## Registered product list for use against specific targets

The information listed below is provided as a guideline to growers.

The provider cannot accept any liability for its accuracy and users who rely on this information do so at their own risk.

## **FUNGICIDES**

## Updated: Winter 2019

Target	Group code	Active ingredient	Trade name	Form.	Reg. no.	Company	Active quantity	Dosage	Application type	PHI	Notes
	FRAC 9	cyprodinil	Chorus	WG		Syngenta South Africa (Pty) Ltd	500 g/kg	380-500 g/ha	Aerial; Foliar	7	Do the first application during early bloom, repeat every 14 days if conditions remain favourable for disease development. Ensure good coverage. No more than 2 aerial applications. Do not exceed 1400 g/ha per season.
Alternaria	FRAC 9 + FRAC 12	cyprodinil + fludioxonil	Switch	WG	L5926	Syngenta South Africa (Pty) Ltd	375 g/L + 250 g/L	800-950 g/ha	Foliar	/	Ensure good coverage during early bloom and repeat at 14 day intervals if conditions remain fevourable. No more than 2 sequetial applications. Maximum 4 applications per season.
	FRAC M5	chlorothalonil	Bravo 720	sc	L7005	Syngenta South Africa (Pty) Ltd	720 g/L	3.5 L/ha	Aerial; Foliar	120	Suppresion only. Apply at beginning of the flowering period and at full bloom. Do additional applications as required on 14 - 28 days intervals. Maximum 5 applications per season. Do not apply with oils, pesticides, surfactants of fertilizers.
	FRAC 11 + FRAC 3	azoxystrobin + difenoconazole	Amistar Top	sc		Syngenta South Africa (Pty) Ltd	200 g/L + 125 g/L	500- 1000 ml/ha	Aerial; Foliar	45	Apply as part of a protectant programme before disease occurs with no more than 2 consecutive sprays 10-14 days apart. Maximum 4 sprays per season. Do not use with an adjuvant. Spray volumes for aerial sprays: 30-40 L water/ha.
Anthracnose	FRAC 7 + FRAC 11	boscalid + pyraclostrobin	Bellis	WG	L7817	BASF South Africa (Pty) Ltd	252 g/kg + 128 g/kg	800 g/ha	Foliar	14	Apply in a preventative program, commencing at flower tassel emergence, followed with a second application two weeks later. Apply 1200-1500 L water/ha. Maximum 2 sequential and 3 total applications per season.
	FRAC 11	azoxystrobin	Ortiva	sc		Syngenta South Africa (Pty) Ltd	250 g/L	480-880 ml/ha	Aerial; Foliar	45	Apply prior to disease development. Apply at 7-21 day intervals. No more than 2 sequetial applications. Maximum 4 applications per season. An adjuvant may be added at the registered rate. Optimum pH = 5.0-5.5.
	FRAC 11 + FRAC 3	azoxystrobin + difenoconazole	Amistar Top	sc		Syngenta South Africa (Pty) Ltd	200 g/L + 125 g/L	500- 1000 ml/ha	Aerial; Foliar	45	Apply as part of a protectant programme before disease occurs with no more than 2 consecutive sprays 10-14 days apart. Maximum 4 sprays per season. Do not use with an adjuvant. Spray volumes for aerial sprays: 30-40 L water/ha.
Blossom blight	FRAC 7 + FRAC 11	boscalid + pyraclostrobin	Bellis	WG		BASF South Africa (Pty) Ltd	252 g/kg + 128 g/kg	800 g/ha	Foliar	14	Apply in a preventative program, commencing at flower tassel emergence, followed with a second application two weeks later. Apply 1200-1500 L water/ha. Maximum 2 sequential and 3 total applications per season.
	FRAC M5	chlorothalonil	Bravo 720	sc		Syngenta South Africa (Pty) Ltd	720 g/L	3.5 L/ha	Aerial; Foliar	120	Suppresion only. Apply at beginning of the flowering period and at full bloom. Do additional applications as required on 14 - 28 days intervals. Maximum 5 applications per season. Do not apply with oils, pesticides, surfactants of fertilizers.

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Target	Group code	Active ingredient	Trade name	Form.	Reg. no.	Company	Active quantity	Dosage	Application type	PHI	Notes		
Dotatic	FRAC M5	chlorothalonil	Bravo 720	SC	L7005	Syngenta South Africa (Pty) Ltd	720 g/L	3.5 L/ha	Aerial; Foliar	120	Suppresion only. Apply at beginning of the flowering period and at full bloom. Do additional applications as required on 14 - 28 days intervals. Maximum 5 applications per season. Do not apply with oils, pesticides, surfactants of fertilizers.		
Botrytis	FRAC 9 + FRAC 12	cyprodinil + fludioxonil	Switch	WG	L5926	Syngenta South Africa (Pty) Ltd	375 g/L + 250 g/L	800-950 g/ha	Foliar	7	Ensure good coverage during early bloom and repeat at 14 day intervals if conditions remain fevourable. No more than 2 sequetial applications. Maximum 4 applications per season.		
Brown rot - Monilinia	FRAC M5	chlorothalonil	Bravo 720	sc	L7005	Syngenta South Africa (Pty) Ltd	720 g/L	3.5 L/ha	Aerial; Foliar	120	Suppresion only. Apply at beginning of the flowering period and at full bloom. Do additional applications as required on 14 - 28 days intervals. Maximum 5 applications per season. Do not apply with oils, pesticides, surfactants of fertilizers.		
Downy spot	FRAC 11 + FRAC 3	azoxystrobin + difenoconazole	Amistar Top	sc	L7897	Syngenta South Africa (Pty) Ltd	200 g/L + 125 g/L	500- 1000 ml/ha	Aerial; Foliar	· 45	Apply as part of a protectant programme before disease occurs with no more than 2 consecutive sprays 10-14 days apart. Maximum 4 sprays per season. Do not use with an adjuvant. Spray volumes for aerial sprays: 30-40 L water/ha.		
Eastern Filbert blight	FRAC M5	chlorothalonil	Bravo 720	sc	L7005	Syngenta South Africa (Pty) Ltd	720 g/L	3.5 L/ha	Aerial; Foliar	120	Suppresion only. Apply at beginning of the flowering period and at full bloom. Do additional applications as required on 14 - 28 days intervals. Maximum 5 applications per season. Do not apply with oils, pesticides, surfactants of fertilizers.		
<i>Botrytis</i> fruit rot	FRAC 9	cyprodinil	Chorus	WG	L5383	Syngenta South Africa (Pty) Ltd	500 g/kg	380-500 g/ha	Aerial; Foliar	7	Do the first application during early bloom, repeat every 14 days if conditions remain favourable for disease development. Ensure good coverage. No more than 2 aerial applications. Do not exceed 1400 g/ha per season.		
Fungi	-	organic plant acids	Kannar Kanguard 940	SL	L7421	Kannar Earth Science (Pty) Ltd	19 g/L	300-450 ml/100 L water	Foliar	2	Full cover application. Add an adjuvant. Repeat every 5 days. Optimum pH = 5.5-6.5.		
Husk rot	FRAC 7 + FRAC 11	boscalid + pyraclostrobin	Bellis	WG	L7817	BASF South Africa (Pty) Ltd	252 g/kg + 128 g/kg	800 g/ha	Foliar	14	Apply in a preventative program, commencing at flower tassel emergence, followed with a second application two weeks later. Apply 1200-1500 L water/ha. Maximum 2 sequential and 3 total applications per season.		
	FRAC 7 + FRAC 11	boscalid + pyraclostrobin	Bellis	WG	L7817	BASF South Africa (Pty) Ltd	252 g/kg + 128 g/kg	800 g/ha	Foliar	14	Apply in a preventative program, commencing at flower tassel emergence, followed with a second application two weeks later. Apply 1200-1500 L water/ha. Maximum 2 sequential and 3 total applications per season.		
Husk spot	FRAC 3	difenoconazole	Score	EC	L5132	Syngenta South Africa (Pty) Ltd	250 g/L	50 ml/100 L water	Ground	45	Apply at nut set with an adjuvant. Maximum 2 applications per season.		
Late blight	FRAC 11 + FRAC 3	azoxystrobin + difenoconazole	Amistar Top	sc	L7897	Syngenta South Africa (Pty) Ltd	200 g/L + 125 g/L	500- 1000 ml/ha	Aerial; Foliar	45	Apply as part of a protectant programme before disease occurs with no more than 2 consecutive sprays 10-14 days apart. Maximum 4 sprays per season. Do not use with an adjuvant. Spray volumes for aerial sprays: 30-40 L water/ha.		

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Target	Group code	Active ingredient	Trade name	Form.	Reg. no.	Company	Active quantity	Dosage	Application type	PHI	Notes
Leaf spot	FRAC 11 + FRAC 3	azoxystrobin + difenoconazole	Amistar Top	sc	L7897	Syngenta South Africa (Pty) Ltd	200 g/L + 125 g/L	500- 1000 ml/ha	Aerial; Foliar	45	Apply as part of a protectant programme before disease occurs with no more than 2 consecutive sprays 10-14 days apart. Maximum 4 sprays per season. Do not use with an adjuvant. Spray volumes for aerial sprays: 30-40 L water/ha.
Panicle and shoot blight	FRAC 11 + FRAC 3	azoxystrobin + difenoconazole	Amistar Top	sc	L7897	Syngenta South Africa (Pty) Ltd	200 g/L + 125 g/L	500- 1000 ml/ha	Aerial; Foliar	45	Apply as part of a protectant programme before disease occurs with no more than 2 consecutive sprays 10-14 days apart. Maximum 4 sprays per season. Do not use with an adjuvant. Spray volumes for aerial sprays: 30-40 L water/ha.
Powdery mildew	FRAC 11 + FRAC 3	azoxystrobin + difenoconazole	Amistar Top	sc	L7897	Syngenta South Africa (Pty) Ltd	200 g/L + 125 g/L	500- 1000 ml/ha	Aerial; Foliar	· 45	Apply as part of a protectant programme before disease occurs with no more than 2 consecutive sprays 10-14 days apart. Maximum 4 sprays per season. Do not use with an adjuvant. Spray volumes for aerial sprays: 30-40 L water/ha.
Rust - Leaf rust	FRAC 11 + FRAC 3	azoxystrobin + difenoconazole	Amistar Top	sc	L7897	Syngenta South Africa (Pty) Ltd	200 g/L + 125 g/L	500- 1000 ml/ha	Aerial; Foliar	45	Apply as part of a protectant programme before disease occurs with no more than 2 consecutive sprays 10-14 days apart. Maximum 4 sprays per season. Do not use with an adjuvant. Spray volumes for aerial sprays: 30-40 L water/ha.
Stone fruit rust	FRAC M5	chlorothalonil	Bravo 720	sc	L7005	Syngenta South Africa (Pty) Ltd	720 g/L	3.5 L/ha	Aerial; Foliar	120	Apply at beginning of the flowering period and at full bloom. Do additional applications as required on 14 - 28 days intervals. Maximum 5 applications per season. Do not apply with oils, pesticides, surfactants of fertilizers.
	FRAC 30	fentin hydroxide	Ag-Tin	sc	L9493	Rolfes Agri (Previously known as Ag- Chem Africa	480 g/L	50 ml/100 L water	Foliar	*	Active is banned in Europe. Only for local use. *Do not spray after the shucks have opened. Do the first application at green tip stage (early October). Repeat 4 times with 3 week intervals, with the second of these 4 applications being applied at the first browning of tips of small nuts.
	FRAC M5	chlorothalonil	Bravo 720	sc	L7005	Syngenta South Africa (Pty) Ltd	720 g/L	3.5 L/ha	Aerial; Foliar	120	Suppresion only. Apply at beginning of the flowering period and at full bloom. Do additional applications as required on 14 - 28 days intervals. Maximum 5 applications per season. Do not apply with oils, pesticides, surfactants of fertilizers.
Scab	FRAC 3	propiconazole	Bumper 250 EC	EC	L6034	Adama South Africa (Pty) Ltd	250 g/L	50 ml/100 L water	Foliar	90	Apply 1000-2000 L spray mixture/ha. Refer to the label for detailed instructions. Spray intervals: when leaves unfold; 10-; 21- (+ contact fungicide); 28- (+ contact fungicide); 28 (+ contact fungicide) days later depending on conditions.
	FRAC 11	azoxystrobin	Ortiva	sc	L5968	Syngenta South Africa (Pty) Ltd	250 g/L	480-880 ml/ha	Aerial; Foliar	45	Apply prior to disease development. Apply at 7-21 day intervals. No more than 2 sequetial applications. Maximum 4 applications per season. An adjuvant may be added at the registered rate. Optimum pH = 5.0-5.5.
	FRAC 3	propiconazole	Makhrozole 250 EC	EC	L7974	Makhro-Agro SA (Pty) Ltd	250 g/L	50 ml/100 L water	Foliar	90	Apply 1000-2000 L spray mixture/ha. Refer to the label for detailed instructions. Spray intervals: when leaves unfold; 10-; 21- (+ contact fungicide); 28- (+ contact fungicide); 28 (+ contact fungicide) days later depending on conditions.
	FRAC 3	propiconazole	Propiconazole 250EC	EC	L7306	Villa Crop Protection (Pty) Ltd	250 g/L	50 ml/100 L water	Foliar	90	Apply 1000-2000 L spray mixture/ha. Refer to the label for detailed instructions. Spray intervals: when leaves unfold; 10-; 21- (+ contact fungicide); 28- (+ contact fungicide); 28 (+ contact fungicide) days later depending on conditions.

FUNG	ICIDES	5				Updated: Winter 2019					
Target	Group code	Active ingredient	Trade name	Form.	Reg. no.	Company	Active quantity	Dosage	Application type	рні	Notes
	FRAC 3	propiconazole	Propizole 250 EC	EC	L7561	Villa Crop Protection (Pty) Ltd	250 g/L	50 ml/100 L water	Foliar	90	Apply 1000-2000 L spray mixture/ha. Refer to the label for detailed instructions. Spray intervals: when leaves unfold; 10-; 21- (+ contact fungicide); 28- (+ contact fungicide); 28 (+ contact fungicide) days later depending on conditions.
	FRAC 3	propiconazole	Tilt	EC	L6668	Syngenta South Africa (Pty) Ltd	250 g/L	50 ml/100 L water	Foliar	90	Apply 1000-2000 L spray mixture/ha. Refer to the label for detailed instructions. Spray intervals: when leaves unfold; 10-; 21- (+ contact fungicide); 28- (+ contact fungicide); 28 (+ contact fungicide) days later depending on conditions.
	FRAC 11 + FRAC 3	azoxystrobin + difenoconazole	Amistar Top	sc	L7897	Syngenta South Africa (Pty) Ltd	200 g/L + 125 g/L	500- 1000 ml/ha		45 90	Apply as part of a protectant programme before disease occurs with no more than 2 consecutive sprays 10-14 days apart. Maximum 4 sprays per season. Do not use with an adjuvant. Spray volumes for aerial sprays: 30-40 L water/ha.
Scab	FRAC 3	propiconazole	Propizole 250 EC	EC	L7561	Villa Crop Protection	250 g/l	50 ml / 100 l water	Aerial; Foliar		Apply five (5) applications.
	FRAC 3	propiconazole	Principle 250 EC	EC	L10533	ICA Internationa I Chemicals	250 g/l	50 ml / 100 l water			Apply the first application when the leaves unfold and the second application 10 days later. Follow instructions on the label. The application with a suitable registered contact fungicide
	FRAC 3	propiconazole	Propiconazole 250	EC	L7306	Universal Crop Protection (Pty) Ltd.	250 g/l	50 ml / 100 l water			from a different FRAC group with the 3 <sup>rd</sup> , 4 <sup>th</sup> and 5 <sup>th</sup> application, will be beneficial for disease control.
Septoria leaf spot	FRAC M5	chlorothalonil	Bravo 720	sc	L7005	Syngenta South Africa (Pty) Ltd	720 g/L	3.5 L/ha	Aerial; Foliar	120	Suppresion only. Apply at beginning of the flowering period and at full bloom. Do additional applications as required on 14 - 28 days intervals. Maximum 5 applications per season. Do not apply with oils, pesticides, surfactants of fertilizers.
Shot-hole	FRAC M5	chlorothalonil	Bravo 720	sc	L7005	Syngenta South Africa (Pty) Ltd	720 g/L	3.5 L/ha	Aerial; Foliar	120	Suppresion only. Apply at beginning of the flowering period and at full bloom. Do additional applications as required on 14 - 28 days intervals. Maximum 5 applications per season. Do not apply with oils, pesticides, surfactants of fertilizers.
(Fusicladium effusum)	FRAC M5	furfural (aldehyde)	Protect	EC	L7534	Illovo Sugar Ltd	990 g/L	400-600 L/ha	Drip; Broad spray; Seedbed	-	The third application to be applied 21 days after the second and the fourth application 28 days later.

Formulation notes: EC - Emulsifiable concentrate, WG - Water-dispersible granule, SC - Suspension concentrate, SL - Soluble concentrate