



Splatter gun control of Lantana

The splatter gun (or gas gun) control technique involves the low volume, high concentration application of herbicide to lantana foliage. This technique is particularly useful in areas of difficult access or sensitive vegetation because the tool is easily portable and causes limited off target damage. Splatter gun is also considerably cheaper than traditional foliar spray methods with herbicide costs of less than five cents per bush.

While it is still important to integrate control techniques, this tool is proving to be an important weapon in the lantana control arsenal.

Advantages	Disadvantages
✓ Can be used when treating lantana in sensitive areas as well as in production situations.	× Can not be used in wet weather.
✓ Good where dense lantana prevents other conventional methods being used.	× Low effectiveness on plants with heavy dew.
✓ Good where inaccessibility or restrictions on vegetation clearing means mechanical methods cannot be used.	× Difficult to apply effectively to spindly lantana re-growth.
✓ Small volumes of herbicide reduce chemical usage.	
✓ Only a small portion of the foliage needs to be sprayed and accurate delivery reduces off target damage.	
✓ Can be used from a vehicle, from horse back or on-foot.	
✓ Low water volume requirements so easily portable and can cover larger areas using a back-pack compared with traditional foliar spray techniques.	

Timing

- Can be used year-round if plants are actively growing, but works best during summer months. Effective herbicide control requires sap flow to ensure the transport of herbicides into the root system.

Potential follow-ups

- Fire (depending on fuel load).
- Foliar spray or further splatter gun herbicide application (use the latter only if re-growth is compact). Only spray once re-growth has reached at least 300mm. This ensures sufficient leaf coverage for effective herbicide uptake.
- Re-establishment of pasture, revegetation or encouragement of natural regeneration to provide competition.

The splatter gun method

- This technique works best on thick, clumped lantana or scattered re-growth with a compact growth form which is at least 300 mm in height.
- Only glyphosate and metsulfuron-methyl are registered for use on lantana using this technique. For glyphosate mix concentrations refer to the table below.

Active	Rate (glyphosate:water)	Amount to add per 5L pack
Glyphosate 360 g/L	1:9	500 mL (to 4500 mL water)
Glyphosate 450 g/L	1:11	415 mL (to 4585 mL water)
Glyphosate 480 g/L	1:12.33	405 mL (to 4395 mL water)
Glyphosate 540 g/L	1:13	355 mL (to 4645 mL water)

- To apply the herbicide, angle the spray gun at 45 degrees and arc the stream of herbicide over the top of the bush and down the front face.
- If treating dense walls of lantana, apply one vertical spray line every two strides, with an occasional horizontal pass low across the front edge of the bushes to treat any low growth.
- Ensure you only apply the recommended volume of herbicide (for glyphosate 360 g/L that is two squirt lines of 2 mL chemical mix per half meter of plant height ~ approximately 16 mL of mixed herbicide in total for a 2 m bush).
- It is vital with this technique that you do not spray to the point of run-off as you would with conventional foliar spray techniques. Application of too much chemical at this concentration will put the plant into shock and inhibit herbicide uptake.
- Always use clean water for mixing and cleaning as dirty/heavy water can bind the glyphosate and dramatically reduce the kill rate.
- A specialized nozzle that produces large droplets of herbicide mix must be used to achieve the desired low volume, high concentration application. A fine spray or mist will not be effective.
- The commercial gas powered devices enable the application of a stream of herbicide from a distance of 6-10 m—allowing the delivery of herbicide from an elevated position into gullies.
- The splatter gun technique does not work well on spindly canes as it is difficult to apply the total volume of required herbicide to the leaves in this situation.
- Apply only to actively growing plants with full foliage and ensure leaves are not wet from rain or dew.
- A marker dye is recommended to identify splattered bushes, particularly if working in a team.
- You do not need a surfactant or additive—these increase the costs and provide little additional benefit to this application technique.
- The best times to spray are before 10 am and after 3 pm, when there is reduced evaporation and the plant will be more susceptible to herbicides.
- A 5 L bottle of herbicide mix should cover approximately 2000 m² (0.5 acres or 0.2 hectares) of moderate density lantana.
- A manual drench gun or gas powered gun are commercially available. The gas powered option will allow a longer day's work when compared to the manual option but costs more to buy and operate.
- Follow-up treatments are critical to control seedlings and/or re-growth.

Registered herbicides

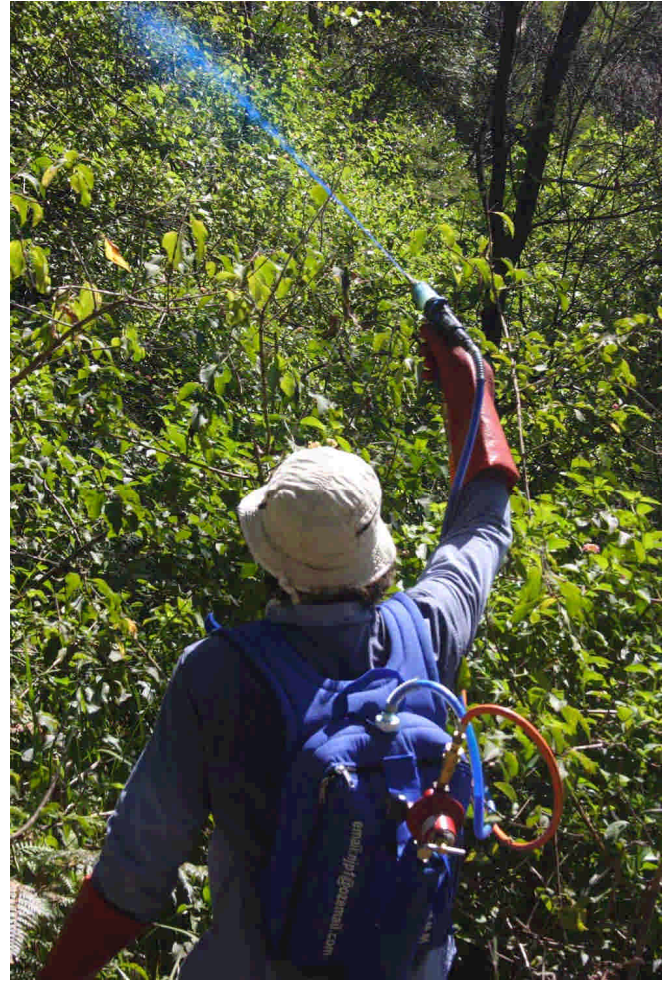
*Note: Herbicide prices provided were correct at the time of original publication but are subject to change.

Registered herbicides for Splatter or gas gun		Registered Mix Rates	States Registered	Retail price* /L or kg (inc GST)	Approx \$/5L mix	Indicators for use against lantana
Active constituent	Brands and mixes	Ratio: X parts product to Y parts water				
Glyphosate (360 g/L or 540 g/L)	Roundup® 360 Weedmaster® Duo Roundup® Biactive	<u>360g/L</u> : 1:9 glyphosate to water <u>540g/L</u> : 1:11 glyphosate to water 2 x 2 mL dose per 0.5 m bush height	Qld NSW NT	\$6-7/L	\$3-4	Non-selective and non-residual herbicide. Poisons schedule: S5
	Credit®	1:13 glyphosate + water + surfactant (e.g. Bonus®) at same rate as Credit®	All states	\$10-12/L	\$3-5	
Metsulfuron-methyl (600 g/kg)	Brushkiller® 600 Lynx® 600	2 g/L water + surfactant at 10 mL/5L (0.2%) (e.g. Pulse®)	Qld NSW (WA included for Lynx 600®)	\$155 – 156/kg + Pulse® \$40-42L	\$2-3	Non-selective and non-residual herbicide. Poisons schedule: not scheduled.

Control results



Manual splatter gun.



Gas powered splatter gun, using a marker dye.



Lantana 2 months after treatment with glyphosate applied using the splatter gun.

Further information

For more information or a copy of the Lantana WoNS herbicide manual, *Using herbicides on lantana: a guide to best management practices*, or the DVD, *Battling lantana: learning from the experiences of others*, please contact the team on LantanaWoNS@dpi.qld.gov.au or call Kym Johnson, National Lantana Coordinator on (07) 3362 9627.

For further information on lantana identification and control, visit the Weeds Australia website at www.weeds.org.au.

