

## FACTSHEET

### Rotational crop withholding guide- for the Herbert region.



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## SOYBEANS

This applies to coming out of another crop and going into soybeans.

Herbicide	Situation	Rate	Price/ha	Adjuvant	Withholding Period		Comments
Treflan®480 (Trifluralin)	Pre-emergent control of annual grasses & some broadleaves	1.2 – 2.3 L/ha		Yes – if mixed with a knockdown product use a non-ionic surfactant	<i>Plantback</i> Not required when used as directed	<i>Harvest</i> Not required when used as directed	
Stomp® Xtra (Pendimethalin)	Pre-emergent control of annual grasses & some broadleaves	1.8 – 2.2 L/ha		Yes – if mixed with a knockdown product use a non-ionic surfactant	Not required when used as directed	Not required when used as directed	
Dual Gold (S-Methlachlor)	Pre-emergent control of annual grasses & some broadleaves	1.0 – 2.0 L/ha		Yes – if mixed with a knockdown product use a non-ionic surfactant	Not required when used as directed	Not required when used as directed	
Spinnaker 700 WG (Imazethapyr)	Pre and post emergent control of annual grasses & some broadleaves	100 – 140 g/ha		NIS or Hasten™ for post-emergent applications	0 months withholding.  Do NOT use the 140 gm rate in dryland soybeans unless it is intended to re-crop with another soybean crop.	Not required when used as directed	
Basagran® (Bentazone)	Post emergent control of selected broadleaves	1.5 – 2.0 L/ha		Add a NIS to the spray mixture to improve control	Soybeans are tolerant of Basagran at all stages of growth.	Do not harvest for 8 weeks after application.	

Herbicide	Situation	Rate	Price/ha	Adjuvant	Withholding Period		Comments
					Mild leaf scorching may occur but will not affect yield.		
Blazer® (Acifluorfen)	Post emergent control of certain broadleaf weeds and some grasses	1.0 – 2.0 L/ha		Generally do not mix with oils, fertilisers or other pesticides.	-	-	
Fusilade® (Fluazifop-p)	Post emergent control of a range of grasses	0.5 – 1.65 L/ha		Is compatible with a range of adjuvants. Apply at least 100l/ha of water volume.	-	-	
Falcon®/Factor® (Butroxydim)	Post emergent control of certain grasses	120 – 180 g/ha		Apply with Surcharge® @1l/100 of spray volume	Withholding period prior to harvest not required when used as directed.	-	
Targa® / Pantara (Quizalofop)	Post emergent control of a range of grasses	0.25 – 0.5 L/ha		May be used with Hasten® or an NIS wetting agent. Apply greater than 50L/ha of water volume.	12 weeks.	-	
Verdict® (Haloxypop)	Post emergent control of a range of annual & perennial grasses	100 – 150 ml/ha		May be used with Uptake® spraying oil or other oils or NIS	Not required when used as directed.	Not required when used as directed.	
Select® (Clethodim)	Post emergent control of a range of grass weeds	250 – 375 ml/ha		Always apply with D-C-Trate® @ 2L/100L or Hasten® @ 1L/100L or	Not required when used as directed.	Not required when used as directed.	

Herbicide	Situation	Rate	Price/ha	Adjuvant	Withholding Period		Comments
				Update <sup>®</sup> @ 500 mls/100L.			
Sertin <sup>®</sup> (Sethoxydim)	Post emergent control of specific grass weeds	1L/ha		Apply 1 or 2LD-C D-C-Trate <sup>®</sup> / 100L of spray tank volume	Not required when used as directed.	Not required when used as directed.	

## COWPEAS

This applies to coming out of another crop and going into cowpeas.

Herbicide	Situation	Rate	Price/ha	Adjuvant	Withholding Period		Comments
Treflan <sup>®</sup> 480 (Trifluralin)	Pre-emergent control of annual grasses & some broadleaves	1.2 – 2.3 L/ha		Yes – if mixed with a knockdown product use a non-ionic surfactant	<i>Plantback</i> Not required when used as directed	<i>Harvest</i> Not required when used as directed	
Stomp <sup>®</sup> Xtra (Pendimethalin)	Pre-emergent control of annual grasses & some broadleaves	1.8 – 2.2 L/ha		Yes – if mixed with a knockdown product use a non-ionic surfactant	Not required when used as directed	Not required when used as directed	
Dual Gold S-Metolachlor	Pre-emergent control of annual grasses & some broadleaves	1.0 – 2.0 L/ha		Yes – if mixed with a knockdown product use a non-ionic surfactant	Not required when used as directed	Do not graze or cut for stock food 13 weeks after application.	
Spinnaker 700 WG (Imazethapyr)	Pre and post emergent control of annual grasses & some broadleaves	100 – 140 g/ha		NIS or Hasten <sup>™</sup> for post-emergent applications	27 months withholding.  Do NOT use the 140 gm rate in dryland soybeans unless it is intended to re-crop with another soybean crop. Assume that this applies to cowpeas.	Not required when used as directed	

Herbicide	Situation	Rate	Price/ha	Adjuvant	Withholding Period		Comments
Basagran <sup>®</sup> (Bentazone)	Post emergent control of selected broadleaves	1.5 – 2.0 L/ha		Add a NIS to the spray mixture to improve control	Soybeans are tolerant of Basagran at all stages of growth. Mild leaf scorching may occur but will not affect yield.	For soybeans, do not harvest for 8 weeks after application. Assume the same applies for cowpeas.	
Blazer <sup>®</sup> (Aciflurofen)	Post emergent control of certain broadleaf weeds and some grasses	1.0 – 2.0 L/ha		Generally do not mix with oils, fertilisers or other pesticides.	-	17 weeks	
Fusilade <sup>®</sup> (Fluazifop-p)	Post emergent control of a range of grasses	0.5 – 1.65 L/ha		Is compatible with a range of adjuvants. Apply at least 100l/ha of water volume.	-	Do not harvest for 7 weeks after application	
Falcon <sup>®</sup> /Factor <sup>®</sup> (Butroxydim)	Post emergent control of certain grasses	120 – 180 g/ha		Apply with Surcharge <sup>®</sup> @1l/100 of spray volume	Withholding period prior to harvest not required when used as directed.	-	
Targa <sup>®</sup> / Pantara (Quizalofop)	Post emergent control of a range of grasses	0.25 – 0.5 L/ha		May be used with Hasten <sup>®</sup> or an NIS wetting agent. Apply greater than 50L/ha of water volume.	12 weeks.	-	
Verdict <sup>®</sup> (Haloxypop)	Post emergent control of a range of annual & perennial grasses	100 – 150 ml/ha		May be used with Uptake <sup>®</sup> spraying oil or other oils or NIS	Not required when used as directed.	Not required when used as directed.	

Herbicide	Situation	Rate	Price/ha	Adjuvant	Withholding Period		Comments
Select <sup>®</sup> (Clethodim)	Post emergent control of a range of grass weeds	250 – 375 ml/ha		Always apply with D-C-Trate <sup>®</sup> @ 2L/100L or Hasten <sup>®</sup> @ 1L/100L or Update <sup>®</sup> @ 500 mls/100L.	Not required when used as directed.	Not required when used as directed.	
Sertin <sup>®</sup> (Sethoxydim)	Post emergent control of specific grass weeds	1L/ha		Apply 1 or 2LD-C D-C-Trate <sup>®</sup> / 100L of spray tank volume	Not required when used as directed.	Not required when used as directed.	

## MUNGBEANS

This applies to coming out of another crop and going into mungbeans.

Herbicide	Situation	Rate	Price/ha	Adjuvant	Withholding Period		Comments
Treflan <sup>®</sup> 480 (Trifluralin)	Pre-emergent control of annual grasses & some broadleaves	1.2 – 2.3 L/ha		Yes – if mixed with a knockdown product use a non-ionic surfactant	<i>Plantback</i> Not required when used as directed	<i>Harvest</i> Not required when used as directed	
Stomp <sup>®</sup> Xtra (Pendimethalin)	Pre-emergent control of annual grasses & some broadleaves	1.8 – 2.2 L/ha		Yes – if mixed with a knockdown product use a non-ionic surfactant	Not required when used as directed	Not required when used as directed	
Dual Gold S-Metolachlor	Pre-emergent control of annual grasses & some broadleaves	1.0 – 2.0 L/ha		Yes – if mixed with a knockdown product use a non-ionic surfactant	Not required when used as directed	Do not graze or cut for stock food 13 weeks after application.	
Spinnaker 700 WG (Imazethapyr)	Pre and post emergent control of annual grasses & some broadleaves	100 – 140 g/ha		NIS or Hasten <sup>™</sup> for post-emergent applications	27 months withholding.  Do NOT use the 140 gm rate in dryland soybeans unless it is intended to re-crop with another soybean crop. Assume that this applies to cowpeas.	Not required when used as directed	



Herbicide	Situation	Rate	Price/ha	Adjuvant	Withholding Period		Comments
Basagran <sup>®</sup> (Bentazone)	Post emergent control of selected broadleaves	1.5 – 2.0 L/ha		Add a NIS to the spray mixture to improve control	Soybeans are tolerant of Basagran at all stages of growth. Mild leaf scorching may occur but will not affect yield.	For soybeans, do not harvest for 8 weeks after application. Assume the same applies for cowpeas.	
Blazer <sup>®</sup> (Aciflurofen)	Post emergent control of certain broadleaf weeds and some grasses	1.0 – 2.0 L/ha		Generally do not mix with oils, fertilisers or other pesticides.	-	17 weeks	
Fusilade <sup>®</sup> (Fluazifop-p)	Post emergent control of a range of grasses	0.5 – 1.65 L/ha		Is compatible with a range of adjuvants. Apply at least 100l/ha of water volume.	-	Do not harvest for 7 weeks after application	
Falcon <sup>®</sup> /Factor <sup>®</sup> (Butroxydim)	Post emergent control of certain grasses	120 – 180 g/ha		Apply with Surcharge <sup>®</sup> @1l/100 of spray volume	Withholding period prior to harvest not required when used as directed.	-	
Targa <sup>®</sup> / Pantara (Quizalofop)	Post emergent control of a range of grasses	0.25 – 0.5 L/ha		May be used with Hasten <sup>®</sup> or an NIS wetting agent. Apply greater than 50L/ha of water volume.	12 weeks.	-	
Verdict <sup>®</sup> (Haloxypop)	Post emergent control of a range of annual & perennial grasses	100 – 150 ml/ha		May be used with Uptake <sup>®</sup> spraying oil or other oils or NIS	Not required when used as directed.	Not required when used as directed.	

Herbicide	Situation	Rate	Price/ha	Adjuvant	Withholding Period		Comments
Select <sup>®</sup> (Clethodim)	Post emergent control of a range of grass weeds	250 – 375 ml/ha		Always apply with D-C-Trate <sup>®</sup> @ 2L/100L or Hasten <sup>®</sup> @ 1L/100L or Update <sup>®</sup> @ 500 mls/100L.	Not required when used as directed.	Not required when used as directed.	
Sertin <sup>®</sup> (Sethoxydim)	Post emergent control of specific grass weeds	1L/ha		Apply 1 or 2LD-C D-C-Trate <sup>®</sup> / 100L of spray tank volume	Not required when used as directed.	Not required when used as directed.	

## RICE

This applies to coming out of another crop and going into rice.

Herbicide	Situation	Rate	Price/ha	Adjuvant	Withholding Period		Comments
Treflan®480 (Trifluralin)	Pre-emergent control of annual grasses & some broadleaves	1.2 – 2.3 L/ha		Yes – if mixed with a knockdown product use a non-ionic surfactant	<i>Plantback</i>  5 months	<i>Harvest</i>  Nothing stated on label. Assume not required when used as directed	
Stomp® Xtra (Pendimethalin)	Pre-emergent control of annual grasses & some broadleaves	1.8 – 2.2 L/ha		Yes – if mixed with a knockdown product use a non-ionic surfactant	12 months	Nothing stated on label. Assume not required when used as directed	
Dual Gold (S-Metalachlor)	Pre-emergent control of annual grasses & some broadleaves	1.0 – 2.0 L/ha		Yes – if mixed with a knockdown product use a non-ionic surfactant	Nothing stated on label. Assume not required when used as directed	Nothing stated on label. Assume not required when used as directed	
Spinnaker 700 WG (Imazethapyr)	Pre and post emergent control of annual grasses & some broadleaves	100 – 140 g/ha		NIS or Hasten™ for post-emergent applications	Under conditions which do not favour breakdown of this product, carry-over soil residues can affect susceptible follow crops.  Recropping can be up to 34 months, depending on the type and rainfall,	27 months, provided rainfall exceeds 2000 mm	

Herbicide	Situation	Rate	Price/ha	Adjuvant	Withholding Period		Comments
					with rainfall and/or irrigation from application to sowing at least 500 mm.		
Basagran® (Bentazone)	Post emergent control of selected broadleaves	1.5 – 2.0 L/ha		Add a NIS to the spray mixture to improve control	Rice crops can be planted immediately	-	
Blazer® (Acifluofen)	Post emergent control of certain broadleaf weeds and some grasses	1.0 – 2.0 L/ha		Generally do not mix with oils, fertilisers or other pesticides.	-	50 days since application	
Fusilade® (Fluazifop-p)	Post emergent control of a range of grasses	0.5 – 1.65 L/ha		Is compatible with a range of adjuvants. Apply at least 100l/ha of water volume.	60 day plant back period	-	
Falcon®/Factor® (Butroxydim)	Post emergent control of certain grasses	120 – 180 g/ha		Apply with Surcharge® @1l/100 of spray volume	-	-	
Targa® / Pantara (Quizalofop)	Post emergent control of a range of grasses	0.25 – 0.5 L/ha		May be used with Hasten® or an NIS wetting agent. Apply greater than 50L/ha of water volume.	-	-	
Verdict® (Haloxypop)	Post emergent control of a range of annual & perennial grasses	100 – 150 ml/ha		May be used with Uptake® spraying oil or other oils or NIS	Cereal crops or grasses planted within 12 weeks of application may be damaged by the		

Herbicide	Situation	Rate	Price/ha	Adjuvant	Withholding Period		Comments
					residual effects of this herbicide, particularly on light and/or red soils. It is best to wait 12 months.		
Select <sup>®</sup> (Clethodim)	Post emergent control of a range of grass weeds	250 – 375 ml/ha		Always apply with D-C-Trate <sup>®</sup> @ 2L/100L or Hasten <sup>®</sup> @ 1L/100L or Update <sup>®</sup> @ 500 mls/100L.	-	-	
Sertin <sup>®</sup> (Sethoxydim)	Post emergent control of specific grass weeds	1L/ha		Apply 1 or 2LD-C D-C-Trate <sup>®</sup> / 100L of spray tank volume	-	-	

## Rice-specific plantback guidelines

Active constituent, trade name	Plantback	Comments
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### Group A haloxyfops

Group A herbicides may interfere with germination for a period after their application. This may not be on the label as these herbicides are used as selective post-emergence herbicides and the next crop is not normally sown until well after their plantback period has lapsed.

haloxyfop, Verdict® 520	12 weeks	Cereal crops or grasses planted within twelve weeks of application may be damaged by the residual effects of this herbicide, particularly on light and red soils.
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### Group B sulfonylureas and imidazolinones

The persistence of residual Group B herbicides is dependent on various environmental conditions such as soil pH, temperature, soil moisture and organic matter content.

chlorsulfuron, Glean®	12 months	As soil pH increases rate of breakdown decreases. Glean® should not be used on soil pH 8.6 or higher as extended soil residual activity could adversely affect crop rotation options beyond normal intervals.
metsulfuron, Ally®	6 weeks	Recropping interval varies from 10 days to 14 months for a pH range of 5.6 to 8.5.
triasulfuron, Logran®	12 months	As pH increases the rate of breakdown decreases. Replanting can be up to 24 months or more depending on pH and rainfall.
imazethapyr, Spinnaker®	10 months	Under conditions which do not favour breakdown of this product, carry-over soil residues can affect susceptible follow crops. Recropping can be up to 34 months, depending on crop type and rainfall, with rainfall and/or irrigation from application to sowing at least 500 mm.
MCPA imazapic imazapyr, Midas®	10 months	Under conditions that DO NOT favour breakdown, such as impoverished soils low in organic matter, non-wetting sands, anaerobic situations such as waterlogging, and prolonged dry periods, soil residues will persist longer and may affect susceptible follow crops.

### Group C triazines

atrazine, Atrazine 500	6 months 18 months	To avoid carryover on acid soils (pH < 6.5) – The maximum rate of atrazine 500 g/L or simazine 500 g/L or a combination of the two products to be applied to the crop during the growing season is 4 L/ha. On alkaline soils (> 6.5) – The maximum rate of atrazine 500 g/L or simazine 500 g/L or a combination of the two products to be applied to the crop during the growing season is 2 L/ha. To avoid carryover with post-emergence use – It is recommended that atrazine 500 g/L only be used, and at rates of 2 L/ha or less, on either acid or alkaline soils.
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In addition to the triazine herbicides, other Group C herbicides also present potential rice plantback issues. Diuron, for example, presents a risk as aerially sown rice is known to be extremely sensitive to it.

**Always consult the product label, your agronomist or the product manufacturer for plantback information.**

Source: *Rice crop protection guide 2015-2016*, NSW Department of Primary Industries, 2015