

**Appendix 6 Fertiliser and chemical application**

# Indicative fertiliser use from Mowjanum trial pivot

nutrient	Monthly nutrient supplied (fertiliser + irrigation) (kg/ha)											
	January	February	March	April	May	June	July	August	September	October	November	December
N	39.30	39.30	42.69	48.48	36.59	36.31	35.14	48.34	61.41	72.47	74.78	64.94
P	0.00	20.30	0.00	0.01	0.01	20.31	0.01	0.01	0.01	20.31	0.01	0.01
K	24.90	24.90	27.77	32.68	19.84	19.61	18.82	20.06	46.39	52.41	53.25	47.15
S	5.61	6.61	5.67	5.79	5.78	6.77	5.75	5.78	5.81	8.52	8.06	6.87
Cu	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.03
Zn	0.18	0.18	0.25	0.37	0.36	0.35	0.36	0.36	0.39	0.45	0.44	0.35
Mo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mn	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.01
Ca	0.00	8.50	2.50	6.76	6.47	14.77	5.41	6.66	7.81	18.32	9.47	6.32
Mg	0.00	0.00	3.71	10.04	9.61	9.31	8.03	9.89	11.61	14.58	14.06	9.39

## tonnes/ha forecasted based on evapotranspiration

tonnes/ha	January	February	March	April	May	June	July	August	September	October	November	December
yield as % of pan evap from Nov	0.70	0.71	0.71	0.70	0.64	0.60	0.63	0.73	0.88	0.96	1.00	0.91
	3.5	3.6	3.6	3.6	3.2	3.0	3.2	3.7	4.5	4.8	5.0	4.6

November is max production can change the target production to determine what Nov production will be

45 t/ha target

## Monthly nutrient removal per Ha (kg)

nutrient	Monthly nutrient removal per Ha (kg)											
	January	February	March	April	May	June	July	August	September	October	November	December
N	47.82	48.47	48.61	47.99	43.38	40.63	42.72	49.63	60.20	65.46	68.17	62.15
P	5.67	5.75	5.76	5.69	5.14	4.81	5.06	5.88	7.14	7.76	8.08	7.37
K	89.97	91.20	91.46	90.30	81.62	76.44	80.37	93.38	113.27	123.15	128.27	116.94
S	7.79	7.90	7.92	7.82	7.07	6.62	6.96	8.09	9.81	10.67	11.11	10.13
Cu	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.04	0.04	0.04	0.04
Zn	0.24	0.25	0.25	0.22	0.22	0.21	0.22	0.25	0.31	0.33	0.35	0.32
Mo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mn	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.08	0.10	0.11	0.11	0.10
Ca	0.58	0.59	0.59	0.59	0.53	0.50	0.52	0.61	0.74	0.80	0.83	0.76
Mg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Monthly nutrient remaining (kg/ha)

nutrient	Monthly nutrient remaining (kg/ha)											
	January	February	March	April	May	June	July	August	September	October	November	December
N	-8.52	-17.69	-23.61	-23.12	-29.92	-34.23	-41.81	-43.09	-41.88	-34.86	-28.26	-25.47
P	-5.67	8.89	3.13	-2.55	-7.68	7.81	2.75	-3.12	-10.25	2.31	-5.76	-13.12
K	-65.07	-131.38	-195.07	-252.69	-314.47	-371.30	-433.05	-506.37	-573.25	-643.99	-719.01	-788.81
S	-2.19	-3.48	-5.73	-7.77	-9.06	-8.90	-10.11	-12.42	-16.42	-18.56	-21.61	-24.87
Cu	0.00	-0.01	-0.01	0.00	0.00	0.01	0.02	0.02	0.02	0.02	0.02	0.02
Zn	-0.06	-0.12	-0.12	0.00	0.14	0.28	0.39	0.50	0.59	0.70	0.79	0.83
Mo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mn	-0.08	-0.16	-0.23	-0.30	-0.35	-0.41	-0.47	-0.53	-0.62	-0.70	-0.79	-0.88
Ca	-0.58	7.32	9.23	15.40	21.34	35.61	40.49	46.54	53.62	71.14	79.77	85.33
Mg	0.00	0.00	3.70	13.75	23.35	32.66	40.69	50.58	62.18	76.76	90.83	100.21

## Rhodes Grass herbicide registered products Sept 2017

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 DPIRD  
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 September 5, 2017

Cameron McDonald  
 Australian Standard Agriculture

Cameron,

Thank you for your recent pest control inquiry. I have enclosed the **HerbiGuide** output outlining the options available to control weeds in Rhodes Grass at any stage of growth. Please note that the recommended rate is the only rate that is registered for use. Trial rates are not registered for use.

CROPS	CROP STAGES	WEEDS	WEED STAGES
Rhodes Grass	ANY STAGE		

Rates of Achieve WG Tralkoxydim (Group A) at these stages of Rhodes Grass:

	2-4 Leaves	5-8 Leaves	Tillering
Recommended Rate	0	0	0
Trial Rate	400	500	800
	Est-Autumn	Est-Winter	Est-Spring
Recommended Rate	0	0	0
Trial Rate	1000	1000	1000
	Est-Summer	Active-Hard Grazed	Dormant-HardGrazed
Recommended Rate	0	0	0
Trial Rate	1000	1000	1000

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Ally, Metsulfuron, BrushOf Lynx, Aim, Renovate, Ass at these stages of Rhodes Grass:

	5-8 Leaves	Tillering	Est-Autumn
Recommended Rate	0	0	0
Trial Rate	5	10	20
	Est-Winter	Est-Spring	Est-Summer
Recommended Rate	0	0	0
Trial Rate	20	20	20
	Active-Hard Grazed	Dormant-HardGrazed	
Recommended Rate	0	0	
Trial Rate	20	20	

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Atradox 900 WG Atragranz, Nutrazine (Gr at these stages of Rhodes Grass:

	8/More Wk Pre Em	3-8 Weeks Pre Em	1-3 Weeks Pre Em
Recommended Rate	0	0	0
Trial Rate	2500	1500	1200
	0-1 Week Pre Em	2-4 Leaves	5-8 Leaves
Recommended Rate	0	0	0

Trial Rate	600	500	1000
	Tillering	Est-Autumn	Est-Winter
Recommended Rate	0	0	0
Trial Rate	1500	2000	2000
	Est-Spring	Est-Summer	Active-Hard Grazed
Recommended Rate	0	0	0
Trial Rate	2000	2000	2000
	Dormant-HardGrazed		
Recommended Rate	0		
Trial Rate	2000		

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Basta Finale, Liberty (Group at these stages of Rhodes Grass:

	8/More Wk Pre Em	3-8 Weeks Pre Em	1-3 Weeks Pre Em
Recommended Rate	0	0	0
Trial Rate	10000	10000	10000
	0-1 Week Pre Em		
Recommended Rate	0		
Trial Rate	5000		

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Bladex900 (Group C) at these stages of Rhodes Grass:

	8/More Wk Pre Em	3-8 Weeks Pre Em	1-3 Weeks Pre Em
Recommended Rate	0	0	0
Trial Rate	8000	6000	4000
	0-1 Week Pre Em		
Recommended Rate	0		
Trial Rate	3000		

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Brodal + Metribuzin (1:1 tankmix) (Group F, at these stages of Rhodes Grass:

	Tillering	Est-Autumn	Est-Winter
Recommended Rate	0	0	0
Trial Rate	200	500	500
	Est-Spring	Est-Summer	Active-Hard Grazed
Recommended Rate	0	0	0
Trial Rate	500	500	500
	Dormant-HardGrazed		
Recommended Rate	0		
Trial Rate	500		

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Chlorsulfuron, Glean Tackle (Group B) at these stages of Rhodes Grass:

	8/More Wk Pre Em	3-8 Weeks Pre Em	1-3 Weeks Pre Em
Recommended Rate	0	0	0
Trial Rate	100	60	30
	0-1 Week Pre Em	5-8 Leaves	Tillering
Recommended Rate	0	0	0
Trial Rate	20	15	30
	Est-Autumn	Est-Winter	Est-Spring
Recommended Rate	0	0	0
Trial Rate	50	50	50
	Est-Summer	Active-Hard Grazed	Dormant-HardGrazed
Recommended Rate	0	0	0
Trial Rate	50	50	50

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Destiny Iodosulfuron at these stages of Rhodes Grass:

	5-8 Leaves	Tillering	Est-Autumn
Recommended Rate	0	0	0
Trial Rate	100	250	300
	Est-Winter	Est-Spring	Est-Summer
Recommended Rate	0	0	0

Trial Rate	300	300	300
	Active-Hard Grazed	Dormant-HardGrazed	
Recommended Rate	0	0	
Trial Rate	300	300	

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Diclofop 375 Nugrass (Group A) at these stages of Rhodes Grass:

	5-8 Leaves	Tillering	Est-Autumn
Recommended Rate	0	0	0
Trial Rate	1000	2000	4000
	Est-Winter	Est-Spring	Est-Summer
Recommended Rate	0	0	0
Trial Rate	4000	4000	4000
	Active-Hard Grazed	Dormant-HardGrazed	
Recommended Rate	0	0	
Trial Rate	4000	4000	

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Diurex 900 WG, (Group C) at these stages of Rhodes Grass:

	8/More Wk Pre Em	3-8 Weeks Pre Em	1-3 Weeks Pre Em
Recommended Rate	0	0	0
Trial Rate	2000	1500	1000
	0-1 Week Pre Em	Tillering	Est-Autumn
Recommended Rate	0	0	0
Trial Rate	600	500	1000
	Est-Winter	Est-Spring	Est-Summer
Recommended Rate	0	0	0
Trial Rate	1000	1000	1000
	Active-Hard Grazed	Dormant-HardGrazed	
Recommended Rate	0	0	
Trial Rate	1000	1000	

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Duet, Yield (Treflan+Surflan) (Grou at these stages of Rhodes Grass:

	8/More Wk Pre Em	3-8 Weeks Pre Em	1-3 Weeks Pre Em
Recommended Rate	0	0	0
Trial Rate	3000	2000	1500
	0-1 Week Pre Em		
Recommended Rate	0		
Trial Rate	1250		

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of GF-2361 Aminopyralid+metsulfuro at these stages of Rhodes Grass:

	8/More Wk Pre Em	3-8 Weeks Pre Em	1-3 Weeks Pre Em
Recommended Rate	0	0	0
Trial Rate	400	320	100
	2-4 Leaves	5-8 Leaves	Tillering
Recommended Rate	0	0	0
Trial Rate	10	30	50
	Flowering	Seed Set	Est-Autumn
Recommended Rate	0	0	0
Trial Rate	100	100	400
	Est-Winter	Est-Spring	Est-Summer
Recommended Rate	0	0	0
Trial Rate	400	400	400
	Active-Hard Grazed	Dormant-HardGrazed	
Recommended Rate	0	0	
Trial Rate	400	400	

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Glyphosate360 Roundup 360 at these stages of Rhodes Grass:

	8/More Wk Pre Em	3-8 Weeks Pre Em	1-3 Weeks Pre Em
Recommended Rate	9000	9000	9000

Trial Rate	12500	10000	5000
	0-1 Week Pre Em		
Recommended Rate	3000		
Trial Rate	2500		

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of GlyphosateAquatic Roundup Biactive at these stages of Rhodes Grass:

	8/More Wk Pre Em	3-8 Weeks Pre Em	1-3 Weeks Pre Em
Recommended Rate	9000	9000	9000
Trial Rate	12500	10000	5000
	0-1 Week Pre Em		
Recommended Rate	3000		
Trial Rate	2500		

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Hoegrass Nugrass (Group A) at these stages of Rhodes Grass:

	5-8 Leaves	Tillering	Est-Autumn
Recommended Rate	0	0	0
Trial Rate	750	1500	3000
	Est-Winter	Est-Spring	Est-Summer
Recommended Rate	0	0	0
Trial Rate	3000	3000	3000
	Active-Hard Grazed	Dormant-HardGrazed	
Recommended Rate	0	0	
Trial Rate	3000	3000	

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Hussar OD Iodosulfuron at these stages of Rhodes Grass:

	5-8 Leaves	Tillering	Est-Autumn
Recommended Rate	0	0	0
Trial Rate	100	250	300
	Est-Winter	Est-Spring	Est-Summer
Recommended Rate	0	0	0
Trial Rate	300	300	300
	Active-Hard Grazed	Dormant-HardGrazed	
Recommended Rate	0	0	
Trial Rate	300	300	

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Logran 750, Triasulfuron Nugran, Lonestar, Ausgran at these stages of Rhodes Grass:

	5-8 Leaves	Tillering	Est-Winter
Recommended Rate	0	0	0
Trial Rate	10	20	40
	Est-Summer	Active-Hard Grazed	Dormant-HardGrazed
Recommended Rate	0	0	0
Trial Rate	40	40	40

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Metribuzin750 Sencor 750 (Group C) at these stages of Rhodes Grass:

	8/More Wk Pre Em	3-8 Weeks Pre Em	1-3 Weeks Pre Em
Recommended Rate	0	0	0
Trial Rate	1500	500	200
	0-1 Week Pre Em	Tillering	Est-Autumn
Recommended Rate	0	0	0
Trial Rate	150	200	200
	Est-Winter	Est-Spring	Est-Summer
Recommended Rate	0	0	0
Trial Rate	400	200	400
	Active-Hard Grazed	Dormant-HardGrazed	
Recommended Rate	0	0	
Trial Rate	400	400	

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Pyresta Xtreme 2,4-D + pyrafluthrin at these stages of Rhodes Grass:

	8/More Wk Pre Em	3-8 Weeks Pre Em	1-3 Weeks Pre Em
Recommended Rate	0	0	0
Trial Rate	4000	2000	900

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of RoundupPowerMAX&Touchdown with NO CULTIVATION (Gr at these stages of Rhodes Grass:

Est-Spring

Recommended Rate	0
Trial Rate	350

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Sertin + oil (Group A) at these stages of Rhodes Grass:

	5-8 Leaves	Tillering	Est-Autumn
Recommended Rate	0	0	0
Trial Rate	300	800	1000
	Est-Winter	Est-Spring	Est-Summer
Recommended Rate	0	0	0
Trial Rate	1000	1000	1000
	Active-Hard Grazed	Dormant-HardGrazed	
Recommended Rate	0	0	
Trial Rate	1000	1000	

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Simatox WG, Simagranz Gesatop 900 WG (Group C at these stages of Rhodes Grass:

	8/More Wk Pre Em	3-8 Weeks Pre Em	1-3 Weeks Pre Em
Recommended Rate	0	0	0
Trial Rate	4500	3000	2000
	0-1 Week Pre Em	5-8 Leaves	Tillering
Recommended Rate	0	0	0
Trial Rate	2000	500	1000
	Est-Autumn	Est-Winter	Est-Spring
Recommended Rate	0	0	0
Trial Rate	2000	2000	2000
	Est-Summer	Active-Hard Grazed	Dormant-HardGrazed
Recommended Rate	0	0	0
Trial Rate	2000	2000	2000

-----READ THE HERBICIDE LABEL BEFORE USE-----

Rates of Simazine 500 Flowable Gesatop (Group at these stages of Rhodes Grass:

	8/More Wk Pre Em	3-8 Weeks Pre Em	1-3 Weeks Pre Em
Recommended Rate	0	0	0
Trial Rate	9000	6000	4000
	0-1 Week Pre Em	5-8 Leaves	Tillering
Recommended Rate	0	0	0
Trial Rate	4000	1000	2000
	Est-Autumn	Est-Winter	Est-Spring
Recommended Rate	0	0	0
Trial Rate	4000	4000	4000
	Est-Summer	Active-Hard Grazed	Dormant-HardGrazed
Recommended Rate	0	0	0
Trial Rate	4000	4000	4000

-----READ THE HERBICIDE LABEL BEFORE USE-----

If you have any further enquires please contact me at the above address.

Kind regards,

Chris Ham.

# Rhodes Grass insecticide registered products Sept 2017

DPIRD

27 Hunter Street  
Broome, WA 6725

September 5, 2017

Cameron McDonald  
Australian Standard Agriculture

Dear Cameron,

Thank you for your recent pest control inquiry. I have enclosed the **HerbiGuide** output outlining the options available for insect control in Rhodes Grass. Please note that the recommended label rates are the only registered options. Trial rates are not registered for use.

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CROPS | INSECTS
-----+-----
Rhodes Grass |
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Cruiser/5kg          RATE          COST          Cyhalothrin+Thiameth Active
L-Cyhalothrin+Thiamethox  mL(g)/Ha    $/Ha          1-28 days Withhold
Label recommendation    0            0.00          6 hours Rainfast
Trial rate              200          27.61         Seed Dress Applic.
Rhodes Grass: Apply rate above to 5kg seed. Cost assumes a planting rate of 5
kg/ha.
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-----READ THE INSECTICIDE LABEL BEFORE USE-----
Iron-EDTA           RATE          COST          Iron-EDTA Active
Multiguard          mL(g)/Ha    $/Ha          7 days Withhold
Label recommendation 5000-16000  23.90-76.48  0 hours Rainfast
Trial rate          30000        143.40         Bait Applic.
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-----READ THE INSECTICIDE LABEL BEFORE USE-----
METARHIZIUM        RATE          COST          METARHIZIUM Active
Green Guard         mL(g)/Ha    $/Ha          0-7 days Withhold
Label recommendation 0            0.00          6 hours Rainfast
Trial rate          0            0.00          Boom & HiVol Applic.
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For best results apply when locusts and grasshoppers are at early nymph stage after all the eggs have hatched.  
Apply when the temperature is between 15-30C.  
Multiply rates above by 0.33 if using 300 g/L products  
Don't spray where bees are foraging.  
Follow mixing instructions to get 50-75 g spores/ha for pre pack products.

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-----READ THE INSECTICIDE LABEL BEFORE USE-----
SUMI-ALPHA ec, FLEX  RATE          COST          ESFENVALERATE 50g/L Active
HALLMARK 50 EC      mL(g)/Ha    $/Ha          2-14 days Withhold
Label recommendation 35-70       0.46-0.92
Trial rate          1000        13.20
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Non-systemic. Do not apply if rain expected within 6 hours.  
Do not mix product with wetttable powders before addition to the spray tank.  
Apply by aircraft or ground equipment.  
Dangerous to bees. Do not spray where bees are foraging.  
Dangerous to fish. Do not contaminate water.  
See label for pest resistance warning. Flammable.



-----READ THE INSECTICIDE LABEL BEFORE USE-----

If you have any further enquires please contact me at the above address.

Kind regards,  
Chris Ham.