



Countryside Weeds

by Michelle Le Strange, UC Master Gardener Program

Field bindweed is easily one of the worst weeds in the world and it's all due to the way it grows. Also known as perennial morningglory and creeping jenny, this drought tolerant, hardy perennial grows a huge system of roots to support its twining leafy stems that either sprawl across the land or climb up fence posts, trees, or shrubs in summer. Bindweed entangles anything in its path.



Field Bindweed

Mature plants have arrowhead shaped leaves and white trumpet shaped flowers about an inch in size. Seeds can be buried in soil for more than 20 years and

are still viable to produce a new plant. However, the worst parts of bindweed are the roots and rhizomes (underground creeping stems) because small pieces can create more plants. Bindweed can easily grow roots down to 15 feet and spread 10 feet wide, but 75% of the underground root system is in the top 2 feet of soil. Experiments on bindweed have shown it to produce 10 pounds of roots per 50 square feet and that's not counting the top growth!

Control of field bindweed is not easy and cannot be done with a single treatment or in a single year. A multi-faceted approach called IPM - Integrated Pest Management is required:

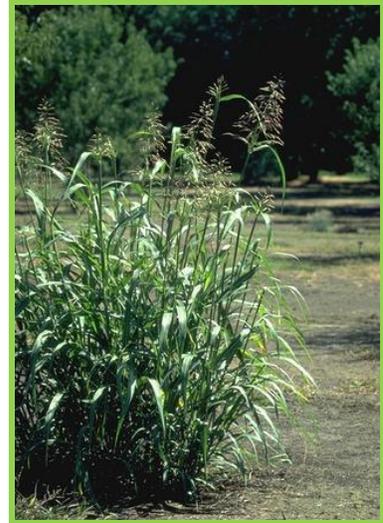
- 1) Prevent new seeds from forming
- 2) Hoe off the top growth (religiously)
- 3) Reduce underground roots and stems by regularly separating shoots from roots by slicing them as deep as possible
- 4) Apply herbicides to reduce bindweed growth (glyphosate, 2,4-D or dicamba) and prevent seeds from germinating (oryzalin, pendimethalin, or trifluralin).

It is important to control new infestations when they are small, because spot treatments are least expensive and the most effective strategy. For more information download the UC IPM Pest Note on Field Bindweed. <http://www.ipm.ucdavis.edu/PDF/PESTNOTES/pnfieldbindweed.pdf>

Johnsongrass is a coarse, perennial grass that becomes troublesome because it rapidly forms large clumps. Mature stems are 6 to 7 feet tall and stand erect. New shoots (called tillers) sprout from the base of the plant. The leaf has a prominent white midvein. Underground stems are thick, fleshy, and segmented and new roots and shoots will sprout from these segments, so the clump enlarges. Flowers bloom from May through October. The flower head is large, open,

well branched and has an overall pyramid outline. Initially it is green but at maturity it becomes a dark reddish or purplish brown. Dig out the clumps; to young grasses and small clumps apply postemergence herbicides that only kill grasses: sethoxydim (Grass Getter) or fluazifop (Fusilade).

Puncturevine is a summer annual that thrives in hot and dry conditions where many other plants cannot. This broadleaf weed generally grows low to the ground forming dense mats that are 2 to 5 feet in diameter. Stems radiate out from a central point at the taproot. Yellow flowers with 5 petals form in the leaf joints and develop into spiky seedpods. These break apart into individual burrs (also called goatheads) that are capable of making a grown man cry when stepped on barefoot and are the bane of cyclists as they commonly puncture bicycle tires. These seeds also injure livestock, people and pets. Biological control is common with insects, but rare in plants, yet puncturevine is one positive example. Two weevils were introduced into the USA as biocontrol agents in 1961 and are common throughout all of Kings and Tulare counties. A seed weevil deposits its eggs in the immature pod and its babies feed on and destroy puncturevine seeds. A stem weevil lays its eggs on the plant and its babies tunnel through the stem causing the plant to weaken. They work well together to diminish the puncturevine population, but often not fast enough for us. Hoe out plants before they form seed pods. Chemical control is generally not necessary in the home landscape, however in the countryside spot treatments with glyphosate or broadleaf weed killers may be needed.



Johnsongrass



Puncturevine

Puncturevine closeup

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