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VINE WEEDS OF THE NORTH CENTRAL STATES NORTH CENTRAL REGIONAL EXTENSION PUBLICATION NO. 33

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This circular was prepared by the Publications Committee of the North Central Weed Control Conference and reviewed by weed control extension specialists of the North Central states. The members of the Publications Committee are as follows: J. D. Furrer, Chairman, University of Nebraska; E. L. Knake, University of Illinois at Urbana-Champaign; C. E. Sommers, Successful Farming Magazine; E. W. Stroube, The Ohio State University; E. P. Sylwester, Iowa State University; and J. L. Williams, Purdue University.

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# Contents

Bigroot Morningglory
Ivyleaf Morningglory
Tall Morningglory
Field Bindweed 8
Hedge Bindweed
Bureucumber10
Wild Cucumber11
Honeyvine Milkweed
Wild Buckwheat
Trumpetcreeper14
Dodder15

VINE WEEDS COMPETE WITH CROPS to reduce yields, make harvesting more difficult, and reduce crop quality. They are easily identified as vines by their climbing nature: they climb on fences, trees, ornamentals, crops, and even on other weeds. To identify a particular vine weed, carefully observe the leaves, flowers, and fruit or seed pods and seed. You may find only leaves on the stems in the spring, and only fruit or seed pods in the fall. But the more complete the plant, the easier and more certain will be your identification.

There are eleven major vine weeds that are troublesome on cropland in the North Central Region of the United States. These weeds, which may also be found in non-crop areas, are described and illustrated in this circular, and control measures are given for each plant. For more information on these control measures, consult the current weed control publications of your state. If you plan to use herbicides, read the labels carefully. Governmental regulations and registration of herbicides undergo review and change, and you must be certain to use a herbicide only as specifically approved at the time of use.



### Bigroot Morningglory (Ipomoea pandurata)

#### DESCRIPTION

Bigroot morningglory (also known as wild sweetpotato and man-of-the-earth) has large, funnel-shaped white flowers with purple centers. The leaves of this perennial are smooth, alternate, heart-shaped, and 2 to 6 inches long, with long petioles. The smooth stems are often purplish. Bigroot morning-glory grows from an extremely large tuber located several feet beneath the soil surface. It is often found in fertile bottomlands.

Another species of large-rooted morningglory, *Ipomoea leptophylla* (commonly known as bush morningglory), is found in the western portion of the North Central Region. The flowers are similar to those of bigroot morningglory in size and shape but vary in color from pink to purple. The leaves are narrowly linear (seldom more than ½ inch wide) and 2 to 5 inches long. Individual roots sometimes weigh up to 25 pounds.

#### CONTROL

Bigroot can be controlled with 2,4-D applied at the rates usually suggested for postemergence spraying in corn. The timing of the application is extremely critical. It is important to spray during the bud stage — just before the flower buds open and blooms appear. At bud stage, the leaves are rapidly producing food that moves downward to the tubers. Spraying at this stage allows maximum movement of 2,4-D downward along with the food material.



## Ivyleaf Morningglory (Ipomoea hederacea)

#### DESCRIPTION

Ivyleaf morningglory is an annual commonly found in corn and soybeans. The funnel-shaped flowers are usually pale blue to rose-purple, and are borne singly on long stalks. The alternate leaves have three pointed lobes. The stems and leaves are hairy.

#### CONTROL

Ivyleaf morningglory is not controlled well by most preemergence herbicides for soybeans. A postemergence application of 2,4-DB gives relatively good control, but may cause some damage to soybeans. One of the most effective means of controlling morningglory is to plant corn and use a herbicide such as atrazine (AAtrex) preplant or preemergence or 2,4-D postemergence.



### Tall Morningglory (Ipomoea purpurea)

#### DESCRIPTION

The flowers of tall morningglory are slightly larger than those of ivyleaf morningglory, and may be red, blue, purple, white, or multicolored. They may occur in clusters. The leaves of this annual are alternate, broadly heart-shaped, and usually a darker green than those of ivyleaf morningglory. The stems are hairy.

#### CONTROL

Tall morningglory is not controlled well by most preemergence herbicides for soybeans. A postemergence application of 2,4-DB gives relatively good control, but may cause some damage to soybeans. One of the most effective means of controlling morningglory is to plant corn and use a herbicide such as atrazine (AAtrex) preplant or preemergence or 2,4-D postemergence.



## Field Bindweed (Convolvulus arvensis)

#### DESCRIPTION

Field bindweed is a deep-rooted perennial with white to pinkish funnel-shaped flowers about the size of a quarter in diameter. The small leaves are arrowshaped but blunt-pointed. Field bindweed may be found in non-cropland, lawns, ornamentals, row crops, small grains, forages, and forestry plantings.

#### CONTROL

This plant is difficult to control. Closely spaced crop plants can compete fairly well against bindweed and discourage growth. Repeated tillage also weakens bindweed by depleting the root reserves. 2,4-D alone or in combination with dicamba (Banvel) can suppress bindweed, but several applications are necessary. Spray in the spring just before the buds open into flowers and in the fall when the weed again begins vigorous growth. Use appropriate precautions with 2,4-D and dicamba to avoid injuring nearby susceptible plants such as soybeans, vegetables, and ornamentals. Picloram (Tordon) is effective in controlling bindweed, but it can only be used on non-cropland. *Extreme* precaution must be taken with picloram to avoid injuring susceptible plants.



## Hedge Bindweed (Convolvulus sepium)

#### DESCRIPTION

Hedge bindweed is a perennial with white or pinkish funnel-shaped flowers that are 1½ to 2 inches across. The alternate leaves are shaped somewhat like an arrowhead, with sharp, pointed tips and large, sharp-pointed basal lobes. The roots are extensive but rather shallow.

#### CONTROL

Since hedge bindweed is a perennial, most preemergence herbicides do not give effective control. It is, however, quite susceptible to 2,4-D applied postemergence to corn, small grains, and non-crop areas.



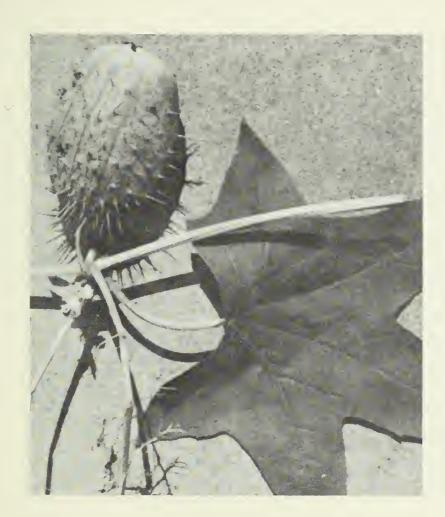
### Burcucumber (Sicyos angulatus)

#### DESCRIPTION

Burcucumber is an annual with small whitish flowers. The leaves are sticky-hairy, alternate along the stem, and somewhat star-shaped (usually with 5 pointed lobes). The tendrils (small, curled appendages) form early and aid the plant in climbing. The seed pods are in clusters, and each small, prickly seed pod contains a seed slightly larger than a watermelon seed. Burcucumber in especially troublesome in bottomland cornfields, where the vines can become quite dense.

#### CONTROL

During the early part of the season, burcucumber can be controlled by incorporating atrazine (AAtrex) or simazine (Princep) within 2 weeks before planting. Dicamba (Banvel) may give partial control. 2,4-D has little effect on burcucumber.



### Wild Cucumber (Echinocystis lobata)

#### DESCRIPTION

Wild cucumber closely resembles burcucumber, but the seed pod is a pulpy, oval, spiny fruit that is 1 to 2 inches long and contains 4 black or brown spindle-shaped seeds. The leaves of this annual are alternate and star-shaped, with 3 to 7 (usually 5) pointed lobes. The plant has tendrils for climbing. Like burcucumber, wild cucumber is a problem in bottomland cornfields.

#### CONTROL

During the early part of the season, wild cucumber can be controlled by incorporating atrazine (AAtrex) or simazine (Princep) within 2 weeks before planting. Dicamba (Banvel) may give partial control. 2,4-D has little effect on wild cucumber.



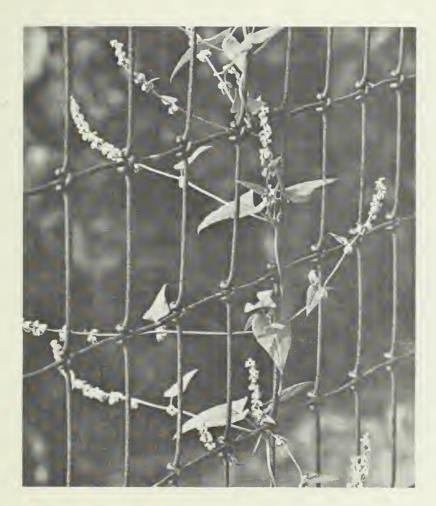
## Honeyvine Milkweed (Ampelanus albidus)

#### DESCRIPTION

Honeyvine milkweed (also known as climbing milkweed) has very small whitish flowers borne in clusters on stalks from the axils of the leaves. The leaves of this perennial are smooth, opposite, and dark green with light-colored veins. They are rounded and somewhat heart-shaped at the base, but taper to a sharp point at the tip. The stems are long, smooth, and slender. Unlike other species of milkweed, the stems do not have milky juice. The pods resemble those of common milkweed, but are smooth on the outside instead of rough, and are shiny light green. When dry, the pods open to expose a flat, oval, dark brown seed with fluffy white "hairs." This seed is similar to that of the common milkweed. Honeyvine milkweed seems to be increasing, especially in fields where herbicides are giving good control of annual weeds and tillage has been reduced. The plant spreads by producing lateral roots in the upper soil surface.

#### CONTROL

Honeyvine milkweed is not controlled by preemergence herbicides, although a slight chlorosis or discoloration, especially along the veins, may be noted when atrazine (AAtrex) is used. Thorough coverage with 2,4-D can suppress honeyvine milkweed if sprayed before the plant starts climbing on corn.



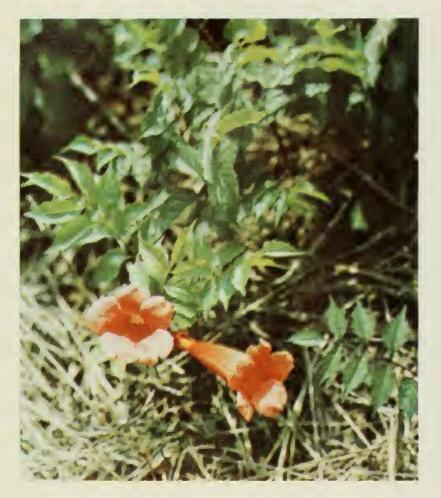
# Wild Buckwheat (Polygonum convolvulus)

#### CONTROL

Wild buckwheat can be controlled in small grains with dicamba (Banvel). This herbicide should be used early, when there is less risk of injuring susceptible crops in the vicinity. Dicamba may also be used with appropriate precautions in non-crop areas. Bromoxynil (Buctril, Brominal) or certain combinations with bromoxynil can be used effectively postemergence in wheat and barley.

#### DESCRIPTION

Wild buckwheat is an annual with very small greenish-white flowers borne in clusters. The small leaves are alternate, somewhat heart-shaped, and sharp-pointed. The triangular seeds are shiny black, but may be covered with a dull brown hull. Wild buckwheat may be found on fences in the Midwest, but does not usually grow in row crops such as corn and soybeans. It can be a serious problem in small grain, especially in the Great Plains states.



### Trumpetcreeper (Campsis radicans)

#### DESCRIPTION

Trumpetcreeper is a woody perennial vine with bright orange trumpet-shaped flowers. The leaves are opposite, compound, and from 6 to 15 inches long. Each leaf is composed of 7 to 11 leaflets with notched edges. Trumpetcreeper grows more commonly in the southern areas of the North Central states, often in bottomlands. It is sometimes grown as an ornamental.

#### CONTROL

Good seedbed preparation and cultivation are helpful in suppressing trumpetcreeper. In grass pastures and non-crop areas, trumpetcreeper can be controlled with repeated applications of 2,4-D or silvex. In cornfields, control of trumpetcreeper with 2,4-D is more difficult because rates must be kept relatively low. Dicamba (Banvel) or a combination of dicamba and 2,4-D can be used.



## Dodder (Cuscuta species)

#### DESCRIPTION

Dodder is a parasitic annual with very small white flowers. Although the seeds germinate in the soil, dodder separates from the soil and attaches itself to host plants soon after emergence. Since dodder does not have leaves for manufacturing food, it must obtain its nourishment from the host plants. Its yellow to orange vinelike stems wrap tightly around legumes or certain wild host plants. Dodder usually grows only in small patches in the Midwest.

#### CONTROL

Clean legume seed will help prevent dodder infestation. One method of controlling dodder is to cut the host plants to which it is attached and allow these plants to dry. Plant desiccants such as dinoseb ("dinitro") and certain oils also give good control. Check current labels for approved uses. Chlorpropham has been used to control dodder in certain areas. Small grain and corn are resistant to dodder attack, and can be grown without difficulty on dodder-infested land.









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