



Qualibra Turf Safety Trials in Singapore (April 2016)

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

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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

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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[®] 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 #1: TifEagle Bermudagrass

Treatment #4

 **Subdue Maxx**[®]
Fungicide   **Qualibra**[®]
Wetting agent



0DAT



8DAT

Treatment #5

 **Qualibra**[®]
Wetting agent



0DAT



8DAT

Treatment #6

UNTREATED CONTROL



0DAT



8DAT

Trial #2

TifEagle Bermudagrass

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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

 **Heritage Maxx**[®] Fungicide +  **Qualibra**[®] Wetting agent



0DAT



8DAT

Treatment #3

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



0DAT



8DAT

Trial #2: TifEagle Bermudagrass

Treatment #4

 **Subdue Maxx**[®]
Fungicide   **Qualibra**[®]
Wetting agent



0DAT



8DAT

Treatment #5

 **Qualibra**[®]
Wetting agent



0DAT



8DAT

Treatment #6

UNTREATED CONTROL



0DAT



8DAT

Trial #3

Serangoongrass

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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

HeadwayMAXX[®] 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

 **Subdue Maxx**[®]
Fungicide   **Qualibra**[®]
Wetting agent



0DAT



8DAT

Treatment #5

 **Qualibra**[®]
Wetting agent



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



0DAT



8DAT

 **Headway MAXX[®]**
Turf Fungicide

+

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



11DAT



Trial #2 (T1): Slight yellowing observed

 **Headway MAXX**[®]
Turf Fungicide



 **Qualibra**[®] 10 l/ha
Wetting agent



ODAT



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.