



## **HERBICIDE SELECTION**

For Japanese, Bohemian, and giant knotweeds, and invasive phragmites injection, a concentrated glyphosate (40-55%) is recommended. Where these infestations are near or in standing water, YOU MUST use an aquatic formulation of glyphosate\* and can use the same aquatic formulation on upland sites. Read the label to make sure that glyphosate is the ONLY active ingredient and at a concentration of 40-55%.

The following brand names are some examples of herbicides that contain only glyphosate as an active ingredient in the correct concentration range for upland site treatments:

- Round-up Super Concentrate (note that there are many varieties of round-up available retail – only the “Super Concentrate” will be useful for an undiluted glyphosate treatment) (widely available: e.g., Family Farm & Home, Tractor Supply, Meijer, & Home Depot)
- Compare-N-Save Concentrate Grass and Weed Killer (available at Tractor Supply)
- Ground Work Concentrate 50% Super Weed & Grass Killer (available at Tractor Supply)
- HDX Weed & Grass Killer Concentrate (available at Home Depot)

\*Aquatic approved brand names:

- Rodeo (found on Amazon.com and forestrysupply.com)\*
- Accord (found on Amazon.com and forestrysupply.com)\*
- Shore-Klear Emergent Herbicide\*
- AquaNeat Emergent Herbicide\*

The Mid-Michigan Cisma and the Clinton, Eaton, Ingham, and Ionia Conservation Districts do not endorse any particular products. These are examples of products that contain the active ingredient recommended. If you already have a product, or are interested in using a product not listed here, and would like assistance determining if it is acceptable and effective to use on your target plant, contact Erin Pavloski, Regional Invasive Species Coordinator, at 517-676-2290 ext. 2.

**FOLLOW ALL DIRECTIONS ON THE LABEL AND WEAR NECESSARY PERSONAL PROTECTIVE EQUIPMENT.**

The label is the law. These instructions do not replace the need to read and follow the label of the herbicide product that you are using. IT IS ILLEGAL TO USE AN HERBICIDE IN A MANNER NOT SPECIFICALLY PERMITTED ON THE LABEL.

## **INJECTOR USE**

**For treating Japanese, Bohemian, and giant knotweeds (Best treatment timing during flowering- August into September):**

1. Wear required personal protective equipment as instructed on the herbicide label.
2. To prepare the injection tool for usage, insert needle with the hole pointing down into end of tool by pulling back on the coupler then letting go.
3. For the injection of knotweed, you do not need to mix/dilute your herbicide. Purchase a concentrated formulation of glyphosate (40-55%, detailed above) and carefully pour the approximate amount you need into the canister on the tool.
4. Treat ALL knotweed stems- It is recommended that you start near the center of the infestation and work your way outward. Inject each stem with the needle between the 1st and 2nd node above ground level and squeeze the trigger. The tool will automatically inject the correct amount of herbicide into each stem.
5. Leave stalks in place until they are completely dead and dry. Then you can remove them and dispose of them as you would other yard waste. NOTE: If the plants are not completely dead and dry, any part of them that touches the ground may root and grow into a new plant - this is why you must leave them in place until they are completely dead and dry. Follow the State of Michigan’s proper plant disposal guidelines: <https://tinyurl.com/yblpo55g>
6. **TRIPLE RINSE:** When you are done with all treatment, rinse the tool canister and lid three times with water, then fill with water and spray residue until tool is drained of water. Dispose of all rinse water directly on top of the area you just treated.
7. Monitor the site and follow up foliar treatments with a 2% glyphosate solution will be required for several years following this initial treatment. These are best done in the spring or early summer. Contact the Conservation District to report the percentage treated that died and did not come back the following year. 0-25%, 25-50%, 50-75%, and 75-100%

**For treating invasive phragmites: (ALWAYS USE AQUATIC FORMULATION, Best treatment timing- August to October)**

1. Wear required personal protective equipment as instructed on the herbicide label.
2. To prepare the injection tool for usage, insert the cavity needle into end of tool by pulling back on the coupler then letting go.
3. Use a concentrated formulation of aquatic approved glyphosate (40-55%, detailed above) and carefully pour the approximate amount you need into the canister on the tool.
4. Cut invasive phragmites stems at the base a few inches from the ground. Treat ALL cut stems- Insert needle into the hollow part of each cut stem with the needle and squeeze the trigger. The tool will automatically inject the correct amount of herbicide into each stem.
5. Properly dispose of cut phragmites seed heads- Carefully double bag seed heads and throw in municipal trash or burn. Follow the State of Michigan’s proper plant disposal guidelines: <https://tinyurl.com/yblpo55g>
6. **TRIPLE RINSE:** When you are done with all treatment, rinse the tool canister and lid three times with water, then fill with water and spray residue until tool is drained of water. Dispose of all rinse water directly on top of the area you just treated.
7. Monitor the site and follow-up with treatment again the following year as needed. Contact the Conservation District to report the percentage treated that died and did not come back the following year. 0-25%, 25-50%, 50-75%, and 75-100%