

Integrated Pest Management

MISSOURI





Plant Protection Programs College of Agriculture, Food and Natural Resources

Published by MU Extension, University of Missouri-Columbia

This publication is part of a series of IPM Manuals prepared by the Plant Protection Programs of the University of Missouri. Topics covered in the series include an introduction to scouting, weed identification and management, plant diseases, and insects of field and horticultural crops. These IPM Manuals are available from MU Extension at the following address:

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Production

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A PHOTO COMPENDIUM OF MISSOURI WEED SEEDS

Positive identification of pests, including weeds, is the first step in a sound integrated pest management program. Knowledge of plant morphological features, such as leaf and stem shape, flower type and color, and the presence of hairs make identification relatively easy compared with relying on seed physical characteristics. On occasion, the agricultural producer and other professionals will be challenged to identify a weed by the features of its seed. This can be a daunting task because of the relatively small size of seed, the change in surface characteristics caused by various processes and subtle color variation within even the same species.

The purpose of this publication is to assist those who attempt to identify weeds by their seed characteristics. This guide is intended not only for agricultural professionals, but also those who are hobbyists, such as FFA members. A hand or pocket lens with a magnification power of 10x will be especially helpful in using this guide. For an idea of relative seed size, each photograph contains a millimeter ruler. The distance between increments on the sacle is 1 mm. Compare your sample with the color images in this guide to assist in your identification. Seed photographs are grouped by their plant taxonomic family for both broadleaf and grass or grasslike weeds. You may also refer to the indexes of common names -- broadleaf plant families on page 16 and grass and grass-like plant families on page 19.

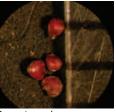
Local University of Missouri Extension Centers can provide information to assist you in pest identification and control decisions. They can help you submit samples to MU's Extension Plant Diagnostic Clinic for positive identification. For specific weed control information in agronomic crop settings, MU publication MP 575, Weed Control Guide for Missouri Field Crops, may be purchased through the local centers. For weed control in turfgrass areas, refer to MU publication IPM 1009, Turfgrass and Weeds. To order these or any other MU Extension publication, call 1-800-292-0969 or go online at <u>http://muextension.missouri.edu/</u>.

Aizoaceae (Carpetweed family)

Broadleaf plant families

Aizoaceae (Carpetweed family)

This is a small family of plants. Other than carpetweed, only two species of plants in this family are known to occur in relatively isolated locations in Missouri.

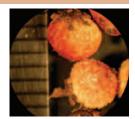


Carpetweed Mollugo verticillata

Anacardiaceae (Cashew family)

In addition to several sumac species, poison ivy is a member of this family and is widespread throughout the state.

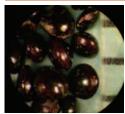




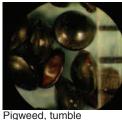
Sumac, smooth; Rhus glabra

Amaranthaceae (Amaranth family)

In Missouri the *amaranths* (pigweeds) make up the vast majority of plant genera that occur within this family.



Amaranth, Palmer Amaranthus palmerii

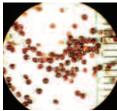


Amaranthus albus



Pigweed, smooth Amaranthus hybridus

Pigweed, redroot Amaranthus retroflexus



Waterhemp, common Amaranthus rudis

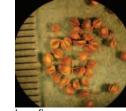


Hedgeparsley, Japanese *Torilis japonica*

Carrot, wild Daucus carota



Chervil, wild Anthriscus sylvestris



Laceflower Ptilimnium nuttallii



Poison-hemlock Conium maculatum



Apiaceae (Carron family)

Also known as the parsley family, this large family includes several herbal plants such as caraway, dill and fennel. It also contains several toxic plants such as poison hemlock and water hemlock.



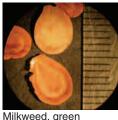
The Dogbane family has relatively few members that occur in Missouri.



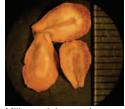
Dogbane, hemp; Apocynum cannabinum

Araceae (Arum family)

The two most prevalent members of the arum family are jack-in-the-pulpit and the closely related green dragon, both found throughout the state.



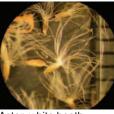
Milkweed, green Asclepias hirtella



Milkweed, honeyvine *Ampelamus albidus*

Asteraceae (Aster family)

The aster family is the largest and most diverse family of broadleaf plants in Missouri. Its members include various species of goldenrod, sunflower and thistle.



Aster, white heath Aster pilosus

Boneset, false



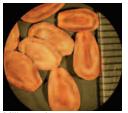
Beggarticks, bearded Bidens aristosa



Jack-in-the-pulpit Arisaema atrorubens

Asclepiadaceae (Milkweed family)

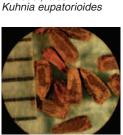
All members of this plant family are known as milkweeds. There are at least 15 species of milkweeds that occur in the state.



Milkweed, common Asclepias syriaca



Milkweed, eastern whorled Asclepias verticillata



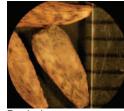
Browneyed-susan Rudbeckia triloba



Burnweed, American Erechtites hieraciifolia



Boneset, late Eupatorium serotinum



Burdock, common Arctium minus



Chicory Cichorium intybus

Apocynaceae (Dogbane family)

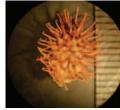
Broadleaf plant families

Asteraceae (Aster family)

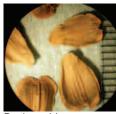
Asteraceae (Aster family) continued

Asclepiadaceae (Milkweed family)

continued



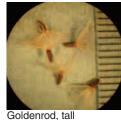
Cocklebur, common Xanthium strumarium



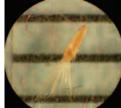
Dock, prairie Silphium terebinthinaceum



Galinsoga, hairy *Galinsoga ciliata*



Goldenrod, tall Solidago altissima

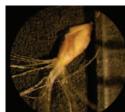


Horseweed *Conyza canadensis*

Dandelion Taraxacum officinale



Eclipta Eclipta prostrata



Goldenrod, Canada Solidago canadensis



Groundsel, common Senecio vulgaris



Ironweed, tall Vernonia altissima



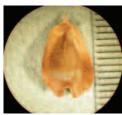
Ironweed, western Vernonia baldwinii



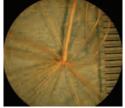
Lettuce, tall Lactuca canadensis



Ambrosia trifida



Rosinweed, cup Silphium perfoliatum



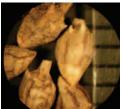
Salsify, western *Tragopogon dubius*



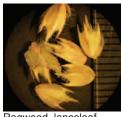
Sowthistle, annual Sonchus oleraceus



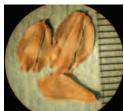
Lettuce, prickly Lactuca serriola



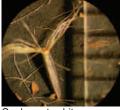
Ragweed, common Ambrosia artemisiifolia



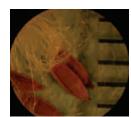
Ragweed, lanceleaf Ambrosia bidentata



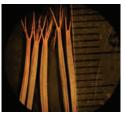
Rosinweed, wholeleaf Silphium integrifolium



Snakeroot, white Eupatorium rugosum



Sowthistle, spiny Sonchus asper



Spanishneedles Bidens bipinnata



Thistle, bull Cirsium vulgare



Thistle, field Cirsium discolor



Thistle, Scotch Onopordum acanthium



Sunflower, common *Helianthus annuus*



Thistle, Canada Cirsium arvense



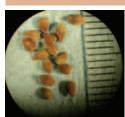
Carduus nutans



Thistle, tall *Cirsium altissimum*

Boraginaceae (Borage family)

This family of plants also includes several nuisance plants known as "beggar's lice" because their fruits readily attach to clothing and other articles.

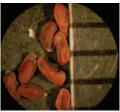




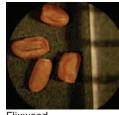
Gromwell, corn; Lithospermum arvense

Brassicaceae (Mustard family)

The mustard family is one of the larger groups of plants in the state. Several plants within this family, such as yellow rocket and wild mustard, are common throughout Missouri.



Falseflax, smallseed Camelina microcarpa



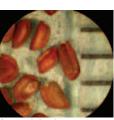
Flixweed Descurainia sophia



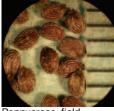
Besides trumpetcreeper, there are few species of *catalpa* that are present in this family within Missouri.



Trumpetcreeper *Campsis radicans*



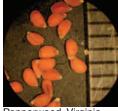
Mustard, hedge Sisymbrium officinale



Pennycress, field Thlaspi arvense



Mustard, wild Brassica kaber



Pepperweed, Virginia Lepidium virginicum

Asteraceae (Aster family)

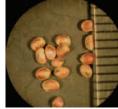
Broadleaf plant families

Brassicaceae (Mustard family)

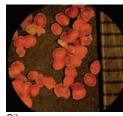
Dipsacaceae (Mustard family) continued

Brassicaceae (Mustard family)

continued



Rocket, yellow Barbarea vulgaris



Sibara *Sibara virginica*

Cannabaceae (Mulberry family)

Other than hops, this family includes mulberry, Osage orange and hemp.



Tansymustard, green

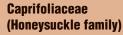
brachycarpa

Descurainia pinnata ssp.

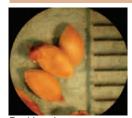
Shepherd's-purse

Capsella bursa-pastoris

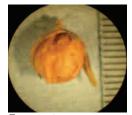
Hops, Japanese *Humulus japonicus*



This family includes several species of honeysuckle, viburnum and elderberry.



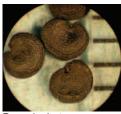
Buckbrush Symphoricarpos orbiculatus



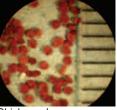
Feverwort Triosteum perfoliatum

Caryophyllaceae (Pink family)

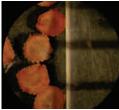
At least 14 species of "chickweed" and several species of sleepy catchfly make up the majority of this family in Missouri.



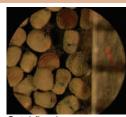
Bouncingbet Saponaria officinalis



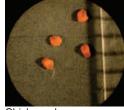
Chickweed, common Stellaria media



Chickweed, nodding Cerastium nutans



Catchfly, sleepy Silene antirrhina



Chickweed, mouseear *Cerastium vulgatum*

Capparidaceae (Caper family)

This small family of plants has only a few members that occur in Missouri such as spider flower.



Clammyweed, roughseed *Polanisia dodecandra*

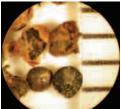
Caryophyllaceae

(Pink family)

Chenopodiaceae (Goosefoot family)

At least 18 different Chenopodium genera members, also known as lambsquarters, are present in Missouri. Kochia is also another important member.





Kochia Kochia scoparia



Povertyweed, Nuttall Monolepis nuttalliana

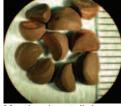




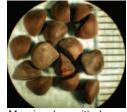
Thistle, Russian Salsola iberica



Morningglory, ivyleaf Ipomoea hederácea



Morningglory, tall; Ipomoea purpurea

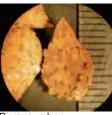


Morningglory, pitted Ipomoea lacunosa



Cucurbitaceae (Gourd family)

Cucurbits include cultivated plants, such as gourd, squash and cucumber.



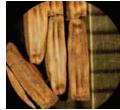
Burcucumber Sicyos angulatus

Dipsacaceae (Teasel family)

The only two members of this family of plants that are known to occur in Missouri are cutleaf and common teasel.



Teasel, common Dipsacus fullonum



Teasel, cutleaf Dipsacus laciniatus

Chenopodiaceae (Goosefoot family)

Broadleaf plant families

Dipsacaceae (Teasel family)

Convolvulaceae (Morningglory family)

Most of the members of this family are vining plants, including several common species of morningglories, bindweeds and the parasitic group of plants, dodders.



Bindweed, field Convolvulus arvensis



Dodder, field Cuscuta campestris





Ipomoea pandurata

Missouri Weed Seeds - A Photo Compendium 9

Euphorbiaceae (Spurge family)

Euphorbiaceae (Spurge family)

Most of the plants from this family present in Missouri are spurges, which include about 20 different species.

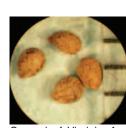




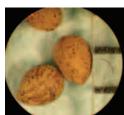
Croton, woolly

Croton capitatus

Copperleaf, hophornbeam; Acalypha ostryifolia



Copperleaf, Virginia; Acalypha virginica







Fabaceae

(Pea family)

and peas.

The legume family is one of the largest

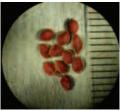
members include clovers and various beans

groups of broadleaf plants. Common

Medic, black Medicago lupulina



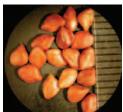
Rattlebox Crotalaria sagittalis



Sericea lespedeza Lespedeza cuneata



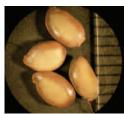
Sicklepod Cassia obtusifolia



Bundleflower, Illinois Desmanthus illinoensis



Partridgepea Cassia fasciculata



Senna, wild Cassia marilandica



Sesbania, hemp Sesbania exaltata



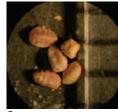
Tick trefoil Desmodium paniculatum



Croton, tropic Croton glandulosus var. septentrionalis



Spurge, nodding; Euphorbia nutans



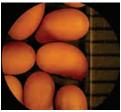
Spurge, prostrate Euphorbia humistrata

Spurge, toothed Euphorbia dentata



Fabaceae

(Pea family)



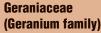
Wildindigo, long-bracted Baptisia leucophaea



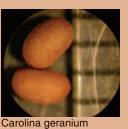
Wildindigo, white Baptisia leucantha

Liliaceae (Lily family)

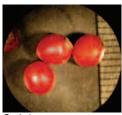
Besides being considered weedy plants, several members of the lily family are commonly cultivated. Such members include asparagus, yucca and many cultivars of daylilies.



The majority of this family of plants present in Missouri are geraniums. There are at least five species known to occur in the state.



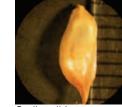
Geranium carolinianum



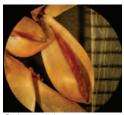
Catbriar Smilax bona-nox



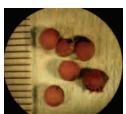
Smilax hispida



Garlic, wild Allium vineale



Onion, wild Allium canadense



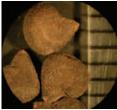
Solomon's seal Polygonatum biflorum

Malvaceae (Mallow family)

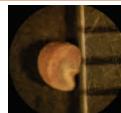
Smooth carrion flower

Smilax herbacea

Several species of the mallow family are among the most common broadleaf weeds in Missouri. These include velvetleaf and prickly sida. Cotton is also a member of this family.



Anoda, spurred Anoda cristata



Mallow, common

Geraniaceae (Geranium family)

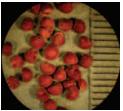
Broadleaf plant families

Malvaceae (Mallow family)

11

Lamiaceae (Mint family)

Common members of the mint family not shown in this guide are henbit and purple deadnettle, which are two of the most prevalent winter annuals in Missouri.

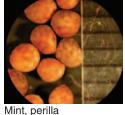


Germander, American Teucrium canadense

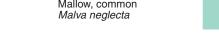


Prunella vulgaris





Perilla frutescens

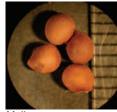


Missouri Weed Seeds - A Photo Compendium

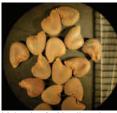
Malvaceae (Mallow family)continued

Malvaceae (Mallow family)

continued



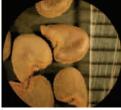
Mallow, rose *Hibiscus lasiocarpos*



Velvetleaf; Abutilon theophrasti



Sida, prickly Sida spinosa



Passifloraceae (Passionflower family)

Onagraceae

(Evening primrose family)

species present in Missouri.

Although about 18 genera of the passion flower family are known, only one genus is known to be present in Missouri.

Martyniaceae (Unicorn-plant family)

Devil's-claw, also known as unicorn plant, is the only known species of this family to be present in Missouri.



Proboscidea Iouisianica

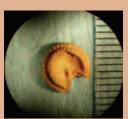
Passionflower, maypop; Passiflora incarnata

Phytolaccaceae (Pokeweed family)

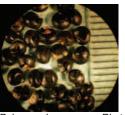
This relatively small plant family has only one genus occurring in Missouri, common pokeweed.

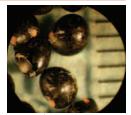
Menispermaceae (Moonseed famiy)

Although there are about 75 genera of the moonseed family, Missouri has only three known genera.



Moonseed, redberry Cocculus carolinus





Pokeweed, common; Phytolacca americana



Primrose is a common member of this family with approximately 14 different

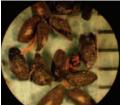
Eveningprimrose, common; Oenothera biennis

Phytolaccaceae

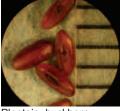
(Pokeweed family)

Plantaginaceae (Plantain familiy)

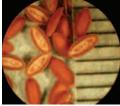
The group of plants known collectively as plantains has about 11 species in the state.



Plantain, blackseed Plantago rugelii



Plantain, buckhorn Plantago lanceolata



Plantain, bracted Plantago aristata



Plantain, hoary Plantago media



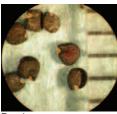
Ladysthumb Polygonum persicaria



Polygonum pensylvanicum

Portulacaceae (Purslane famiy)

Of 20 genera known within this family, there are only three present in the state. Purslane is the most common among them.



Smartweed, hedge

Sorrel, red

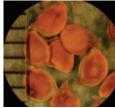
Rumex acetosella

Polygonum scandens

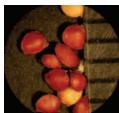
Purslane, common Portulaca oleracea

Ranunculaceae (Buttercup family)

This rather large group of plants is best known for buttercups, of which there are nearly 20 species in Missouri. Clematis is another fairly common plant genus occurring in this family.



Buttercup, bulbous Ranunculus bulbosus



Buttercup, smallflower Ranunculus abortivus

Plantaginaceae (Plantain family)

Broadleaf plant families

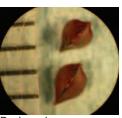
Ranunculaceae (Buttercup family)

Polygonaceae (Smartweed family)

Many different species of plants in Missouri are known as smartweeds, some of which are among the state's most common weeds. Of about 30 genera of these plants worldwide, at least six are present in Missouri.



Buckwheat, wild Polygonum convolvulus



Dock, curly Rumex crispus





Polygonum aviculare

Ranunculaceae (Buttercup family)continued

Ranunculaceae (Buttercup family)

continued



Columbine Aquilegia canadensis

Rubiaceae (Madder family)

Although a large family of plants with about 600 genera, there are about eight genera present in Missouri. The genus, Galium, is the largest in this state with at least 11 species, including a common winter annual, catchweed bedstraw.





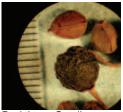
Poorjoe; Diodia teres (both photos)

Rhamnaceae (Buckthorn family)

The buckthorn family has three genera found in the state; Rhamnus spp. or buckthorn is the more common with three species.

Sapindaceae (Soapberry family)

The soapberry family has only two genera present in the state and is not common, although there are about 140 members worldwide.



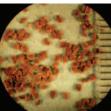
Buckthorn, Carolina Rhamnus caroliniana



Rhamnus lanceolata

Rosaceae (Rose family)

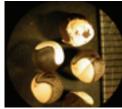
Many of the members of this family are commonly grown as cultivated plants, including rose, apple, pear and strawberry. A notorious member, multiflora rose, is one of the state's noxious weeds.





Scrophulariaceae (Figwort family)

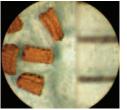
Cinquefoil, sulfur; Potentilla recta



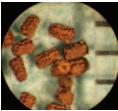
Balloonvine Cardiospermum halicacabum

Scrophulariaceae (Figwort family)

Of the nearly 280 genera, at least 25 are known to be in Missouri. The genera that contain mullein and speedwell are among the most common.



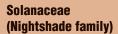
Mullein, common Verbascum thapsus



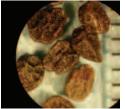
Mullein, moth Verbascum blattaria



Speedwell, corn Veronica arvensis



Some of the state's most prevalent weed problems are caused by this family's members, such as various species of nightshade. Other members are commonly cultivated such as tomato, pepper, potato and eggplant.



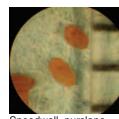
Buffalobur Solanum rostratum



Groundcherry, smooth Physalis subglabrata



Jimsonweed Datura stramonium



Speedwell, purslane *Veronica peregrina*

Groundcherry, clammy

Physalis heterophylla

Horsenettle

Solanum carolinense

Nightshade, bittersweet

Solanum dulcamara

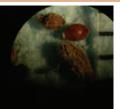
Nightshade, eastern

Solanum ptycanthum

black

Urticaceae (Nettle family)

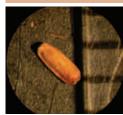
This relatively small family of plants has only five genera occurring in Missouri, but one of its members, *Laportea canadensis* or wood nettle, is a common nuisance plant because of its stinging hairs.



Pellitory; Parietaria pensylvanica

Verbenaceae (Vervain family)

Of about 90 known genera, only three occur in the state. Most prevalent are the vervains, with seven species, most commonly encountered throughout Missouri.



Vervain, blue *Verbena hastata*



Vervain, hoary *Verbena stricta*

Vitaceae (Grape family)

Several species of the grape family are commercially valuable to the state's economy. Virginia creeper is one of the most common vining weeds encountered in undisturbed habitats.



Raccoon grape Ampelopsis cordata



Virginia-creeper; Parthenocissus quinquefolia

Scrophulariaceae (Figwort family)continued

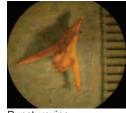
Broadleaf plant families

Vitaceae (Grape family)

Zygophyllaceae (Caltrop family)

Zygophyllaceae (Caltrop family)

This relatively small plant family has about 30 members, but only two actually occur in Missouri. Of these two, puncturevine is the more common.



Puncturevine Tribulus terrestris

Common name index- Broadleaf plant families

Amaranth, Palmer, 4 Anoda, spurred, 11 Aster, white heath, 5 Balloonvine, 14 Beggarticks, bearded, 5 Bindweed, field, 9 Bindweed, hedge, 9 Blue false indigo, 10 Boneset, false, 5 Boneset, late, 5 Bouncingbet, 8 Browneyed-susan, 5 Buckbrush, 8 Buckthorn, Carolina, 14 Buckthorn, lance-leaved, 14 Buckwheat, wild, 13 Buffalobur, 15 Bundleflower, Illinois, 10 Burcucumber, 9 Burdock, common, 5 Burnweed, American, 5 Buttercup, bulbous, 13 Buttercup, smallflower, 13 Carolina geranium, 11 Carpetweed, 4 Carrot, wild, 4 Catbriar, 11 Catchfly, sleepy, 8 Chervil, wild, 4 Chickweed, common, 8 Chickweed, mouseear, 8 Chickweed, nodding, 8 Chicory, 5 Cinquefoil, sulfur, 14 Clammyweed, roughseed, 8 Cocklebur, common, 6 Columbine, 14 Copperleaf, hophornbeam, 10 Copperleaf, Virginia, 10 Croton, tropic, 10 Croton, woolly, 10 Dandelion, 6

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Milkweed, eastern whorled, 5 Milkweed, green, 5 Milkweed, honevvine, 5 Mint, perilla, 11 Moonseed, redberry, 12 Morningglory, bigroot, 9 Morningglory, ivyleaf, 9 Morningglory, pitted, 9 Morningglory, tall, 9 Mullein, common, 14 Mullein, moth, 14 Mustard, hedge, 7 Mustard, wild, 7 Nightshade, bittersweet, 15 Nightshade, eastern black, 15 Onion, wild, 11 Partridgepea, 10 Passionflower, maypop, 12 Pellitory, 15 Pennycress, field, 7 Pepperweed, Virginia, 7 Pigweed, redroot, 4 Pigweed, smooth, 4 Pigweed, tumble, 4 Plantain, blackseed, 13 Plantain, bracted, 13 Plantain, buckhorn, 13 Plantain, hoary, 13 Poison-hemlock, 4 Pokeweed, common, 12 Poorjoe, 14 Povertyweed, nuttall, 9 Puncturevine, 16 Purslane, common, 13 Raccoon grape, 16 Ragweed, common, 6 Ragweed, giant, 6 Ragweed, lanceleaf, 6 Rattlebox, 10 Rocket, vellow, 8 Rosinweed, cup, 6 Rosinweed, wholeleaf, 6

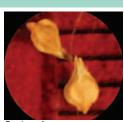
Salsify, western, 6 Senna, wild, 10 Sericea lespedeza, 10 Sesbania, hemp, 10 Shepherd's-purse, 8 Sibara, 8 Sicklepod, 10 Sida, prickly, 12 Smartweed, hedge, 13 Smartweed. Pennsylvania, 13 Smooth carrion flower, 11 Snakeroot, white, 6 Solomon's seal, 11 Sorrel, red, 13 Sowthistle, annual, 6 Sowthistle, spiny, 6 Spanishneedles, 7 Speedwell, corn, 15 Speedwell, purslane, 15 Spurge, nodding, 10 Spurge, prostrate, 10 Spurge, toothed, 10 Sumac, smooth, 4 Sunflower, common, 7 Tansymustard, green, 8 Teasel, common, 9 Teasel, cutleaf, 9 Thistle, bull, 7 Thistle, Canada, 7 Thistle, field, 7 Thistle, musk, 7 Thistle, Russian, 9 Thistle, Scotch, 7 Thistle, tall, 7 Tick trefoil. 10 Trumpetcreeper, 7 Velvetleaf, 12 Vervain, blue, 15 Vervain, hoary, 15 Virginia-creeper, 16 Waterhemp, common, 4 Wildindigo, long-bracted, 11 Wildindigo, white, 11

Cyperaceae (Sedge family)

Missouri is home to more than 200 species of sedges. Agronomically, yellow nutsedge, *Cyperus esculentus*, is considered to be the most problematic in prevalence of this family of plants.



Nutsedge, yellow Cyperus esculentus



Sedge, fox *Carex vulpinoidea*



Sedge, Short's *Carex shortiana*

Rush, grassleaf

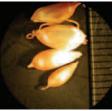
Juncus marginatus

Juncaceae (Rush family)

More than 20 species of rushes occur in Missouri. Rushes are not true grasses or sedges. Determining individual species of rushes by plant characteristics is nearly impossible.

Liliaceae (Lily family)

Several members of this family are cultivated as ornamentals, including daffodil and day lily. About 30 species of this family are present in the state.



Garlic, wild Allium vineale



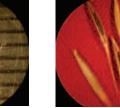
Onion, wild *Allium canadense*

Poaceae (Grass family)

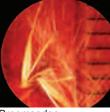
> About 270 species of true grasses are found in the state. Many species are economically important, including corn, wheat, sorghum, rye, fescue, oats, rice, barley and various millets.



Barnyardgrass Echinochloa crus-galli



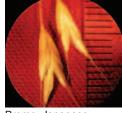
Brome, downy Bromus tectorum



Broomsedge Andropogon virginicus



Bluegrass, annual Poa annua



Brome, Japanese Bromus japonicus



Canarygrass, reed *Phalaris arundinacea*

Cyperaceae (Sedge family)

Grass and grasslike plant families

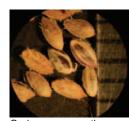
Poaceae (Grass family) Poaceae (Grass family) ...continued

Poaceae (Grass family)

Continued



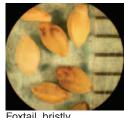
Cheat Bromus secalinus



Crabgrass, smooth Digitaria ischaemum



Dropseed Sporobulus asper

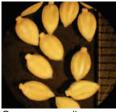


Foxtail, bristly Setaria verticillata



Foxtail, green Setaria viridis

Crabgrass, large Digitaria sanguinalis



Cupgrass, woolly Eriochloa villosa



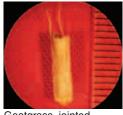
Fountaingrass, crimson Pennisetum ruppelii



Foxtail, giant Setaria faberi



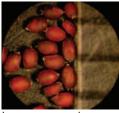
Foxtail, yellow Setaria glauca



Goatgrass, jointed Aegilops cylindrica



Indiangrass, yellow Sorghastrum nutans



Lovegrass, purple Eragrostis spectabilis



Millet, foxtail Setaria italica



Panicum, fall Panicum dichotomiflorum



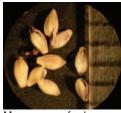
Paspalum, hairyseed *Paspalum pubiflorum*



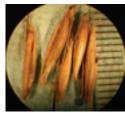
Goosegrass Eleusine indica



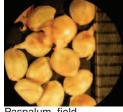
Johnsongrass Sorghum halepense



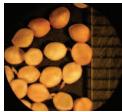
Mannagrass, fowl *Glyceria striata*



Oat, wild Avena fatua



Paspalum, field Paspalum laeve



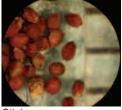
Paspalum, thin Paspalum setaceum



Purpletop Tridens İlavus



Sandbur, longspine Cenchrus longispinus



Stinkgrass Eragrostis cilianensis



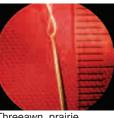
Quackgrass Elytrigia repens



Shattercane Sorghum bicolor



Panicum virgatum



Threeawn, prairie Aristida oligantha



Tridens, longspike Tridens strictus



Timothy Phleum pratense



Windmillgrass, tumble Chloris verticillata



Witchgrass Panicum capillare

Poaceae (Grass family) ...continued

Grass and grasslike plant families

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Nutsedge, yellow, 17 Oat, wild, 18 Onion, wild, 17 Panicum, fall, 18 Paspalum, field, 18 Paspalum, hairyseed, 18 Paspalum, thin, 18 Purpletop, 19 Quackgrass, 19 Rush, grassleaf, 17 Sandbur, longspine, 19 Sedge, fox, 17

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