DuPont Pioneer Info Bulletin – June 2013

Critical Factors for Successful Ensiling: Monitoring Numbers of Naturally Occurring Lactic Acid Bacteria on Grass

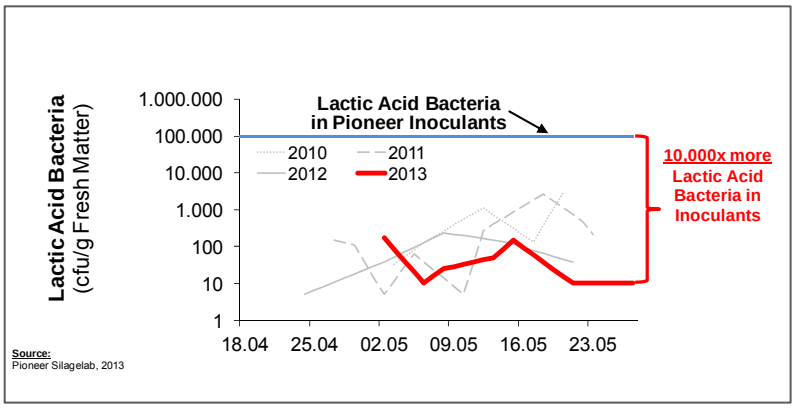

Figure 1: Naturally occurring *lactic acid bacteria* on grasses compared to *lactic acid bacteria* provided in DuPont Pioneer Inoculants.

The key requirement for rapid fermentation of grass is the formation of sufficient amounts of lactic acid. Water-soluble carbohydrates from grass are transformed by *lactic acid bacteria* into lactic acid.

Figure 1 compares recent and historical levels of naturally occurring *lactic acid bacteria* present on a range of grasses to numbers of *lactic acid bacteria* provided by DuPont Pioneer Inoculants:

Evaluation

Low levels of sunlight and low nighttime temperatures are restricting the development of water-soluble carbohydrates and depressing the growth of naturally occurring *lactic acid bacteria.*

The current growing conditions throughout the UK have also made nitrogen uptake slower than would be ideal. Hence the risk of poor fermentation in first cut grass silage is increased.

Recommendations

Given the current challenges, Pioneer recommends usage of the following silage additives:

PIONEER® 1188 — High digestibility grass with minimal wilting up to 30 % dry matter for improvement in fermentation.

PIONEER® 11G22 — High digestibility grass with wilting to greater than 25 % dry matter for improvement in fermentation and aerobic stability.

11GFT — For increased fibre digestibility of grass with wilting to greater than 25 % dry matter and improvement in fermentation and aerobic stability.

Pioneer Hi-Bred Northern Europe Sales Division GmbH

Contacts: Andrew Stainthorpe, Mobile: 07801 / 183234; Jonathan Bellamy, Mobile: 07801 / 183233 or Ian Davy, Mobile: 07801 / 183235

United Kingdom Branch ● Blythe Valley Business Park ● Solihull B90 8AG
Tel.: 01604 / 858008 ● Fax: 01604 / 879027 ● Internet: www.pioneer.com/uk