

MASTERLINE® Newsletter



4turf gives:

- Deeper rooting and stronger plants
- More stress tolerance
- Better establishment due to larger seeds

These characteristics bring the following benefits :

- Reduced labour costs
- Better sward quality after summer stress
- Better sward quality after winter stress
- Reduced fertiliser and chemical input costs



4turf Perennial Ryegrass with extra power



4turf varieties are tetraploid types of turf Perennial Ryegrasses. Tetraploids are well known from forage grass situations and give extra power for yield and stress tolerance. DLF-TRIFOLIUM has managed to duplicate these benefits in genuine turf types of Perennial Ryegrass. This is a unique innovation and DLF-TRIFOLIUM is the only one offering this on the market.

Deeper rooting gives a better drought tolerance

Testing 4turf in comparison with normal diploid turf Perennial Ryegrass in France has given significant results:

DROUGHT TOLERANCE RELATIVE		
VARIETY	LES ALLEUDS	CARPENTRAS
Diploid Lp (average of 3 varieties)	100	
Diploid varieties (average of 6 varieties)		100
4turf (average of 3 varieties)	133	119

Scorings for drought tolerance in Les Alleuds (North of France) and Carpentras (South of France)

Better sward quality after winter stress

The winter 2010/11 was very severe with a long period of snow cover. The attack of winter Fusarium was significant all over Europe. After the snow melted in spring 2011, a clear proof of the improved resistance to winter Fusarium became obvious. The below photo was taken in Denmark in March and speaks louder than words. 4turf plots are marked with 4turf. The other plots are conventional diploid turf Perennial Ryegrasses.

All grasses did survive the winter, as Fusarium normally does not kill the grass, but the greening up is very much delayed and the attractive look is somewhat missing with conventional material.



Two solutions to increase success with overseeding

The first solution is the 4turf concept as described on the front page. 4turf has larger seeds with more germinative energy and added to this also has the capability of germinating at lower temperatures - down to 4-5 °C. This makes it a fantastic product for late autumn and early spring overseeding as it extends the period with opportunity for sowing which is usually restricted by weather conditions.

The second solution is the unique turf type Annual Ryegrass AXCELLA. This turf type has got the fastest germination and establishment among any species. The germination and even growth is possible at temperatures at 4-5 °C.

COMPARISON OF AXCELLA WITH ORDINARY ANNUAL RYEGRASS

	LEAF TEXTURE	COLOUR	DENSITY	VERTICAL GROWTH
Ordinary Annual Ryegrass	Coarse	Medium	Open	High
AXCELLA	Fine	Darker	Denser	Medium

Winter sowing of AXCELLA and normal Perennial Ryegrass

Proof of early establishment

The below photo is taken in March 2011 where the sowing was done in January 2011 during the cold winter. As the picture shows the normal turf types of Perennial Ryegrass do not germinate and grow before temperatures have reached a higher level (than 4-5 °C.) in early spring whereas the AXCELLA is able to germinate much earlier.

This effect offer the difference between success and failure in preparing of sports fields for early use in tournaments.



Expressmaster for fast repair and strengthening of sports fields

Overseeding sports fields has become a standard procedure for all professional groundsmen. Most sports fields in cold and temperate regions are established – either by sowing or by using turf. The seed mixture consists of mainly Perennial Ryegrass and Smooth-stalked Meadow-grass. Both grasses are very tolerant to wear. The further maintenance of the fields is achieved by overseeding, thus adding new seeds to the field on a continuous basis. The establishment of Smooth-stalked Meadow-grass is very slow and normally this species will not establish very well by overseeding. The larger seeded Perennial Ryegrass is very easy to establish and is the main component in overseeding mixtures.

Based on the new species/products DLF-TRIFOLIUM has created the two following Masterline mixtures:

Expressmaster

75% Lolium Perenne, 3 different varieties
25% Lolium Perenne, 4turf

Expressmaster Plus

10% Turf Annual Ryegrass
50% Lolium Perenne, 4turf
40% Lolium Perenne

