

Weeds: What You Need to Know

Women in Ag Conference

February 21, 2014

Review questions:

- 1) If there were no people, plants would change the earth. How?

- 2) An invasive plant can dominate other plants and entire ecosystems. How important is this?

- 3) Why is it important to be able to identify plants?

- 4) How do plants become invasive?

- 5) What do plants compete for?

- 6) What is the most important transporter of invasive plants?

For more information:

Contact: Dr. Steve Young, Weed Ecologist

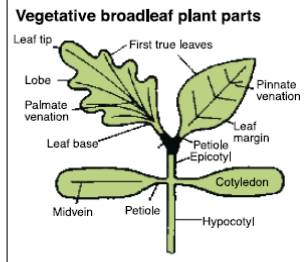
Address: West Central Research & Extension Center

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Website: <http://ipscourse.unl.edu/iwep>

Programs: Workshops for high schools; Short course (online and in-person) for teachers, professionals, land owners; College course on invasive plants for everyone

Broadleaf weed seedling identification key



STEP 1 - Identify cotyledon shape.
STEP 2 - Are first true leaves alternate or opposite?
STEP 3 - Answer question yes or no.

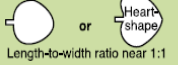


Opposite leaves
 Two leaves attached per node or opposite sides of stem. Leaves at the same node are of similar size.
 Often the first true leaves are opposite, but later leaves are alternate.



Alternate leaves
 One leaf per node. Newest leaf is smaller than preceding leaf.

Round or round with tapered tip



Cotyledon shapes

Butterfly

Deeply notched tip & base.



Kidney

Notched tip.



First true leaves alternate?

YES

YES

Heart-shaped true leaves with short hairs.

Cotyledons velvety



Velvetleaf

YES

Third and subsequent leaves deeply lobed?



Venice mallow

NO

NO



Prickly sida

Other weeds with round cotyledons:

First true leaves alternate:
 Common mallow, Sicklepod, Corn groundsel, Yellow rocket

First true leaves opposite:
 Henbit, Copperleaf, Marshelder, Field pennycress (later alternate)

First true leaves alternate. Large cotyledons with prominent veins.



Tall morningglory



Ivyleaf morningglory



Pitted morningglory

First true leaves alternate. Arrowhead shaped leaves. Perennial with vinelike growth habit.



Wild mustard



Field bindweed

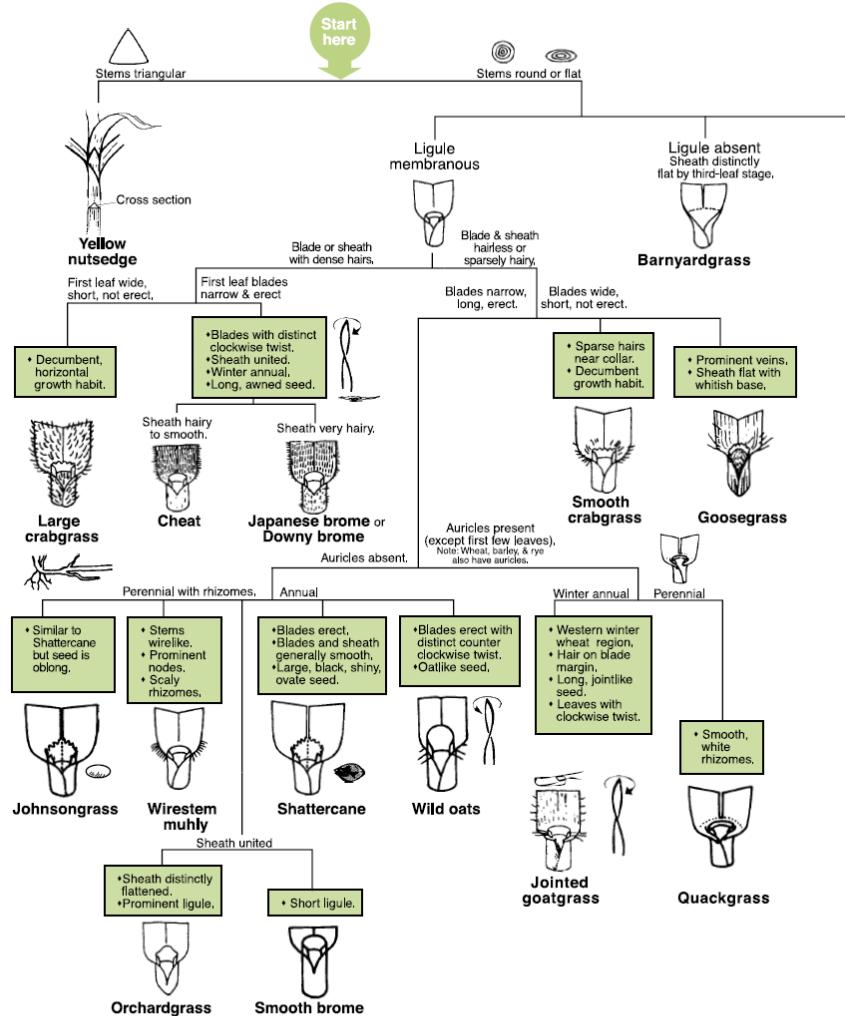
Other weeds with butterfly cotyledons:

Most morningglory species

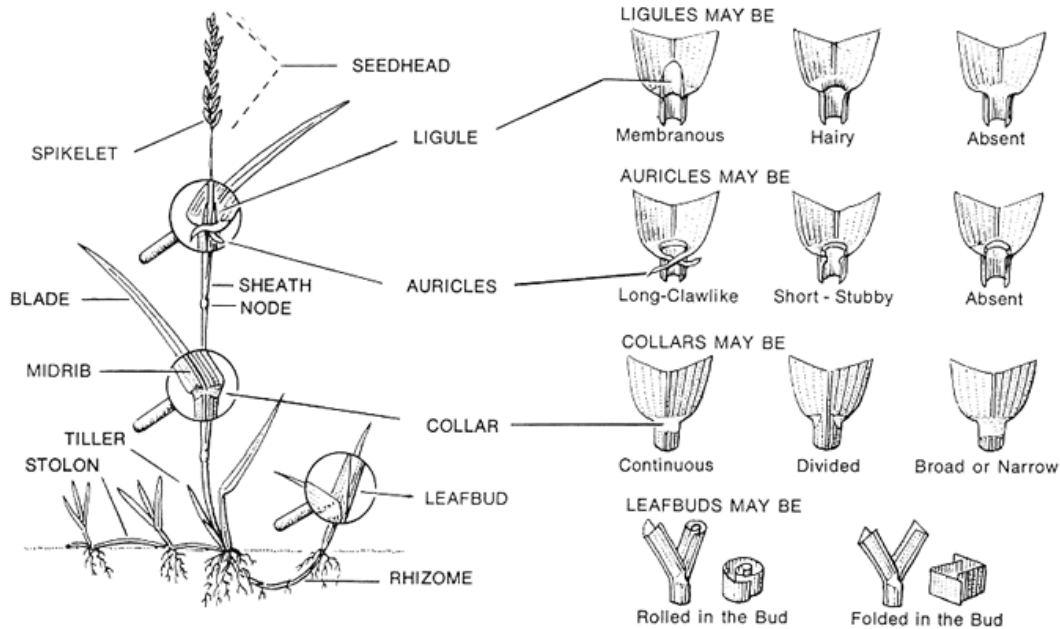
Other weeds with kidney cotyledons:

Hedge bindweed, Wild radish

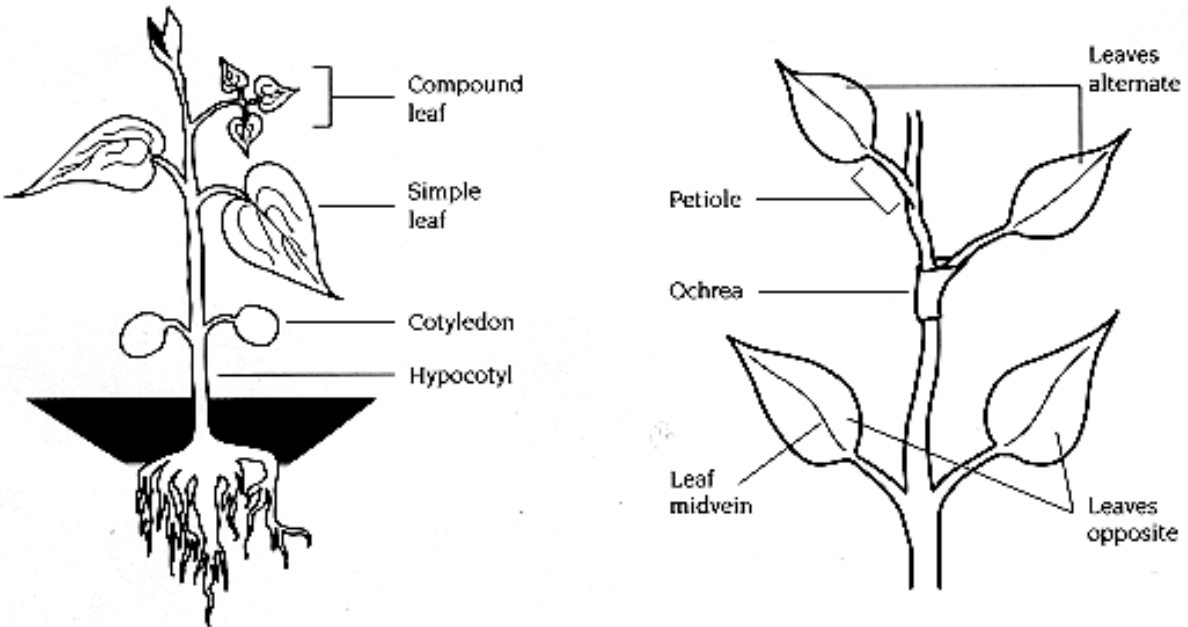
Grass weed seedling identification key



Parts of a grass plant



Broadleaf Morphology





Purple Loosestrife



Figure 1. Canada thistle stems are erect, branching, and greened. Flowering heads form in clusters.



Figure 2. Canada thistle cotyledons are oblong and fleshy. The first true leaves are obovate and do not have a petiole.

Canada thistle



Figure 1. Saltcedar stems have multiple stems arising from the plant base and mature trees can reach 15 feet in height.



Figure 2. Saltcedar seeds are contained in a small capsule with a felt of hair which aids in the wind dispersal of seeds.

Saltcedar



Figure 1. Section of non-woody common reed.

Figure 2. Single spike producing flowers (white when young, brown when mature).

Common reed