

# ForageMax

## Newsletter



### Earn €100 extra per cow

Digestibility of the cell walls (DNDF – also known as digestible neutral detergent fibre) is the single most important quality parameter in grasses. High DNDF results in higher animal intake of forage and consequently higher output as milk or weight gain.

- 1% increase in DNDF = 0.25 l more milk per cow per day
- Trial results show 3-6% difference between commonly used varieties. 4% = 1 l milk extra per cow per day, when choosing a top digestible variety
- 1 l milk = €0.3-0.35 more per cow per day or around €100 extra per year
- High DNDF also results in lower nitrogen release to the environment due to a better balance between protein and carbohydrates in the cow's diet

With high DNDF varieties you get more milk as these varieties deliver the best possible combination of yield and quality, when harvested at the optimal time.

All grass varieties with increased levels of fibre digestibility from DLF-TRIFOLIUM are easy to recognise by this glass of milk with the 'More Milk with DLF' logo.

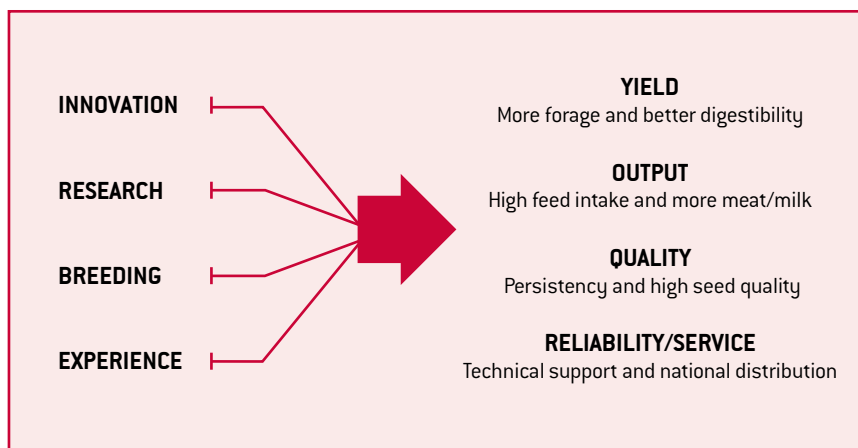


**FORAGEMAX**

by DLF-TRIFOLIUM

## More Milk with DLF

High yielding livestock need high quality forage. By increasing the feeding value of grass, a great deal can be gained in the livestock farmer's output and economy. As a consequence, DLF has concentrated on feeding value throughout all stages of our breeding and testing programme for varieties and mixtures of grasses and legumes. Here is what we can offer and what it brings to you.



In DLF we are convinced that good seed and good research go hand in hand. Since the early 90's we have been working with biotechnology as an important part of plant breeding. Here we dig deeper into the important features of main value to the end-users of our products. We call this "Seeds and Science". The demands of agriculture are focused on increased output (yield and quality), combined with an increased demand for sustainability such as:

- **Improved nutritional value**  
Varieties with changed chemical composition, better cell wall digestibility (also known as digestible neutral detergent fibre or 'DNDF') and lower content of lignin
- **Increased yield**  
An increased amount of forage harvested per hectare
- **Better utilisation of nutrients**  
Varieties able to deliver higher yield and quality together with lower input of fertiliser
- **Improved tolerance to stress**  
Varieties that can better overcome drought, salinity, frost and diseases, etc. and on top of that have better persistency



## Overcoming salinity


According to the Food and Agriculture Organization (FAO), more than 300 million square kilometres around the world are suffering from salinity to a smaller or larger extent. Salinity occurs mainly in dry areas when evaporation is high or when salt or waste water is used for irrigation. But also on more local spots in other areas, salinity may appear.

Varieties with higher tolerance to salt stress will in saline conditions increase chances of successful establishment, growth and consequently chances to maintain forage yield, persistency and disease tolerance.

### There are differences

Extended trials at DLF show remarkable differences in salt tolerance – mainly between species, but also within each of these species. Relatively large variations can be found between varieties, and it is noted that tetraploid ryegrass varieties are more salt tolerant than diploids.

	Tall fescue – Cocksfoot
	Westerwold ryegrass; tetraploid more salt tolerant than diploid – Hybrid ryegrass – Italian ryegrass, tetraploid – Festulolium – Perennial ryegrass
	Bromegrass – Smooth-stalked meadow-grass – Meadow fescue – Italian ryegrass, diploid
	Timothy – Red clover – White clover

*Tolerance to salinity in grass and legume species.*  
 = most salt tolerant. Greenhouse trials at DLF.



**Based on this knowledge, DLF ForageMax mixtures are constructed with the most tolerant varieties of Tall fescue, Cocksfoot and tetraploid ryegrasses for areas with increased stress conditions like drought and salt.**

## DLF gives lectures at the Milk Business Academy (MBA) in Russia

The most important goal for Russian milk producers is to make the production more efficient and profitable. This is why one of the largest milk dairies in Russia – Danone/Unimilk - has launched the Milk Business Academy (MBA). This project combines all the important issues for milk producers; improved genetics, milk equipment, efficient daily farm operations and of course the feeding.



Training is provided by professionals in a combination of theory and practical training. The goal is a 7-10 % increase in the output on the farm by training the staff. In the first year of the project it is planned to train about 150 representatives of farmers and next three years this will increase to about 800 people.

The Milk Business Academy is based on the farm Verbilovskoe in the Lipetsk region. This farm is well known across regional borders. The farm operates 2,800 ha and has 1,200 milking cows. The basis of the forage consists of high quality maize silage (12,000 t) and grass silage (9,000 t). The last is mainly ForageMax mixtures. Director of the Verbilovskoe farm, Elena Efimova, states: "We can only achieve increased milk yield by using high quality forage".

DLF-TRIFOLIUM and the Milk Business Academy have agreed to provide training for farm specialists at the end of February 2014. At this session DLF professionals will present the main topics of intensive forage grass production and utilisation.