

Homeowner Considerations Prior to Selecting a Weed Control Product¹

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A weed in a home landscape is defined as a plant in an undesirable location. Whether this plant is a "true weed" or a desired plant that has become invasive, steps must be taken to limit the effect on the surrounding plants' growth and improve the visual quality of the landscape. Any successful weed control program should be multifaceted and include scouting, sanitation, cultural control, mechanical removal, and, when necessary, chemical control methods. Prior to purchasing a weed control product, it is important to know the type of weed and its location within the landscape.

Weed Identification

It is beneficial to identify the weed, either by genus and species, or at least by family. If this is not possible, the next step is to determine what kind of weed it is.

Grass weeds emerge from the soil with only one leaf present. Grasses have rounded or flattened stems with joints or nodes down the length of the stem. The veins in the leaf are parallel to the edge of the leaf. Grass weeds can be annuals or perennials. Annual grass weeds have a fibrous root system, with the majority of their roots located just below the soil

surface in a clump, making them easy to pull out of the ground. Perennial grass weeds can have above- (stolons) or below-ground (rhizomes) roots that spread laterally. Pulling up a perennial weed is much harder, and upon removal these root structures should be obvious. Stolons and rhizomes can spread several feet each year. All southern turfgrasses are perennial and spread by vegetative growth of either stolons or rhizomes.

Broadleaf weeds emerge from the soil with two leaves present. The first leaves are called cotyledons and are opposite of each other. The cotyledons usually do not look similar to the next leaf coming out, which is called the first true leaf. Annual broadleaf weeds have a small taproot with even smaller roots coming off of this main root. Perennial broadleaf weeds usually have a deeply rooted taproot, although some can have underground rooting structures that can spread several feet every year.

Sedges can look like grasses, but they have a triangular stem with three distinct sides. Annual sedges have a fibrous root system similar to grass weeds. Perennial sedges (often called nutsedges) often have underground roots that produce tubers in chains, usually three to eight in a row. These tubers

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are similar in structure to a potato, although they are smaller (the size of a marble) and will sprout from this structure if the main shoot has been removed by hand pulling, hoeing, or herbicides.

Annual weeds are often best controlled with hand pulling or mechanical cultivation unless the weed has gotten large. Application of an herbicide will easily control these weeds in most cases. Make the application prior to the seed production stage. Annual weeds can produce thousands of seeds, so letting one plant escape control can cause a hundredfold increase in the weed population.

Perennial weeds can be much more difficult to control. Their above- and below-ground rooting structures allow for rapid regrowth if hand pulling or cultivation is used. These methods can still provide control but require quite a bit of manual labor. Many cultivations or removals will be necessary to deplete the resources of the perennial structures. A single application of an herbicide will often not provide complete control. Several applications made 21 or more days apart will most likely be necessary.

Weed Location in the Landscape

In what habitat does the weed exist? Considering the home landscape can help split up the location of weeds to better inform weed control decisions.

Home Garden – Many people are producing vegetables and fruits in home gardens. Use of an herbicide in a home garden is most likely unnecessary and could cause injury to the desired plants. Also, not many products are labeled for use in the home garden. Prior to planting, most people mechanically cultivate the soil, which reduces the weed population but also creates the best conditions for weed seed germination. Mechanical cultivation and hand removal are the best tools for keeping a garden weed free. Newly emerged weeds are small and can be easily destroyed with a hoe or rake.

Planting Beds – Annual and herbaceous perennial beds are very common places for weeds to emerge. Any chemical control should be used prior to planting these beds. Prepare the land months ahead of the anticipated planting date, and use sanitation procedures to prevent weeds from gaining a foothold.

Keeping a piece of ground free of weeds is called the "stale seedbed" technique and is very effective. This technique involves creating favorable conditions for weed seeds to germinate and removing them as they emerge with mechanical cultivation or chemical sprays. Perennial weeds can be killed with a combination of cultivation and chemical sprays. A common practice in agricultural fields is to cultivate, allow the perennial weeds to emerge, and then spray them with a product containing only glyphosate. Glyphosate is the active ingredient present in many homeowner herbicide products, including the Roundup® trademarked products. Read the label carefully prior to purchase and use, as many of these products contain other herbicides that cannot be used in planting beds. Some of these additional herbicides are residual products that will severely injure any annuals or herbaceous perennials planted in the bed. Do not apply chemical weed control after planting the bed without reading the label on the container first.

Shrubs and Tree Beds – Weeds can become a problem around shrub beds and trees. Hand pulling is always an option in these areas, while mechanical cultivation can cause injury to the roots of the shrubs and trees. This injury can allow for disease to move into the wounds and cause stress to the plants. A wider variety of chemical products is available for use in these areas. Some herbicide products can provide extended control, with claims of up to four months free of weeds. Read the label prior to use to make sure the shrubs to be treated are not sensitive to the herbicide. Any time an herbicide is sprayed around a shrub or tree, take care to prevent spray from coming in contact with the foliage or roots. Also, make sure that a heavy rainfall event is not forecasted, and turn off any overhead irrigation in the area for at least a week. Some of these herbicide products can move into the plants' root zones if water is allowed to puddle.

Driveways and Walkways – Unsightly weeds can emerge in the cracks of hardscapes, such as walkways and driveways, and cause damage to the edges of the cement or asphalt. There are many herbicide products available for use in these areas. Use caution when using herbicides on hardscapes, especially those that slope, since any water movement

across the area can carry some herbicide with it and deposit it in areas that have sensitive plants.

Nonlandscape Areas – Waste areas are where most invasive weeds are usually found. They are along the edge of the property and can creep into planting beds, turf, and hardscapes. Many products are available for use in these areas, but sanitation is the best means to prevent the movement of these weeds back into the landscape. Take advantage of edging, preferably 12 in. deep, to prevent the movement of most underground rooting structures into the landscape. Repeated control measures are necessary to knock out the population of weeds in these areas. Invasive weeds are difficult to control, but continued efforts will prove successful and make managing weeds in the landscape much easier.

Review

First, determine if the weed is a grass weed, broadleaf weed, or sedge weed. They may all be located in the same area. Next, determine if they are annual or perennial weeds. Then select the location in which to apply the weed control product. If the product is to be applied to several different areas, make sure the product selected is labeled for all areas and situations, or select two different products. Take the time to select the right product, and make sure to read the label prior to every use. Store products in a cool, dry place if at all possible, away from living areas. If the label gets wet and starts to come off, place it in a resealable bag and tape the bag to the container.

Once a weed management program is started, be persistent. A steady effort will reduce the levels of weeds in the landscape, making future weeding easier.