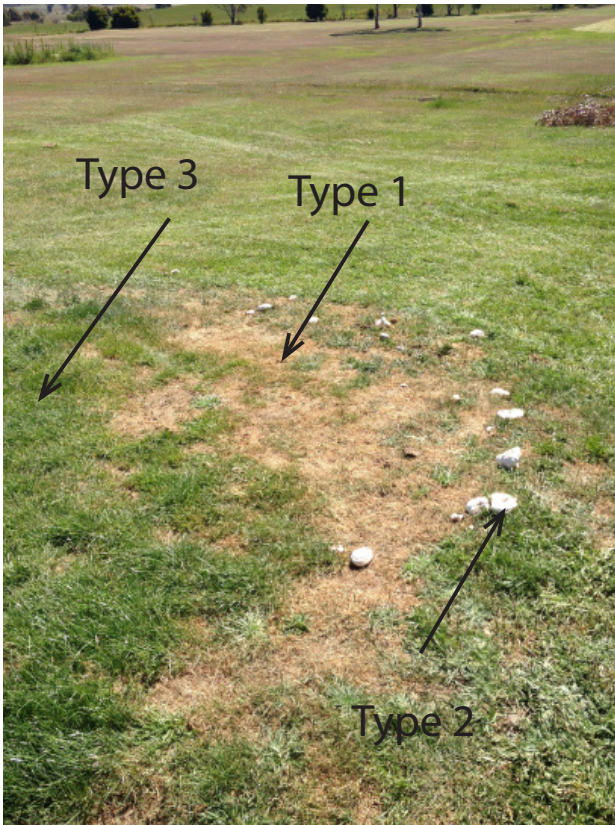


BEST PRACTICES FOR FAIRY RING MANAGEMENT

All types of Fairy Ring in one area

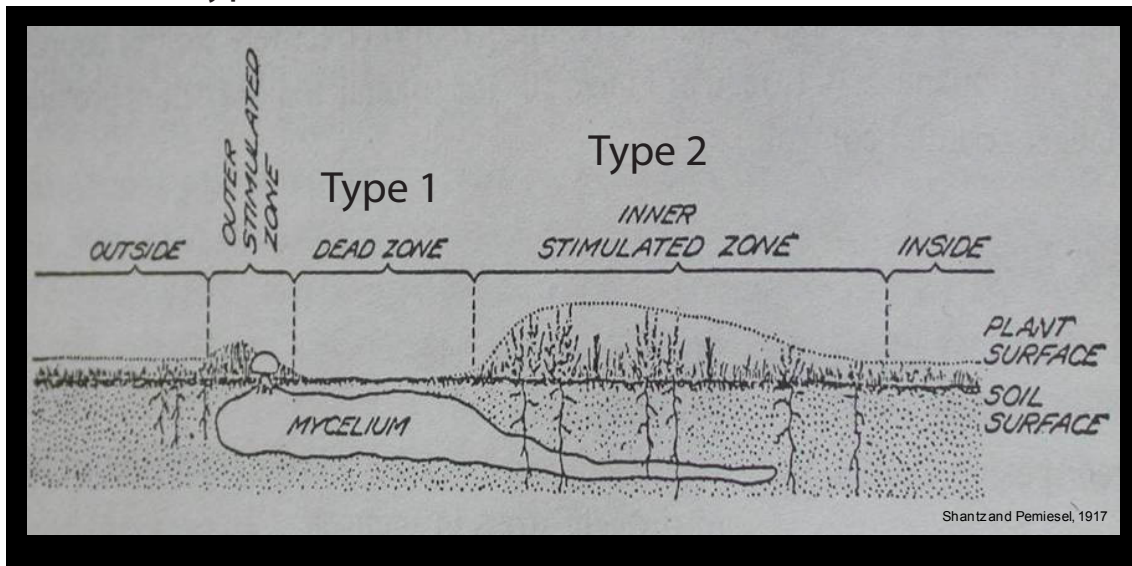


Monstar[®] SC Fungicide



SOLUTION TO COMBAT FAIRY RING

Type 3



This picture taken from Fidazna GCSAA Webcast Feb 2014

Classic example of a cross-section of fairy ring in turf.



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BEST PRACTICES FOR FAIRY RING MANAGEMENT

What conditions favour fairy ring

- Turf which is under low fertility and low mowing heights mainly
- Turf suffering from heat/drought/soil moisture stress
- Extremes in wet/dry weather conditions favour fairy ring - this season has been perfect conditions for fairy ring
- High thatch areas
- Can occur anytime of the year. Mainly seen from spring onwards.

How fairy ring kills turf

Fairy ring does not infect the plant directly it works in the soil. The fairy ring fungi attach to the soil and the soil and sand particles become severely hydrophobic. The soil becomes difficult to re-wet and the plant cannot take up any water or nutrients and hence suffers from drought stress (type 1) and dies.

Fairy ring is associated with the breakdown of organic matter and a build up of ammonia. The bacteria normally converts the ammonia into a nitrate form - you get the stimulated green ring commonly seen (type 2).

When you have hydrophobic soil this is not the case. The bacteria cannot live in this environment and it cannot convert the ammonia to nitrate due to hydrophobic conditions. Instead excess ammonia builds up causing death by ammonia toxicity hence dead rings appear.

Type 3 (mushrooms) appears usually after rainfall or heavy irrigation. In saying this type 3 symptoms can quickly turn into type 1 or type 2 fairy ring with the onset of any heat stress conditions and are seen where mushrooms were present.

Type 2 & 3 symptoms can turn into type 1 if left untreated and can all types can be present at once (see picture).

Best Application of Monstar

- Apply Monstar with a good soil wetting agent
- Irrigate turf before application
- Aerify or spike area to be treated.
- Apply Monstar as per permit rates up to 200mL per 100m². Apply with 400L water per hectare and water in to affected area 5mm irrigation - however do not puddle up the area get Monstar to the target area).
- A follow up second application may be needed 2-4 weeks later if needed

Monstar[®] SC Fungicide



Recovery can take time after an application. Monstar kills the fungi but the profile is still hydrophobic and until this is cured the turf cannot recover fully. Hand watering areas with wetting agent tablets can also aid in recovery.

Monitor soil moisture levels with a moisture meter as areas infected can retain less moisture than healthy areas.

Full recovery can take time especially from type 2 rings as the nitrogen to deplete.

Preventative sprays- Minimal work has been done as fairy ring may not appear in the same area or at all each year. However if fairy ring is a chronic problem map your area with symptoms and timings. Apply Monstar and wetting agent in these areas to prevent fairy ring using this information.



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