



Cut Surface Treatment Tips

By Bill Kline

Tree injection, frill or girdle, and cut stump treatments are the cut surface methods generally used to eliminate exotic and large, undesirable species. One advantage of cut surface treatments is that very little equipment is required for application, making it an economical option. Also, cut surface treatments combined with basal or directed foliar applications are effective management strategies where both large and small undesirable stems are selected for removal. Most cut surface treatments can be applied at any time of the year.

Garlon® 3A herbicide is commonly used for cut surface treatments in invasive/exotic plant control programs. Garlon 3A undiluted or diluted in a 1 to 1 ratio with water for injection (hack 'n' squirt) or cut stump is very effective for controlling most woody species. Always check the product label for labeled uses, directions, precautions, certain hazards, etc.

A dye is often added to the herbicide or herbicide mix to aid in treatment monitoring, especially when the applications are done on a contractual basis. When dyes are used, application equipment usually requires more maintenance, especially regular cleaning.

Tree injection method (hack 'n' squirt)

Tree injection can be made with tools designed specifically for making the cut in the tree and simultaneously applying the herbicide to the opening, such as the Jim Gem injector. A simpler, but equally effective method is to use a hatchet to make the cut and a squirt bottle to apply the herbicide to the opening. In any case, the wounds should angle downward through the bark into the sapwood –

waist high or below for hatchet and at the base of the tree for injectors. Space single cuts evenly around the tree trunk with the spacing between the cuts as recommended by the product label. When a hatchet and squirt bottle is used, apply the herbicide to the cut when the hatchet is removed. The squirt bottle should have chemically resistant seals.

Frill or girdle method

This method usually involves cutting completely around the tree into the sapwood with an ax or hatchet. Completely wet the cuts with the herbicide using a squirt bottle, or a small pressurized spray unit.

When making tree injection or frill applications, additional cuts and/or increased herbicide rates are usually required for trees 10 inches in diameter and larger or damaged trees.

Cut stump treatment

Freshly cut stumps should be treated as soon after cutting as possible – within minutes is usually the most effective. A delay of more than a couple of hours between cutting and herbicide treatment can reduce the effectiveness of the herbicide. A pressurized backpack sprayer or spray bottle is very effective for this application. The cambial area and sapwood (the outer inch of the stump) must be thoroughly sprayed with the herbicide. Smooth, level stumps, free of bark tears, sawdust, or other debris can be most easily and effectively treated.

Stumps that have been cut previously up to about eight months can be treated effectively with the previously described basal bark spray mixture. The outer edges of the stump should be sprayed, until the spray runs down the sides of the stump. If the stumps are high above the ground, the application can be made as a basal bark treatment.

Bill Kline is a product technology specialist with Dow AgroSciences. ■

