



CENTRE FOR
INVASIVE SPECIES SOLUTIONS

BEST PRACTICE MANAGEMENT FOR THE CONTROL OF asparagus weeds (*Asparagus spp.*)

ADDENDUM TO THE WEEDS OF NATIONAL SIGNIFICANCE ASPARAGUS WEEDS MANAGEMENT MANUAL



weeds.org.au

This publication is licensed under a Creative Commons Attribution 4.0 International license, except for photographic and graphical images contained within it. Photographs and other graphical material must not be acquired, stored, copied, displayed and printed or otherwise reproduced — including by electronic means — for any purpose unless prior written permission has been obtained from the copyright owner.

Copyright of photographs and other illustrations is variously owned by Invasive Animals Ltd, individuals and corporate entities. For further details, please contact the Communications and Marketing Manager, Centre for Invasive Species Solutions.

The Creative Commons Attribution 4.0 International license allows you to copy, distribute, transmit and adapt material in this publication, subject to the exception for photographic and other graphic material set out above, and provided you attribute the work as shown below. The license does not transfer ownership of the copyright. A summary of the license terms is at: <https://creativecommons.org/licenses/by/4.0/>

© Invasive Animals Ltd

Citation: Wild Matters (2023). *Best practice management for the control of asparagus weeds (Asparagus spp.); Addendum to the Weeds of National Significance asparagus weeds management manual*. A Weeds Australia publication, report to Centre for Invasive Species Solutions.

Print ISBN: 978-1-922971-43-2

Web ISBN: 978-1-922971-42-5

Published by: Centre for Invasive Species Solutions

The Centre for Invasive Species Solutions gratefully acknowledges the funding support for this publication through the Australian Government Department of Agriculture, Fisheries and Forestry.

The Centre also acknowledges Wild Matters as the primary author and thanks those who made technical contributions and reviewed the publication, including:

- Peter Michael, Travelling Stock Reserves, North Coast Local Land Services
- Geoff Bowman, Lizzie Doyle, David Hinchiffe, Nicole McGuinness, Grace Porter and Alan Robins; Landscape Operations, Limestone Coast Landscape Board
- Andrew Storrie, Agronomo Consulting
- Royce Holtkamp, Ecological Horizons, Chair NSW Biocontrol Taskforce
- Kerinne Harvey

Disclaimer: The information contained in this publication has been prepared with care and is based on knowledge and understanding at the time of writing (2023). Some of the information in this document is provided by third parties, and all information is provided “as is”, without warranty of any kind, to the extent permitted by law. After publication, circumstances may change and before relying on this information the user needs to take care to update as necessary.

NO PRODUCT PREFERENCES: The product trade names in this publication are supplied on the understanding that no preference between equivalent products is intended and that the inclusion of a product name does not imply endorsement over any equivalent product from another manufacturer.

ALWAYS READ THE LABEL: Users of agricultural chemical products must always read the label and any permit, before using a product, and must strictly comply with the directions on the label and the conditions of any permit. Users are not absolved from compliance with the directions on the label or the conditions of the permit by reason of any statement made or not made in this publication.

This publication was funded by



Australian Government

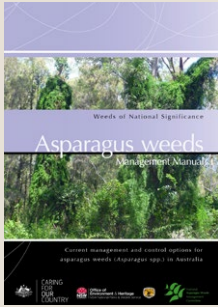
**Department of Agriculture,
Fisheries and Forestry**

Cover images

Front — African Asparagus (*Asparagus aethiopicus*).
Image by Ian Parsons.

Back — African Asparagus (*Asparagus aethiopicus*)
growing on a fence. Image by Carl Ramirez.

How to use this addendum



The [asparagus weeds management manual](#) (PDF, 9.4 MB) was published in 2013 and provides information on the weed and best practice management options. The manual has since been reviewed to ensure currency of best practice management advice and information. Any updates to the information contained within the manual are included in this addendum and should be taken as the most current source of information.

Note: the addendum is not a standalone document and should be read in conjunction with the 2013 manual.

The addendum focuses on updates to control options, including mechanical, chemical and biological control methods. It also includes updates on available herbicides and where to go to find additional information on asparagus weeds and their management.

When new or additional information is provided in the addendum, page numbers reference the related text in the original manual.

Section 3: Control methods

Detailed overview of control methods

Manual control

Digging out plants/grubbing

Page 47 – When first digging around the rhizomatous root mass, lifting out a greater area of soil, rhizomes and tubers than you may at first think necessary can be effective in ensuring you do not leave any rhizomes in the ground.

Disposal

Off-site disposal

Page 48 – Once removed off-site, plant material can be incinerated.

Chemical control

Page 49

Herbicide labels and legislation

The Australian Pesticides and Veterinary Medicines Authority (APVMA) regulates the availability of all pesticides, which includes herbicides. Herbicides are registered with the APVMA for specific applications, as stated on the label. State governments regulate the use of pesticides after sale. A herbicide label is a legal document that defines where, when and how a herbicide can be used on which weed species and at what rate.

Note: not all registered herbicides are commercially available. Often, companies improve herbicide formulations and only market the new formulation. For example, many herbicides are being marketed in higher concentrations. This reduces transport, storage and container-disposal costs.

In addition to herbicides being registered and described 'on-label' for specific weeds and situations, herbicides can sometimes be used through permits or 'off-label' use. These situations are described below.

Minor use and emergency use permits

APVMA may issue minor use and emergency use permits for herbicide applications that are not otherwise registered for that particular use. Minor use permits are sometimes referred to as 'off-label' permits. Minor use and emergency permits are valid ('in force') for a limited time. See the [APVMA website](#) to find current permits.

Some states also have permits for the control of 'declared' weeds and may not specifically list the weed species to be controlled. These permits will often list a range of herbicides that can be used for the control of declared or environmental weeds. To find these permits for your state:

- go to the [APVMA permits database](#) search
- enter 'declared weeds' or 'environmental weeds' in the SEARCH box
- click the search term 'Pest/purpose'
- click 'Search'.

It is also recommended that if you are unsure which herbicides can legally be used on a particular weed in your state, contact the relevant biosecurity section of your state department of agriculture. When using herbicides in aquatic situations, only use those that are registered or permitted for use in and around aquatic areas.

Any minor use permits relevant to asparagus weeds are listed in Table 6.

Off-label use

Off-label use is the use of a registered chemical to address a specific issue that is not covered by the APVMA-approved label. Off-label use is to:

- control a different weed (or pest)
- apply at a different rate (only lower)
- apply in a different manner (not allowed in ACT, NSW and Tasmania).

Off-label use is permitted in all states and territories; however, conditions vary in each jurisdiction (Table 1).

Table 1. Where to find specific rules relating to herbicide use, including off-label use, in each state and territory

STATE/ TERRITORY	WEBSITE AND FURTHER INFORMATION
ACT	Agvet chemical use https://www.accesscanberra.act.gov.au/s/article/pest-and-weed-control-tab-Agvet-chemical-use
NSW	Pesticides https://www.epa.nsw.gov.au/your-environment/pesticides/pesticides-nsw-overview Weed control and identification https://www.dpi.nsw.gov.au/biosecurity/weeds/weed-control
NT	Chemical use https://nt.gov.au/industry/agriculture/farm-management/using-chemicals-responsibly
Qld	Chemical use https://www.business.qld.gov.au/industries/farms-fishing-forestry/fisheries/aquaculture/chemicals/registered
SA	Rural chemicals https://pir.sa.gov.au/biosecurity/rural_chemicals Weed control handbook https://www.pir.sa.gov.au/_data/assets/pdf_file/0020/232382/WEB_8867_PIRSA_Weed_Control_Handbook_2018.pdf (PDF, 4.2 MB)
Tas	Agricultural and veterinary chemicals https://nre.tas.gov.au/agriculture/agvet-chemicals Weeds https://nre.tas.gov.au/invasive-species/weeds
Vic	Off-label chemical use https://agriculture.vic.gov.au/farm-management/chemicals/offlabel-chemical-use
WA	Using pesticides safely https://ww2.health.wa.gov.au/Articles/U_Z/Using-pesticides-safely

Safety and training

Page 50 – Personal protective equipment (such as protective clothing, eye or face shields, and respiratory protection) must be used in accordance with the recommendations stated on the herbicide label or permit. Chemical-use training is required for people using herbicides as part of their job or business. Training is recommended for community groups and may be required if working on public land. Training courses are run by ChemCert, AusChem and TAFE in each state. Other training courses may be available through state agencies (e.g. AgTrain in Victoria, SMARTtrain in NSW), local councils or non-government organisations.

By law, you must read the label (or have it read to you) before using any herbicide product. Always follow the label or permit.

Chemical user certification

Commercial weed-control operators need to be licenced in most states (Table 2). It should also be noted that there is now shared responsibility between landholders and their contractors for any breaches of laws and regulations (such as herbicide drift).

Table 2. Chemical-user certification by state and territory

STATE/ TERRITORY	WEBSITE
ACT	www.accesscanberra.act.gov.au/s/article/pest-and-weed-control-tab-Agvet-chemical-use
NSW	www.epa.nsw.gov.au/your-environment/pesticides/licences-and-advice-for-occupational-pesticide-users
NT	nt.gov.au/industry/agriculture/farm-management/using-chemicals-responsibly/spray-applicator-licences
Qld	www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/chemical-controls/commercial-operators
SA	www.sa.gov.au/topics/business-and-trade/licensing/building-and-trades/pest-control-licence
Tas	nre.tas.gov.au/agriculture/agvet-chemicals/licences-and-certificates/ground-spraying-and-pest-management-licences
Vic	agriculture.vic.gov.au/farm-management/chemicals/licences-and-permits/commercial-operator-licence-for-contractors
WA	https://www.health.wa.gov.au/articles/n_r/pest-industry-licensing-and-registration

Effective use of herbicides

Successful herbicide control is dependent on the right herbicide for the target species, growth stage of the target species, weather conditions during and after spraying, how thoroughly the herbicide is applied, and the herbicide mix and application rate.

For spraying, wind speeds should be low (< 15 km/h) with no rain expected in the following six hours.

Do not apply herbicide to plants that are under any sort of stress, as herbicide will not be absorbed and translocated effectively, resulting in a reduced level of control. Plants may be stressed due to:

- dry soil
- low humidity
- air temperatures above 30 °C
- frost.

Effectiveness of herbicides can be maximised further by:

- mixing dye with the herbicide to help minimise missed areas and prevent overspraying (double spraying)
- using an adjuvant – an additive that improves herbicide uptake (always read the adjuvant's product labels to ensure that they are compatible with the particular herbicide and there are no restrictions on their use; e.g. most adjuvants should not be used near waterways)
- ensuring spray equipment is correctly calibrated and maintained, including being thoroughly cleaned between uses.

Spraying in sensitive areas

Herbicide users have a legal obligation to avoid spray drift damage and to ensure that the chemicals applied stay within the target area. Target-weed infestations are often located in areas of native vegetation, so great care should be taken to avoid spraying surrounding foliage and soil. Do not use high pump/sprayer pressures that create small droplets which float in the air. Adjust the nozzle settings to produce coarser droplet sizes.

Using herbicides near water

Never spray herbicides over bodies of water or plants standing in water. Some herbicides are formulated to be a lower risk when used near water (e.g. Roundup® Biactive). NEVER add unregistered adjuvants to herbicides that will be used near water. Some states have publications explaining the safe use of herbicides near water (Table 3).

Table 3. Safe use of herbicides near water by state and territory

STATE/ TERRITORY	WEBSITE
South-eastern Australia	archive.dpi.nsw.gov.au/__data/assets/pdf_file/0011/319448/riparian-habitat-management-guide.pdf (PDF, 1.1 MB)
Qld	https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/sustainable/chemical/ground-distribution-herbicide/laws
SA	https://www.epa.sa.gov.au/files/477387_pesticide_water.pdf (PDF, 1.7 MB)
Tas	https://nre.tas.gov.au/Documents/herbicide_guidelinesFINAL2012.pdf (PDF, 689 kB)
WA	https://www.water.wa.gov.au/__data/assets/pdf_file/0016/3355/12149.pdf (PDF, 113 kB)

Regulations and permits for works in riparian zones

Areas on or near the bank of a river or other body of water (riparian zones) are sensitive habitats, and in some states a licence is required to conduct weed-control works (Table 4).

Table 4. Authorities who can advise about regulations and permits for works in riparian zones

STATE/ TERRITORY	DEPARTMENT	WEBSITE
NSW	NSW Department of Planning and Environment – Water	https://water.dpie.nsw.gov.au/
SA	Landscape SA, including 8 regional boards	https://www.landscape.sa.gov.au/
Vic	Catchment management authorities	https://viccatchments.com.au/about-us/our-cma-regions/
	Department of Energy, Environment and Climate Action – Forests and Reserves	Riparian management licences – www.forestsandreserves.vic.gov.au/__data/assets/pdf_file/0016/31426/Riparian-management-licences.pdf (PDF, 160 kB)

Herbicides for use on asparagus weeds

Page 54 – There are several herbicides registered for the control of asparagus weeds (Table 5), and there are minor use permits available (Table 6).

Table 5. Herbicides permitted for use on asparagus weeds under registration as at September 2023

APPLICATION METHOD	SPECIES	HERBICIDE ACTIVE	COMMERCIAL PRODUCT EXAMPLES ¹	RATE	SITUATION AS PER LABEL	LABEL REQUIREMENTS	COMMENTS
All states							
Spot spray	<i>A. asparagoides</i>	metsulfuron-methyl 600 g/kg	Rygel® 600	5 g/100 L + surfactant	Native pastures, rights of way, commercial and industrial areas	As per label	Apply from mid-June to late August. For complete control, follow-up applications over at least 2 seasons are required. To minimise damage to native vegetation, water volumes of 500–800 L/ha are recommended.
Spot spray	<i>A. scandens</i>	glyphosate + triclopyr (143 + 15 g/L)	Concentrate Tough Roundup® Weedkiller	40 mL/L	Unspecified	As per label	Apply when weeds are actively growing. Run-off should not occur. 1 L will treat 10 square metres. Repeat treatment likely.
		glyphosate + triclopyr (7.4 + 0.72 g/L)	Tough Roundup® Ready-to-use Weedkiller	Do not dilute	Gardens	As per label	Apply when weeds are actively growing. Repeat treatment likely.
Cut and paint or gouge and paint	<i>A. aethiopicus</i> <i>A. africanus</i> <i>A. plumosus</i> <i>A. scandens</i>	pictoram + aminopyralid 45 + 4.5 g/L	Vigilant® II	Gel on cut	Native vegetation, conservation area, gullies, reserves and parks	As per label	Avoid use over or near desirable plants, in areas where their roots may extend or where the chemical may be washed or moved to their roots. Do not use if rain is likely to fall within 12 hours of application.
SA							
Spot spray	<i>A. asparagoides</i>	aminopyralid + metsulfuron 375 + 300 g/kg	Stinger®	10 g/100 L	Non-agricultural areas, rights of way, commercial and industrial areas	As per label	Apply mid-June to late August. Follow-up applications over at least 2 seasons are required. Application volumes of 500–800 L/ha recommended.
WA							
Spot spray	<i>A. asparagoides</i>	metsulfuron-methyl 600 g/kg	Rygel® 600	5 g/100 L	Native pastures, rights of way, commercial and industrial areas		Apply during mid-June to late August. Follow-up applications over at least 2 seasons are required for complete control. Water volumes of 500–800 L/ha are recommended to minimise the risk of damage to native vegetation.

Notes to this table can be found at the bottom of Table 6.

Table 6. Herbicides permitted for use on asparagus weeds under minor use permits as at September 2023

APPLICATION METHOD	SPECIES	HERBICIDE ACTIVE	COMMERCIAL PRODUCT EXAMPLES ¹	RATE	SITUATION AS PER PERMIT	PERMIT REQUIREMENTS	COMMENTS
NSW							
Spot spray	<i>A. aethiopicus</i> <i>A. africanus</i> <i>A. plumosus</i>	glyphosate 360 g/L	Roundup®	1 part glyphosate to 50 parts water + surfactant	Areas of native vegetation (e.g. subtropical rainforest remnants, littoral rainforest and other bushland reserves)	PER9907 expires 25 March 2025	Do not allow spray to drift onto sensitive areas including but not limited to natural streams, rivers, wetland waterways and non-target species. The latter is particularly important when using a surfactant or penetrant.
Cut and paint or gouge and paint	<i>A. asparagoides</i>	metsulfuron- methyl 600 g/kg	Rygel® 600	As per permit	Urban bushland and forests, coastal reserves	PER11916 expires 31 March 2025	Do not allow spray to drift onto sensitive areas including but not limited to natural streams, rivers, wetland waterways and non-target species. The latter is particularly important when using a surfactant or penetrant. August to September only.
Spot spray	<i>A. aethiopicus</i> <i>A. africanus</i> <i>A. plumosus</i>	glyphosate 360 g/L	Roundup®		Areas of native vegetation (e.g. subtropical rainforest remnants, littoral rainforest and other bushland reserves)	PER9907 expires 25 March 2025	
	<i>A. aethiopicus</i> <i>A. africanus</i> <i>A. plumosus</i> <i>A. scandens</i> <i>A. asparagoides</i>	metsulfuron- methyl 600 g/kg	Rygel® 600	10–20 g/100 L water plus surfactant	Lands controlled by the Botanic Gardens Trust Non-cropland areas		
	<i>A. aethiopicus</i> <i>A. africanus</i> <i>A. plumosus</i> <i>A. scandens</i> <i>A. asparagoides</i>	glyphosate 360 g/L + metsulfuron- methyl 600 g/kg	Roundup® + Rygel® 600	Tank mix of up to 2 L glyphosate + 15 g metsulfuron- methyl /100 L water			
	<i>A. aethiopicus</i> <i>A. africanus</i> <i>A. plumosus</i> <i>A. scandens</i> <i>A. asparagoides</i>	fluroxypyr 333 g/L	Starane® Advanced	300–600 mL/100 L water; or 3–6 L/ha			
	<i>A. aethiopicus</i> <i>A. africanus</i> <i>A. plumosus</i> <i>A. scandens</i> <i>A. asparagoides</i>	fluroxypyr 200 g/L	Titan 200 Fluroxypyr EC	500 mL/100 L water; or 5–10 L per ha			

APPLICATION METHOD	SPECIES	HERBICIDE ACTIVE	COMMERCIAL PRODUCT EXAMPLES ¹	RATE	SITUATION AS PER PERMIT	PERMIT REQUIREMENTS	COMMENTS
Splatter gun	<i>A. aethiopicus</i>	glyphosate 360 g/L	Roundup®	Rates of up to 1:9 with water	Areas of native vegetation (e.g. subtropical rainforest remnants, littoral rainforest and other bushland reserves)	PER9907 expires 25 March 2025	
Wipe on leaves	<i>A. asparagoides</i>	Glyphosate 360 g/L	Roundup®	1:20 with water to undiluted herbicide	Lands controlled by the Botanic Gardens Trust		
					Non-cropland areas		
Spot spray – aerial	<i>A. aethiopicus</i>	metsulfuron-methyl 600 g/kg	Rygel® 600	1-2 g/10 L	Natural Ecosystems (non-agricultural)	PER12363 expires 31 March 2026	Aerial spot spray from helicopter or unmanned aircraft vehicles.
Cut stump	<i>A. aethiopicus</i> <i>A. africanus</i> <i>A. plumosus</i>	Glyphosate 360 g/L	Roundup®	As per permit	Urban bushland and forests, coastal reserves	PER11916 expires 31 March 2025	Do not allow spray to drift onto sensitive areas including but not limited to natural streams, rivers, wetland waterways and non-target species. The latter is particularly important when using a surfactant or penetrant.
Cut stump, basal bark spray or cut and paint	<i>A. aethiopicus</i> <i>A. africanus</i> <i>A. plumosus</i> <i>A. scandens</i>	Glyphosate 360 g/L	Roundup®	1:1.5 with water to undiluted herbicide	Areas of native vegetation, bushland reserves, national parks	PER9907 expires 25 March 2025	
Cut and paint		Glyphosate 360 g/L + metsulfuron-methyl 600 g/kg	Roundup® + Rygel® 600	Tank mix of 666 mL glyphosate + 1 g metsulfuron-methyl/ 1 L water	Non-cropland, including rights of way, commercial and industrial areas, domestic and urban areas, public service areas		
Basal bark spray	<i>A. africanus</i> <i>A. plumosus</i>	Fluroxypyr 333 g/L	Starane® Advanced	21 mL/ L diesel or kerosene	Botanic gardens		
QLD							
Spot spray	<i>A. aethiopicus</i> <i>A. africanus</i> <i>A. plumosus</i>	glyphosate 360 g/L where product has an aquatic registration	Roundup® Biactive, Weedmaster® Duo	1 L/100 L water; or 10 L/ha	Non-agricultural areas, bushland, forests, wetlands, coastal and adjacent areas	PER11463 expires 30 April 2027	Spot spray in aquatic and wetland areas.
	<i>A. aethiopicus</i> <i>A. africanus</i> <i>A. plumosus</i>	glyphosate 360 g/L	Roundup®	1 L/100 L water; or 10 L/ha	Non-agricultural areas, bushland, forests, wetlands, coastal and adjacent areas		Non-wetland areas

APPLICATION METHOD	SPECIES	HERBICIDE ACTIVE	COMMERCIAL PRODUCT EXAMPLES ¹	RATE	SITUATION AS PER PERMIT	PERMIT REQUIREMENTS	COMMENTS
Spot spray	<i>A. aethiopicus</i>	metsulfuron-methyl 600 g/kg	Rygel® 600	10 g/100 L water plus wetting agent; or 100 g/ha plus wetting agent	Non-agricultural areas, bushland, forests, wetlands, coastal and adjacent areas	PER11463 expires 30 April 2027	
	<i>A. africanus</i>						
	<i>A. plumosus</i>						
	<i>A. africanus</i>	Titan 200 Fluroxypyr EC	Non-agricultural areas, bushland, forests, wetlands, coastal and adjacent areas				
	<i>A. plumosus</i>						
<i>A. africanus</i>	2,4-D 625 g/L	Amicide® 625	3 mL/L water; or 3 L/ha	Non-agricultural areas, bushland, forests, wetlands, coastal and adjacent areas			
					<i>A. plumosus</i>		
<i>A. plumosus</i>	Triclopyr 600 g/L	Garlon® 600	33 mL/10 L water	Non-agricultural areas, bushland, forests, wetlands, coastal and adjacent areas	Knapsack		
Paint or spot spray crowns	<i>A. aethiopicus</i>	diesel	diesel	Undiluted	Non-agricultural areas, bushland, forests, wetlands, coastal and adjacent areas		
	<i>A. africanus</i>						
	<i>A. plumosus</i>						
Cut stump	<i>A. africanus</i>	glyphosate 360 g/L	Roundup®	1:2 dilution (50 mL/100 mL water)	Non-agricultural areas, bushland, forests, wetlands, coastal and adjacent areas		
	<i>A. plumosus</i>						
Basal bark spray	<i>A. africanus</i>	Fluroxypyr 200 g/L	Titan 200 Fluroxypyr EC	35 mL/ L diesel or kerosene	Non-agricultural areas, bushland, forests, wetlands, coastal and adjacent areas		
	<i>A. plumosus</i>						
WA							
Spot	<i>A. aethiopicus</i>	glyphosate 360 g/L	Roundup®	1 L/100 L water or 10 L/ha	Non-agricultural areas bushland and forests, wetlands, roadsides, industrial areas	PER13333 expires 31 March 2025	
	<i>A. plumosus</i>						
	<i>A. scandens</i>						
	<i>A. declinatus</i>						
	<i>A. asparagoides</i>						

APPLICATION METHOD	SPECIES	HERBICIDE ACTIVE	COMMERCIAL PRODUCT EXAMPLES ¹	RATE	SITUATION AS PER PERMIT	PERMIT REQUIREMENTS	COMMENTS
Spot spray	<i>A. aethiopicus</i> <i>A. plumosus</i> <i>A. scandens</i> <i>A. declinatus</i> <i>A. asparagoides</i>	glyphosate 360 g/L Aquatic formulations only	Roundup® Biactive, Weedmaster® Duo	1 L/100 L water or 10 L/ha	Non-agricultural areas bushland and forests, wetlands, roadsides, industrial areas	PER13333 expires 31 March 2025	Spot spraying in aquatic and wetland areas.
Spot spray	<i>A. aethiopicus</i> <i>A. plumosus</i> <i>A. scandens</i> <i>A. declinatus</i> <i>A. asparagoides</i>	metasulfuron-methyl 600 g/kg	Rygel® 600	10 g/100 L plus adjuvant, or 100 g/ha plus adjuvant	Non-agricultural areas bushland and forests, wetlands, roadsides, industrial areas		
Mister or knapsack	<i>A. asparagoides</i>	metasulfuron-methyl 600 g/kg	Rygel® 600	0.5 g/10 L water + organosilicone penetrant @ 2 mL/L	Crop and non-crop areas as specified on the label. Apply up to maximum registered label rates in accordance with DPIRD advice for the control of Declared plants ²		Lower rates are also recommended for bushland treatment (see permit). Mid-June to late August Follow-up treatment is required for a couple of seasons.
Wipe onto leaves	<i>A. asparagoides</i>	glyphosate 360 g/L	Roundup®	Undiluted to 1 L/5 L water	Non-agricultural areas bushland and forests, wetlands, roadsides, industrial areas		Apply directly to plant using a sponge glove. Retreatment necessary
Tas							
Spot spray	<i>A. asparagoides</i>	glyphosate 360 g/L (where product has an aquatic registration)	Roundup® Biactive	10–13 mL/L ONLY in accordance with label as required	Non-crop and Bushland	PER84775 expires 30 September 2025	
		glyphosate 540 g/L		7 mL/L plus adjuvants			Use as per existing registrations, or if the weed is not recorded on label, use in accordance with label as required

APPLICATION METHOD	SPECIES	HERBICIDE ACTIVE	COMMERCIAL PRODUCT EXAMPLES ¹	RATE	SITUATION AS PER PERMIT	PERMIT REQUIREMENTS	COMMENTS
Vic							
Spot spray	<i>A. scandens</i> <i>A. asparagoides</i>	Triclopyr 600 g/L	Garlon® 600	17 mL/10 L	Non-agricultural areas including parks and reserves, bushlands and forests, commercial and industrial areas and rights of way	PER89738 expires 30 November 2025 Licence (COL)	All Cardinia Shire Council Parks Services staff and approved Council bushland contractors who hold a current Commercial Operators Licence (COL) Triclopyr is a Restricted Chemical in Victoria. Use in Victoria is authorised only by persons authorised to use specified agricultural chemical products in Victoria, under the <i>Agricultural and Veterinary Chemicals (Control of Use) Act 1992</i> .
SA							
Spot spray	<i>Asparagus</i> spp.	Glyphosate (360 g/L)	Roundup®, Roundup® Biactive™ etc.	100 mL: 10 L water surfactant or spray oil may be added	Non-crop areas, rights of way, roadsides and easements, forest and conservation areas	PER13371 expires 30 April 2027	Persons generally
	<i>A. asparagoides</i>	metsulfuron-methyl (600 g/kg)	Associate®	1.5 g: 100 L water + surfactant			
Weed wiper, sponge or brush	<i>A. asparagoides</i>	Glyphosate (360 g/L)	Roundup®, Roundup® Biactive™ etc.	1 L: 2 L water surfactant may be added			
<p>¹ Commercial products listed here are examples only, and many other products containing these active ingredients are registered or permitted for use on asparagus weeds. Search at https://apvma.gov.au/node/10831</p> <p>² DPIRD's Declared plants page: https://www.agric.wa.gov.au/pests-weeds-diseases/weeds/declared-plants</p>							
<p>Note: herbicides are not to be used for any purpose or in any manner contrary to the label unless authorised under appropriate legislation. Always follow the label and permit directions. Not all herbicides currently registered are commercially available. Check the company website for a current label.</p>							

Application methods

Basal bark spray

Page 62 – To maximise coverage, ensure plant stems are covered in the least amount of leaf material from the ground litter as possible.

Foliar spot spraying

Page 62 – To avoid missing plants, use a visible dye and multiple people on-ground to ensure all plants are targeted.

Stop and think!

Page 63 – Where asparagus weeds are growing over native plants, they can be physically moved prior to spraying to prevent off-target damage. Move asparagus weeds by hand or by using the spray wand.

Other methods

Fire

Page 65 – Just as for planned fires, a wildfire can be used to take advantage of reduced biomass and increased accessibility to implement appropriate control methods on regenerating infestations.

Grazing

Page 65 – Sheep grazing can damage native understorey plants and tree seedlings, so grazing is not suitable for conservation reserves or riparian areas.

Biological control

Bridal creeper (*Asparagus asparagoides*) is the only asparagus weed for which biological control is an option. The biological control of bridal creeper is discussed in a separate manual.

There is currently no active research on biological control of other asparagus weeds being conducted in Australia. **No biological control agents have been released for asparagus weed (other than bridal creeper) species in Australia.**

Contacts

STATE/ TERRITORY	DEPARTMENT	PHONE	EMAIL	WEBSITE
National	Australian Pesticides and Veterinary Medicines Authority	02 6770 2300	enquiries@apvma.gov.au	www.apvma.gov.au
ACT	Parks and Conservation	13 22 81	ACTBiosecurity@act.gov.au	www.environment.act.gov.au/parks-conservation/plants-and-animals/Biosecurity/invasive-plants
NSW	Department of Primary Industries	1800 680 244	weeds@dpi.nsw.gov.au	www.dpi.nsw.gov.au/biosecurity/weeds
NT	Department of Environment, Parks and Water Security	08 8999 4567	weedinfo@nt.gov.au	www.nt.gov.au/environment/weeds
Qld	Department of Agriculture and Fisheries	13 25 23	info@daf.qld.gov.au	www.daf.qld.gov.au/business-priorities/biosecurity/invasive-plants-animals/plants-weeds
SA	Department of Primary Industries and Regions	1300 374 731	invasivespecies@sa.gov.au	www.pir.sa.gov.au/biosecurity/weeds
Tas	Department of Natural Resources and Environment	1300 368 550	biosecurity.tasmania@nre.tas.gov.au	www.nre.tas.gov.au/invasive-species/weeds
Vic	Agriculture Victoria	13 61 86	Refer to www.agriculture.vic.gov.au/about/contact-us for contact options	www.agriculture.vic.gov.au/biosecurity/weeds
WA	Department of Primary Industries and Regional Development	08 9368 3333	enquiries@agric.wa.gov.au	www.agric.wa.gov.au/pests-weeds-diseases/weeds

Further information

Asparagus weeds management manual. Office of Environment and Heritage, NSW (2013).

<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Pests-and-weeds/asparagus-weeds-management-manual-130486.pdf> (PDF, 9.4 MB)

Ground asparagus fern weed identification. Brisbane City Council (2023). <https://weeds.brisbane.qld.gov.au/weeds/ground-asparagus-fern>

WA asparagus weeds profile. Department of Primary Industries and Regional Development, WA (2017). <https://www.agric.wa.gov.au/weeds-national-significance/asparagus-weed-national-significance>

Restricted invasive plants in Queensland. Business Queensland (2022). <https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/biosecurity/plants/invasive/restricted>

Weeds Australia asparagus fern weed profile. Weeds Australia (2019) <https://weeds.org.au/profiles/asparagus-fern-ground/>

Tas weeds information page. Department of Natural Resources and Environment, Tas (2022). <https://nre.tas.gov.au/invasive-species/weeds>

NSW WeedWise search tool. Department of Primary Industries, NSW. <https://weeds.dpi.nsw.gov.au/>

**CENTRE FOR INVASIVE
SPECIES SOLUTIONS**

Building 22, University of Canberra
University Drive South, BRUCE ACT 2617

T 02 6201 2887

E communications@invasives.com.au

