

Answers to Frequently Asked Questions About Control of Saltcedar and Russian Olive Using Garlon® 4 Ultra and Garlon® 3A

What is the difference between Garlon 3A and Garlon 4 Ultra?

Both Garlon 3A and Garlon 4 Ultra are formulations of the active ingredient, triclopyr. Garlon 4 Ultra is a 4 pound acid equivalent per gallon (lb ae/gal) low volatile ester in a plant based oil carrier, whereas Garlon 3A is a 3 lb ae/gal water soluble amine in water.

How do I decide whether to use Garlon® 3A or Garlon® 4 Ultra?

Garlon 4 Ultra will provide better Russian olive or saltcedar control than Garlon 3A when applied as a foliar, modified cut stump, and basal bark treatment. Garlon 3A will provide good control as a cut stump application (always mix with water) and will provide fair to good control when applied as a foliar treatment. Garlon 3A should be used when applying in aquatic sites. The addition of Milestone® herbicide to either product improves control of both species when applied as a foliar treatment.

When do I mix Garlon 3A and Garlon® 4 Ultra with water and when do I mix with basal oil?

MIXING WITH WATER

1. Always mix Garlon® 3A or Garlon 4 Ultra with water for foliar applications with the addition of a nonionic or seed oil surfactant (e.g. methylated seed oil).
2. Always mix Garlon 3A with water for cut stump treatments. **Note:** applications with Garlon 3A must be made as soon as possible or at least within 30 minutes after cutting the stems.

MIXING WITH BASAL OIL

1. Always use basal oil with Garlon® 4 Ultra for basal bark, cut stump, and modified cut stump applications. Applications of Garlon 4 Ultra in basal

oil for cut stump or modified cut stump can be made up to a week after cutting. The oil mixture normally penetrates the suberized (scar) layer that forms on the cut stump; however, if the scar layer is too thick, the stem may need to be re-cut to allow for application to the cambium. It is recommended that applications are made as soon as possible but no longer than one week following cutting to provide the greatest level of control.

2. **Note:** Mixing Garlon 4 Ultra with oil requires vigorous agitation to form an oil solution. Once a solution is formed it will stay stable; however, agitation after four hours is recommended.

What is the difference between modified cut stump and cut stump?

Modified cut stump applications involve cutting 6 inches above the ground level and treating both the bark and exposed cambium (photo next page). Use only Garlon 4 Ultra for modified cut stump application.

Cut stump applications involve cutting the tree close to the ground and treating only the exposed cambium in a continuous ring around the tree stump (including around any bark torn away from the stem) with the herbicide solution (photo, next page). A higher application rate is necessary for cut stump treatments compared to modified cut stump treatment because less surface area is being treated.

APPLICATION RATES

Modified cut stump = Garlon® 4 Ultra at 25 to 30% volume to volume (v/v) in oil. [For example, mixing 1 quart of Garlon 4 Ultra with 3 quarts of basal oil would yield one gallon of a 25% solution]. Use a 30% v/v application rate on saltcedar [e.g. 1.3 quarts of herbicide to 2.7 quarts basal oil].

Cut stump = Garlon 3A at 50% v/v in water or undiluted, or Garlon 4 Ultra at 50% v/v in oil or undiluted.



Photo courtesy of Ralph Whitesides

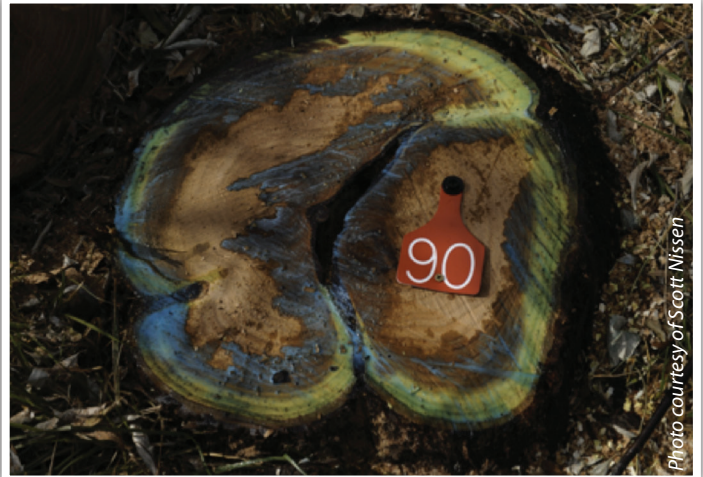


Photo courtesy of Scott Nissen

Comparison of a modified cut stump application (left) and cut stump application (right).

When can I use a low volume basal bark treatment?

Russian olive or saltcedar that have stems less than 6 inches in basal diameter can be treated with Garlon 4 Ultra in oil with a low volume basal bark application. Spray the basal parts of the tree trunks to a height of 12 to 15 inches from the ground, thoroughly wetting the stems but not to the point where herbicide runs off and puddles. Old or rough bark requires treating up to 18 inches from the ground.

Russian olive and saltcedar often grow in riparian areas and near waterways – what are the guidelines for using Garlon® 3A and Garlon® 4 Ultra near water?

Both herbicides can be used in seasonably dry wetlands and transitional sites, non-irrigation ditch banks, and other similar sites as described on the labels. Garlon 4 Ultra applications are more restricted around water (see herbicide label for more complete information). Garlon 3A can be used in and around standing water sites, such as marshes, wetlands, and the banks of ponds and lakes.

Will I kill desirable cottonwood or willow trees if I apply basal bark, cut stump, or foliar applications of Garlon 3A or Garlon 4 Ultra to saltcedar or Russian olive growing under the cottonwood canopy?

Potential damage to non-target trees is highly variable and depends on the size of the cottonwood or willow

and density of the target tree species. Under large cottonwood or willow trees (about two feet in diameter and larger) with low target tree densities (four or five saltcedar/Russian olive growing under the canopy), a cut stump or basal treatment could be used with caution. Do not create puddles around the target tree trunk at the soil interface during herbicide application. Foliar applications should be made with the precaution of keeping the spray off the desired trees.

When do I add Milestone to either Garlon 3A or Garlon 4 Ultra to control Russian olive and saltcedar?

Milestone does not need to be added for basal bark, cut stump or modified cut stump applications. The addition of Milestone to either Garlon® 3A or Garlon® 4 Ultra as a foliar treatment will improve control of both Russian olive and saltcedar. Milestone will also control undesirable broadleaf weeds such as Canada thistle and Russian knapweed that may be growing in association with the trees. If you are controlling either Russian olive or saltcedar growing under the canopy of desirable sensitive trees, be sure to consult the Milestone® label to avoid damage to desirable trees.

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State restrictions on the sale and use of Garlon® 4 Ultra apply. Consult the label before purchase or use for full details.

Milestone is not registered for sale or use in all states. Contact your state pesticide regulatory agency to determine if a product is registered for sale or use in your state. Always read and follow label direction