

Power coating gives added value to sport pitches

iSeed, a practical comparison



Last season, the iSeed grass seed coating was brought to the market by the companies TopGreen and Innoseeds. IPC Groene Ruimte conducted research into the emergence and growth of grass treated with iSeed. Sports fields were sown, in part with iSeed coated grass and in part with ordinary seed. For this the mixture Win2Win was used. By comparison under field conditions, a clear view of the wear tolerance under intensive play of the grass mixtures was obtained.

The three test fields were in the towns of Rheden and Harderwijk / Hierden.

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The test was conducted as follows: the pitch was sown on a main field (sowing) and two intensively used training fields (overseeding). In particular the training pitch in Rheden had been played intensively, and was almost bare soil at sowing. The pitches in all cases used sand as the substrate.

During the sowing in the spring of 2007 (the maintenance) one half of each field was sown with Win2Win and the other Win2Win iSeed. In both cases the grass came from the same seed

lot, so that the baseline was exactly the same. The amount of fertilization applied was in both cases at the same level, so that no account was taken with additional fertilization by the iSeed. Subsequently, both parts received the same treatment.

The turf density was measured at three time points: before the start of the competition in August 2007, in the autumn of 2007 just before the winter break and in the spring of 2008, after the league ended.

The quantity of grass used in both cases was equal, with the iSeed double the weight of product is sown as the coating makes the seed heavier. For assessment of the plant density, samples were taken from the field. These samples were fully analyzed and root development was assessed.

A positive first impression

The first assessment was made in August 2007, just before the start of the competition season. In all three fields the pitch was denser and greener

	Win2Win iSeed	Win2Win
Perennial ryegrass	97,7	93,5
Smooth stalked meadowgrass	0,2	0
Annual bluegrass	2,1	6,5

Table 1: Share of grasses at the start of the season (in%)

of colour in the areas where the iSeed treated grass was sown. There were also significantly less weed plants and there was less grass street observable in these iSeed areas. The part without the iSeed treatment was less green in colour and the pitch was more open, which gave extra space to the development of annual bluegrass.

"On average, the iSeed sections contained 30 percent more plants and the turf was clearly much denser"

The counts that were made revealed that, compared to the sections where iSeed had not been applied, in the sections where iSeed was used more ryegrass and smooth stalked meadowgrass plants were present. The root length at that time was 7 centimetres in the iSeed part and 4.5 centimetres in the part without iSeed.

Further it showed that a higher proportion of good grasses were present, see table above. Besides an increase in the proportion of perennial ryegrass the number of plants was also clearly increased. There was an improved germination of the grass. On average, the iSeed sections contained 30 percent more plants, and the turf was clearly much denser. In particular, the proportion of perennial ryegrass was much higher.

Keep ahead

Because of intensive play, the number of plants decreased during the winter break and at the end of the league. This a logical consequence of the heavy wear. However, it appeared at the assessment in the autumn of 2007 that the increased

turf density and the greener colour were still clearly visible. Again, there were more plants in the field with iSeed than in the field without iSeed.

Table 2 shows the final results.

The root length differences remain. To the end of the competition the difference in root volume is still present, over 22 percent increased. The iSeed sections contained a lot more good grass plants (40%) at the end of the season. During the year the difference between the iSeed sections and the non-iSeed sections continued to increase. The stronger rooting has certainly contributed as the plants with iSeed were clearly stronger.

Conclusion

The iSeed coating creates a dense turf at the beginning of the season. This advantage is maintained, and even increased, during playtime. The result on all three test fields was a sward with less annual bluegrass and virtually no weeds. Although the fertilizer in the iSeed coating is used up soon after sowing, the iSeed plant clearly keeps its head start. The advantage gained at the beginning is retained during the entire season.

"During the year the difference between the iSeed sections and the non-iSeed sections had increased. The stronger rooting has certainly contributed as the plants with iSeed were clearly stronger"

	End winter		End of soccer season	
	Win2Win iSeed	Win2Win	Win2Win iSeed	Win2Win
Perennial ryegrass	94,9	87	80,2	68,8
Smooth stalked meadowgrass	0,8	0,5	3,5	3,1
Annual bluegrass	4,3	12,5	16,3	28,2

Table 2: Proportion of grass plants with and without iSeed treated grass (%)

Not only on sports pitches

Currently IPC Groene Ruimte is testing the use of iSeed in two turf fields. Here again, a part of the field is sown with and a part without iSeed. The preliminary results are in agreement with those achieved on the sports fields. Also noticed so far, is that the turf with iSeed after only four months was already pretty good at cutting and rolling, whereas the turf in the non-coated part of the field fell apart on harvesting. In short this also indicates that the root growth under iSeed grass is better. A lawn on the R&D-station in Moerstraten also assessed by IPC Groene Ruimte 2007, gave the same picture: a denser turf with a greener colour.

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