

Forage Newsletter



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FROM DLF-TRIFOLIUM



The trial network

DLF forage development trials are located at a number of our breeding stations throughout Europe (Denmark, England, Holland, France and Czech Republic). Furthermore we use data from trials at Lopuszna in Southern Poland as well as Smolensk and Kursk in Russia. All trial plots are managed with a professional infrastructure and collection of data.

The fields are open

The forage development trials are located alongside a large number of demonstration plots at our trial stations. Here it is possible to see a great part of our variety and mixture portfolio – and also the forage development trials. If you are interested in a visit to one of our trial stations to see for yourself, please contact your local product manager or sales person.

DLF Forage Development Trials

- Adding Value to Grassland

A good forage mixture of grasses and clovers consists of the best varieties that can be obtained. Here probably very few can disagree – however, when you start a discussion of what exactly are the characteristics for a good grass or clover variety, there will be a number of opinions.

At the end, focus of course shall be on the farmer's economy, so our aim as breeders must be to provide varieties with the best possible scores for all relevant properties. For this purpose we at DLF-TRIFOLIUM carry out a large number of forage development trials – along with the even greater number of trials conducted for breeding purposes.

Trial subjects

At the moment we have trials in the ground in which we are looking for answers to some key questions for future grassland farming:

Forage quality

Varieties of grasses vary when looking at principal quality parameters like digestibility of organic matter and cell walls (NDF), protein and sugar content, etc. Selecting and describing varieties with the highest feeding value is therefore very important.

iSeed® for forage grasses

iSeed® has already shown remarkable results in trials as well as in practical farming when used for forage grasses. We are investigating further opportunities for this product – i.e. for overseeding, replacement of seedbed fertiliser, late sowing, etc.



Forage solutions for dry areas

Water is a limited resource in many areas and in the future we probably will have to cope with even dryer conditions. We are looking for grasses and combination of grasses and legumes which are able to produce feed also when the precipitation is scarce and opportunity for irrigation is limited.

ForageMax development

The forage mixture brand, ForageMax, is the subject of ongoing R&D effort. We are constantly testing new varieties, species and combinations which, if proven worthy, will end as new or revised ForageMax mixtures.

ForageMax overseeding

Another successful DLF-TRIFOLIUM concept is the ForageMax Overseeding. The continuing trials are still showing new convincing results concerning the benefits of keeping the sward young by introducing new plants into the old field.

DLF Triple Crown

- A Quality Stamp for the Top Varieties from DLF-TRIFOLIUM

The breeding of new forage grasses at DLF-TRIFOLIUM aims to offer the farmer still better varieties – better in all senses of the word. It has always been our ambition to develop grass varieties with higher yields per hectare which will also provide improved nutrition and palatability to the cow's diet; in addition, the importance of good field performance must not be forgotten i.e. tolerance against major diseases, high persistency, plus suitability for grazing and cutting.

All these properties are measured and described using the great number of trials carried out by DLF-TRIFOLIUM's trialing network around the world. DLF-TRIFOLIUM wants to make these results available to farmers and others who have an interest in grass and we are therefore introducing the newly developed system for evaluating forage quality, DLF Triple Crown.



The DLF Triple Crown logo is given to a variety on a country-by-country basis as conditions and climate change from region to region. This is an example from Denmark.

DLF Triple Crown describes the factors to be considered for a grass variety as below:

1) FEED – the most important factors to be considered for feeding value. Here are measured the content and digestibility of cell walls (NDF), digestibility of organic matter (DOM), content of crude protein, sugar and indigestible fiber (ADL).

2) FIELD – the most important factors to be considered in the field. Here the main characters are winter hardiness, persistency and disease resistance – especially crown rust and dreschlera.

3) YIELD - which naturally needs to be as high as possible.

In each category an index is calculated and each variety will receive from one to five stars depending on the performance values in each group. The reference will normally be well-known varieties within the same species and type. To obtain a DLF Triple Crown logo a variety must have at least four stars in each category and the actual number of stars will be printed on the logo.

Grass can offer so much more!

It is too simple to evaluate a grass variety on only one property like sugar. Grass consists of many elements, but in particular the content and digestibility of cell walls and organic matter is important when feeding cows. It is well known that high digestibility of the forage increases feed intake by cows and consequently their production. Increasing the digestibility of NDF by one per cent leads to an increase of around 1/4 liter in milk yield per cow per day. That is a lot of money!

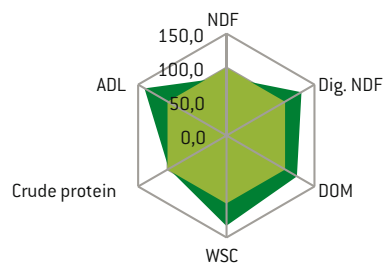
Another important reason for growing grass and clover grass is the supply of protein – giving the farmer the opportunity to buy less concentrate. Protein content is therefore also a very important parameter in DLF Triple Crown.



The feed index

The feed index is describing the parameters of importance for the feeding value of a variety, and is the result of trials carried out by DLF-TRIFOLIUM. Samples are analysed at an independent laboratory using NIRS technique. However, the yield and field indexes used when appointing a DLF Triple Crown variety are based on local, national figures, normally originating from official trials.

We use all cuts in a year for the feed index, not just 1st cut or midsummer. The results are therefore quite robust with a number of replications behind each figure. The reference uses all varieties of the same type (species, earliness, ploidy) in the trial and harvest is done as close to the optimal time as possible.



■ CALVANO 1

■ Reference = Average of 9 intermediate diploid varieties

Example: The feed index for CALVANO 1. Average of 1st, 2nd and 3rd cut 2009.