## Yard and Garden - 07-16-2011 - Ted Griess / Extension Horticulture Assistant

If I were to make a top-ten list of the most troublesome weeds, no doubt I would list *Convolvulus arvensis* as number one. To most gardeners, this weed is commonly called field bindweed. To others, it is known as creeping jenny or green vine. No matter what one calls it, bindweed is a nasty plant.

I've known about this vegetative pest since I was a youngster. Back in the 50's, while growing up on the farm, bindweed seemed to be everywhere. I remember my dad telling me that when he was a lad, he recalled helping his father hook up a team of horses to a piece of farm machinery almost hidden by the surrounding weeds. After hitching it to the team, they attempted to move it, but it wouldn't budge. The bindweed was so intertwined with the machine that it anchored it to the ground. They had to cut away the vines before the horses could pull the equipment free.

Although that story seems a bit far-fetched, I do know bindweed is a pernicious, persistent weed. After all, as the first syllable of its name implies, bindweed binds! Today, most any gardener is aware of this weed and the problems it creates. The weed is most difficult to control and is extremely prolific. In many states, it is deemed a noxious weed but not in Nebraska.

Field bindweed is found growing throughout the Great Plains on both cultivated and uncultivated land. It is most common in small grain fields, gardens and roadsides. It certainly is not uncommon to find it a problem in turfgrass as well as flower borders. Historically, it is thought to have been introduced to North America in the 1870's when wheat was imported from Turkey.



Bindweed is a perennial. Its leaves are arrowhead-shaped, about 1/2 to 2 inches long, and attached to vine-like stems that twine and trail over the surface of the soil or, more noticeably, climb upon other plants. There it competes for the sunlight and creates a strangling, tangling, matted mess. The rhizomatous roots of this plant may

penetrate to a depth of ten meters. Bindweed readily reproduces by seed or from the roots. One plant may produce 500 seeds that can remain viable for 50 years. The flowers of this weed are funnel-shaped, generally one inch in diameter, and are usually white or pink in color. The flowers bloom from June through September, open during the early morning hours, and close later in the day.

Controlling this pest is difficult. Young plants (within one month) can be easily destroyed by cultivation or by pulling, but once established, bindweed is almost impossible to control through cultivation or other physical means.

The best way to control this weed is with chemical herbicides such as pre-emergent or postemergent herbicides.

In turfgrass areas, bindweed seed can be prevented from germinating by using a preemergence; however, for existing bindweed, a product containing 2, 4-D and/or Dicamba works best. Always apply these chemicals according to the label directions. One may need to repeat the process one or two more times spaced by ten days in order to get the job done.

The biggest problem exists when bindweed is found growing in the vegetable garden or in a flower border with other broadleaf plants. 2, 4-D and Dicamba are selective herbicides, capable of killing most all herbaceous broadleaf plants; but they will not harm grasses. If these products are used in the vegetable garden or in a flower border, desirable plants as well as bindweed will be killed.

Unfortunately, no selective herbicide exists that will kill only the bindweed and not the desirables. To chemically rid the garden or flower border of this pest involves a labor intensive procedure. Mix and pour the non-selective (kills all green plants) herbicide glyphosate, commonly called Roundup®, in a small bucket. Place a rubber glove on one hand and cover it with a cloth glove or sock. Dip the gloved hand into the Roundup® mixture and carefully wipe the leaves of the bindweed. Avoid contact with the desirable plants. This procedure will also need to be repeated at least once about ten days later in order to achieve a kill.

Now you understand why bindweed is the number one weed pest on my list. As far as the rest of the top ten are concerned, they're lightweights.

