

TURF TRIAL INFORMATION

Vitalnova®

Integrated Turf Management can reduce Dollar Spot (*Clarireedia spp*) on Turf

INSTITUT
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SUMMARY

- Independent trial completed at Lyon Salvagny Golf Club, France by Ecoumene Golf and Environment with 20 combination treatment programmes.
- Completed summer 2020 on *Agrostis stolonifera* / *Poa annua*, sand-based golf green.
- High pressure dollar spot year saw large amounts of disease.
- A fungicide programme (6 applications) managed disease levels very effectively.
- No completely fungicide-free programme was effective
- Combining Vitalnova Silk (20L/ha), Vitalnova Stressbuster (30L/ha) and Qualibra (10L/ha) monthly alongside nutrition and rolling and a single fungicide application significantly reduced dollar spot incidence, to a manageable level.

METHODS

An independent summer disease trial was conducted at Lyon Salvagny Golf Club by Ecoumene Golf and Environment, managed by Ollivier Dours. Five product treatment combinations were trialled focussed on biostimulant and biological solutions alongside an untreated control and a fungicide programme (six applications). All treatments had a rolled (3x per week) and unrolled application, plus a high N (delivering 145-0-165, NPK) and a low N version (delivering 87-0-99, NPK) – all nutrients applied via 3x granular applications. Standard assessments were made with the key assessment for this trial of number of dollar spots per plot (2m²) on a weekly basis.



Image 1 - Example trial plots during trial showing low disease incidence (left), and high disease incidence (right).

RESULTS

2020 was a high dollar spot pressure year, with many treatment plots reaching over 50 spots of disease per 2m² during august (Image 1). A programme of fungicide applications (Instrata Elite x2, Ascernity x2, Heritage x2), managed the disease very effectively reducing the incidence of dollar spots to less than 5 per plot over the whole season (figure 1). No completely fungicide-free programme was able to manage the disease outbreak effectively and an emergency fungicide application was made to all plots when disease pressure was at its peak to save turf cover. Rolling 3x per week or increasing N from 87 to 145 kg-N / ha did not significantly lower the disease incidence. However a programme of Vitalnova Silk (20L/ha), Vitalnova Stressbuster (30L/ha) and Qualibra (10L/ha) all applied monthly alongside the higher nutrition (145-0-166, NPK) and rolling 3x per week and one fungicide application (Ascernity 3L/ha) significantly reduced dollar spot incidence to a level where its effect on surface quality was minimised, and might be acceptable for some golf courses.

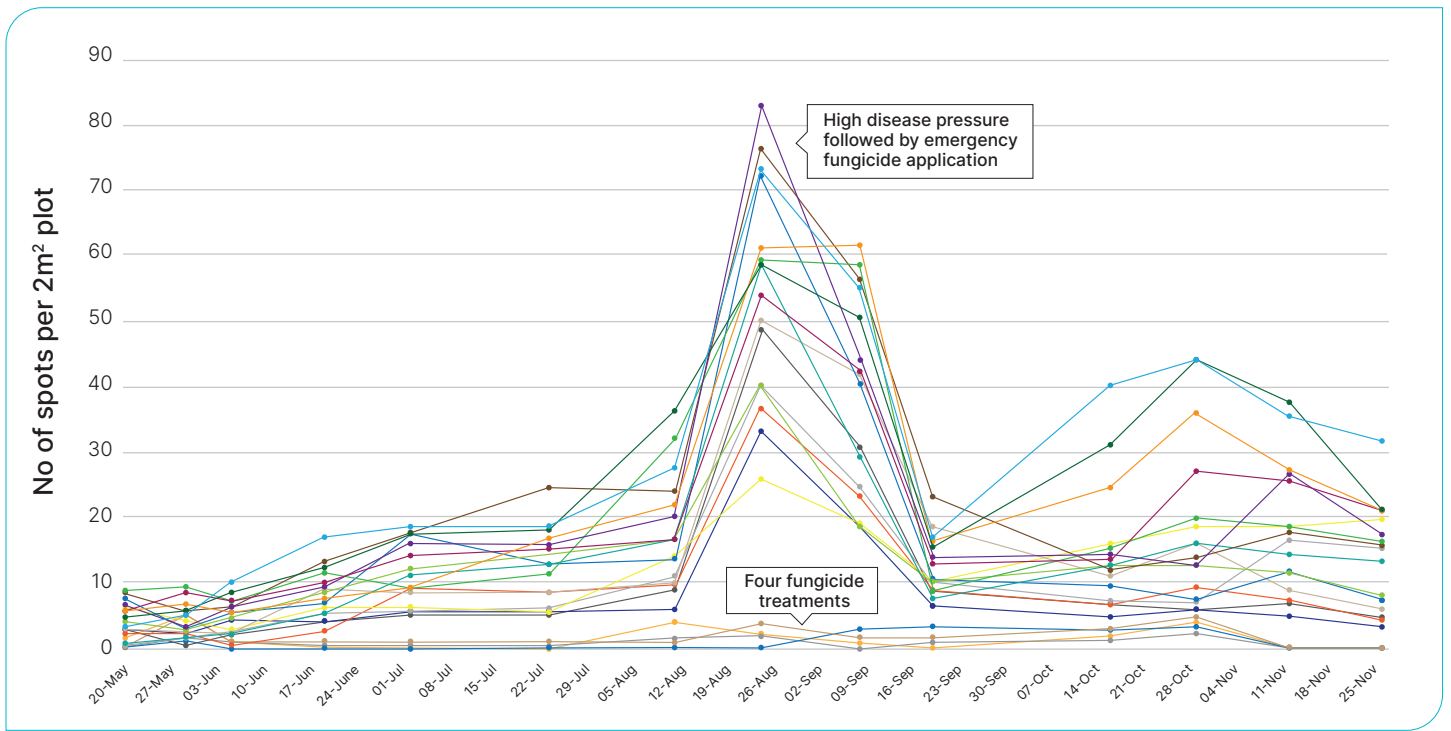


Figure 1. Overview of disease progression (no of spots / per plot) through the trial for all 20 treatments (no legend).

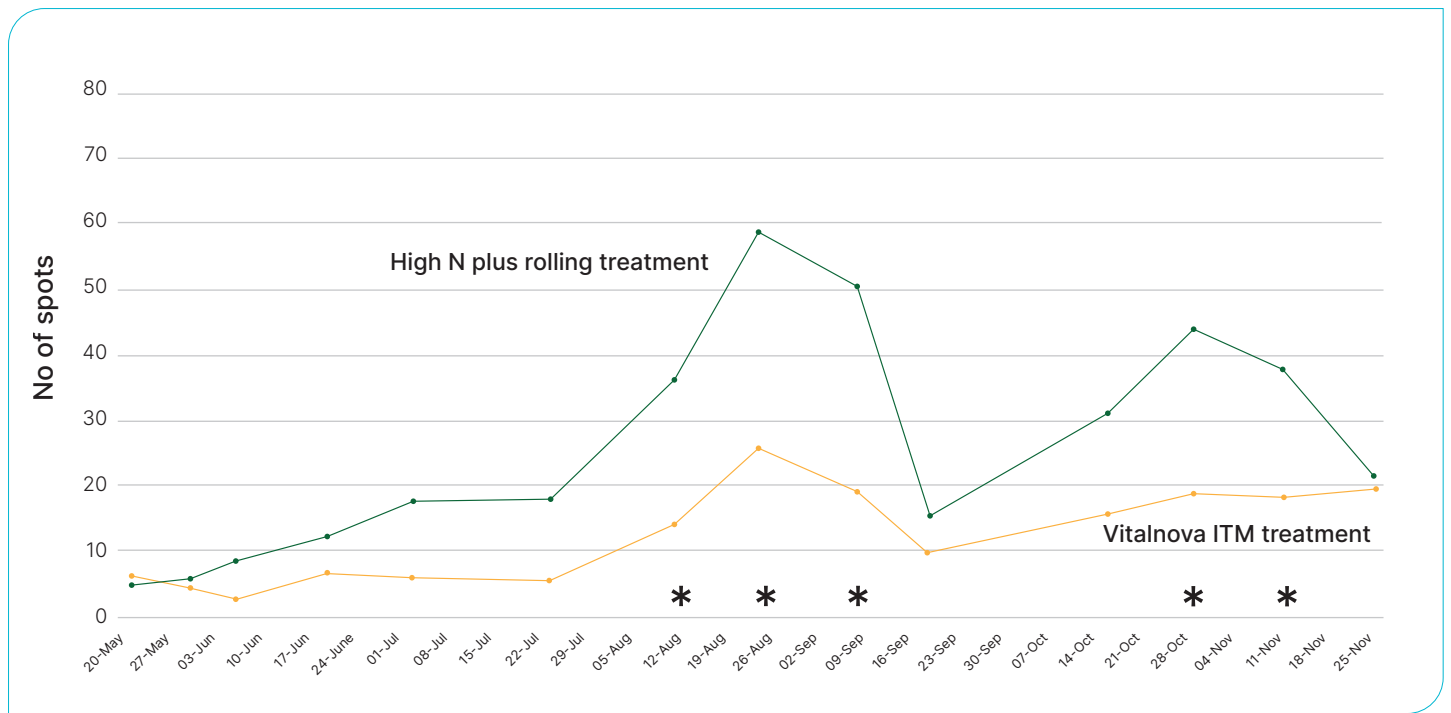


Figure 2. The best treatment (Vitalnova ITM) alongside equivalent control (rolling and high N only). Asterisks note significant difference ($p < 0.05$).

CONCLUSION

An independent ITM trial at Lyon Salvagny Golf Club demonstrated that dollar spot can be effectively managed with a programme of fungicide applications without needing to increase nutrient inputs or carry out surface rolling. Rolling in isolation or increasing N rate in isolation as well as a number of integrated biological and biostimulant based programmes were not effective in managing the disease. However, the right combination of products alongside rolling, raising the N rate and a single fungicide application did significantly reduce dollar spot infection.