

## Weed Free? It's Possible!!

*A good gardener is a good weeder.*

Definition of weed: And plant growing where it isn't wanted.

The answer:

- Remove the unwanted plant
- Prevent new ones from growing
- Prevent seed production and deplete seed reservoirs
- Destroy underground vegetation and reproductive organs

Weed classification

- Monocots (narrowleaf)
- Dicots (broadleaf)
- Sedges

Weed control management

- Cultural controls
  - Prevention
  - Keep desired plants competitive
- Mechanical controls
  - Cultivate and hand weed
  - Mulch
  - Soil solarization
- Biological controls
- Chemical controls

Pre-emergent

- Timing –
- Selection
- Incorporation of herbicide
- Application

Post-emergent

- Modes of action
  - Contact
  - Systemic
- How to be successful with post-emergent controls
  - Proper weed ID
  - Proper timing in life cycle of weed
  - Herbicide selection
  - Application method
  - Equipment calibration
  - Use of surfactant
  - Tips for effective chemical control
    - Use herbicides in combination
    - Several applications a few weeks apart
    - Alternate herbicides, choose different modes of action
  - Other considerations
    - How long does the chemical last on the surface before it breaks down
    - How long does it last in the soil
    - What environmental or plant conditions contribute to success

Preparing a site for planting

- Water, wait, cultivate

Turf management

- Keep turf vigorous

Landscape management

- Selection of plants
- Bark or mulches

Vegetables

- Don't use herbicides

IPM

Invasive Plants

- <http://www.missouribotanicalgarden.org/Portals/0/Shaw%20Nature%20Reserve/PDFs/horticulture/NLM%20Ch3.pdf>
- <http://www.ipm.ucdavis.edu/>

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