

# Forage Newsletter

## Spring 2015



## NEW! Mahulena Festulolium

Mahulena is an early maturing festulolium 6n (a tall fescue type). This variety is very suitable for grazing and cutting systems where a large early cut is desired and combined with a fall regrowth for stockpiling. To be expected from a DLF festulolium, Mahulena forage quality is higher compared to traditional tall fescue. This will translate in better uptake and better animal performance from your pasture. More tons/acre and more value/ton!

It is a welcome complement to our late maturing festulolium 6n Fojtan. Seed is available now.

## Novel Endophyte

DLF has isolated novel endophytes that provide tall fescue protection against summer stress and insects without producing detectable levels of ergot alkaloids (<100ppb). This makes it non-toxic to livestock. The first novel endophyte released by DLF is called *Protek*<sup>®</sup> (patent pending). Several tall fescue varieties have then been inoculated with *Protek*<sup>®</sup> to create an improved forage variety with increased persistency that is safe for livestock. Two varieties, Martin2<sup>Protek</sup><sup>®</sup> and Tower<sup>Protek</sup><sup>®</sup> are now commercially available. The endophyte-free versions of these varieties remain available for the northern regions where novel endophyte does not offer a clear advantage.

### Martin 2<sup>Protek</sup><sup>®</sup>

Martin 2 is an early-medium maturity variety with transition zone genetics. It performs very well in the transition zone. Trials show increased forage yield in subsequent years compared to the trial mean, indicating its improved persistence. View tech sheet by scanning the QR code.



### Tower<sup>Protek</sup><sup>®</sup>

Tower is a new, late maturing tall fescue. It is soft leaved and has high forage quality. It is very suited for grazing and stockpiling. With the inclusion of the *Protek*<sup>®</sup> endophyte, it is well adapted to the transition zone.

Grassland renovation to introduce novel endophyte varieties requires careful planning for optimal results. Good results have been obtained by a spring kill of the old stand, followed by a summer forage crop, followed by a second application of Glyphosate, if necessary, and then a fall seeding of the novel endophyte tall fescue. Producers, seed industry and University of Missouri have formed the Alliance for Grassland Renewal to promote the conversion of toxic K-31 pastures to novel endophyte pastures. The Alliance assists producers in obtaining USDA-NRCS financial assistance through its EQIP program to defray the cost of such conversion and advises in best practices to establish and maintain high producing novel endophyte containing pasture. DLF Pickseed is a proud member of this Alliance.

**Order seed now to assure delivery of new crop seed in time for fall seeding.**

Scan the QR codes to visit these sites:

Alliance for Grassland Renewal:



USDA-NRCS EQIP Program:



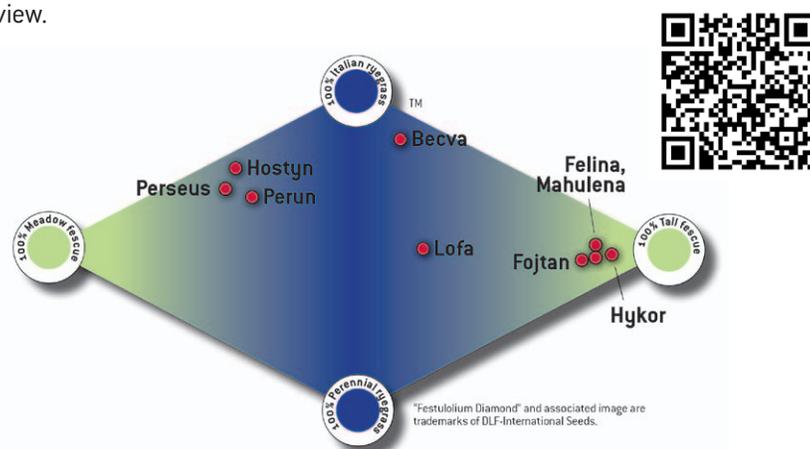
## Learn More.

To learn more about DLF Forages, scan the QR code below or visit us at:  
[www.dlfis.com/Forage.aspx](http://www.dlfis.com/Forage.aspx)



## The Value of Festulolium

The best traits of ryegrass and meadow fescue or tall fescue are combined into a hybrid grass called Festulolium. There are many of these hybrid combinations possible and with backcrossing after the initial hybridization to either hybrid parent, a wide range of varying genetic makeup is achieved. Therefore it is important to understand the genetic background of a festulolium variety, as that will predict to a great extent what performance can be expected from the variety. We have created the Festulolium Diamond® to illustrate this and published the festulolium paper to explain. Scan QR code to view.



### Perun Festulolium vs Italian Ryegrass Grazing Trial

The festulolium variety Perun is a hybrid between Italian Ryegrass and Meadow Fescue. Its genetic makeup is approx 60% ryegrass and 40% meadow fescue. How does that translate into pasture performance? It brings the yield and high forage quality of ryegrass and combines it with the strong summer performance and persistence of meadow fescue. The advantage that this provides to grazing livestock is presented in a weight gain study performed by the Penfield Research Station (part of Seed Distributors - Pasture Genetics) in Australia. The study used 24 Angus steers simultaneously grazing each of the two italian ryegrasses and the festulolium variety Perun.

#### Trial Details:

- An irrigated 6Ha paddock was divided into 12 half Ha sections. On the 6th of May, 4 of these sections were each sown with either Icon italian ryegrass, Crusader italian ryegrass or Perun festulolium. Sowing rate was 30Kg/Ha.
- 24 Angus steers were split into 3 grazing groups of 8 steers, with an average starting weight of 225Kg (500 lbs).
- The 3 groups simultaneously grazed each of the varieties throughout the duration of the trial.
- The trial ran for 16 weeks, in which each section of each variety would be grazed in a rotation at least for a week every 4 weeks.
- No other source of feed or supplements were given to the animals.

## Results:

Weight gain for the steers grazing Perun festulolium over a period of 16 weeks was 123% of those grazing the italian ryegrass (Table 1, Graph 1).

## This Remarkable Result is Driven by Two Factors:

1. Higher feed quality and better nutritional balance of Perun throughout the trial. [Graph 2]

At every rotation, feed quality samples were taken prior to grazing. Perun's high RFV can be attributed to a higher protein content, lower ADF and a lower NDF compared to the ryegrasses.

2. Longer forage production into the summer by Perun. [Graph 3]

The added root depth and heat tolerance characteristics allowed Perun to exceed the italian ryegrass varieties in dry matter production in the fourth rotation, showing less of the traditional summer slump. Perun is more suited to the hot summer conditions experienced later in the trial.

23% more live weight gain in a 4-month grazing period presents significant value. Based on current steer prices of \$200 - 220/cwt, this extra weight gain translates into an additional steer value of \$175/steer. Grazing Perun festulolium substantially increases gross income/acre compared to grazing italian ryegrass, as Perun can take the same stocking density as italian ryegrass.

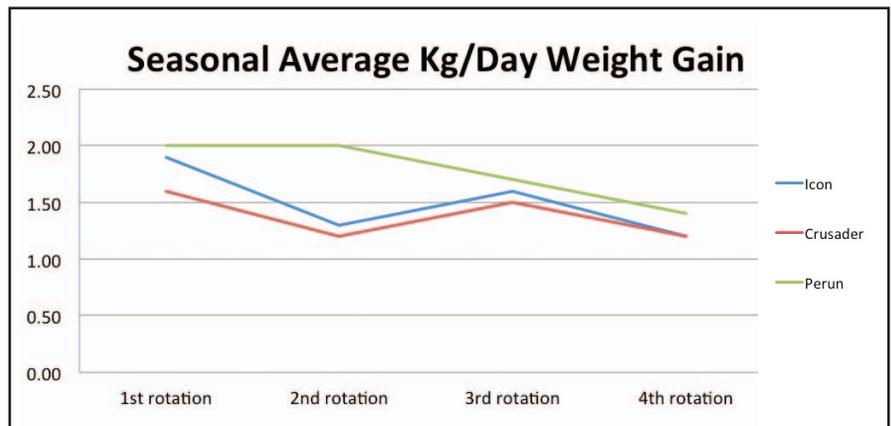
## Therefore, GRASSHANCE® with DLF Festulolium!

For full trial data, please contact:  
forages@dlfna.com

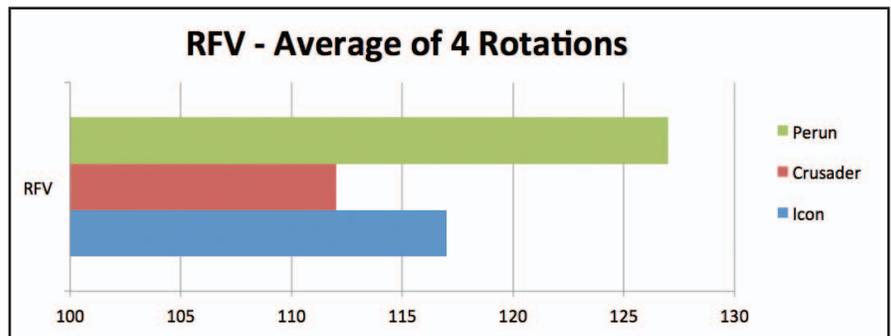
### Average daily weight gain in kg

|          | Type        | 1st rotation | 2nd rotation | 3rd rotation | 4th rotation | Total weight gain per steer in (kg) |      |
|----------|-------------|--------------|--------------|--------------|--------------|-------------------------------------|------|
|          |             |              |              |              |              |                                     |      |
| Icon     | Lm 2n       | 1.9          | 1.3          | 1.6          | 1.2          | 161                                 | 100% |
| Crusader | Lm 2n       | 1.6          | 1.2          | 1.5          | 1.2          |                                     |      |
| Perun    | Festulolium | 2            | 2            | 1.7          | 1.4          | 199                                 | 123% |

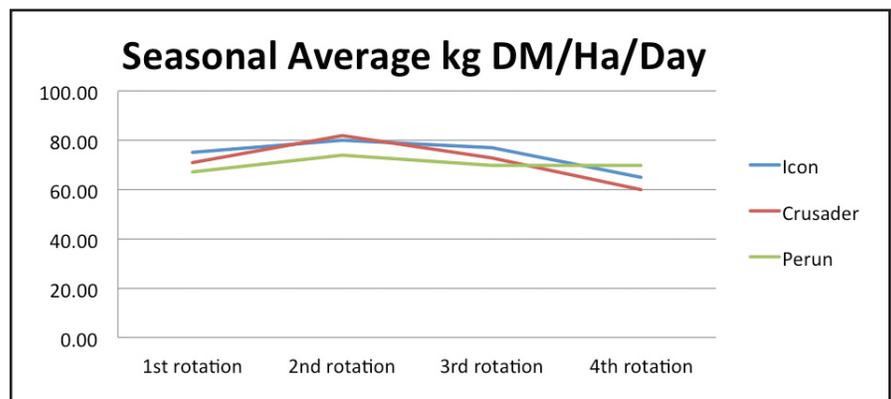
Table 1



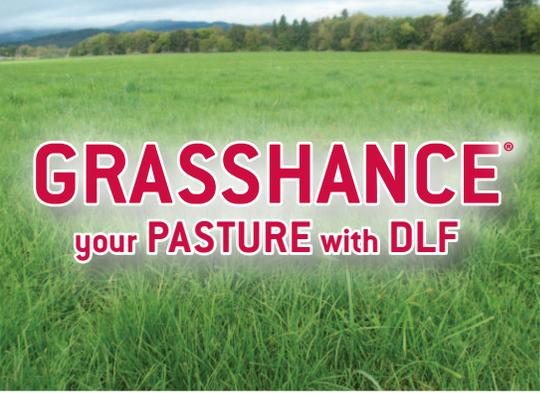
Graph 1



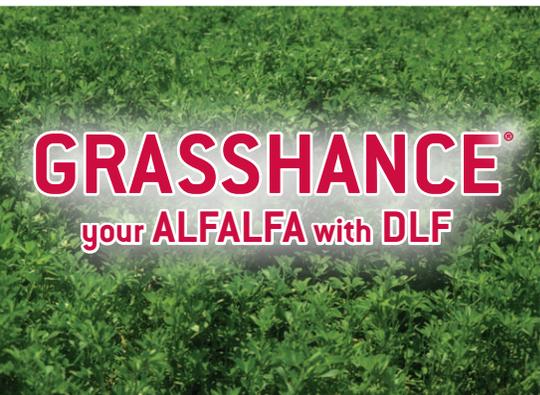
Graph 2



Graph 3



**GRASSHANCE®**  
your PASTURE with DLF



**GRASSHANCE®**  
your ALFALFA with DLF

## GRASSHANCE®

Grasshance is a DLF-coined verb, a word play built on “enhancing with grass”

**Grasshance®** [verb] – *improve your forage production by introducing improved DLF grass varieties to an existing forage crop or by mixing DLF grass seed with non-grass forage crop seed in new plantings.*

The methods to **Grasshance®** thinned out stands of forage crops can be seen as rescue measures, but also as maintenance procedure to maintain maximum yield from your forage crops and in doing so, stretch the economical life of the stand.

**Interseeding** – *planting a different species into an existing stand. “You can Grasshance® your alfalfa” by interseeding a festulolium to increase production and maintaining quality.*

**Overseeding** – *planting new and improved varieties of grass into an existing grass stand.*

Research in the UK and Belgium confirms the value of grassland renewal through grasshancing: up to 16% increase in dry matter/acre. Scan QR code to read more.



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