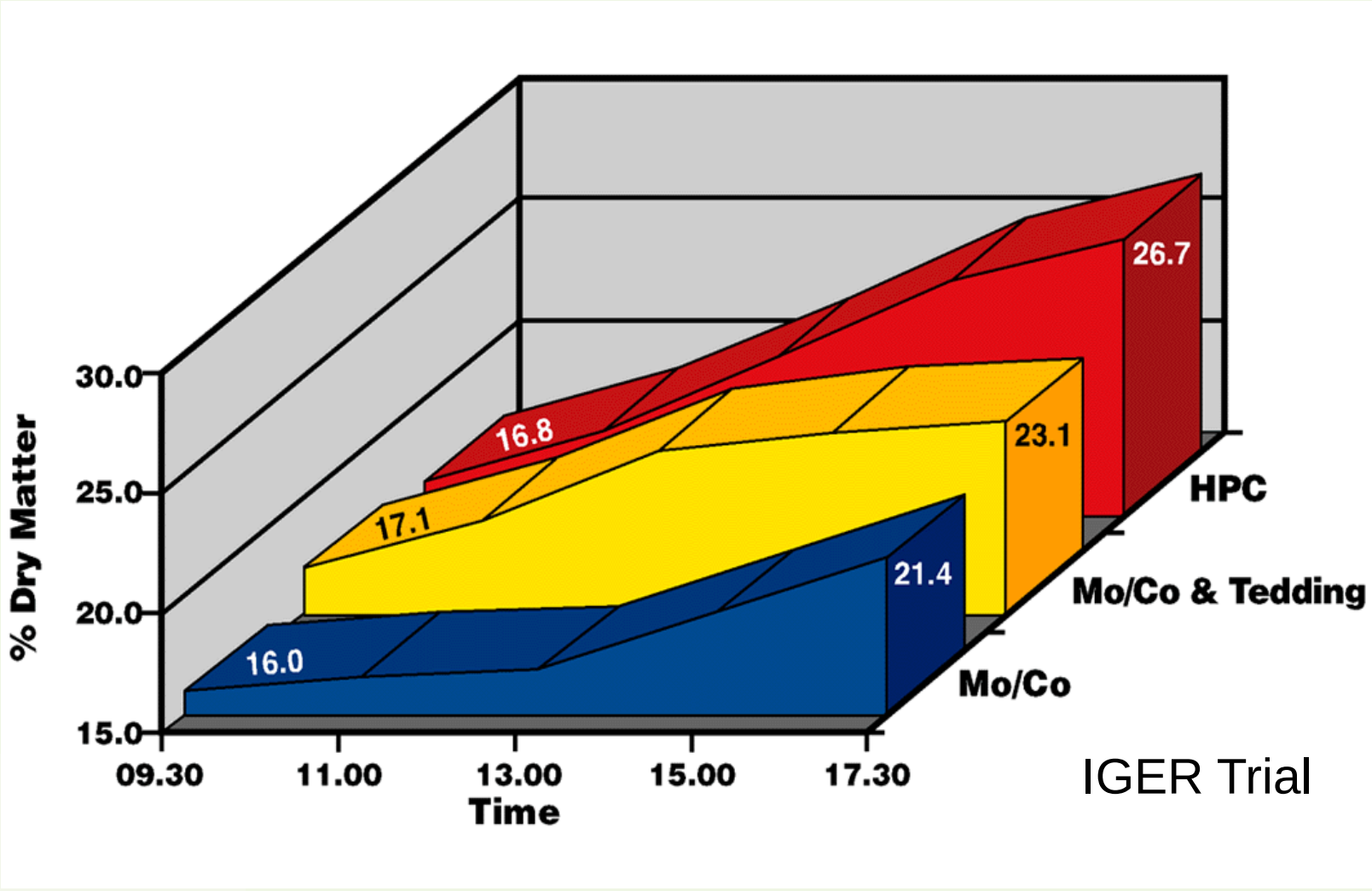
Open
100 litres / t / h

Closed
20 litres / t / h

Bosma 1991

Wilting Research

Comparison of Drying Times



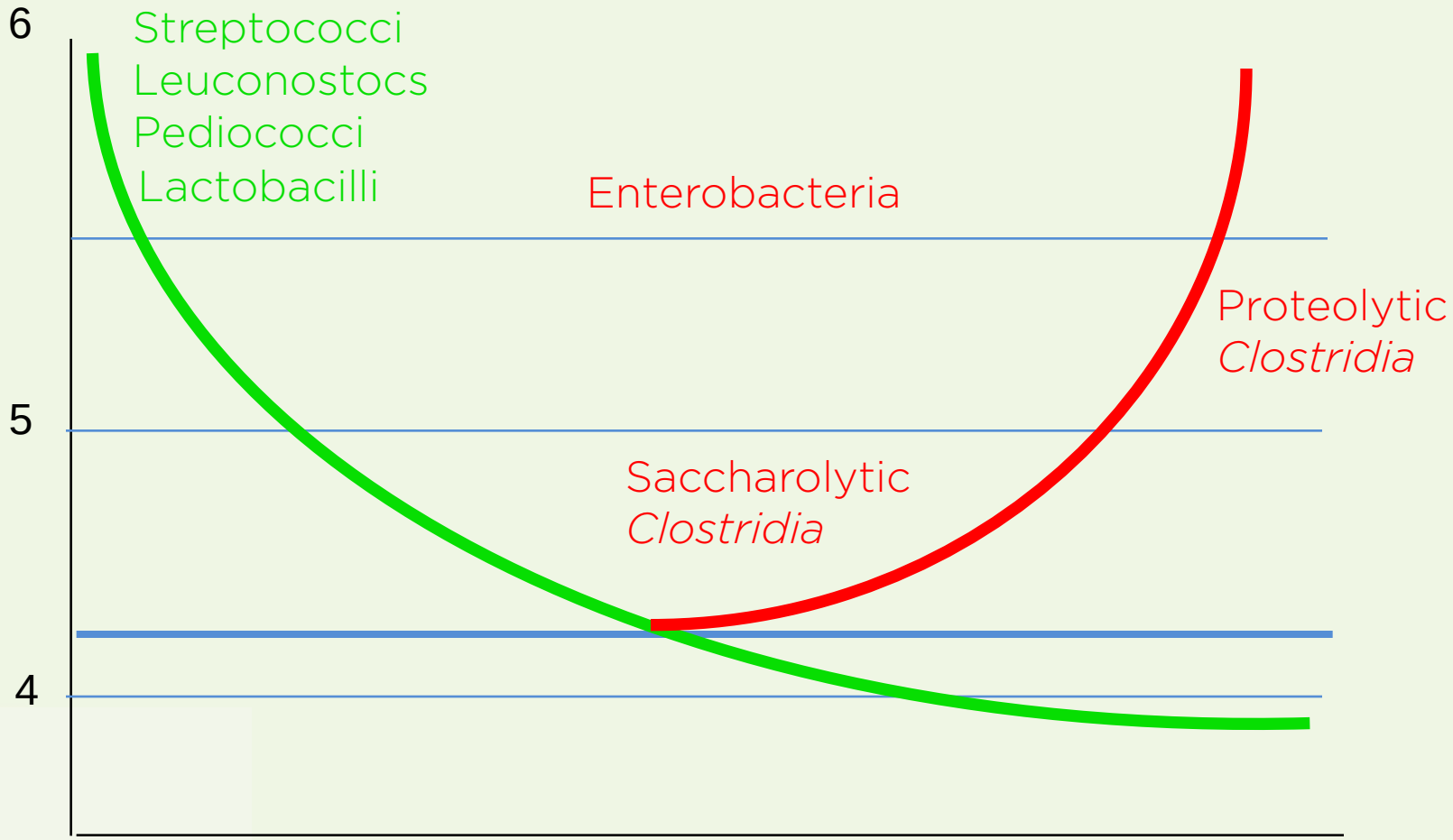
IGER Trial

WSC Requirements for a Good Fermentation Assuming Best Practice

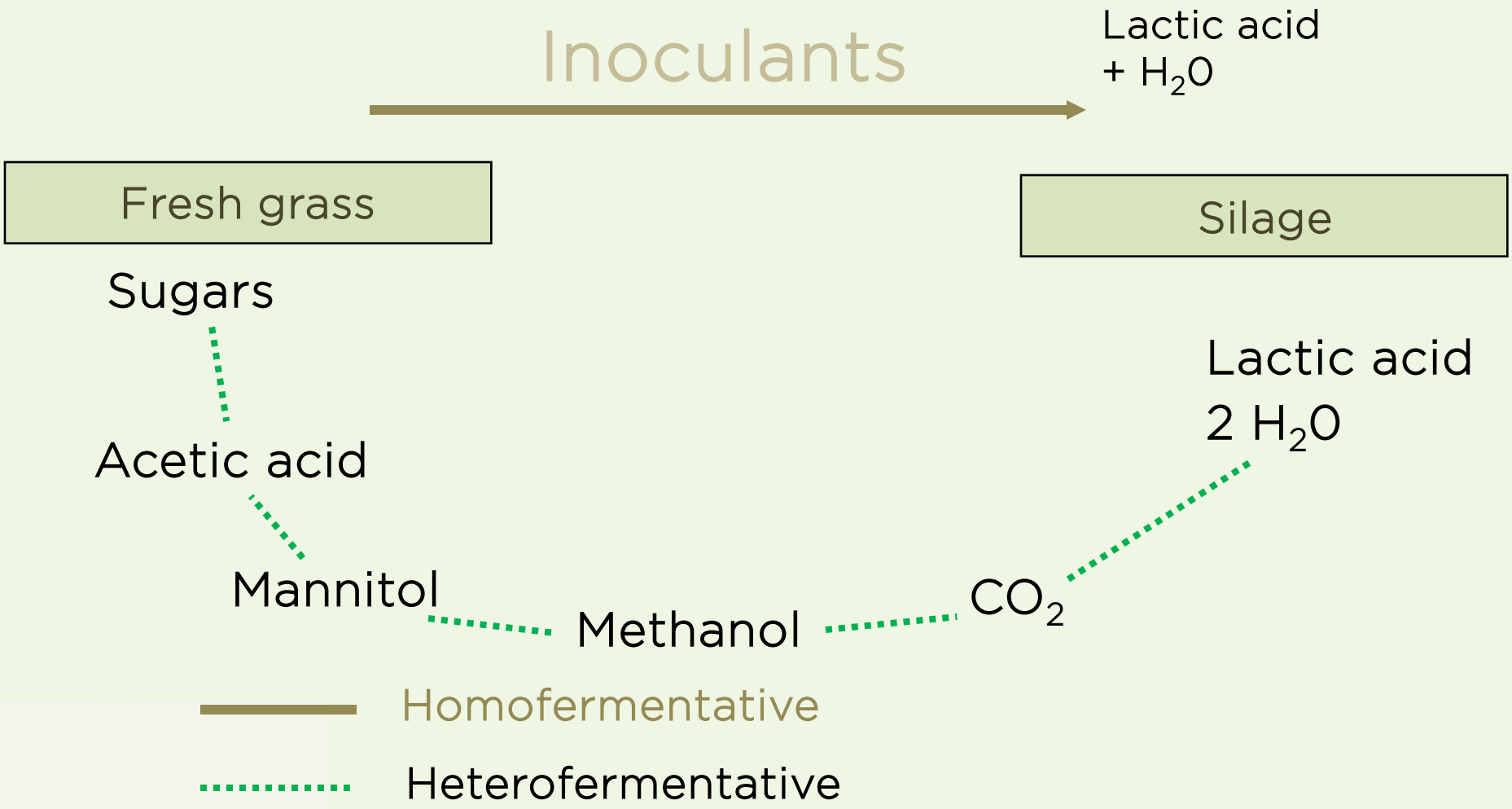
	%FM	
Experimental	2.0	Wilkinson et al. 1981
Farm	3.0	
Untreated	2.5	Petterson and Lindgren 1990
Inoculated	2.0	

Additives

Qualitative Changes in Silage Microflora During Fermentation



Fermentation



Additives and Grass Silage WSC

	pH	Ammonia-N (g/kg TN)	Lactic Acid (g/kg DM)	WSC (g/kg DM)
Untreated	4.3	71	85	40
Heterofermentative	4.3	68	90	22
Homofermentative	4.1	46	101	40

Chemical Additives

What is the Most Effective Method for Harvesting and Storing your Autumn grass?

- Precision chopped forage harvester and silage clamp (Forage Wagon and silage clamp)
- Round bale with no forage chopping
- Round bale with chopping
- Square bale
- Soil contamination


BIO

Take Home Messages

- Increase rate of wilting by spreading the crop this increases the sugar content relative to fresh matter
- Ensure good palatability by controlling fermentation by using homo-fermentative silage inoculants or chemical additives
- Opening an existing clamp to place a small quantity of 3 cut grass on top is a big risk. If there is not an empty clamp available strongly suggest baling

Our Resources

Website:
www.silageadvice.com

Factsheets:
www.silageadvice.com/factsheets

Advisory articles:
www.silageadvice.com/library

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Thank You!