



WILD FOUR O'CLOCK (*Mirabilis nyctaginea*)

Family: Nyctaginaceae (Four O'Clock) Life Cycle: Perennial

Class: A - Eradication Required

AKA: Heartleaf four o'clock

WILD FOUR O’CLOCK
<ul style="list-style-type: none"> Flowers significantly smaller than ornamental garden variety of <i>Mirabilis</i> Dried stalks look like gray bones with swollen joints at stem nodes Leaves and stems waxy Name refers to flowers, which open late in the day and wither the following morning Native east of the Rockies

CONTROL METHODS
<p>Mechanical: Hand pulling ineffective as branches break at root crown. Stems breaking from root crown may stimulate more growth. Digging may work on small infestations, if all root fragments are removed. Monitor area for missed segments. Repeated mowing or cultivation will reduce seed production, but will not eradicate the plants. Cultivation alone has not been effective in Washington. Hand hoeing after cultivation, when plants re-sprout, can be effective.</p> <p>Cultural: Field corn competes with wild four o’clock, but will not result in eradication.</p> <p>Biological: There are currently no biological agents approved for release in Washington State.</p> <p>Chemical*: Use a surfactant; waxy leaves make it difficult for spray to stick. See table below.</p>

DESCRIPTION
<p>Growth Traits: Perennial herbaceous plant with smooth waxy leaves and stems that dies back to the ground in the winter. May grow three to four feet tall with oppositely branching stalks.</p> <p>Leaves and Stems: Leaves oppositely arranged, heart to egg-shaped. Typically waxy and hairless. Stems oppositely branched and waxy. Young growth may be red tinged.</p> <p>Flowers: Blooms June - July. Clusters of three to five flowers grow from short hairy stalks at branch tips. Produces reddish to lavender flowers with five sepals and a whorl of bracts at the base of each flower. Sepals wither and bract whorl may spread open when seeds mature, creating a pink-tinged yellow-green ‘flower’ from which seeds drop.</p> <p>Roots and Reproduction: Thick black taproot can grow two feet deep and may form a semi-woody root crown. Branching roots can produce new sprouts when cut. Reproduces by seed and fragmented root segments. Seeds are ribbed, warty, and gray-brown. Seeds set July to September.</p> <p>Habitat: Tolerant of very dry, infertile conditions and can be found in a wide range of habitats: perennial crops, orchards, railroad lines, dry meadows, riparian areas and rangelands. In Washington, it spread from a small ten acre site to several hundred acres.</p> <p>Toxicity: Reported to produce mildly toxic alkaloid, but not considered to be a toxic species.</p>

***ALWAYS read herbicide labels and follow instructions for use and PPE.** The use of a surfactant (aka sticker) increases the efficacy of herbicide application, saving you time and money. If treating over multiple seasons, rotate using herbicides with different modes of action to reduce likelihood of herbicide resistance developing. Below are recommended herbicides based on stage of growth and time of year. All recommendations are supplied with the understanding that no discrimination is intended and no endorsement by the Noxious Weed Board is implied. Trade names are used to simplify recommendations.

NOTE: There is no ‘magic bullet’ in noxious weed control, and control efforts must be repeated every season to stop their spread. Using a combination of methods (e.g. cultural and chemical) will lead to better control over time.

April - May Rosette, Seedling Stage	June - July Bolting, Bud, Bloom Stage	August - October Seeding, Fall Regrowth Stage
Range Star	Range Star	Roundup (spot spray)
Escort	Escort	
Telar	Roundup (spot spray)	
HiDep		