



Qualibra Turf Safety Trials in Singapore (April 2016)

syngenta®

Shane Lee, Technical Sales Manager
Syngenta Asia Pacific Pte. Ltd.

TM

Qualibra Turf Safety Trials in Singapore

Objective

To evaluate turf safety when tank mixing with Syngenta fungicides and Qualibra wetting agents

Information	Trial #1	Trial #2	Trial #3
Location	KSGC	KSGC	SICC
Turf Species	TifEagle Bermudagrass	TifEagle Bermudagrass	Serangoongrass
Height of Cut	3.0mm	3.0mm	3.5mm
Experimental			
Plot Design	1m x 1m x 2reps	1m x 1m x 2reps	1m x 1m x 2reps
Sprayers	Backpack w/ single nozzle (Gray Hypro Even)	Backpack w/ single nozzle (Gray Hypro Even)	Backpack w/ single nozzle (Gray Hypro Even)
Output Vol.	970 l/ha	970 l/ha	970 l/ha
Irrigation	10 mins; approx 6mm	10 mins; approx 6mm	5 mins; approx 3mm
Observation	0DAT; 1DAT; 2DAT; 4DAT; 8DAT		

Treatment List

Treatment #	Trial #1	Trial #2	Trial #3
T1	Headway 9 l/ha + Qualibra 20 l/ha	Headway 9 l/ha + Qualibra 10 l/ha	
T2	Heritage 6 l/ha + Qualibra 20 l/ha		
T3	Agador 2 l/ha + Qualibra 20 l/ha		
T4	Subdue Maxx 3.5 l/ha + Qualibra 20 l/ha		
T5	Qualibra 20 l/ha		
T6	Untreated Control		

Trial #1

TifEagle Bermudagrass

syngenta®

TM

Trial #1 – TifEagle Bermudagrass

Date of Application: 21st March 2016

Time of Application: 2.20pm

Temperature: 33 °C

Remarks:

Heavy rain at 3.45pm;
55mm of rain in 45mins

Treatment #	Product Tank Mix
T1	Headway 9 l/ha + Qualibra 20 l/ha
T2	Heritage 6 l/ha + Qualibra 20 l/ha
T3	Agador 2 l/ha + Qualibra 20 l/ha
T4	Subdue Maxx 3.5 l/ha + Qualibra 20 l/ha
T5	Qualibra 20 l/ha
T6	Untreated Control

Trial #1: TifEagle Bermudagrass Data

Treatment #1

HeadwayMAXX[®] + Qualibra[®]
Turf Fungicide Wetting agent



0DAT



8DAT

Treatment #2

HeritageMaxx[®] + Qualibra[®]
Fungicide Wetting agent



0DAT



8DAT

Treatment #3

Agador[®] + Qualibra[®]
Turf nematocide Wetting agent



0DAT



8DAT

Trial #1: TifEagle Bermudagrass

Treatment #4



0DAT

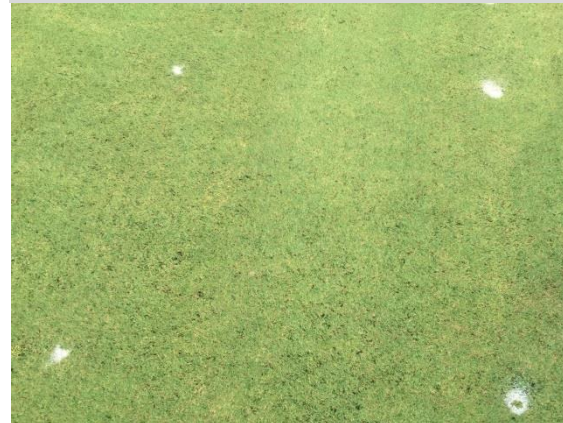


8DAT

Treatment #5



0DAT



8DAT

Treatment #6

UNTREATED CONTROL



0DAT



8DAT

Trial #2

TifEagle Bermudagrass

syngenta®

TM

Trial #2 – TifEagle Bermudagrass

Date of Application: 28th March 2016

Time of Application: 11.00 am

Temperature: 32 °C

Remarks:

No rain for the next 8 DATS

Treatment #	Product Tank Mix
T1	Headway 9 l/ha + Qualibra 20 l/ha
T2	Heritage 6 l/ha + Qualibra 20 l/ha
T3	Agador 2 l/ha + Qualibra 10 l/ha
T4	Subdue Maxx 3.5 l/ha + Qualibra 20 l/ha
T5	Qualibra 20 l/ha
T6	Untreated Control

Trial #2: TifEagle Bermudagrass

Treatment #1

 **Headway MAXX**
Turf Fungicide   **Qualibra**
Wetting agent



0DAT



8DAT

Treatment #2

 **HeritageMaxx**
Fungicide   **Qualibra**
Wetting agent



0DAT



8DAT

Treatment #3

 **Agador**
Turf nematocide   **Qualibra**
Wetting agent



0DAT



8DAT

Trial #2: TifEagle Bermudagrass

Treatment #4



0DAT



8DAT

Treatment #5



0DAT



8DAT

Treatment #6

UNTREATED CONTROL



0DAT



8DAT

Trial #3

Serangoongrass

syngenta®

TM

Trial #3 – Serangoongrass

Date of Application: 29th March 2016

Time of Application: 11.00 am

Temperature: 33 °C

Remarks:

No rain for the next 8 DAT

Treatment #	Product Tank Mix
T1	Headway 9 l/ha + Qualibra 20 l/ha
T2	Heritage 6 l/ha + Qualibra 20 l/ha
T3	Agador 2 l/ha + Qualibra 10 l/ha
T4	Subdue Maxx 3.5 l/ha + Qualibra 20 l/ha
T5	Qualibra 20 l/ha
T6	Untreated Control

Trial #3: Serangoongrass

Treatment #1

 **Headway MAXX**
Turf Fungicide  **Qualibra**
Wetting agent



0DAT



8DAT

Treatment #2

 **HeritageMaxx**
Fungicide  **Qualibra**
Wetting agent



0DAT



8DAT

Treatment #3

 **Agador**
Turf nematocide  **Qualibra**
Wetting agent



0DAT



8DAT

Trial #3: Serangoongrass

Treatment #4



0DAT



8DAT

Treatment #5



0DAT



8DAT

Treatment #6

UNTREATED CONTROL











0DAT



8DAT

Results & Finding

Tank Mixing Compatibility Results

PRODUCTS AT LABEL RATE	TifEagle Bermudagrass		Serangoongrass	
	 Qualibra® Wetting agent 10 l/ha	 Qualibra® Wetting agent 20 l/ha	 Qualibra® Wetting agent 10 l/ha	 Qualibra® Wetting agent 20 l/ha
 HeadwayMAXX® Turf Fungicide	NR	NC	C	-
 HeritageMaxx® Fungicide	C	C	C	C
 SubdueMaxx® Fungicide	C	C	C	C
 Agador® Turf nematocide	C	C	C	C

NR = Not Recommended

NC = Not Compatible

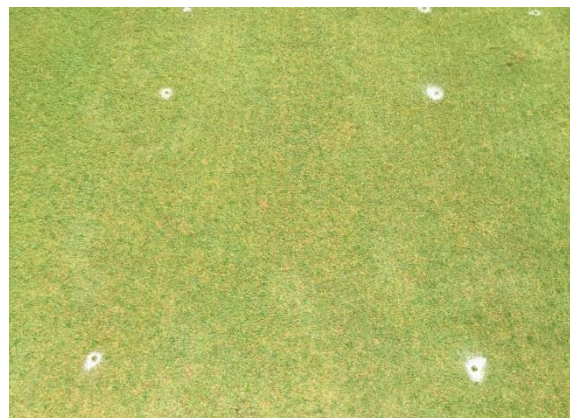
C = Compatible

Trial #1(T1): Phytotoxicity observed at TifEagle Bermudagrass

 **Headway** **MAXX**[®]
Turf Fungicide



 **Qualibra**[®] 20 l/ha
Wetting agent



0DAT



8DAT



11DAT

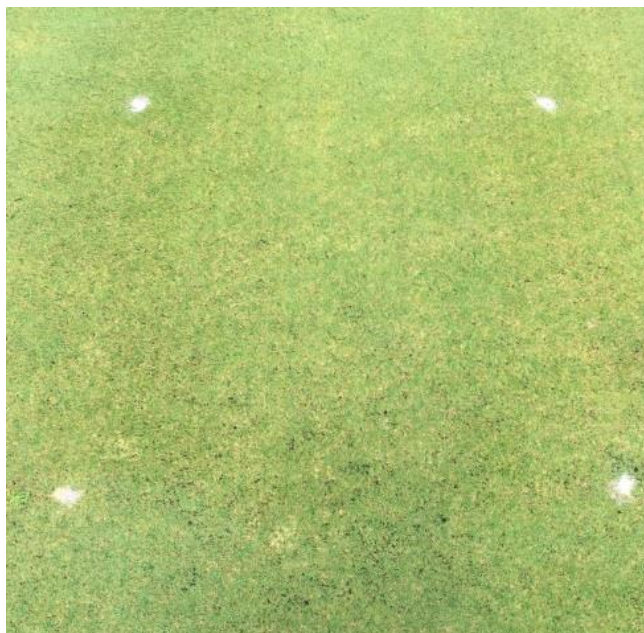


Trial #2 (T1): Slight yellowing observed

 **HeadwayMAXX**
Turf Fungicide



 **Qualibra**® 10 l/ha
Wetting agent



0DAT



8DAT

Summary

- Phytotoxicity was observed in TifEagle Bermudagrass with **Qualibra 20 l/ha + Headway 9 l/ha**, despite 55mm depth of rain 100 mins after application in Trial #1. It was observed only at 8DAT, only the older leaves were bronzing, and not the younger leaves.
- Qualibra rate was reduced from 20 l/ha to 10 l/ha on subsequent Trial #2 & #3. Slight yellowing was observed in TifEagle Bermudagrass with **Qualibra 10 l/ha + Headway 9 l/ha**. No adverse effect was observed in Serangoongrass when tank mixed Qualibra with Headway at 10 l/ha & 20 l/ha.
- No phytotoxicity or yellowing was observed with standalone Qualibra 20 l/ha and with tank mixes of Qualibra 20 l/ha + Agador / Heritage Maxx / Subdue Maxx.

Conclusion

- Be caution when tank mixing Qualibra with other fungicides
- Tank mixing with Qualibra at high rate (20 l/ha) together with Headway Maxx 9 l/ha has caused phytotoxicity to TifEagle bermudagrass. On a separate user trial, tank mixing high rate of Qualibra 20 l/ha+ Headway Maxx 9 l/ha has also caused phytotoxicity in TE Platnium Seashore Paspalum.
- Though no bronzing or phytotoxicity was observed when tank mixing of Qualibra at low rate (10 l/ha) together with Headway Maxx 9 l/ha, slight yellowing was observed in TifEagle bermudagrass.