

## Targeted solutions



Arm & Hammer Animal and Food Production has announced the discovery of two new beneficial *Bacillus* strains, *Bacillus subtilis* 839 and *Bacillus subtilis* 4976.

The new strains will be incorporated into Arm & Hammer Targeted Microbial Solutions available in Certillus products for cattle producers.

Both new strains have antimicrobial activity against harmful bacteria that are prevalent within the livestock industries. *Bacillus subtilis* 839 is effective against diverse *E. coli* species in ruminants.

*Bacillus subtilis* 4976 offers activity against *E. coli*, salmonella, *Clostridium perfringens* and other clostridial bacteria that are common in beef and dairy cattle.

“Commercial development of these strains is integral to helping our customers address pathogenic disease and food safety threats,” Dr Xandra Smith, Arm & Hammer

manager of microbial ecology and genetics, told International Dairy Topics.

“Through our commitment to research and problem-solving, livestock producers can support the overall production and health of their herds, while helping to protect the integrity of our food supply.”

Targeted Microbial Solutions are available exclusively from Arm & Hammer through its Certillus products for feed, forage and manure. These solutions are tailored to the individual operation based on an evaluation of the Microbial Terroir, an assessment of the microbial makeup of the environment, soil, animals and weather at the specific farm location. After identifying the operation’s unique challenges, Arm & Hammer develops custom Certillus solutions with the precise combination of *Bacillus* strains to address those challenges.

[ahfoodchain.com](http://ahfoodchain.com)

### Homogenous minerals



One of the main challenges in feed production is the low inclusion of essential nutrients like minerals. This inclusion can be so low that distributed feed may not be homogenised and, as a result, animals will not get all the nutrients they need.

Providing the greatest homogeneity in feed is the latest development and newest generation of multi-mineral products from Pancosma – B-Traxim All-in-One.

As with all products in the B-Traxim range, the use of glycine as a ligand provides pure metal glycinates with high levels of trace elements, which are easy to handle, dust-free and provide optimal distribution in premixes and feed.

These criteria are important for the safety of operators, and optimise the quality of the product, limiting contamination and providing better homogeneity of trace elements.

Pancosma’s advanced R&D has made it possible to specify the chemical structure of the B-Traxim range and also demonstrate the stability of the organic bond at different pH.

[pancosma.com](http://pancosma.com)

### Products for an augmented rumen



Since 1995, Idena has created and developed targeted nutritional solutions using the properties of essential oils and plant extracts. These are innovative alternatives to conventional chemical and antibiotic products.

Vertan and Valkalor are Idena’s solutions to reach an ‘augmented-rumen’ and enhance dairy production, animal welfare and the environmental footprint:

- Vertan optimises the nitrogen metabolism and then reduces urinary nitrogen excretion.
- Valkalor stimulates the appropriate ruminal fermentations to improve the use of carbohydrates.

[idena.fr](http://idena.fr)



## QUALITYSILAGE 1

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LALLEMAND

FORWARD

Helping producers make the best possible silage from a variety of forages

### Preparation & Harvesting

Controlling the cost of production on a farm is crucial to achieving and maintaining profitability in a continually challenging dairy market. Feed costs and milk prices constantly fluctuate, making long-term planning difficult. Producing the best quality silage possible can help producers take control of feed costs and reduce their reliance on purchased feeds. Producing better quality silage on a consistent basis can make a significant difference to the profitability of the farm. This is the first in a series of articles that will help producers make the best possible silage from a variety of forages.

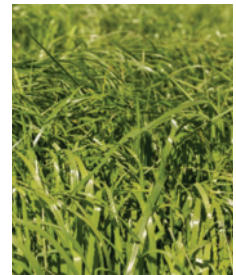
#### SILAGE quality starts in the field

The harvesting stage and the dry matter (DM) content are two key factors in maximising feed value, quality of conservation and the palatability of silage.

#### SILAGE from grass

Typical target DM: 28-35%

The key to high-quality grass silage is to cut and wilt the crop to an appropriate DM. If the grass is ensiled too wet, it is susceptible to spoilage and effluent production. This will result in significant DM losses. If ensiled too dry, it makes packing and consolidation difficult, which increases the chances of mould and aerobic instability occurring. The result is losses through wastage and a reduction in the feed value of the grass silage.



#### SILAGE from whole maize/corn plants

Typical target DM: 32-38%

Corn is optimally harvested between 32-38% DM. Corn harvested for silage at greater than 35% DM may benefit from using a kernel processor or shredder processor at the time of harvest. Achieving optimal DM for corn silage is not always possible in all areas of the world due to specific climate issues. Often, it is necessary to harvest below 30% when frost has occurred or when it is becoming increasingly difficult to work with a forager because of field conditions.

#### SILAGE from alfalfa/lucerne

Typical target DM range (see table below)

Alfalfa	Harvest stage	DM level
Silos/bunker or bag	bud - 1/10 bloom	35-45%
Stave	bud - 1/10 bloom	40-55%
Harvestore	bud - 1/10 bloom	50-70%
Wrapped bales	bud - 1/10 bloom	40-60%

If the alfalfa is harvested and ensiled when it is too wet, there is the risk of prolonged fermentation, which can result in DM losses and a high acid load. If the alfalfa is ensiled too dry, it makes packing more difficult, and this can lead to mould growth and aerobically unstable silage.

For more information visit: [qualitysilage.com](http://qualitysilage.com)

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