

Weed Management

A number of different small-scale, low-input tactics may be used to control weeds. These tactics can be categorized as preventative, biological, chemical, cultural, and physical tactics.

Preventative Tactics:

Prevent seed production: This is the most important tactic in weed control. Weeds produce a lot of seeds that remain alive in the soil for up to ten years. Therefore, it is important to remove weeds before they produce seed. Removing weeds when young is the best way to prevent seed production. If weeds are already flowering or setting seed, they should be not only removed from the soil, but also carried out of the field.

Use good seed: Make sure that the crop seed being sown is free of weed seeds.



Physical Tactics:

Pre-plant Irrigation: Irrigate the field two weeks before planting to encourage weed seeds to sprout. Remove the weeds by hoeing or plowing just prior to planting the crop.

Soil solarization: Kill weeds and diseases by trapping heat from the sun near the soil surface with a transparent plastic sheet. More details on this technique can be found in the Soil Solarization Fact Sheet.

After pre-plant irrigation wait until weeds have sprouted, but are still small, to hoe or plow them under.
(Photo: Thaddeus Gourd, CSU Ext)

Cultivation: After the crop is planted, remove weeds close to the seed row without disturbing the crop. Weed early in the season to reduce competition with the crop during its major growth stages and avoid disturbing the crops' roots, flowers, or fruit. Small weeds may be destroyed by burying them in soil. Larger weeds should be cut just below the soil surface or pulled out of the soil. Work close to the soil surface to avoid bringing deeply buried weed seeds to the surface where they can sprout.



Cultural Tactics:

Crop competition: Reduce the space between crop plants in a row and between rows. This decreases the amount of light available to weeds. This tactic is especially useful for tall, fast-growing crops such as cereals and maize.

Mulches: Mulch is any ground cover that can be used to reduce light access for weeds. See the "Mulches for Weed Control" Fact Sheet for more information.

Dandelions setting seeds in a home garden. (Photo: Adam Berry)

Chemical Tactics:

Herbicides: Herbicides can provide excellent weed control when used correctly. When used incorrectly they can be harmful to the crop and the environment. Use herbicides with great care and always follow the label instructions.