

# TURF TRIAL INFORMATION

PROTURF®

A single application of ProTurf controlled release fertilizer reduces red thread for twelve weeks



## SUMMARY

- Independent summer fertilizer trial completed at STRI, Bingley, UK
- Completed 2025 on lawn/fairway turf over natural sandy soil.
- ProTurf fertilizer containing controlled release nitrogen was included at 30 g/m<sup>2</sup> (single application) supplying the equivalent of 63 kg N/ha, as part of a larger trial examining new products.
- Turf Quality and Turf Color was significantly (P<0.01) improved from day 7 to day 98 by the ProTurf treatment compared with the control treatment.
- The presence of the turf fungal disease 'red thread' (*Laetisaria fuciformis*) was significantly (P<0.01) reduced compared with the control plots from day 7 to day 98.

## METHODS

An independent summer fertilizer trial was conducted at STRI trials ground, Bingley, UK. A perennial rygrass (*Lolium perenne*) dominated sward over a sandy soil was maintained as a golf course fairway for the trial over 12 weeks during the summer of 2025. A single application of ProTurf 21-5-6 controlled release granular fertilizer was made at 30 g/m<sup>2</sup> (supplying 63 kg N/ha split between conventional urea and controlled release N forms) as part of a larger trial examining new granular fertilizers. The treatment was replicated four times in 1m × 1m plots in a randomized block layout and compared with an untreated control. Visual assessments of turf quality and turf color on a 1-10 scale, alongside visual red thread % were made fortnightly through the trial for 12 weeks.



**Image 1:** Red thread (*Laetisaria fuciformis*); a fungal disease of slow growing turf, recognized by pink fungal strands which can become thin and thread like and present on the upper portion of turf leaves.



**Image 2:** Red thread (*Laetisaria fuciformis*) present in an otherwise high-quality turf surface.

## RESULTS

Mean turf color was significantly ( $P < 0.01$ ) improved by the single ProTurf application from Day 7 to Day 98 (Table 1). Mean turf quality was similarly improved ( $P < 0.01$ ) over the period of the trial (Table 1).

### Mean Turf Color (1-10)

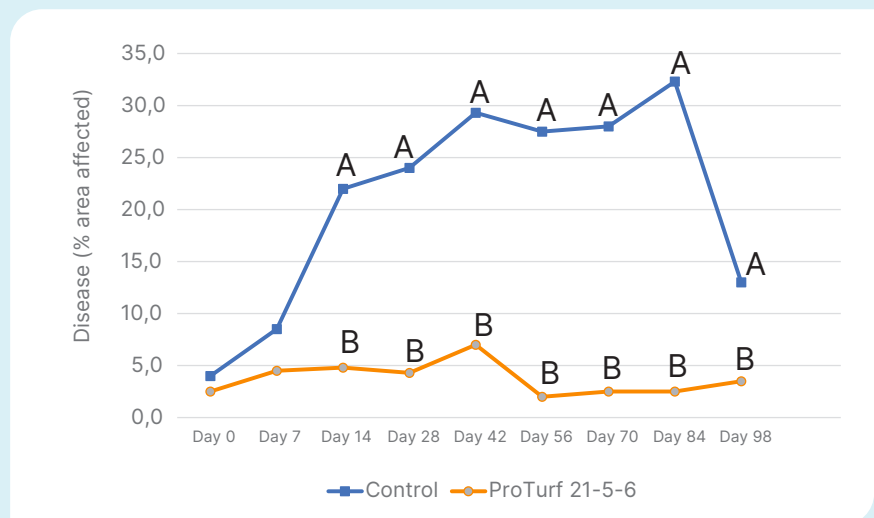
	Day 0	Day 7	Day 14	Day 28	Day 42	Day 56	Day 70	Day 70	Day 98
Control	6.1	5.0 a	5.0 a	4.6 a	4.5 a	4.4 a	4.0 a	4.1 a	4.0 a
ProTurf 21-5-6	6.0	7.5 b	6.9 b	7.1 b	7.5 b	6.6 b	6.1 b	6.0 b	5.9 b

### Mean Turf Quality (1-10)

	Day 0	Day 7	Day 14	Day 28	Day 42	Day 56	Day 70	Day 70	Day 98
Control	5.6	4.5 a	4.6 a	4.3 a	4.1 a	3.8 a	3.9 a	4.0 a	4.0 a
ProTurf 21-5-6	5.9	7.1 b	6.8 b	6.8 b	7.3 b	6.1 b	5.8 b	5.8 b	5.8 b

**Table 1:** Mean Turf Quality (1-10) and Mean Turf Color (1-10) assessed for the duration of the trial. Scores which share a letter indicate no significant difference.

Red thread recorded on the trial area throughout the trial period. The presence of red thread (mean % of plot area affected) was significantly ( $P < 0.01$ ) reduced by the single application of ProTurf 21-5-6. This reduction was apparent from Day 7 through to Day 98 (Figure 1).



**Figure 1:** Mean red thread (% of plot affected). Treatment points sharing a letter indicate no significant difference.

## CONCLUSIONS

This trial clearly demonstrates and reinforces the existing knowledge that an application of a blended fertilizer containing both controlled release and conventional nitrogen improves turf color and turf quality. In this example the improvement lasted for 12 weeks from a single application delivering 63 kg N/ha supporting the product information for the longevity of ProTurf products which is described as a 2-3 month product. The results also provide clear evidence that a single ProTurf application will significantly reduce the turf disease red thread, for up to 3 months, improving surface quality and color.