

Canada thistle

Cirsium arvense

Erect, rhizomatous perennial

Kansas has many ecotypes, all with varying degrees of herbicide susceptibility

Distinguished from all other thistles by:

- Creeping, horizontal roots
- Small, dioecious flower heads
- High variability in leaf size and shape

Habitat

- Invades nearly every type of upland community
- Prefers fertile, moist soils, can tolerate salt content of 2%
- Prairies and grasslands
- Roadsides and wasteland
- Range and pasture
- Cropland

Flowers

- Dioecious
- Female flowers lack pollen and have a "vanilla" scent
- Flowering occurs 12-14 weeks after emergence

Seeds

- Seeds are viable 8-10 days after onset of anthesis
- Dissemination occurs 2-3 weeks after pollination
- Majority of seeds germinate during the first year, remainder during the following spring

Roots

- Plants produce horizontal and vertical roots
- Vertical roots can grow to 20 feet, however most are in top 24"
- Roots live an avg. of 2 years
- Carbohydrate reserves are lowest just prior to flowering
- Roots begin to increase carbohydrate reserves in early fall as shoot growth declines

Shoots

- Primary shoots grow as rosettes for 2-3 weeks
- Bolting occurs 2-4 weeks after emergence
- Several growth stages can occur on the same plant, during summer

Growth and reproduction

- 18 week old plant can produce 36 feet of roots, 26 above ground stems, 154 underground shoots
- Average lateral root growth is 14-16 feet per year
- Reproduction mainly from rootstocks, some seed

Management

- Frequent mowing during summer can enhance fall herbicide application
- Herbicides: clopyralid (2,4-D, dicamba, metsulfuron not effective)

Threats

- Moderately allelopathic, can change ecosystem structure/composition
- Aggressively competes for light, nutrients and water, decreases yields
- Displaces native, desirable plants and reduces species diversity

CANADA THISTLE

