Weed Identification and Control

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Weed identification is very important!

- To determine which method of control to use
- To slow down reproduction
- To determine the best chemical (herbicide)
Weed Growth Cycle

Summer

- pigweed
- purslane
- puncturevine
- crabgrass
- junglerice
- nightshade
- horseweed
- knotweed
- lambsquarters

***Active (plant)
Dormant (seed)

Spring

Fall

Winter
Weed Growth Cycle

Winter annuals – live and die in <1 year

- cheeseweed
- mustard
- nettle
- sowthistle
- filaree
- shepherd’s-purse
- annual bluegrass
- groundsel
- ryegrass
Annuals can produce lots of seed!

- horseweed 1,000,000
- mullein 223,200
- redroot pigweed 117,400
- purslane 52,300
- Shepherd’s-purse 38,500
- sunflower 7,200
- wild oats 250
Pigweed - 117,400 seeds
Purslane (verdolaga) - 52,300 seeds
Wild oats - 250 seeds
Weed Growth Cycle, con’t

- **Biennials**  - Live 2 years
- **Perennials**  – Live more than 2 years

Spring ———- Spring  

Fall

Dormant (roots, rhizomes, tubers)

***Active (plant)***

Summer

Winter
Perennials reproduce from plant parts and from seeds

- yellow nutsedge - 1 tuber = 1,918 plants in 1 year
- johnsongrass – one plant produces 85’ of stems underground in 14 weeks
- bermudagrass, dallisgrass, bindweed, nutsedge, johnsongrass, others
Johnsongrass- 85 feet rhizomes underground stems
Nutsedge - purple and yellow 1, 918 plants in 1 year
Methods of control

- **Field Equipment** - rototiller, disc, hoe, plow, lilliston
- **Plastic** - black, brown, blue, green
- **Transplants** - cover the soil making shade
- **Crop rotation** - sudangrass, clover
- **Other** - water, wait, then cultivate (or spray)
- **Solarization** - clear plastic 4-6 weeks (in summer)
- **Herbicides** - pre-emergents, post-emergents, and fumigants
Equipment and hand labor
Colored plastic mulch to stop weed seed germination
Soil Solarization
(to kill weed seeds)

Keep in place 4-6 weeks during summer to reach a temp of 140 °F.
Herbicides – Pre-emergents
(applied to soil to control weed seed in the soil)

- Water and/or mechanical incorporation is needed to activate
- Lasts for 3-6 months in the soil

- Devrinol
- Treflan
- Prefar
Devrinol – Pre-emergent (to control weed seed in the soil)

• Needs to be mixed in to soil before planting
• Registered for:
  – Broccoli, cauliflower, others
  – Eggplant, pepper
  – Tomatoes
Devrinol – weed seeds killed

• Controlled

Blegrass, foxtail, barnyardgrass, junglerice, other grasses, cheeseweed, purslane, sowthistle, pigweed lambsquarters

Not controlled

Groundcherry, nightshade, fleabane, groundsel, others
Herbicides – Post-emergents (to control growing plants)

– No water is needed to activate, to remain dry
– Lasts 0 months in the soil

⇒ Roundup
⇒ Gramoxone
⇒ Poast
⇒ Fusilade
Poast—Post-emergent
(to control growing plants)

• Kills grass plants but does not hurt broadleaf plants, so can be sprayed over the top of most vegetables.
• Applied 7-30 days before harvest
• Registered for:
  – Most vegetable crops
"We never should have waited this long ... Now the weeds have completely taken over."