Environment and Sustainability

Approved pesticides

Fact sheet

transport.nsw.gov.au

May 2023



Background

Transport for NSW (Transport) follows an integrated pest management program which aims to use best practice and cost-effective techniques with minimal impacts on the environment.

Transport selects from a variety of control techniques depending on the target species and receiving environment.

Pesticides are a control technique used in the Transport integrated pest management program for managing pests and vegetation in transport corridors, on Transport lands and in Transport facilities in conjunction with physical, mechanical and biological control techniques.

Definition

For the purposes of this list, 'pesticides' is a generic term used to include herbicides, insecticides, termiticides, fungicides and pesticides.

Transport approved pesticides

Tables 1 and 2 list details of pesticide active ingredients that are approved by Transport for use by its staff and contractors where the maintenance of the land or structure to which the pesticides are to be applied is the responsibility of Transport.

These pesticides are to be applied in accordance with label conditions and any notes for application as detailed in this list or an associated Work Instruction.

Contact and further information



Internal: Environment & Sustainability Management Framework

All users: environmentandsustainability@transport.nsw.gov.au



OFFICIAL EMF-BP-FS-0006



Table 1: Approved herbicides

Herbicide active ingredient and MOA ¹ Group	Example product name	Main weeds controlled	Persistence in the soil (half-life)	Poisons Schedule	Mobility in soil	Potential impact on aquatic species	Off target potential
Glyphosate (various salts) Group M	Roundup®; Macspred Glymac Bi Dri 800® Weed master duo® Roundup Biactive® (close-to-waters application)	Grasses and broadleaf plants	25-47 days. Herbicide binds tightly to clay particles, so no residual activity	S5	Low	Low to high-low to aquatic species as formulations vary. Some formulations can be used near waterways, refer to label instructions	Low but spray drift can cause damage to trees, ornamentals and crops
Amitrole Group Q	Amitrole® T	Select broadleaf plants and grasses	About 14 days	S5	Moderate	Low	Low
Cyclohexanedione (Clethodim) Group A	Conquest Nitro 360®	Grass weeds, particularly glyphosate-resistant Feather Top Rhodes Grass	3 days	S5	Low	Slightly toxic to fish and aquatic invertebrate species	Moderate - has a withholding period for planting of crops and not suitable for areas where stock graze
Pelargonic acid (also known as Nonanoic acid)	Slasher® organic weedkiller	Annual and small perennial weeds and grasses, algae, lichen, liverworts and moss	1 day	S5	Low	Low	Low
Amitrole Group Q and Paraquat Group L	Alliance®	Select monocots and broadleaf	14 days	S7	Moderate	Low	Low-has the same precautions as Paraquat and rain-fast in one hour
Bromoxynil Group C	Bromicide 200	Broadleaf seedlings	7 days	S6	Low	High	Low
Carfentrazone-ethyl Group G	Hammer Carpenter 240EC Spotlight Plus (when added to a glyphosate or paraquat product)	Annual broadleaf plants	Less than 2 days	S5	Low-rapidly degraded and minimal potential to leach	High to algae and aquatic plants, but rapidly degraded in water	Low-spray drift will result in bleaching of leaves
Paraquat and diquat Group L	Spray.Seed®	Most broadleaf seedlings	1000 days. Tightly bound to clay particles so inactive in soil.	S7	Immobile	Moderate to high	Low
Dichlorprop	Lantana 600®	Lantana, morning glory and some other	About 10 days	S6	Low to Moderate	Moderate to high	Moderate to high from spray drift - kurrajongs and

¹ MOA means Mode of Action for each identified herbicide. For more information on Group MOA visit <u>Crop Science Australia</u>

Herbicide active ingredient and MOA ¹ Group	Example product name	Main weeds controlled	Persistence in the soil (half-life)	Poisons Schedule	Mobility in soil	Potential impact on aquatic species	Off target potential
		broadleaf plants					casuarinas are particularly susceptible
Fluazifop-p-butyl Group A	AgMerch Fluazifop 212 Fusilade® Forte	Annual and perennial grasses in roadside plantings	About 15 days	S6	Low	Low to moderate - do not contaminate waterways	Low
Fluroxypyr Group I	Starane®	Annual and perennial broadleaf plants	11-38 days	S5	Low	Low for fish but moderate for algae	Moderate to high from spray drift
Glufosinate Group N	Basta®	Many annual and some perennial plants	Less than 7 days	S5	High-rapid degradation limits movement.	Low	Low-spray drift will result in some bleaching of leaves
MCPA (various salts) Group I	MCPA	Broadleaf plants	Less than 7 days	S6	High-rapid degradation limits movement	Low	Moderate to high from spray drift
Paraquat Group L	Gramoxone®	Most seedlings in contact. Poorly translocated	>1000 days. Tightly bound to clay particles so inactive in soil	S7	Immobile	High to moderate	Low
Triclopyr / Butoxy Group I	Garlon® Grazon® DS	Broadleaf plants	30-90 days	S6	Moderate	Low	High from spray drift
Trofloxysulfurion Group B	Monument®	Sedges and broadleaf	45-80 days	S5	High	High to algae	Moderate
Trinexapac-ethyl (PGR)	Primo® Maxx	Grasses	3-6 days	S5	Moderate	Low	Low
2,4-D Group I	Amicide® 700	Broadleaf	10 days	S6	Moderate - rapid breakdown	Low	Moderate to high from spray drift - visual symptoms and smell
Haloxyfop	Verdict® 520	Grasses	80-90 days	S6	Moderate	High to aquatic organisms	High from spray drift
Bromacil Group C	Uragan®	Annual grass and broadleaf	60 days	S5	Moderate to high	Moderate	Moderate
Flupropanate Group J	Taskforce® Tussock®	Needle grasses, Coolatai grass	> 60 days.	S6	Immobile	Low	Low
Simazine Group C	Gesatop®	Annual grass and broadleaf	70-110 days	S5	Low	Moderate - slightly toxic to fish but highly toxic to algae and aquatic macrophytes.	Low
Terbacil plus Sulfometuron	Trimac®	Annual grass and broadleaf	120 days	S5	Moderate to high	Low	Moderate

Herbicide active ingredient and MOA ¹ Group	Example product name	Main weeds controlled	Persistence in the soil (half-life)	Poisons Schedule	Mobility in soil	Potential impact on aquatic species	Off target potential
Groups C and B							
Aminopyralid Group I	Hotshot™ (and fluroxypyr) Grazon™ Xtra (plus triclopyr and picloram)	Select broadleaf plants	25-36 days	S6	Moderate	Moderate	High-do not apply near trees or where roots may extend.
2,2-DPA Group J	Dalapon®	Annual and perennial grasses, monocots		S5	Low	Low	Low to moderate-most natives tolerant to 10 kg/hectare
Clopyralid Group I	Lontrel®	Annual and perennial broadleaf plants	About 40 days	S5	Moderate	Moderate	Moderate to high from spray drift
Imazapyr Group B	Arsenal®	Select grass and broadleaf plants	25-140 days but longer in acidic soils	S5	Moderate	Low	High-do not apply near trees or areas where their roots extend
Metsulfuron-methyl Group B	Ally® / Brushoff®; Macspred Metmac 600 WG®	Broadleaf plants	10-45 days, with a half-life longer in alkaline soils	Not scheduled	Moderate - higher in alkaline soils	Low	Moderate. Select native trees, like stringybarks, are susceptible.
Picloram Group I	Vigilant; Tordon™; Tordon Double Strength (with Triclopyr); Grazon Extra (with Triclopyr and Aminopyralid)	Perennial broadleaf plants	20-300 days but longer in cooler soils	S6	High - highly leachable	Moderate	High-do not apply near trees or where their roots extend
Sulfometuron-methyl Group B	Oust® Enviromac®	Grass and broadleaf plants	20-28 days but longer in alkaline soils	S5	Moderate - higher in alkaline soils	Slight	Moderate - higher in alkaline soils
Dicamba Group I	Dicamba 500®	Broadleaf plants	30-60 days	S6	Low	Low	Moderate - do not apply where spray drift may occur
Glyphosate / Metsulfuron Methyl Group M / Group B	Trounce®	Broadleaf plants (can harm grasses)	7-30 days	S5	Moderate - higher in alkaline soils	Low	Moderate - non-target crops and some native trees, like stringybarks, are susceptible
Oryzalin (Group D)	Farmoz Cameo 500 Flowable Herbicide	Annual grasses and broadleaf plants	20-128 days	None allocated	Moderate - higher in alkaline soils	Low	

Table 2: Approved pesticides

Main active ingredient Group MOA ²	Example product name	Main pests controlled	Example manufacturer	Poisons Schedu le	Mobility in soil	Potential impact on aquatic species	Off target potential
Insecticides							
Surface insect sprays	Various	Crawling insects, ants, spiders, cockroaches	Various (domestic products available)	N/A	N/A	Low	Low
Flying insect sprays	Various	Flying insects	Various (domestic products available)	N/A	N/A	Low	Low
Flea and insect bombs	Various	Flea and insect bomb (spiders)	Various	N/A	N/A	Moderate - do not use if fish tanks present	High. Will kill all insects in an enclosed space.
Domestic ant bait stations and ant sand products	Various	Ants	Various	N/A	N/A	High for Ant Sand. Low for bait stations	Low
Domestic cockroach bait stations	Various	Cockroaches	Various	N/A	N/A	Low	Low
Deltamethrin / D- Tetramethrin Group 3A	Crackdown® Residual Insecticide	Insects	Bayer	S5	Moderate - product mobile in soils	High - very toxic to aquatic life	Moderate. Can cause harm to beneficial insects, including pollinators.
Deltamethrin Group 3A	Cislin® Residual Insecticide	Insects	Bayer	S5	N/A	High - very toxic to aquatic life	Moderate. Can cause harm to beneficial insects, including pollinators.
Permethrin Group 3A	Coopex® insecticidal dusting powder; Dragnet® Insecticidal Dust EnviroMax® Permethrin	Insects	Bayer FMC EnviroMax	S6	N/A	High - very toxic to aquatic life	Moderate. Can cause harm to beneficial insects, including pollinators.
Hydramethylnon Group 4A	Maxforce® cockroach gel	Cockroaches	Bayer		Moderately mobile in soils	High - very toxic to aquatic life	Low
Beta-cyfluthrin Group 3A	Tempo® Insecticide	Insects	Bayer		N/A	High - very toxic to aquatic life	Moderate. Can cause harm to beneficial insects, including pollinators.
Indoxacarb Group 22A	Advion® Gel EnviroMax Indoxacarb Cockroach Gel Bait	Cockroaches and ants	DuPont EnviroMax	S5	Low - lightly mobile in soils	High - very toxic to aquatic life	High. Can be harmful to animals.

² Group MOA – Insecticides Mode of Action group for insecticides. For more information visit <u>Insecticide Resistance Action Committee</u>

Main active ingredient Group MOA ²	Example product name	Main pests controlled	Example manufacturer	Poisons Schedu le	Mobility in soil	Potential impact on aquatic species	Off target potential
Bifenthrin Group 3A	Biflex® Aquamax insecticide Enviromax® Bifenthrin 100EC	Termites and insects	FMC EnviroMax Technologies P/L	S6	Low -slightly mobile in soils	High - very toxic to aquatic life	Moderate. Can be harmful to beneficial insects, including pollinators.
Fipronil and others Group 2B	Termidor® Residual Termiticide EnviroMax® Fipronil 100SC	Termites and crawling insects	Bayer EnviroMax Technologies P/L	S6	Low - slightly mobile in soils	High - very toxic to aquatic life	Moderate. Can be harmful to beneficial insects, including pollinators.
Imidacloprid Group 4A	Premise® 200 SC Termiticide	Termites	Bayer	N/A	Moderate - moderately mobile in soils	High - very toxic to aquatic life	Moderate. Can be harmful to beneficial insects, including pollinators.
Hexaflumuron	Sentricon® IG Termite Rod	Termites	Dow AgroSciences	S5	Low	Moderately to highly toxic to aquatic life	Low
Chlorpyrifos Group 1B	Outplay Outperform®	Termites	Dow AgroSciences Rentokil	S5	Moderate	High - very toxic to aquatic life	High. Highly toxic to birds, bees and can cause harm to pets and animals. Can harm plants if directly sprayed on foliage.
Chlorfluazuron	Requiem® Termite Bait Nemesis® Termite Bait Abide Termite Bait	Termites	Ensystex TPC Termseal Aust P/L	Not scheduled	Low	High - very toxic to aquatic life	Low. Non-toxic to birds, earthworms and soil microorganisms.
Chlorantraniliprole	Altriset® Termiticide	Termites	DuPont	Not scheduled	Moderate	Moderate to High - slightly toxic to fish; very toxic to aquatic invertebrates; non- toxic to algae	No details listed.
Cypermethrin imiprothrin	Aerothor Crawling insect spray	Ensystex	Crawling insect spray		Low	High - very toxic to aquatic life	No details listed.

Main active ingredient Group MOA ²	Example product name	Main pests controlled	Example manufacturer	Poisons Schedu le	Mobility in soil	Potential impact on aquatic species	Off target potential	
Rodenticides								
Bromadiolone	Bromakil (various rodenticide baits)	Rats and mice	Rentokil		Low	High - very toxic to aquatic life	Very high. Very toxic to birds and animals, including domestic pets, native rats, possums and other marsupials.	
Pindone	Rentokil Pin-25 Rabbit bait rodenticide RABBAIT® Pindone Oat Bait	Rabbits	Rentokil		No information available	High - very toxic to aquatic life however, breaks down quickly	Very high. Very toxic to birds and animals, including predatory animals that may eat treated rabbits.	
Brodifacoum	Ditrac® All-Weather Blox Rodenticide; Talon® Rodenticide Wax Blocks; Tomcat11®	Rodents	PCT International Syngenta		No information available	High - very toxic to aquatic life	Very high. Very toxic to birds and animals, including predatory animals that may eat treated rodents.	
Difethialone	Rodilon®	Rodents	Bayer		No information available	High - very toxic to aquatic life	Very high. Very toxic to animals, including pigs, cats, dogs, native wildlife, birds and poultry.	
Fungicides				·				
Boron/fluorine	Preschem Polesaver Rods and Bioguard	Fungi / wood rot Termites	Preschem P/L		No information available	No information available	No information available.	
Boron/fluorine	Bioguard Bandage	Wood rot	Preschem P/L		No information available	No information available	No information available.	
Boron	Boracol 200RH	Algae, fungi, insects	Koppers Performance Chemicals Australia		No information available	No information available	Low. Can be harmful to boron- sensitive plants. No other information available.	
Disodium octaborate tetrahydrate (Borate)	Various	Fungi, Insects, Termites	Various		No information available	High - toxic to aquatic life	High. Toxic to animals, including wildlife. May be phytotoxic to plants.	
Petroleum oil / cooking oil	White Oil	Scale, aphids, mealybugs, mites, citrus leafminer	Bunnings, Yates, various	N/A	No information available	Low - avoid contaminating waterways	No information available.	
Vertebrate pest and bir	d control pesticides	1						
Sodium fluoroacetate	FOXOFF® 1080 Bait DOGGONE® Wild Dog Bait; PIGOUT® Feral Pig Bait RABBAIT® 1080 Oat Bait	Foxes, dogs, pigs, rabbits	Animal control Technologies (Australia) Pty Ltd	S7	N/A	High - toxic to fish	Very High. Fatal to non-target animals, including domestic pets, livestock and native animals.	