CONTACT +

Bio-inspired

explosive performance

Medallion® TL
Fungicide

syngenta®

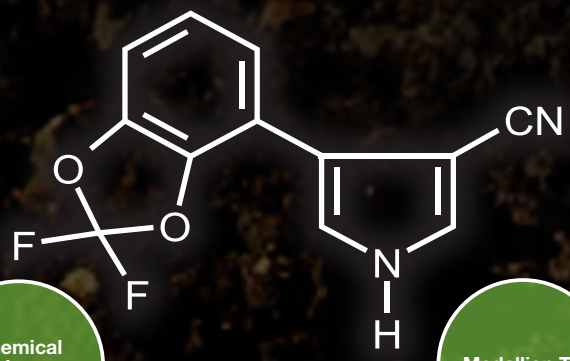
™

Inspired by Nature

The evolution of a bio-inspired fungicide

Fludioxonil, the active ingredient in Medallion TL is a fungicide from the phenylpyrrole chemical class. This group is derived from the natural antifungal pyrrolnitrin, produced by *Pseudomonas pyrocinia* soil bacteria.

The antifungal activity of metabolites isolated from *Pseudomonas* were first developed in human medicine and widely used in pharmaceutical research.



Chemical class Phenylpyrrole

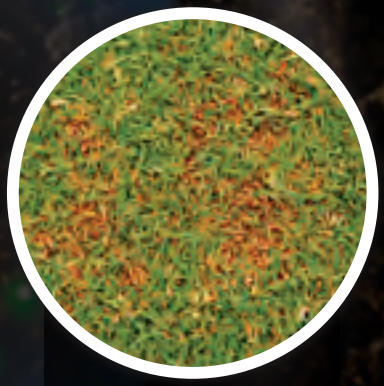
Medallion TL

Medallion TL now offers a new solution with outstanding high levels of disease control and exceptional long-term results.

Medallion TL has been bio-inspired by naturally occurring soil organisms which stop fungi developing.

Medallion TL controls key turf diseases

Fusarium Patch



Anthracnose

Leaf Spot

Trials have shown that Medallion TL delivers powerful and targeted control of pathogens responsible for the key turf diseases – including Fusarium species, Anthracnose and Leaf Spot.

Extensive Research & Development by Syngenta's chemists has developed the activity of Medallion TL – making it more stable while delivering more potent disease control.

Why do we need NEW Contact+ action?

Medallion TL offers an exciting option to provide high levels of disease control and long-lasting results from a modern bio-inspired fungicide. The exciting Contact+ activity of Medallion TL can tackle damaging pathogens on the leaf, thatch and soil surface.

The frequency of Fusarium Patch outbreaks is on the increase. The consequences of resulting turf damage on the financial viability of clubs is now more serious than ever.

- **98% of golf courses have had problems with Fusarium Patch[1]**

[1]Source: STRI

The incidence and severity of attacks of Fusarium Patch and other turf diseases are believed to have increased due to a combination of reasons, including:

- Climatic changes creating conditions conducive to disease
- Lower cutting heights increasing stress on plants
- Reduced nutritional inputs leading to deficiencies in turf plants
- Stretched resources and budget cutbacks in turf maintenance regimes

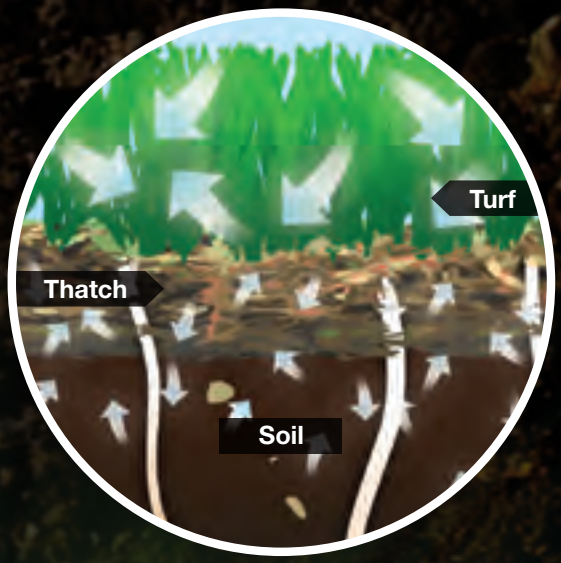
How does Medallion TL target disease?

The exciting Contact+ activity of Medallion TL takes effect on the leaf, thatch and soil surface. This utilises the outstanding fungicidal activity of fludioxonil with maximum efficiency.

On the leaf...

Medallion TL is an extremely effective contact fungicide, providing a shield of protection on the leaf to prevent infection getting in and to stop disease spread.

Trials have shown the innovative formulation of Medallion TL ensures the fungicide bonds onto the leaf wax layer, making it rainfast within one hour. Tight binding to the leaf coupled with rapid rainfastness ensures it won't be washed off by rainfall or irrigation, and will continue to provide long-lasting results.



In the thatch and soil surface...

Medallion TL also targets turf disease pathogens present in the thatch and soil surface, significantly reducing the reservoir of infection. Tackling disease in the thatch knocks down spore numbers that will reduce disease pressure and can enhance the duration of protection delivered.

The fast knockdown of disease spores on the leaf and in the thatch ensures other Integrated Turf Management practices have the greatest opportunity to work and maintain the best possible turf quality.

Knockdown activity gives the rapid reduction of Fusarium inoculum before it has chance to infect turf and cause damage. The fast-acting Contact+ fungicide activity of Medallion TL can achieve this knockdown of disease in leaf, thatch and soil surface.

Disease pathogens ever present in leaf, thatch and soil.

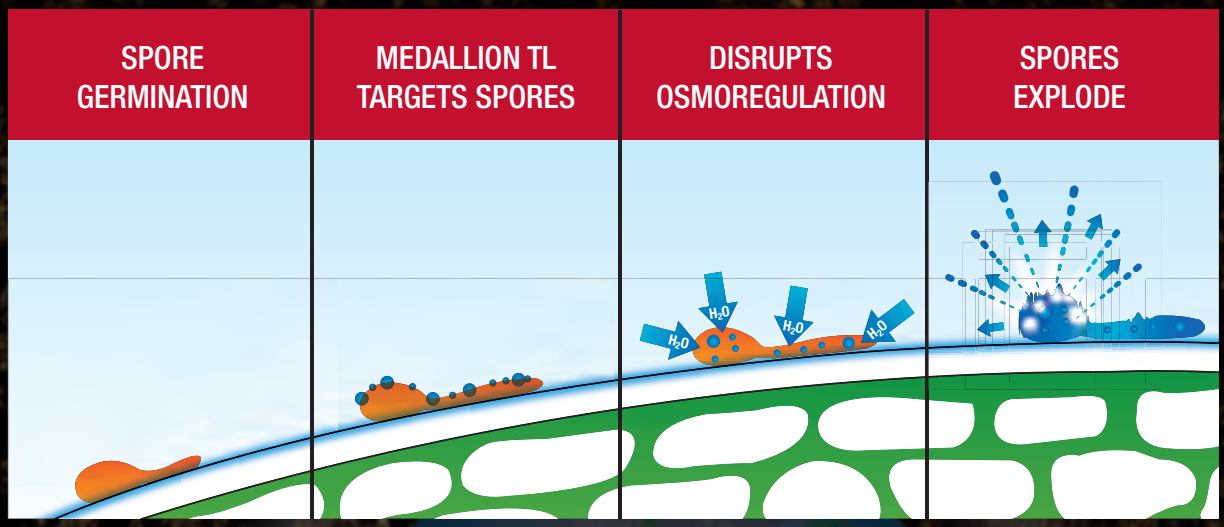
Red dots represent disease spores

Conventional contact foliar fungicides protect against disease infection on the leaf.

Medallion TL targets turf disease on the leaf and in the thatch and soil surface, reducing disease pressure and giving the best possible chance of stopping disease attacks with long-lasting results.

How does Medallion TL knockdown spores?

Explosive disease control



The activity of fludioxonil in targeting pathogens is effective on the leaf, in the thatch and among organic matter in the soil.

When weather conditions are conducive to disease, outbreaks can occur with alarming speed. Medallion TL has proven to provide the essential protective shield, to stop disease developing and prevent infection – before any damage is done.

When Medallion TL comes into contact with disease spores it disrupts osmoregulation causing the disease pathogen cells to rapidly absorb water, to the point where they explode and are rendered harmless to turf. This can occur on the leaf, in the thatch or soil surface.

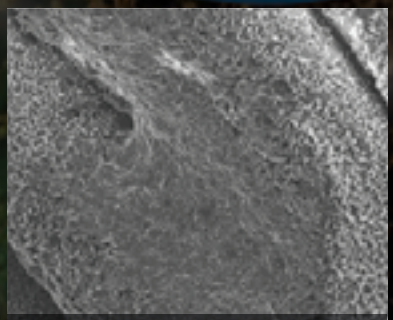
Biochemically, the activity of Medallion TL inhibits spore germination and growth of germ tubes, stopping fungal growth. This occurs at a time when disease spores are most sensitive and before penetration of plant tissue causes leaf damage and spoils surface quality.

Medallion TL stops disease infection and turf damage in its tracks and, with its inherent powerful properties, ensures long-lasting control on the leaf.

Osmoregulation is the mechanism used to regulate water movement into and out of cells.

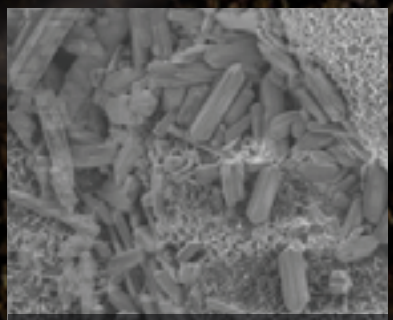
Microscopy of spray deposits

Medallion TL binds tightly to the waxes on the leaf surface. Once locked on, the active is very stable and highly resistant to wash-off by rainfall.



Medallion TL

Locks onto the leaf wax



Iprodione

Larger crystals bind less tightly to leaf

Application

Medallion TL

Application rate	Label water volume	Application technique	LERAP	Packaging
3.0 l/ha Max. 4 applications per year	**125–500 l/ha**	Tractor mounted/trailed; walkbehind; knapsack	B	3 litre S-pac

Medallion TL Contact+ solution for leaf, thatch and soil surface

- Bio-inspired Contact+ activity
- Fast acting knockdown of Fusarium in leaf, thatch and soil
- Provides a long lasting protective shield against disease

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