

Managing Weeds in the Greenhouse

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Weed control is a persistent problem in greenhouses with exposed media/soil. It is very important when choosing a method to control weeds to select methods/materials that will not be detrimental to other actively growing desirable crops.

The first consideration when deciding what to use to eradicate/inhibit weeds is to determine whether you want to control the weeds using a chemical herbicide or whether

to make the media 'uninhabitable' for weeds. The number of herbicides labeled for use in greenhouses is small. Under no circumstances should you apply any '2,4-D' based herbicide in a greenhouse. It is critical that you apply no herbicide in or near a greenhouse if it can volatilize and move freely in the air (as 2,4-D based mat.).

There was a grower in the area who applied a 2,4-D based fertilizer in their empty

greenhouses in the fall. The following spring their entire new guinea impatiens crop expressed herbicide damage. Apparently, the herbicide was still present and volatilized the following spring after watering!

A list of recommended methods for weed control are shown in Table 1 with special considerations with each method.

Trade Name	Chemical Name	Mechanism of Action	R.E.I. (hours)	Manufacturer	Comments
Envoy	Clethodim	Selective contact, meristematic inhibitor	12	Valent USA	No sedge or broadleaf weed control
Finale	Glufosinate-ammonium	Semi-selective, cell membrane disruptor	12	AgrEvo	Turn off Fans. Avoid drift and direct contact with desirable plants.
Reward	Diquat dibromide	Non-selective contact, cell membrane disruptor	24	Zeneca	Relatively high mammalian toxicity
Roundup DryPak	Glyphosate	Non-selective, systemic	12	Monsanto	Do not mix, store or apply in galvanized steel container
Roundup Pro	Glyphosate	Non-selective, systemic	4	Monsanto	Temperatures should be above 50°F, turn fans off
Scythe	Pelargonic acid	Non-selective, contact	12	Mycogen	Sunny, warm conditions best. No residual control
Lime	Calcium/magnesium carbonate	Non-selective growth inhibitor	-	-	Excessive application will increase pH above that which plants can grow at, little leaching.
Salt	Calcium/sodium chloride	Non-selective, desiccator	-	-	Excessive application will inhibit all plant growth via desiccation