

Curative activity to control Fusarium Patch infections

TECHNICAL UPDATE

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In Brief

- Trials show strong curative effect of DACONIL WEATHER STIK on Fusarium Patch (Microdochium Patch) infection
- **Fusarium Patch infection in late winter can cause the most severe damage**
- Outbreaks of Fusarium Patch already recorded on many turf surfaces
- **Preventative applications of DACONIL WEATHER STIK give the best results, but curative activity can tackle disease outbreaks.**



Turf managers can achieve the best control of Fusarium Patch with well timed preventative fungicide applications. But where the first symptoms are already present the curative activity of DACONIL WEATHER STIK can minimise further damage and turf loss.

Late winter disease control

Fusarium Patch is the primary disease target during January and February. Infection can flare up during any mild, wet spell.

Fusarium inoculum will be present in most turf by late winter, awaiting the right conditions to break out.

Undersoil heating of winter sports pitches creates the ideal conditions for Fusarium whenever it rains.

In late winter turf growth is too slow to recover infection and can die back.

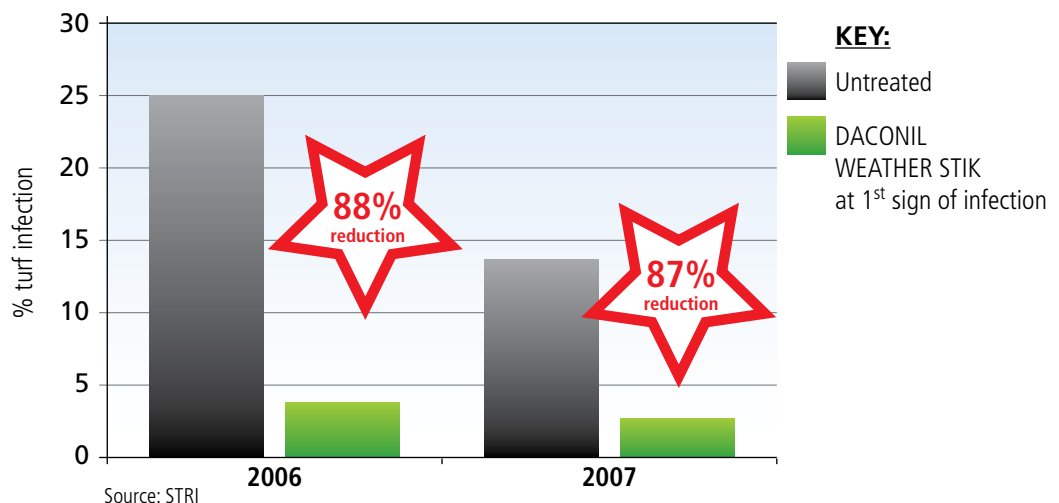
Poa annua is the most susceptible to Fusarium infection, but all turf can be affected.

Turf loss from Fusarium attack has an adverse effect on the consistency of the playing surface, increases susceptibility to damage from winter sports play and leaves bare patches - which will allow *Poa annua* and other weeds to ingress.

Trials show curative control

Independent STRI trials over the past two seasons have shown DACONIL WEATHER STIK application at the first signs of Fusarium Patch have given an average 87% control of disease, demonstrating the powerful curative control.

Assessments of turf quality during STRI trials have shown DACONIL WEATHER STIK increased turf quality by more than 40% over the course of an autumn treatment programme, compared to just 5% improvement with iprodione.



In 2006, DACONIL WEATHER STIK application reduced infection from a highly damaging 25%, to an acceptable 3%.

In 2007, DACONIL WEATHER STIK applied at the first sign of disease held infection at just 2%.

Where fungicide applications have been delayed and symptoms of Fusarium Patch infection are already present, the curative activity of DACONIL WEATHER STIK can give powerful kick back to minimise further development and turf damage.

New GreenCast model spots high Fusarium risk

A new disease model on the web-based turf management website - www.greencast.co.uk - will give early warning of Fusarium Patch infection for turf in high risk situations. The decision support tool can help turf managers achieve the best timing for DACONIL WEATHER STIK applications (see **Prevention better than cure**).

The High Risk prediction has been especially tailored for situations such as shaded greens, areas with poor drainage, urban sports turf pitches and turf with a high percentage of *Poa Annua*.



Turf managers using an indicator green to highlight early disease infection should compare results with the Fusarium Patch High Risk model (above) to evaluate and gain confidence in the system. The standard Fusarium Patch forecast is also available.

DACONIL WEATHER STIK is an ideal fungicide choice for late winter turf disease control:

- **Broad spectrum of activity** – reduces inoculum of many other diseases including Dollar Spot, Anthracnose and Red Thread
- **Disease control that sticks and stays** – rainfast in less than one hour, or as soon as spray is dry on the leaf. Is easy to use in winter conditions
- **Powerful contact activity** – sticks to the leaf surface that is not actively growing
- **Multi-site action** – virtually eliminates any chance of resistance developing in the fungicide rotation programme.

How does it work?

DACONIL WEATHER STIK is the only turf fungicide from the Phthalonitrile group of fungicides. The unique multi-site mode of action targets fungal pathogens at a number of points in the life cycle - by inhibiting the synthesis of essential amino compounds and enzymes.

This gives it the ability to kill turf disease pathogens at spore germination - to prevent infection getting into the leaf - AND during mycelial growth of the pathogen to give the curative activity.

Furthermore, DACONIL WEATHER STIK is also active in stopping blistering and sporulation of disease pathogens, to prevent spread onto clean leaves and turf.

The multi-site activity of DACONIL WEATHER STIK means it is the only turf fungicide classified by STRI with a low risk of resistance developing, making it an essential component of all turf managers' fungicide rotation programmes.



The diagram illustrates a fungicide rotation cycle. At the top is the Heritage Fungicide logo with 'Mode of action: QOI'. In the center is a circular arrow icon representing rotation. At the bottom left is the Daconil Weather Stik logo with 'Mode of action: Multi-site'. At the bottom right is the Banner MAXX logo with 'Mode of action: DMI'. A small SuperWeatherStik logo is also present in the center.

Prevention better than cure

Turf managers can achieve the very best results in winter control of Fusarium Patch from preventative applications of DACONIL WEATHER STIK, timed for when the risk of infection has been high, but before any symptoms of disease are visible.

STRI evaluation of the Fusarium Patch forecasting system for the GreenCast decision support system has shown applications following medium or high risk predictions have given an average 95% disease control.

GreenCast is now a proven effective turf management tool for better decisions on the fungicide application timing.

Applied preventatively DACONIL WEATHER STIK gives exceptional control of Fusarium Patch

If application is delayed, the curative activity of DACONIL WEATHER STIK can still give highly effective Fusarium Patch control