



Products registered for Insect control on Avocados in South Africa

Updated: 19 September 2025



(The latest updates are available under "Technical Info" in the Members section of the SAAGA website (www.avocado.co.za))

Disclaimer: This document provides a list of products registered under Act 36 of 1947 for Post-harvest use on South African avocados. The purpose of this publication is to inform growers, processors, and marketers. This information is believed to be accurate as at the date of publishing the document. The material has been drawn from several sources and is published in good faith. Although Subtrop has exercised due care and skill in the preparation and compilation of the information and data set out in this document, it does not warrant its accuracy, completeness, currency or suitability for any purpose, or the efficacy of any of the products listed. To the maximum extent permitted by law, Subtrop disclaims all liability, including liability for any negligence, for any loss, damage, injury, cost or expense incurred by any person as a result of accessing, using or relying upon any of the information or data set out in this document. Please follow the manufacturer's recommendations with regards to application, handling, and dosage of every product.

Pest	Trade name	Active Ingredient	Export Market (Retailer Status EU/UK)	Company	Formulation		Dosage (Per 100 L water, or as indicated)	Withholding Period (Days)	Application (For high volume applications, unless otherwise indicated)
					Type	Grams per active ingredient			ALWAYS READ THE LABEL FOR DETAILED INSTRUCTIONS
Fruit sucking bug complex	Small to medium sized bugs, green or brown in colour. Cause fruit malformation, premature fruit drop, necrotic lesions and protrusions on fruit. Avocado fruit <30mm in diameter is most susceptible.								
	Ace 750 SP	Acephate (Fruit set to 35 days before harvest)		Nulandis	SP	750 g/kg	75 g	35	Ground application: Commence spraying at 80% fruit set on shaded side of tree. Apply a light cover spray and ensure thorough coverage of entire canopy. Only apply one application. Optimum pH 5. Do not apply more than one (1) application per season. Do not apply during blossom, as it is toxic to bees.
	Acephate 750 SP			Villa Crop Protection / Universal Crop Protection					Ground application Apply as a light cover spray ensuring thorough coverage of all the foliage. Commence spraying at 80 % fruit set on the shaded side of the tree. Do not apply more than one (1) application per season. Do not apply during blossom, as it is toxic to bees
	Bulldock Beta 125 SC	Beta-cyfluthrin (Only at flowering)		Bayer	SC	125 g/L	6 ml	-	Apply a single medium cover spray at end of flowering. Optimum pH 4 - 5.
	Chess	Pymetrozine (Flowering to 21 days before harvest)		Syngenta	WG	500 g/kg	40 g	21	Ensure good coverage (diffuse wetting type) of the target area through a medium cover spray as soon as threshold levels are reached (before flowering and up to the end of December - 1 stinkbug per tree; from January onwards – 2 stinkbugs per tree). Repeat application after 28 days if necessary, but not later than 21 days before harvest. Application timing is critical: A too early application, before threshold is reached, can result in re-infestation. Small fruit may be partially damaged in case of a late application.
	Trivia 500 WDG			Villa Crop Protection	WDG	500 g/kg	40 g		Ground application: Apply as a medium cover spray (diffuse wetting of the target area) as soon as threshold levels are reached (before flowering and up to the end of December = 1 stinkbug per tree; from January onwards = 2 Stinkbugs per tree). Ensure good coverage. Repeat application after 4 weeks if required, but not after 3 weeks before harvest. Application timing is critical: A too early application, before threshold is reached, may result in re-infestation. Small fruit may be partially when applied too late.
	Ramba 100 EC	Bifenthrin (pyrethroid)		Villa Crop Protection	EC	100g/L	40 ml plus 5 ml Charge	28	Apply as a medium cover application as soon as petal fall commences, ensuring good coverage of the target area. Repeat applications every two (2) weeks, but not later than 28 days before harvest. Do not exceed four (4) applications per season. If further control is needed, use insecticides with a different mode of action, such as Tivoli 240 SC. Do not apply when Bees are active.
	Tempes 100 EC			Villa Crop Protection	EC	100g/L	40 ml plus 5 ml Charge	28	Apply as a medium cover application as soon as petal fall commences, ensuring good coverage of the target area. Repeat applications every two (2) weeks, but not later than 28 days before harvest. Do not exceed four (4) applications per season. If further control is needed, use insecticides with a different mode of action, such as Tivoli 240 SC. Do not apply when Bees are active.

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Fruit sucking bug complex	Tivoli 240 SC	Spirotetramat		Villa Crop Protection	SC	240 g/L	30 ml plus 5 ml Charge	14	Apply the first treatment as a medium cover spray (6 litre per meter tree height above skirt) at petal fall. Repeat every two (2) weeks. Do not exceed four (4) applications per season. If further control if needed, use insecticides with a different mode of action, such as Tempes 100 EC
	Eco-Bb	<i>Beauveria bassiana</i>		Andermatt Madumbi	-	min 2 x 10 ⁹ viable spores per gram	Apply at a rate of 1g/L water.	-	Apply as a full cover spray, contact with pest is desired for maximum efficacy. The higher rate is preferred for large trees, high spray volume application or when pest severity is high. Apply at an early stage of infestation to optimize efficacy. Repeat application every 10-14 days.
Heart-shaped scale	Heart or pear-shaped, light to reddish brown scale insect up to 3mm in diameter. Young scale light green in colour. Infest only the leaves and usually only on the underside. A considerable amount of honeydew is secreted.								
	Buprofezin 500 WDG	Buprofezin		Villa Crop Protection	WG	500 g/kg	30 g + see label	160	Full cover spray. Apply when pest is noticed or just before active first generation crawlers start moving (usually end of October). Add a wetter. Thorough coverage of inside of tree is essential. Stable in acidic & alkaline media. OR Early preventive treatment: Two treatments spray programme: Apply as a high volume, full cover spray (30 g/100L water) (6 litres / m tree height above skirt) as soon as an infestation is present. Make sure that the underside of the leaves are well covered. Two (2) applications for each active ingredient at 14-day intervals as a spray programme. Start with Buprofezin 500 WDG/Beretta WDG during the flowering period, followed by Thixam/Thiatox 250 WDG and end with TIVOLI/LUTON 240 SC.
	Kabuto			Meridian Agrochemical Company	SC	500 g/L	30ml + 50 ml nonionic surfactant		Apply when heavy infestations of the pest occur on the underside of the leaves. Apply as a high volume, full cover spray just before movement of active 1st generation crawlers commence. This usually occurs at the end of October, when 80 % females show distinctive yolk-sacks (80 % producing females). NOTE Thorough coverage of the inside of the tree canopy is essential.
	Praise 50 WP			Wentek Chemicals (Pty) Ltd	WP	500 g/kg	30 g		
	Profezin 500 WDG			Sharda International Africa (PTY) LTD	WDG	500 g/kg	30g + 50ml Isotridecanol		
	Tivoli 240 SC	Spirotetramat		Villa Crop Protection	SC	240 g/L	50 ml plus 5 ml Charge	50	Early preventive treatment: Two treatments spray programme*: Apply as a high volume, full cover spray (6 litres / m tree height above skirt) as soon as an infestation is present. Make sure that the underside of the leaves are well covered. Two (2) applications for each active ingredient at 14-day intervals as a spray programme. Start with Buprofezin 500 WDG during the flowering period, followed by and end with TIVOLI 240 SC .
	Spitrus 240 SC			Villa Crop Protection	SC	240 g/L	50 ml plus 5 ml Charge	50	Early preventive treatment: Two treatments spray programme*: Apply as a high volume, full cover spray (6 litres / m tree height above skirt) as soon as an infestation is present. Make sure that the underside of the leaves are well covered. Two (2) applications for each active ingredient at 14 day intervals as a spray programme. Start with Buprofezin 500 WDG during the flowering period, followed by Thixam 250 WDG and end with Spirtus 240 SC .

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Scale	Small brown flattened stationary insect with oval-shaped body not protected by a shield. Usually found on the underside of leaves against the midrib or on the stems of new growth/flushes. Secretes large quantities of honeydew. Often attended to by ants.								
	Datathion 500 EC	Mercaptothion / Malathion		Nulandis	EC	500 g/L	250 ml	7	Apply when infestation occurs.
	Malasol			Agro-Serve (Pty) Ltd t/a Efekto	EC	500 g/L	250 ml		
	Avi Merkaptotoks			Avima	WP	250 g/kg	500 g/100L		
	Avi Gard			Avima	EC	500 g/L	250 mL		
Fruit flies (various spp.)	Medium-sized flies usually brightly coloured with iridescent eyes and mottled wings which are held sideways at rest. Lay eggs in fruit (star-shaped sting mark) which becomes infested with maggots which eat their way into the fruit, causing rot.								
	BioLure® Fruit Fly	Ammonium acetate + trimethylamine hydrochloride + 1,4-diaminobutane		Chempac	CB	211 g/kg / 91 g/kg / 3 g/kg	1 Vapona Strip tablet + 1 trap/2ha	0	Remove the protective strip from each of the three dispensers before placing them into the trap. The McPhail type trap is recommended for use with Biolure® Fruit Fly Lure. Insert a Vapona Strip tablet into the bottom of the trap prior to placing in the orchard or vineyard. Hang the trap at head height (±1,8 m) on an outside limb of the tree. Ensure the trap entrance is free from foliage. Replace the vapour dispensers and Vapona strip every 42 days.
	E.G.O. PheroLure	Enriched Ginger Oil		Insect Science	VP	2 ml	1 trap per 5ha	-	Remove the protective strip from each of the three dispensers before placing them into the trap. The McPhail type trap is recommended for use. Hang the trap at head height (±1,8 m) on an outside limb of the tree. Ensure the trap entrance is free from foliage. Replace the vapour dispensers and Vapona strip every 20-25 weeks.
	Datathion 500 EC	Mercaptothion		Nulandis	EC	500 g/L	175 ml + 8 kg sugar of protein hydro-lysate	7 (NOT to be used for EXPORT)	Bait: Apply at weekly intervals to foliage as a coarse droplet spray at a rate of 250 ml - 1 L /tree when fruit becomes susceptible to attack. Apply in winter to evergreen trees on warm sunny days to reduce over-wintering population. Repeat after rain.
	Avi Gard			Avima	EC	500 g/L	176 ml + 8 kg sugar or 200 mL protein	7	Apply 35 – 40 l/ha as a coarse droplet spray onto underside of foliage. For small plots, repeat application twice per week. For large plots repeat.
	Avi Merkaptotoks			Avima	WP	250 g/kg	300 g + 8 kg sugar or protein hydrolysate	7	Bait: Apply at weekly intervals to foliage as a coarse droplet spray at a rate of 250 ml - 1 L /tree when fruit becomes susceptible to attack. Apply in winter to evergreen trees on warm sunny days to reduce over-wintering population. Repeat after rain.
	Kombat Malathion			Kombat (Pty) Ltd	EC	500 g/kg	2 mL / 1L + 80g Sugar	7	Bait treatment: Apply at 35-40l/ha as a coarse droplet spray onto underside of foliage.

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Fruit flies (various spp.)	Chempac ME lure	Methyl Eugenol		Chempac	CB	4 g/Lure	1 ME block + 1 Vapona (dichlorvos) strip: 1 trap / km ²	0	Ensure that traps are placed in areas where infestation is most likely for instance at rubbish dumps, human dwellings, resting and picnic places next to main roads etc. Traps should not be hung more than 500 metres apart and 1.5 m high in the shade, the south-eastern side of trees. Replace lures in traps every 6 - 8 weeks. Methyl Eugenol attracts male species of <i>Bactrocera dorsalis</i> and other members of the <i>B. dorsalis</i> complex of fruit flies.
	Invader-Lure™			River Bioscience Pty (Ltd)		15 g/block	Use in Lynnfield trap + 1 Vapona (Dichlorvos) strip: 1 trap/25 ha		Ensure that traps are placed in areas where infestation is most likely for instance at rubbish dumps, human dwellings, resting and picnic places next to main roads etc. Traps should not be hung more than 500 metres apart and 1.5 m high in the shade, the south-eastern side of trees. Replace lures in traps every 6 - 8 weeks. Methyl Eugenol attracts male species of <i>Bactrocera dorsalis</i> and other members of the <i>B. dorsalis</i> complex of fruit flies.
	Invader- <i>b</i> -Lok™	Methyl Eugenol + Mercaptothion		River Bioscience Pty (Ltd)	RB	13,5g/block + 4,5 ml/block	10 - 12 blocks/ha	0	Hang each block on the shady side of the tree, 1.5 m high. Replace blocks every 6 - 8 weeks. Invader-b-Lok are used to attract the male species of <i>Bactrocera dorsalis</i> .
	Bi-ME mat blocks			Chempac	RB	15g/block + 5 ml/block	6 - 12 blocks/ha	0	Blocks should be placed as soon as <i>B. dorsalis</i> is caught in a monitoring trap. Blocks should be placed 2 m above the ground and be replaced every 6 weeks.
	M3α	Proteinhydrolysate & plant extract + alpha-cypermethrin		Green Trading BK	RB	Each Bait station 5g + 0.01 g	Trees < 5m: 300 bait stations/ha Trees > 5m: 400 bait stations/ha	0	Place M3 bait stations 4 weeks prior to fruit becoming prone to fruit fly attacks. M3 bait stations on taller trees should be hung 3 m and higher above the orchard floor.
	Last Call F.F.	Permethrin + Fruit Fly attractant (EGO)		Insect Science	VP	60g/kg + 100g/kg	150 g/ha (2800 - 3000 drops/ha)	-	It is recommended that traps are used and placed 1.5 to 1.8 m above the ground. Start the first Last Call™ F.F. treatment as soon as fruit flies are observed. Re-apply at 28-day intervals.
	GF-120 NF	Spinosad		CORTEVA AGRISCIENCE RSA (PTY)	CB	0.24 g/L	1 - 1.2 L in 4 - 29 L water	1	Apply GF-120™ NF bait as coarse droplets (approx. 1 - 4 mm on bearing fruit crops and 4 - 6 mm on non-fruit bearing trees and shrubs). Apply a total volume of 5 to 30 litres bait mixture per planted ha. Use only calibrated equipment adapted to meet the application criteria. Apply as a band of scattered droplets approximately 1 - 2.5 m above ground level to one side of each row of trees. Alternate sides with each consecutive application. Repeat bait applications at least every 7 – 14 days depending on population pressure. Use shorter intervals on ripening fruit.

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Thrips	Minute insect about 1 mm in length with four narrow fringed wings. Immature stages are yellow in colour. Adults usually dark and very active having the habit of turning up the tip of the abdomen. Feed by rasping the plant surface causing small silverish blotches.													
	Agrimec Gold	Abamectin (Restricted Chemical - PCO required)		Syngenta	SC	84 g/L	160 - 320 ml/ha + 1-4 % v/v spray oil	14	Apply when immature thrips are noticed but before exceeding 5 immature thrips per leaf /fruit. Apply 160 - 240 ml / ha for low-moderate pest infestations and 240 - 320 ml/ha for severe infestations. Only apply if necessary a second application 30 days later. Stable to hydrolysis at pH 5, 7 and 9.					
	Avi Gard	Mercaptothion*		Avima	EC	500 g/L	175ml	7 (Refer to label for export protocols)	Full cover spray.					
	Datathion 500 EC			Nulandis			250ml		Apply when pest is noticed. Stable in neutral & acidic media.					
	Kombat Malathion			Kombat (Pty) Ltd			175ml							
	Malasol			Agro-Serve (Pty) Ltd t/a Efekto			250ml							
	Avi Merkaptotoks			Avima	WP	250 g/kg	500 g							
Thrips	Real Metarhizium 69	Metarhizium anisopliae		Real IPM South Africa (Pty) Ltd	EC	At least 1 x 10 ⁹ cfu/ml	600 ml/ha	0	Foliar spray weekly. Soil drench monthly.					
	Delegate 250 WG	Spinetoram		CORTEVA AGRISCIENCE RSA (PTY)	WG	250 g/kg	10 g	7	Commence spraying at the first signs of thrips presence. Repeat application when necessary. Apply as a light cover spray ensuring thorough coverage of the target area.					
	Dusting Sulphur	Sulphur		Villa Crop Protection / Universal Crop Protection	WG	980 g/kg	10 - 40 kg/ha	0	Apply as soon as pest is noticed					
				Orchard Agrikem										
	Sulphur 800 WDG			Villa Crop Protection	WDG	800 g/kg	300 g							
	Flowable Sulphur	Sulphur		Nulandis	SC	700 g/L	350 ml	0						
	Saffron			Corite (Pty) Ltd		800 g/L	3-4,5L /ha							
	SunFlo 800 SC			ICA International Chemicals	SC	800 g/L	3-4,5L /ha							
	Sulfoman			N Laboratories (Pty) Ltd			300 ml/g							
	Sulfomaxx			Rolfes Agri (Pty) Ltd										
	Sulfostar			Rolfes Agri (Pty) Ltd		300 ml								
	Eco Fungimite			Agro-Serve (Pty) Ltd t/a Efekto		800 g/L								
	Cosavet			Villa Crop Protection	WG	800 g/kg								
	Kumulus WG			BASF										
	ThiovitJet			Syngenta										
	Microthiol Special			Total SA										
	Striker			Chempac										

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Leaf rollers	Larvae are yellow-green in colour with dark heads. They spin individual leaves together or web two fruit together to form a protective niche. Larvae can damage leaves, but more importantly damage the fruit surface when they feed inside the protective niche.								
	Dipel® DF	<i>Bacillus thuriangiensis</i>		Valent BioSciences	WG	32 000 IU/mg	12.5 g	0	Apply as a full cover spray when pest occurs. Ensure thorough coverage of trees.
African Bollworm	Bollworm eggs are laid singularly on any plant part. Eggs are round and white when freshly laid, but turn darker as shell hardens. Larvae vary in colour from greenish-yellow to pinkish-brown to nearly black. A distinctive characteristic of the larvae is the pale stripe along each side of the body. Larvae feed on young leaves, flowers and young fruit.								
	Bolldex®	<i>Helicoverpa armigera</i> Nucleopolyhedrovirus (HaNPV)		Madumbi Sustainable Agriculture	SC	7.5 x 10 ¹² occlusion bodies / L	200 ml / ha in sufficient water for full cover film application	0	First application with detection of bollworm eggs. Second application 7 - 10 days after first application. Continue at intervals of 7 - 10 days if bollworm stays present. Apply during late afternoon or evening. Optimum pH 5 - 8.
	Graboll			Chempac					
False codling moth (FCM)	Dark grey-brown moth 5-6 mm in length. Eggs are laid singly on the fruit. Hatched larvae almost immediately tunnel into fruit leaving a white powdery exudate and an elevated ring of tissue surrounding an inconspicuous entrance hole. Full grown larvae are light pink with dark heads.								
	Bioneem	Azadirachthin		Biogrow Chemicals	-	3 g/L	3-6 L/ha	0	Spray every 3rd week - After 2nd spray monitor pressure and adjust sprays to every 14 days if necessary.
	Cordial 350 WDG	Chlorantraniliprole		Villa Crop Protection / Universal Crop Protection	WG	350 g/kg	10 g Max:300g/ha per application	14	Apply as a full cover application when moth catches in pheromone traps indicate infestation, usually at the onset of ripening. Applications should be made in water volumes from 2000-4000 litres spray mixture per ha, depending on the stage of the crop. Follow-up application can be made after 10 days. Do not exceed two (2) applications on the crop per season.
	Cryptogran™	<i>Cryptophlebia leucotreta</i> granulovirus		River Bioscience	SC	5 x 10 ¹⁰ occlusion bodies / ml	10 ml + 250 ml molasses + wetter	0	Apply as a full cover film spray when pest is noticed. Spray should be applied shortly after moth flight peaks. A final application 4 weeks before harvest begins is recommended. Apply during the late afternoon or evening. DO NOT apply during heat of the day. Optimum pH 5 - 8.
	Cryptex®			Madumbi Sustainable Agriculture	SC	2 x 10 ¹⁰ occlusion bodies / ml	Apply 3.3 ml per 100 L of water (min. 200 ml – max 330 ml/ha).	0	Application timing and intervals 1. 1st application approximately 10-14 days after the 1st main peak in FCM moth flight. 2. 2nd application should be made within 10-14 days after second peak in FCM moth flight. 3. 3rd application to follow the next peak in FCM moth flight.
	GraTham			Chempac					

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	Bolt 240 SC	Methoxyfenozide		AECI Limited					Apply as a high volume application. Apply at 8 and 4 weeks prior to harvest or when infestations are expected to occur.
	Chimera 240 SC			Adama South Africa (Pty) Ltd					
	Marksman 240 SC			ICA International Chemicals					
	Chaser 240 SC			Harvest Crop Solutions	SC	240 g/L	60 ml	30	Apply Chaser 240 SC as a high volume application. Apply Chaser 240 SC at 8 and 4 weeks prior to harvest or when FCM infestations are expected to occur.
	Walker 240 SC			Villa Crop Protection (Pty) Ltd					Apply as a high volume application 8 and 4 weeks prior to harvest or when infestations are expected. <u>Resistance management:</u> DO NOT apply WALKER 240 SC more than three (3) times per season to any block of Avocados.
	CheckMate FCM-F	Dodecenyl Acetate E8 (175.2 g/l) + Dodecenyl Acetate Z8 (49.8 g/l)		Spectrum Research Services cc	AP	225.0 g/L	110 ml/ha	21 - 28	Apply as a ground application using a water volume of 20-50l per hectare. Apply iin the top 1/3 of the tree canopy. Apply at or just prior to first peak in moth emergence, or when moth captures are first detected in pheromone traps [November/December]. Application frequency [4-6 sprays]& timing will depend on infestation levels. Do not exceed 21-28 day intervals between sprays- Consult the supplier for details. A follow up spray may be necessary in the event of rain or overhead irrigation in order to maintain effective mating disruption.
	RB Splat FCM	Dodecenyl Acetate E8 (15 g) + Dodecenyl Acetate Z8 (15 g)		River Bioscience	AP	30 g/kg	1000 g per ha every 10 to 12 weeks beginning in October	0	First applications should take place before population pressure builds up from when the pest first emerges in spring. Apply as individual point sources 1.3 – 2.0 grams in weight to the top third of the mature tree or crop evenly distributed over the treated area.
	X-Mate™ FCM	Dodecenyl Acetate E8 (77%) +Dodecenyl Acetate Z8 (23%)		Insect Science	VP	0.9625/0.2875 g/kg	1 dispenser per 250 m ²	-	Use 40 – 42 X-Mate™ F.C.M. dispensers in total per hectare per production season irrespective of tree density. Use the table provided on the label as a guideline to determine your correct placement within the orchard. Always ensure 1 dispenser is placed per 250 m ² . Hang the dispensers evenly and uniformly throughout the orchard.

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False codling moth (FCM)	Delegate 250 WG	Spinetoram		CORTEVA AGRISCIENCE RSA (PTY)	WG	250 g/kg	20 g	7	Apply DELEGATE™ 250 WG as a high volume application when pest normally occurs. Apply at least 2 applications with 3-4 week intervals, starting 2 – 3 months prior to harvest or as monitored. If additional applications are required use a product with a different mode of action.
	Last Call F.C.M.	Permethrin + (E)-7-dodecenyl acetate, (E)-8-dodecenyl acetate, (Z)-8-dodecenyl acetate		Insect Science	VP	60g/kg + 4g/kg	150 g/ha (2800 - 3000 drops/ha)	-	Use false codling moth pheromone traps (1 trap / 4 ha) to monitor moth flights. It is recommended that traps are placed in the top 1/3rd of the tree. When the first false codling moth males are observed, start applying the first Last Call™ FCM treatment. Re apply at 28-day intervals. Apply Last Call F.C.M. 4 to 5 times per season for optimal control.
	Isomate® FCM	E-8 - dodecenyl acetate Z-8 - dodecenyl acetate E/Z-8 – dodecenol		AECI Limited	VP	0.24 g/kg	800 dispensers in total per ha	-	End September to beginning of October (before first FCM emergence): Hang 500 ISOMATE FCM dispensers in all relevant orchards followed by 300 Isomate FCM dispensers at the beginning of January.
	F.C.M. PheroLure	E-7-dodecenyl acetate E-8-dodecenyl acetate Z-8–dodecenyl acetate		Insect Science	VP	0.25g/kg	1 trap per 5ha	-	Use false codling moth pheromone traps (1 trap / 5 ha) to monitor moth flights. It is recommended that traps are placed in the top 1/3rd of the tree. Traps should be replaced every 28-30 Weeks.
Mealybug	Real Metarhizium 69	Metarhizium anisopliae		Real IPM South Africa (Pty) Ltd	EC	At least 1 x 10 ⁹ cfu/ml	600 ml/ha	0	Foliar spray weekly. Soil drench monthly.
Pre-plant: Nematodes	Basamid Granular	Dazomet (thiadiazine)		Mitsui & Co / Chemtura	VP	980 g/kg	Soil depth 20 - 30 cm: 50 g/m ² = 500 kg/ha.	Before planting 18	Not to be used for soil > 25% clay.
Notes:									
New / Changes highlighted in Yellow									
New Product: F.C.M. PheroLure New Product: E.G.O. PheroLure									
Product Removed: Runner 240 SC									
EXPORT STATUS COLOUR CODE									
	Accepted by all retailers in the EU & UK.								
	May not be allowed by some retailers in the EU & UK. Consult your exporter before using.								
	Prohibited by most retailers in the EU & UK. Consult your exporter before using.								



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Updated: 19 September 2025



The latest updates are available under "Technical Info" in the Members section of the SAAGA website (www.avocado.co.za)

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Disease	Trade name	Active Ingredient	Export Market (Retailer Status EU/UK)	Company	Formulation		Dosage (Per 100 L water, or as indicated)	With holding Period (Days)	Application (For high volume applications, unless otherwise indicated)
					Type	Grams per active ingredient			ALWAYS READ THE LABEL FOR DETAILED INSTRUCTIONS
Cercospora (Fruit) spot (Pseudocercospora purpurea)	Cercospora spot is a darkening of the skin epidermis with swelling of the underlying tissue later that raises the small "black" spot. As cells dry out the spot becomes sunken and cracks. Post harvest diseases: Anthracnose and fruit rot.								
	Ortiva	Azoxyastrobin		Syngenta	SC	250 g/L	30 ml + 250 ml narrow range mineral oil	28	First application when fruit are approximately pigeon-egg size. Follow up with a second ORTIVA application 28 days later. Stable over wide pH range.
	Nufarm Azoxy 250 SC			Nufarm Agriculture (Pty) Ltd					Apply only as a high-volume spray. Apply two consecutive sprays 28 days apart. NUFARM AZOXY 250 SC must be used in a programme with copper oxychloride as per label recommendations
	Obstructo 250 SC			ICA International Chemicals (Pty) Ltd					Apply only as a high volume spray. Apply two (2) consecutive sprays 28 days apart. Do not exceed two (2) applications per season. OBSTRUCTO 250 SC must be used in a programme with copper oxychloride as per label recommendations.
	Mycoblock 250 SC			Universal Crop Protection					Apply only as a high volume application and ensure complete coverage of the fruit. Do not apply more than two (2) applications per season.
	Strobin 250 SC			Universal Crop Protection					Apply as part of a Copper oxychloride control programme as per label recommendation. Commence with the application of STROBIN 250 SC when fruit are pigeon-egg size and follow up with a second STROBIN 250 SC application 4 weeks later. Continue with Copper sprays 4 weeks after the second STROBIN 250 SC application if diseases are evident. Apply only as a high-volume application and ensure complete coverage of the fruit.
	Liquicop	Copper ammonium acetate		Hygrotech Properties (Pty) Ltd	SC	316 g/L	500 ml	14	Use LIQUICOP preferably during low infestations and preferably as a last spray in a spray programme.
	Copper Count-N					Use preferably during low infestations and as a last application in a spray programme			
	Copper-Flow-Plus			Arysta Life Science		315 g/L			Use Copper-Flow-Plus preferably during low infestations and preferably as a last spray in a spray programme.

Disease	Trade name	Active Ingredient	Export Market (Retailer Status EU/UK)	Company	Formulation		Dosage (Per 100 L water, or as indicated)	With holding Period (Days)	Application (For high volume applications, unless otherwise indicated)
					Type	Grams per active ingredient			ALWAYS READ THE LABEL FOR DETAILED INSTRUCTIONS
Cercospora (Fruit) spot (Pseudocercospora purpurea)	CopMaxx	Copper hydroxide		Ag-Chem Africa		180 g/L	350 mL	14	Start applications early in November and repeat every 4 weeks. Apply 3 - 4 full cover applications during the season. Will also control Anthracnose if present at time of application.
	Copstar 120 SC			Rolfes Agri (Pty) Ltd	SC	180 g/L		14	Apply 3-4 full cover sprays. First application in early November and repeat at 4-week intervals during the season. Optimum pH 6.5 - 7.0.
	Copstar 360 SC			Rolfes Agri (Pty) Ltd		600 g/L	120 - 170ml		Start applications early in November and repeat every 4 weeks. Apply 3 – 4 full cover applications during the season. Will also control Anthracnose if present at time of application.
	Copperman			N Laboratories (Pty) Ltd		180 g/L	350 mL		Start applications early in November and repeat every 4 weeks. Apply 3 – 4 full cover applications during the season. Will also control Anthracnose if present at time of application.
	Cupra Super			Rolfes Agri (Pty) Ltd					
	CopperKill SC			ICA International Chemicals (Pty) Ltd		542 g/L	180 ml (max 12 L/ha) See label for max per/ha		Apply 3 full cover sprays. First application middle/end of November and repeat at 4-week intervals during the season. Optimum pH 6.5 - 7.0.
	CungFu 538 SC			AECI Limited					
	Royal Blue			Corite (Pty) Ltd		538 g/L			
	StopBac 538 SC			Nulandis		542 g/L	180 ml / 100 ℓ water to a maximum of 12 ℓ / ha + 25 m ℓ of a registered adjuvant		
	Hydrocop 538 SC			AECI Limited					
	Kocide 2000			Mitsui and Co. Southern Africa (Pty) Ltd	WG	538 g/kg	225 g (max 12 kg/ha)		
	Farm-Ag Hydrox			Castle Ag-Chem (Pty) Ltd	WP	770 g/kg	300 g		
	Champion Wettable Powder			Nufarm Agriculture (Pty) Ltd			250 g		
	Funguran-OH			Agri Registrations					
	Copper Oxychloride 850 WP	Copper oxychloride		Villa Crop Protection	WP				
	Demildex			Delta Chemicals	WP	850 g/kg	300 g/100L	14	Apply 4 full cover sprays. First application middle / end of November and repeat at 4-week intervals during the season. Optimum pH 6.5+.
	Coprox WP			Arysta Life Science					
	FarmAg CU Super			Castle Ag-Chem	WP				
	Farmag Copper oxychloride			Castle Ag-Chem					

Disease	Trade name	Active Ingredient	Export Market (Retailer Status EU/UK)	Company	Formulation		Dosage (Per 100 L water, or as indicated)	With holding Period (Days)	Application (For high volume applications, unless otherwise indicated)
					Type	Grams per active ingredient			ALWAYS READ THE LABEL FOR DETAILED INSTRUCTIONS
Anthracnose (<i>Colletotrichum</i> spp.)	Copper-Flow-Plus	Copper ammonium acetate		Arysta Life Science	SL	315 g/L	500 ml	14	Use preferably during low infestations and as a last application in a spray programme. Optimum pH 7.
	Copper Count-N			Hygrotech		316 g/L			
	Liquicop			Hygrotech		316 g/L			Use preferably during low infestations and as a last application in a spray programme. Optimum pH 7.
	Copper Oxychloride WP	Copper oxychloride		Villa Crop Protection	WP	850 g/kg	300 g	14	Apply 3 full cover sprays. First application middle / end of November and repeat at 4-week intervals during the season. Optimum pH 6.5+ .
	FarmAg CU Super			Castle Ag-Chem					
	Demildex			Delta Chemicals					
	Switch	Cyprodinil / Fludioxonil		Syngenta	WG	375 g/kg / 250 g/kg	800 - 950 g/ha	3	First application during early bloom and repeat on 7 - 10 day intervals if conditions remain favourable for disease development. Alternate after two applications with another fungicide with different mode of action for two applications. Do not exceed 4 applications per year.
	Tutor 500 SC	Pyrimethanil/ Fludioxonil		ICA International Chemicals (Pty) Ltd	SC	400g/L / 100g/L	150mL	180	Apply the first application at blossom. Apply in a preventative spray programme ,14–21 days intervals, depending on cultivar and disease pressure. After two (2) applications of Tutor 500 SC alternate with another fungicide with a different mode of action. DO NOT apply more than four (4) applications per season. Do not apply after fruit set.
Fruit rot (<i>Botrytis</i> spp.; <i>Alternaria</i> spp.; <i>Botryosphaeria dothidea</i>)	Ortiva	Azoxyastrobin		Syngenta	SC	250 g/L	30 ml + 250 ml narrow range mineral oil	28	First application when fruit are approximately pigeon-egg size. Follow up with a second ORTIVA application 28 days later. Stable over wide pH range.
	Nufarm Azoxy 250 SC			Nufarm Agriculture (Pty) Ltd					Apply only as a high-volume spray. Apply two consecutive sprays 28 days apart. NUFARM AZOXY 250 SC must be used in a programme with copper oxychloride as per label recommendations
	Obstructo 250 SC			ICA International Chemicals (Pty) Ltd					Apply only as a high volume spray. Apply two (2) consecutive sprays 28 days apart. Do not exceed two (2) applications per season. OBSTRUCTO 250 SC must be used in a programme with copper oxychloride as per label recommendations.
	Mycoblock 250 SC			Universal Crop Protection					Apply only as a high volume application and ensure complete coverage of the fruit. Do not apply more than two (2) applications per season.
	Strobin 250 SC			Universal Crop Protection					Apply only as a high volume application and ensure complete coverage of the fruit. Do not apply more than two (2) applications per season.

Disease	Trade name	Active Ingredient	Export Market (Retailer Status EU/UK)	Company	Formulation		Dosage (Per 100 L water, or as indicated)	With holding Period (Days)	Application (For high volume applications, unless otherwise indicated)
					Type	Grams per active ingredient			ALWAYS READ THE LABEL FOR DETAILED INSTRUCTIONS
Fruit rot (<i>Botrytis</i> spp.; <i>Alternaria</i> spp.; <i>Botryosphaeria dothidea</i>)	Switch	Cyprodinil / Fludioxonil		Syngenta	WG	375 g/kg / 250 g/kg	800 - 950 g/ha	3	First application during early bloom and repeat on 7 - 10 day intervals if conditions remain favourable for disease development. Alternate after two applications with another fungicide with different mode of action for two applications. Do not exceed 4 applications per year.
	Real Trichoderma	Trichoderma asperellum, strain TRC900		Real IPM	EC	1x10 ⁹ cfu/ml	200-400 ml	0	Every 7 days
Sooty blotch	Characterised by sooty blotches on the branches, stems, leaf veins and fruit.								
	Copper Count-N	Copper ammonium acetate		Hygrotech Properties (Pty) Ltd	SL	316 g/L	500 ml	14	Use preferably during low infestations and as a last application in a spray programme. Optimum pH 7.
	Liquicop			Hygrotech Properties (Pty) Ltd					
	Copper-Flow-Plus			Arysta Life Science		315 g/L			
Root & trunk rot	Stunted growth of plants. Feeder roots turn black and rot. Leaves are pale green, wilted and drop readily. Shoots die back from the tip and the tree is eventually reduced to a bare framework of dying branches and wilted, yellow leaves.								
	Aliette WG	Fosetyl-Al		Bayer	WG	800 g/kg	375 g	14	Corrective treatment (orchards): Apply as a foliar spray every 4 weeks throughout summer to new growth flush. Maintenance & preventative treatment: Apply as a foliar spray every 6 weeks throughout summer. Nursery trees: Apply every 6 weeks as a soil drench or foliar spray. Optimum pH 6.5 - 7.5.
	Alyfos 800 WDG			Villa Crop Protection (Pty) Ltd	WDG			10	
	Kickback 5 GR	Metalaxyl		Bitrad Consulting (Pty) Ltd	GR	50 g/kg	40 g/m ² tree drip area	30	Spread granules evenly on soil within the drip area of the tree. Irrigate. Apply just prior to onset of rainy season and repeat 16-20 weeks later. Limit initial applications to two years.
	Ridomil Gold 480 SL	Metalaxyl-M (mefenoxam)		Syngenta		480 g/L	2.1 ml / 200 ml water/m ²	30	Apply evenly as a soil drench within the drip area of the tree. Light irrigation. Applications should be made twice per season. The first application should coincide with new growth, usually shortly before the onset of the rainy season, and the second 16 - 20 weeks later.

Trade name/s	Active Ingredient	Export Market (Retailer Status EU/UK)	Company	Formulation		Dosage (Per ha, or as indicated)	Time of application	With holding Period (Days)	Application (For high volume applications, unless otherwise indicated)
				Type	Grams per active ingredient				ALWAYS READ THE LABEL FOR DETAILED INSTRUCTIONS
Aurora 40WG	Carfentrazone-ethyl		FMC Chemicals	WG	400 g/kg	25 g + 3 L/ha glypho-sate	Post Emergence	-	Annual broad-leaved weeds. Only in tank mix with glyphosate (3 L/ha).
Grainwatch 400 WDG			Universal Crop Protection	WDG		25 g/ha PLUS 1.5 kg / ha Slash 710 SG PLUS 1.0 l / 100 l water (1.0 % V/V) Class Act NG®		120	Shield young vines/trees/bushes with immature bark during application or use a covered sprayer. Apply as a directed interrow spray for the control of difficult to control weeds when actively growing (ideal stage when weeds are 10 to 20 cm in height).
Torus 240 EW			Meridian Agrochemical Company	EW	240 g/L	42 ml / ha TORUS + 5 l NIRVANA			Orchards: Do not apply after commencement of flowering.
Focus Ultra	Cycloxydim		BASF	EC	100 g/L	0.8 - 4 L	Post Emergence	40	Annual and perennial grasses. Dosage depends on grass species and their growth stage.
Basamid Granular	Dazomet (thiadiazine)		Mitsui & Co / Chemtura	VP	980 g/kg	Soil depth 20 - 30 cm: 50 g/m ² = 500 kg/ha.	Pre-Plant	Safety test	Not to be used for soil > 25% clay.
Dazomet 98 GR			Sharda International Africa (PTY) LTD	GR					Pre-planting seedbed fumigation for the control of various weeds, soil fungi and nematodes. For a soil depth of up to 20cm. If weed control is the main object, use 40 g/m ² (= 400 kg/ha.* For Very heavy infestations of Nutsedge use 50 g/m ² . For a soil depth of up to 20 cm. If the main problems are soil fungi or nematodes, use 50 g/m ² = 500 kg/ha For a soil depth of up to 30 cm, use 50 g/m ² under all conditions
Parody 200 SL	Diquat dibromide / Paraquat dichloride (Restricted chemical use; PCO required)		Arysta Life Science	SL	80 / 120 g/L	1.25 - 5 L	Post Emergence	-	Annual grasses and broad-leaved weeds. Use the higher dosages for spraying dense weed growth, and direct spray on the weeds below the trees. Avoid spray contact with the green parts of trees.
Preeglone			Syngenta						

Trade name/s	Active Ingredient	Export Market (Retailer Status EU/UK)	Company	Formulation		Dosage (Per ha, or as indicated)	Time of application	With holding Period (Days)	Application (For high volume applications, unless otherwise indicated)			
				Type	Grams per active ingredient				ALWAYS READ THE LABEL FOR DETAILED INSTRUCTIONS			
Dynamo 800 SC	Diuron		Sharda International Africa cc	SC	800 g/L	4 L/ha	Pre-Emergence	-	Apply onto clean cultivated moist soil during the growing season. Repeat application after 2 to 3 months, if required.			
Diuron 800 SC (L6236)			Arysta LifeScience									
Diuron 800 SC (L7042)			Volcano Agrosience									
FarmAg Diuron 800 SC			Cedar Fall Properties 130									
Diurex 800 SC			Adama									
Diuron 800 WG			Arysta Life Science	WG	800 g/kg	4 kg	Pre Emergence	-	Mainly annual broad-leaved weeds in established orchards. Apply onto clean, moist, cultivated soil during the growing season. Repeat the application after 2 - 3 months if required.			
Karmex DF			Arysta Life Science	WDG	800 g/kg	4 kg						
Extend 800 WDG			Universal Crop Protection									
Develop 800 WDG			Villa Crop Protection									
Farmex			Arysta LifeScience									
FarmAg Diuron 800 WG			SafeGuard Crop Protection	WG	900 g/kg	3.6 kg /ha	Pre Emergence	-	Apply onto clean cultivated moist soil during the growing season. Repeat application after 2 – 3 months, if required.			
Nufarm Diuron 900 WG			Nufarm Agriculture									
Coller 200 SL			Kwelenga South Africa						Commence spraying during late spring when soil moisture is sufficient and weeds are actively growing. Repeat spray 7 - 8 weeks later if necessary.			
Blative 200 SL			Enviro Bio-Chem (Pty) Ltd									
Knersus 200 SL			Nulandis	SL	200 g/L	3 - 7.5 L	Post Emergence	-	Annual and perennial grasses, broad-leaved weeds, yellow and purple nutsedge. Prevent spray contact with leaves, active buds and fruit. Dosage depends on the size of the weeds.			
Glufos 200 SL			Sharda International Africa									
Glufosinex			Adama	SC								

Trade name/s	Active Ingredient	Export Market (Retailer Status EU/UK)	Company	Formulation		Dosage (Per ha, or as indicated)	Time of application	With holding Period (Days)	Application (For high volume applications, unless otherwise indicated)
				Type	Grams per active ingredient				ALWAYS READ THE LABEL FOR DETAILED INSTRUCTIONS
Various	Glyphosate (various salts)		Various	Various	Various	see relevant labels	Post Emergence	-	Annual and perennial weeds. Prevent spray contact with leaves, green stems and fruit.
Crown 750 WDG	Halosulfuron		Universal Crop Protection	WG	750 g/kg	50 g	Post Emergence	-	Yellow and purple nutsedge. Apply to actively growing nutsedge under moist conditions before flowering.
Halo 750 WDG			Villa Crop Protection						
Servian			Syngenta						
WeedO 750 WG	Halosulfuron-methyl		ICA International Chemicals (Pty) Ltd						
Various	Paraquat (Restricted chemical use; PCO required)		Various	Various	Various	see relevant labels	Post Emergence	-	Annual grasses and broad leaved weeds. Use the higher dosages for spraying dense weed growth, and direct spray on the weeds below the trees. Avoid spray contact with the green parts of trees.
Agil 100 EC	Propaquizafop		Adama	EC	100g/L	0.5 - 3.5 L	Post Emergence	40	Annual grasses. Dosage depends on grass species and their growth stage.
Sorgomil Gold 600 SC	S-metolachlor / Terbutylazine		Syngenta	SC	102.8 g/L / 497.2 g/L	2.8-4.2 L + 4-6L glypho-sate / ha	Post Emergence	-	Annual broad-leaved weeds and certain grasses. Dosages depends on the specific rainfall area, growth stages of the trees, clay content of the soil and weed species to be controlled.
Terbutylazine 900 WG	Terbutylazine		Arysta LifeScience	WG	900 g/kg	1.5 - 2.2 kg	Post Emergence	-	For post-emergence control of broadleaf weeds and grasses add 2 – 4 kg/ha Bounty 500 WSG or 2,5 – 5,5 l/ha Bounty SL or 3 – 4 l/ha paraquat SL. Allow 14 days between pruning and application. The lower rate should be used on young 1 – 2 year old trees grown on sandy soils (<10 % clay).
Monelo 90 WDG			Meridian Agrochemical Company	WDG	900 g/kg	1.5 - 2.2 kg	Pre Emergence	-	Annual broad-leaved weeds. Do not apply within one year of transplanting
Notes:									
New / Changes highlighted in Yellow									
Product removed: Product removed:									
EXPORT STATUS COLOUR CODE									
	Accepted by all retailers in the EU & UK.								
	May not be allowed by some retailers in the EU & UK. Consult your exporter before using.								
	Prohibited by most retailers in the EU & UK. Consult your exporter before using.								



Registered Plant Growth Regulators for use on Avocados in South Africa

Updated: 19 September 2025



The latest updates are available under "Technical Info" in the Members section of the SAAGA website (www.avocado.co.za)

Disclaimer: This document provides a list of products registered under Act 36 of 1947 for Post-harvest use on South African avocados. The purpose of this publication is to inform growers, processors, and marketers. This information is believed to be accurate as at the date of publishing the document. The material has been drawn from several sources and is published in good faith. Although Subtrop has exercised due care and skill in the preparation and compilation of the information and data set out in this document, it does not warrant its accuracy, completeness, currency or suitability for any purpose, or the efficacy of any of the products listed. To the maximum extent permitted by law, Subtrop disclaims all liability, including liability for any negligence, for any loss, damage, injury, cost or expense incurred by any person as a result of accessing, using or relying upon any of the information or data set out in this document. Please follow the manufacturer's recommendations with regards to application, handling, and dosage of every product.

Growth regulating activity	Trade name	Active Ingredient	Export Market (Retailer Status EU/UK)	Company	Formulation		Dosage (Per 100 L water, or as indicated)	Withholding Period (Days)	Application (For high volume applications, unless otherwise indicated)
					Type	Grams pure active ingredient			ALWAYS READ THE LABEL FOR DETAILED INSTRUCTIONS
Enhancement and improvement of fruit shape and size	Sunny 50 SC	uniconazole		Philagro SA	SC	50 g/L	1,0 - 2,0 L SUNNY* 50 SC + 2,0 L UP 50 or 0,05 L anionic wetting agent/ 100 L spray mixture	84	In most fully grown orchards use 1 200 L spray mixture/ha. Reduce proportionally for smaller trees.
	UniQ			Enviro / RT Chemicals			1.0 - 2.0 L + foliar feed (N+P) or 50ml anionic wetter.	70	Fuerte, Hass and Pinkerton only. Apply at flowering. Only use on healthy trees which are not under stress.
Vegetative growth control & reduced fruit drop	Cultar	paclobutrazol		Syngenta	SC	250 g/L	0.8 - 1.6 ml / m ² tree canopy @ 250 - 500 ml water / tree (Don't exceed 0.8 ml / m ² tree canopy per application for Pinkerton)	-	Initial treatment: Apply to irrigated orchards only. Applications in spring and early summer will only affect the growth flushes following applications.
									Follow-up treatments should be applied at yearly intervals after initial application. Apply at early to mid-blossom (panicle enlargement) or at an early vegetative flush stage (ideally apply to new vegetative shoots 2 - 4 cm long) directing the foliar spray at the new growth shoots.
	Avocet			UCP					Initial treatment. Apply to trees less than 2.5 m high as a soil drench around the trunk of the tree. Rain or irrigation is needed after treatment.
									Follow Up Treatment. Apply at yearly intervals, using the lower dosage for less vigorous varieties.



Products registered for Post-harvest use on Avocados in South Africa

Updated: 19 September 2025



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Treatment	Trade name	Active Ingredient	Export Market (Retailer Status EU/UK)	Company	Formulation		Dosage (Per 100 L water, or as indicated)	Application (For high volume applications, unless otherwise indicated)
					Type	Grams per active ingredient		ALWAYS READ THE LABEL FOR DETAILED INSTRUCTIONS
Post-harvest decay	Postharvest control of anthracnose, stem-end rot and fruit rot. Treat fruit immediately after harvest.							
	HyperCide	Peracetic Acid + Hydrogen Peroxide		ICA International Chemicals	SC	145 g/L 228 g/L	Dip bath: 100 ml	Dip (up to 3 – minutes) or drench fruit.
	Chronos 450 SC	Prochloraz zinc complex		Adama	SC	530 g/L	Dip bath: 180 ml + 0.2% HCL	Dip fruit for 30 seconds into the acidified fungicide suspension. Let the fruit dry off before storing.
	Chronos 45 EC	Prochloraz (Imidazole)		Adama	EC	450 g/L	Spray on: 1 100 ml (5000 ppm a.i.)	Apply as a low volume application using approximately 1.6 L spray emulsion per ton of fruit. Apply product before wax is applied.
	ICA-Prochloraz 450 EC			ICA International Chemicals				
	Tecto	Thiabendazole (Dip/Drench Treatment)		Syngenta	SC	500 g/L	270 ml + 500 ml light mineral oil	Apply to the fruit immediately after harvesting. Ensure thorough drying of treated fruit, before packing and storing. Stable in acidic medium. Dip treatment: Add 500 ml light mineral oil to the suspension and immerse fruit for 20 seconds.
	Thiazole 500 SC			Universal Crop Protection				
	ICA - Thiabendazole 500 SC			ICA International Chemicals				
	Tecto	Thiabendazole (Wax Treatment)		Syngenta	SC	500 g/L	70 ml + 25 L water emulsion wax	Apply to the fruit immediately after harvesting. Ensure thorough drying of treated fruit, before packing and storing. Stable in acidic medium. Wax treatment: Apply in the water emulsion wax. Ensure thorough coverage with the wax.
	Thiazole 500 SC			Villa Crop Protection				
	Decco TBZ 500 SC			Citrashine				
	ICA - Thiabendazole 500 SC			ICA International Chemicals				

Treatment	Trade name	Active Ingredient	Export Market (Retailer Status EU/UK)	Company	Formulation		Dosage (Per 100 L water, or as indicated)	Application (For high volume applications, unless otherwise indicated)
					Type	Grams per active ingredient		ALWAYS READ THE LABEL FOR DETAILED INSTRUCTIONS
Post-harvest decay	ICA - Thiabendazole 500 SC	Thiabendazole (Low volume Spray-on Treatment)		ICA International Chemicals	SC	500 g/L	400-800 mL	Spray-on application: Mix ICA Thiabendazole 500 SC and Teacher 230 SC (if used) in the appropriate volume of water. Apply the mixture at a pressure of 1 to 3 bar. Stir the mixture constantly to prevent settling. Ensure that the entire fruit surface is thoroughly covered. Use the higher dosage under conditions of high disease pressure. Residues will conform to South African MRL. Dosages of 150 ml Teacher 230 SC may lead to residues close to 1.5 mg/kg fludioxonil, depending on the packing line design, fruit size and cultivar treated.
	Target 200 WDG	Fludioxonil		Villa Crop Protection	WDG	200 g/kg	300 g	Dip/drench treatment: Fruit should be thoroughly rinsed, and surface sanitised with a registered disinfectant before treatment with TARGET 200 WDG in accordance with standard packhouse procedures. DO NOT mix fungicides into the chlorine treated water. For dip treatments, ensure contact time for a minimum of 30 seconds and a maximum of 60 seconds. Fruit should be allowed to dry before packaging.
	Teacher 230 SC			ICA International Chemicals	SC	230 g/L	150 mL	Dip/drench treatment: Treat fruit for at least 30 seconds. Can be applied in a mixture with ICA Thiabendazole 500 SC as per registered label.
							150 - 300 ml	Spray-on application: Mix Teacher 230 SC and ICA Thiabendazole 500 SC (if used) in the appropriate volume of water. Apply the mixture at a pressure of 1 to 3 bar. Stir the mixture constantly to prevent settling. Ensure that the entire fruit surface is thoroughly covered. Use the higher dosage under conditions of high disease pressure. Residues will conform to South African MRL. Dosages of 150 ml Teacher 230 SC may lead to residues close to 1.5 mg/kg fludioxonil, depending on the packing line design, fruit size and cultivar treated.
	Sporekill™ NOT recommended for EXPORT fruit	Didecyl dimethyl ammonium chloride (Quaternary ammonium compound)		ICA International Chemicals	SC	120 g/L	100 - 150 ml	Dip fruit for 3 - 5 minutes. Use higher rate under conditions conducive to higher disease pressure. Keep concentration at recommended rate by using "Sporekill Test Kit".
	Spore-Attack NOT recommended for EXPORT fruit							Dip fruit for 3-5 minutes. Use higher rate under conditions conducive to high disease pressure. Keep spore-ATTACK concentration as recommended rate by using “spore-ATTACK Test Kit”.

Treatment	Trade name	Active Ingredient	Export Market (Retailer Status EU/UK)	Company	Formulation		Dosage (Per 100 L water, or as indicated)	Application (For high volume applications, unless otherwise indicated)
					Type	Grams per active ingredient		ALWAYS READ THE LABEL FOR DETAILED INSTRUCTIONS
Packhouse treatment	SmartFresh SM is a horticultural post-harvest ripening retardant for use on all varieties of avocados. SmartFresh SM works by inhibiting the cellular receptor binding of ethylene, both from internal and external							
	SmartFresh TM	1-Methylcyclopropene (1-MCP)		Rohm & Haas	TB	3.3% w/w 1-MCP	300 - 500 ppb as per label instructions	SmartFresh SM should be applied as soon as possible but not later than 3 days after harvest. Treatment should be applied at the SAAGA/PPECB recommended storage temperature for the variety at the specific maturity. SmartFresh SM application can be done on fruits already waxed and packed.
Notes: New / Changes highlighted in Yellow								
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Markets SAAGA can access - *SAAGA Exporters have full market access to the EU and can access several other markets ("permit markets") on the basis of an import permit and phytosanitary certificate :*

Permit markets (access via a phytosanitary certificate and import permit):

Country/Region:	MRL List:
European Union	EU MRL
United Kingdom	UK MRL
Botswana	Codex MRL
Hong Kong, China	Hong Kong MRL
Kuwait	Codex MRL
Lebanon	Codex MRL
Morocco	Codex MRL
Oman	Codex MRL
Qatar	Codex MRL
Russia	Russian MRL (Codex)
Saudi Arabia	Saudi Arabia MRL
Saint Helena	UK MRL
Singapore	Codex MRL
Togo	Codex MRL
Turkey	Codex MRL
Ukraine	Codex MRL
United Arab Emirates	Codex MRL

Special markets (access via one or more specific mitigation measures):

Country/Region:	MRL List:
India	Codex MRL
Japan	Japan MRL
China	China MRL

**If a country does not have a MRL it will default to Codex MRL. If Codex does not have an MRL it will default to South Africa's MRL*

Updated: September 2025

SA Subtropical Growers' Association



Disclaimer: This publication provides a list of registered chemicals and withholding periods for pesticides & plant growth regulators registered under Act 36 of 1947 for use on South African avocados. Listed in the tables below are MRLs & PHIs for South Africa and countries/regions to which South Africa exports avocados. The purpose of this publication is to inform growers, processors and marketers of the export requirements with regards to pesticide residues. It is important to note that South African MRLs & PHIs do not apply to other countries and even though a pesticide may be registered in South Africa, this may not be the case in the receiving, overseas country. Organisations marketing to overseas countries should be aware that the information provided below represents the official standards, but not necessarily the marketing requirements. Marketers should refer to their contractual agreements concerning agreed residue limits. The information provided in the tables is believed to be accurate as at the date of publishing the document. The material has been drawn from a number of sources and is published in good faith. Although Subtrop has exercised due care and skill in the preparation and compilation of the information and data set out in this publication, it does not warrant its accuracy, completeness, currency or suitability for any purpose. To the maximum extent permitted by law, Subtrop disclaims all liability, including liability for any negligence, for any loss, damage, injury, cost or expense incurred by any person as a result of accessing, using or relying upon any of the information or data set out in this document.

[illegible]

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Actives Registered for use on Avocados in South Africa	SA MRL	"Export default MRL "	EU MRL	UK MRL	CODEX MRL	JAPAN MRL	INDIA MRL	CHINA MRL	SAUDI ARABIA MRL	HONG KONG MRL	Withholding period / PHI (pre-harvest interval) (SA Label)	Export Market (Retailer Status)	Remarks - regarding the "Export default MRL" and therefore also the PHI
	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(Days)	Check colour codes below	
Spinetoram	0.05	0.02	0.02	0.05	0.30	0.30	-	0,3*	0.30	-	7		
Spinosad	0.01	0.02	0.02	0.02	-	0.30	-	-	-	0.30	1		
Spirotetramat	0.70	0.40	0.40	0.70	0.40	0.60	-	0,4*	0.40	-	14 / 50		
Sulphur	50	50	-	-	-	-	-	-	-	-	-		
Terbutylazine	-	0.01	0.01	0.05	-	-	-	-	-	-	-		-
Thaumatotibia (Cryptophlebia) leucotreta	-	0.01	0.01	0.01	-	-	-	-	-	-	-		
Thiabendazole	10*	15.00	15*	20.00	15.00	3.00	-	15.00	15.00	15.00	PHT		*Proposed MRL
Tocovital	-	-	-	-	-	-	-	-	-	-	-		
Trimethylamine hydrochloride	-	-	-	-	-	-	-	-	-	-	-		
Uniconazole	-	0.01	0.01	0.01	-	0.50	-	-	-	-	84		-

Notes:
New / Changes highlighted in Yellow / Red writing

DEFINITIONS

MRL = Maximum Residue Level (Measured in mg/kg = ppm)
PHI = Pre Harvest Interval (Time from spray/application till Harvest - measured in days)
"Export default MRL" - Random fruit samples drawn by PPECB will be tested by the DAFF laboratory and must be below these "default" Residue levels for export!
* = **LOD** = Limit of detection or Lowest level of detection - by analytical equipment
PHT = Pack House Treatment / Post Harvest Treatment (application on harvested commodity)
"- " = no value has been set. Refer to Codex MRL. If no Codex MRL, apply Default MRL of 0.01 mg/kg.

EXPORT STATUS COLOUR CODE

	Accepted by all retailers in the EU & UK.
	May not be allowed by some retailers in the EU & UK. Consult your exporter before using.
	Prohibited by most retailers in the EU & UK. Consult your exporter before using.