Butterfly Gardening for Louisianians

LSU AgCenter
Research & Extension

Butterfly Gardening for Louisianians

Butterflies provide unequaled splendor and motion. Our fascination with these magical creatures is as evident today as it has been throughout history. Speaking to our gentler and possibly our romantic selves, butterflies have a calming effect. Observing these marvelous creatures fluttering seemingly effortlessly sometimes sets our minds adrift.

A growing number of Louisiana gardeners are expressing their desire to attract butterflies to their yards. Increasing awareness of the natural habitat loss of some butterfly species because of land commercialization has many people concerned about butterfly survival. In creating a unique habitat, gardeners enjoy knowing they are helping to maintain the survival of these lovely insects along with the enjoyment of enriching their own lives.

Benefits of gardening to attract butterflies are too numerous to list. Some, however, may include:

1. They are excellent pollinators. Feeding primarily on flower nectar, they carry pollen from one flower to another.

2. Serving as sensitive ecological indicators, butterflies are indicators of the natural balance of our environment (changes in natural communities).

3. Butterfly habitats attract other wildlife and provide an excellent place for children to learn.

Butterfly gardening, or gardening with special thought to adding plants and features attractive and beneficial to butterflies, may be a rewarding hobby. A butterfly garden may be a few containers of one or two butterfly-attracting plants or a very sizable garden with many different species to attract butterflies. To create a "butterfly friendly" environment, there are a few simple requirements: food, water, shelter and a place to reproduce.

Butterflies

Description and Life Cycle

Butterflies are members of the most abundant form of life on Earth, the insects. Insects are small invertebrates, or animals lacking backbones. Wings and bodies of most butterflies are layered with powdery-like scales contributing to their "shimmery" or "glittery" appearance. The butterfly order attains the name Lepidoptera meaning "scaly-winged" from the Greek interpretation, lepido meaning scale, and optera for wings. There is an abundance of butterfly species or varieties in the world.

The life cycle of a butterfly is perhaps the most fascinating occurrence in nature. Butterflies experience a complete metamorphosis, or change, in form and structure during normal growth. Four developmental stages are involved in the transformation process: egg, caterpillar or larval stage, pupal or chrysalis, and the most familiar, the winged adult stage. Individual stages are unique from the other three. It's sometimes difficult to believe that the same single creature is involved with each.

A caterpillar it had been,
Once clad in a suit of nature's green;
But now has changed by nature's laws!
Where are the eyes, the legs, the jaws?...
Lo! the shrouded thing...
Unfolding rises from each side;
Its tapered form in beauty dressed,
Like gold dust o'er a yellow vest.
Whilst hands unseen had giv'n the power
To gather sweets and suck the flower,
It is a butterfly, as bright
As ever sparkled in the light.

H.G. Adams (1881)

Insect bodies are divided into three parts: the head, thorax and abdomen. These segments are composed of facilities essential for existence of the organism. The head, specialized for perceiving the environment, consists of the eyes, antennae and mouthparts. Muscles operating the legs and wings are located on the thorax, which is specialized for locomotion. Breathing occurs on the thorax and the abdomen, whereas digestion and reproductive structures are housed at the abdomen. Eyes of the caterpillar and butterfly are entirely different. Caterpillars have a series of simple eyes or ocelli, which are useful for determining light and darkness. Butterflies possess a pair of compound eyes, allowing the insect to detect movement and a broad spectrum of color. Butterflies enjoy a greater color perception than we do because they can see ultraviolet light.

Eating is accomplished with a chewing mouthpart during the larval stage. This principal development period is perhaps the most important in the growth of the butterfly. Mouthparts of butterflies are specially designed for sucking up liquids. A long, slender tube, known as a proboscis, is extended for feeding. This sucking tube, easiest imagined as a drinking straw, is neatly coiled up when not in use.

One pair of segmented antennae or "feelers" has the primary function as powerful scent receptors. Antennae are useful in discovering delicious flower nectar and detecting mates.

A caterpillar has one to four pairs of legs, used primarily for crawling and gripping onto surfaces. Like all adult insects, butterflies have three pairs of jointed legs for movement. Tips of the legs have claws for landing and grasping onto plants or areas for resting or basking in the sunshine.

Two pairs of wings found on the abdomen provide the magnificent coloration of so many species. The enormous variation in the shape, size and patterns of wings, as well as the diversity of scales, contribute to the many different metallic or iridescent colors among species. Some species are sexually dimorphic; that is, males and females are completely different in their coloring or pattern. Resting with their wings vertically, or above their bod-

ies, is common. This allows viewing of the underside of the wings, which often have patterns or coloration to help them blend in with a particular environment, perhaps to escape predation. Wing coloration aids in individual recognition, as well as in the attraction of a mate.

Butterflies are known for their various colors and intricate wing patterns. Not only are these fabulous colorations a treat for our sense of vision, but often they protect the butterflies against enemies. Some colors help conceal butterflies; other patterns may be a warning to would-be predators that the butterfly is distasteful, or in the case of the monarch, poisonous. Carotenoids in milkweed (*Asclepias currasavica*), the primary host plant for monarch butterflies, are poisonous. Some species mimic one or more characteristics of another to better protect themselves.

Respiration, or the taking in of oxygen from the air in exchange for carbon dioxide, occurs at the thorax and abdomen in the larval and adult stages through tiny pores or spiracles located on the side of the body. Reproductive organs located on the abdomen are completely developed at the winged adult stage. Complex chemicals, or pheromones, are released by the female to attract a mate. Various males pick up this scent with their antennae and, in turn, launch their own pheromones which may act as an aphrodisiac, stimulating the female to choose the desirable one and begin the courtship rituals.

After mating, the adult female seeks out a host plant. This will be a place to lay her eggs on or near, and it will provide the first meal for the caterpillar shortly after it emerges. The number of eggs varies. They come in different shapes and sizes, depending on the species. Hatching occurs within a few days or weeks, although sometimes eggs remain inactive through the winter and hatch in the spring.

The caterpillar locates a plant as a nutritious food source and begins eating and growing.

Feeding

In most cases, the young are more particular about their food source than the adults. The monarch butterfly always chooses a member of the milkweed family (*Asclepias* spp.) as a home for her eggs and, upon hatching, a place for her young to feed. Gulf fritillary young prefer the passion vine or maypop (*Passiflora* spp.) as a host. Some other species are as particular, but many simply look for a succulent plant that is palatable. Numerous species prefer native plants, so it is a good idea to include a few in the garden or allow them to exist in the surrounding landscape. Many species of aster are used by the pearly crescentspot as food plants. Native trees are possibly the most common choice of caterpillar food. Viceroy young deposit eggs on plants in the willow family (*Salix* spp.). Zebra swallowtail are fond of pawpaw (*Asimina* spp.). Juvenile's dusky wing and Horace's dusky wing caterpillars dine on the leaves of oak trees (*Quercus* spp.). Hackberry butterfly and tawny emperor feed on hackberry (*Celtis* spp.), except the spiny hackberry (*Celtis pallida*).

In addition to native species, a few butterfly caterpillars feed on several domestic plants. The eastern black swallowtail larva finds several herbs appetizing - dill, parsley and fennel. These plants can easily be intermingled for caterpillar food or, if several plants of each are placed in the garden, there should be enough to share with the young butterflies and, if desired, for use in the kitchen.

A caterpillar will generally remain active for several weeks to a couple of months, going through several molts, or sheddings, of the skin. This allows the caterpillar's body room to increase in size. After hatching, the caterpillar goes through four molts. Each period between these stages is called an instar. Reaching the fifth instar, the caterpillar is fully mature and now must find a place for the third stage of the life cycle.

The chrysalis, the time between the caterpillar and the winged adult stage, is yet another change in form. Fully grown, the caterpillar seeks a protected area away from direct sun and rain. Selection of the site to pupate, or form the chrysalis, varies from the underside of leaves to the bark of trees and shrubs. These are only a few of the possible places that may be chosen.

The caterpillar secures itself to the selected location and forms a pupal case, or chrysalis, which becomes home for a week up to a few months, depending on species and season of the year. Time spent in the chrysalis is in some ways a resting period. There is no feeding at this time. In actuality, this seemingly inactive state is where the transformation to the butterfly occurs. Many times, the wings become visible through the chrysalis during the last few hours of this stage. Finally, the winged adult breaks through the chrysalis and crawls out.

Butterflies emerge from the chrysalis with small, crumpled wings and immediately begin pumping blood and air into their veins, forcing the wings to unfold and expand. In a few hours, the butterfly is ready for flight.

Fully grown at this time, butterflies require food to maintain their bodies. Nectar provides sugars (carbohydrates) which are converted into energy necessary for survival. At the adult stage, the primary goal is to mate and produce offspring.

Butterfly Species in Louisiana

Many butterfly species have been spotted in Louisiana, although some are more common to our area than others. In becoming more familiar with the butterflies in your garden, you may note some visitors not on this list. Certain regions or habitats attract species which may not occur in every location.

Common Name	Scientific Name
Swallowtails	
Eastern black swallowtail	*Papilio polyxenes*
Giant swallowtail	*Heraclides cresphontes*
Palamedes swallowtail	*Pterourus palamedes*
Pipe-vine swallowtail	*Battus philenor*
Spicebush swallowtail	*Pterourus troilus*
Tiger swallowtail	*Pterourus glaucus*
Zebra swallowtail	*Eurytides marcellus*
Sulphurs and Whites	
Alfalfa butterfly	*Colias eurytheme*
Cabbage butterfly	*Pieris rapae*
Cloudless sulphur	*Phoebis sennae*
Common sulphur	*Colias philodice*
Dainty sulphur	*Nathalis iole*
Falcate orange tip	*Anthocharis midea*
Little sulphur	*Eurema lisa*
Sleepy orange	*Eurema nicippe*
Southern dog face	*Colias cesonia*

Hairstreaks	
Gray hairstreak	*Strymon melinus*
Red-banded hairstreak	*Calycopis cecrops*
Snouts and Beaks	
Snout butterfly	*Libytheana bachmanii*
Milkweeds	
Monarch	*Danaus plexippus*
Longwings	
Gulf fritillary	*Agraulis vanillae*
Brushfoots	
American painted lady	*Vanessa virginiensis*
Buckeye	*Junonia coenia*
Hop merchant	*Polygonia comma*
Painted lady	*Vanessa cardui*
Pearl crescent	*Phyciodes tharos*
Phaon crescent	*Phyciodes phaon*
Question mark	*Polygonia interrogationis*
Red admiral	*Vanessa atalanta*
Red-spotted purple	*Basilarchia arthemis asty-anax*
Texas crescentspot	*Phyciodes texana*
Variegated fritillary	*Euptoieta claudia*
Viceroy	*Limenitis archippus*
Hackberry and Goatweed Butterflies	
Goatweed butterfly	*Anaea andria*
Hackberry butterfly	*Asterocampa celtis*
Tawny emperor	*Asterocampa clyton*

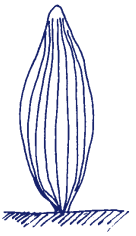
Satyrs

Carolina satyr	*Hermeuptychia sosybius*

Skippers

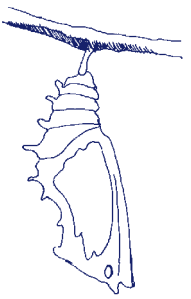
Checkered skipper	*Pyrgus communis*
Fiery skipper	*Hylephilia phyleus*
Horace's dusky wing	*Erynnis horatius*
Juvenal's dusky wing	*Erynnis juvenalis*
Long-tailed skipper	*Urbanus proteus*
Ocola skipper	*Panoquina ocola*
Silver-spotted skipper	*Epargyreus clarus*

Life Cycle



egg
(ovum)

caterpillar
(larva)



chrysalis
(pupa)

butterfly
(adult)

Gardening to Attract Butterflies

In addition to plants, other features are necessary in attracting these winged beauties. Nectar is important, as is drinking water. Water must be in a place that is not deep so the butterflies can comfortably rest and drink. Butterflies cannot drink from open water. Sinking a shallow pan into the ground, which can be refilled when the garden is watered or during rains, is one possibility. Others are a birdbath filled with pebbles and water or a dish filled with moist sand. These locations will also let butterflies replenish needed minerals from the rocks or sand.

Some butterflies like the juice from fruit, so rather than throwing away leftover or fermenting fruit or the peeling, place them in the garden. A piece of watermelon or the rind is a tasty treat and a nutritious source of sweet syrup for energy.

Basking spots are of great importance, because butterflies are cold-blooded insects and depend on the warmth of the sun for energy to maintain proper body temperature. Spring and fall are perhaps the most important times in the absorption of the sun's energy since night-time and morning temperatures may be low. Placing stones or boards in a sunny spot gives butterflies a place to thrive in the sunshine. In addition, the sun enhances their wing colors.

Planting Location

The objective of a butterfly garden is to take part in the endlessly fascinating hobby of gardening and to lure beautiful butterflies to your home. In the largest sense, a garden is composed of the entire landscape, whether it be a small backyard or acres of space. One of the first considerations in planning the garden should be the relationship of the plantings to the house.

Making a rough sketch showing the relative size and position of existing elements on your property and the potential use of the major elements will give you a place to begin. Consider situating flower beds, showy shrubs or flowering trees in view of windows and doors so you can enjoy the plants and butterflies from inside your house. Evaluating the existing landscape site will

allow you to discover features already there. Many trees and shrubs provide the necessary environmental structures for all stages of the butterfly's life.

A location that receives several hours of sun each day will help produce an abundance of nectar-producing flowers. Butterflies and the plants they are attracted to need plenty of sunshine. There are a few exceptions, such as impatiens (*Impatiens wallerana*). Warmth of the sun is absolutely necessary for the survival of butterflies. They cannot produce their own body heat and must depend on the sun for survival. If the garden is too shady, carefully prune trees and shrubs to open up the designated area.

In determining the size of the butterfly habitat, consider the available space and the amount of time you are willing to spend maintaining the garden. If space is limited, a few plants, such as lantana, in containers will attract butterflies. Begin with a manageable size and, if desired, increase the size of the garden over time. Adjusting the location of plants (along with the trial and error of finding what plants are preferable or grow well for you) are all a part of the fun of gardening. After selecting a site with adequate sunlight, consider the drainage. A well-drained location is necessary for the survival of most plants, especially for annual and perennial garden plants.

Planting and Bed Preparation

Raised beds are ideal for butterfly garden plantings. This is especially recommended when using herbaceous annual and perennial flowering plants. A well-drained soil is essential. Amend heavy clay soils with organic matter (pine bark, peat moss) and sharp sand. Amend light sandy soils with organic matter only. A light application of a slow-release (2-3 month) complete garden fertilizer should be made at planting. Be sure to have a soil sample analyzed before planting. This will give you information on the current nutrient status of the soil and its pH.

Select quality plants. Container-grown annuals and perennials are available at most retail garden centers. Vines, shrubs and trees for butterfly attraction are excellent companion plants for the flowering annuals and perennials. These plants provide nighttime protection for the butterflies and add different

forms and textures to the garden area. Be sure to plan a design before buying plants. Plant tall-growing plants toward the back of beds, with medium height plants in the center or middle area, and use short plants for borders, edgings and bed fronts. Plant in masses (especially annuals) of single species to make the garden more attractive to butterflies.

Maintenance

Many items are important in a proper maintenance program. Be sure to provide proper watering and fertilization. Mulching should be considered after bed construction and planting.

Watering

Supplemental irrigation may be needed during the growing season to assure steady growth and optimum performance of plants. When normal rainfall does not provide adequate moisture (about 1 inch/week from spring through fall), water will be needed, especially if proper preparation produced a well-drained bed area. A thorough soaking is preferred instead of frequent sprinklings. In general, water about once a week, when needed. It is probably best to underwater plants than to overwater. Overwatering and frequent wetting of foliage lead to increased disease incidence.

Fertilization

As with any garden, regular fertilization will enhance performance of plants in a butterfly garden. Remember to fertilize at planting. It is important to maintain proper soil moisture after fertilization. Dolomitic limestone can be applied, if needed, to raise soil pH. Do this based on results of a soil sample.

Mulching

Mulching can be one of the most beneficial cultural practices used in gardening. Several inches of mulch can be added on a seasonal basis. Excellent mulches include pine straw, bagasse, compost, pine bark mulch or nuggets, tree chippings, grass clippings and many other types of organic matter. Benefits of mulching plants include maintaining a cooler root zone in the summer

and a warmer root zone in the winter, moisture conservation, weed suppression and increasing soil organic matter.

Dead-heading

Dead-heading is the process of removing spent flowers. Retention of old flowers on plants leads to seed production. If a plant expends energy on seed production, flower production is sacrificed. Some plants are self-cleaning, but many require that old flowers be removed. Periodically removing these old flowers will keep the butterfly garden flowering for an extended period.

Pruning of vines, shrubs and trees may be needed. Pruning is the removal of plant parts to improve the overall function or landscape performance of that plant. Enhancing plant vigor, controlling size, removing dead branches and regulating flowering are benefits of pruning.

Plant Selection

Many plants can attract butterflies to a garden area. They can include annual and perennial flowers, deciduous and evergreen trees and shrubs, vines and other material. Butterflies use many different species as hosts or nectar plants. Some butterflies are attracted to a wide range of plants. Others may be attracted to just one or two individual plant species. Listed are common and scientific names of plants serving as hosts or nectar sources. Typical flowering periods for annuals and perennials are also included.

Common Name	Scientific Name	Flowering Period
	Flowering Annuals	
African marigold	*Tagetes erecta*	Spring - Frost
Ageratum	*Ageratum houstonianum*	Summer - Fall
Anise hyssop	*Agastache foenicium*	May - September
Annual dianthus	*Dianthus chinensis*	
Annual larkspur	*Consolida ambigua*	Spring
Annual salvia	*Salvia splendens*	Spring - Frost
Annual sunflower	*Helianthus annuus*	Spring - Frsot
Balsam	*Impatiens balsamia*	Spring - Frost
Borage	*Borage officianalis*	
Cosmos	*Cosmos bipinnatus*	Spring - Fall
Delphinium	*Delphinium* spp.	Spring
Dill	*Anethum gravoelens*	Spring
Fennel	*Foeniculum vulgare*	
Flowering tobacco	*Nicotiana sylvestris*	Spring
Forget-Me-Nots	*Myosotis scorpioides*	
French marigold	*Tagetes patula*	Spring - Frost
Gazania, treasure flowers	*Gazania* spp.	Summer
Globe amaranth	*Gomphrena globosa*	April - Frost
Impatiens	*Impatiens wallerana*	Spring - Frost
Johnny jump ups	*Viola tricolor*	Fall - Spring
Nasturtium	*Tropaelum majus*	Spring
Ornamental kale/cabbage	*Brassica* spp.	Winter - Spring
Pansy	*Viola* x *wittrockiana*	Fall - Spring

Parsley	*Petroselinium crispum*	Spring
Periwinkle	*Catharanthus roseus*	Late Spring - Frost
Petunia	*Petunia* x *hybrida*	Spring - Frost
Pot Marigold, calendula	*Calendula officianalis*	Fall - Spring
Queen Anne's Lace	*Daucus carota*	Summer
Snapdragon	*Antirrhinum* spp.	Fall - Spring
Spider flower	*Cloeme Hmasslerana*	Summer
Sweet alyssum	*Lobularia maritima*	Winter - Spring
Verbena	*Verbena* spp.	Spring - Frost
Zinnia	*Zinnia elegans*	Spring - Frost

Herbaceous Perennials

Asters	*Aster* spp.	Fall
Bee balm	*Monarda didyma*	Spring
Bergamot	*Monarda fistulosa*	Spring
Black-eyed susan	*Rudbeckia fulgida*	Summer
Blanket flower	*Gaillardia* x *grandiflora*	Summer
Blue mist	*Caryopteris* x *clandoensis*	Summer
Butterfly weed	*Ascelpias tuberosa*	Summer - Fall
Candlestick tree	*Cassia alata*	Summer - Fall
Canna	*Canna* x *generalis*	
Cardinal flower	*Lobelia* spp.	May - September
Clerodendron	*Clerodendron* spp.	Summer
Comphrey	*Symphytum officinale*	Spring - Summer
Coreopsis	*Coreopsis* spp.	Spring - Summer
Cutleaf coneflower	*Rudbeckia laciniata*	Summer

Daisy	*Chrysanthemum* spp.	Spring, Fall
Daylily	*Hemerocallis* spp.	Spring - Fall
Dianthus	*Dianthus* spp.	Spring - Fall
Firebush	*Hamelia patens*	Summer
Flamingo flower	*Jacobina carnea*	
Four o'clock	*Mirabilis jalapa*	Summer - Fall
Garlic chives	*Allium tuberosum*	Mid-late Summer
Goldenrod	*Solidago* spp.	Fall
Glory bush	*Tibouchina urvilleana*	May - September
Hardy ageratum	*Eupatorium coelestinum*	Fall
Hena	*Lawsonia inermis*	Spring - Fall
Hibiscus	*Hibiscus* spp.	Spring - Fall
Hollyhock	*Althea rosea*	
Joe-pye weed	*Eupatorium fistulosum*	Fall
Lantana	*Lantana camara*	April - Frost
Loosestrife	*Lythrum salicaria*	June - September
Mallow	*Malva* spp.	
Mexican cigar plant	*Cuphea micropetela*	May - September
Mexican hat	*Ratibida columnifera*	Summer
Mexican mint marigold	*Tagetes lucida*	Fall
Mexican petunia	*Ruellia* spp.	
Milkweed	*Ascelpias currasavica*	Summer - Fall
Mint	*Mentha* spp.	
Montbretia	*Crocosmia Pottsii*	May - September
Moss rose	*Portulaca grandiflora*	Spring - Frost

Moss verbena	*Verbena tenuisecta*	Spring - Frost
Obedient plant	*Physostegia* spp.	Late Spring - September
Onion chives	*Allium schoenoprasum*	Spring
Pentas	*Pentas lanceolata*	April - Frost
Phlox	*Phlox* spp.	Spring - Summer
Purple coneflower	*Echinacea purpurea*	Spring - Fall
Purslane	*Portulaca oleracea*	Spring - Frost
Rosemary	*Rosemarinus officianalis*	Spring, Fall
Rue	*Ruta graveolens*	
Salvia	*Salvia* spp.	Late Spring - Fall
Sedum	*Sedum* spp.	Spring
Shrimp plant	*Beloprone guttata*	
Society garlic	*Tulbaghia violacea*	Spring - Fall
Stokes aster	*Stokesia laevis*	May - November
Swamp sunflower	*Helianthus angustifolius*	Fall
Tansy	*Tanacetum vulgare*	May - September
Trailing lantana	*Lantana montevidensis*	April - Frost
Turk's cap	*Malvaviscus arboreus*	Summer - Fall
Verbena	*Verbena* spp.	Spring - Frost
Veronica	*Veronica* spp.	Summer - Fall
Violet	*Violet odorata*	Spring
White boltonia	*Boltonia asteroides*	Late Summer
Woods violet	*Viola odorata*	
Yarrow	*Achillea millefolium*	Spring - Fall

Yellow coneflower	*Ratabida pinnata*	Summer

Evergreen Trees

Camphor tree	*Cinnamomum camphora*
Citrus	*Citrus* spp.
Redbay	*Persea borbonia*

Deciduous Trees

American hop hornbeam	*Ostrya virginiana*
American hornbeam	*Carpinus caroliniana*
Ash	*Fraxinus* spp.
Basswood	*Tilia americana*
Chaste tree	*Vitex agnus-castus*
Crabapple	*Malus* spp.
Dogwood	*Cornus florida*
Elm	*Ulmus* spp.
Hackberry	*Celtis* spp.
Hop tree	*Ptelea trifoliata*
Locust	*Robinia* spp.
Mayhaw	*Crataegus opaca*
Mimosa	*Albizia julibriossin*
Oak	*Quercus* spp.
Parsley hawthorn	*Crataegus marshallii*
Pawpaw	*Asimina triloba*
Pear	*Pyrus* spp.
Persimmon	*Diospyros virginiana*
Plum	*Prunus* spp.

Poplar, cottonwood	*Populus* spp.
Redbud	*Cercis canadensis*
River birch	*Betula nigra*
Sassafras	*Sassafras albidum*
Sycamore	*Platanus occidentalis*
Tuliptree	*Liriodendron tulipifera*
Willow	*Salix* spp.

Evergreen Shrubs

Indian azalea	*Rhododendron indicum*
Privet, ligustrum	*Ligustrum* spp.

Deciduous Shrubs

Althea	*Hibiscus syriacus*
Arrowwood	*Viburnum dentatum*
Bridal wreath	*Spiraea* spp.
Buckeye	*Aesculus pavia*
Butterfly bush	*Buddleia davidii*
Buttonbush	*Cephalanthus occidentalis*
Flame azalea	*Rhododendron austrinum*
Honeysuckle azalea	*Rhododendron canescens*
Mock orange	*Philadelphus coronarius*
Snowbell	*Styrax americanus*
Sparkleberry	*Vaccinium arboreum*
Spicebush	*Lindera benzoin*
Sweetshrub	*Clethera alnifolia*
Viburnum	*Viburnum* spp.

Vines

Carolina jessamine	*Gelsemium sempervirens*
Chinese wisteria	*Wisteria sinensis*
Cypress vine	*Ipomoea quamoclit*
Honeysuckle	*Lonicera* spp.
Morning glory	*Ipomoea purpurea*
Passionflower, maypop	*Passiflora* spp.
Sweet pea	*Lathyrus odoratus*

Edward W. Bush
Associate Professor (Horticulture)

Daniel J. Gill
Associate Professor (Horticulture)

Allen D. Owings
Professor (Horticulture)

Dale K. Pollet
Professor (Entomology)

Visit our Web site: www.lsuagcenter.com

Louisiana State University Agricultural Center
William B. Richardson, Chancellor
Louisiana Agricultural Experiment Station
David J. Boethel, Vice Chancellor and Director
Louisiana Cooperative Extension Service
Paul D. Coreil, Vice Chancellor and Director

Pub. 2583 (6M) 04/07 Rep.

Issued in furtherance of Cooperative Extension work, Acts of Congress of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. The Louisiana Cooperative Extension Service provides equal opportunities in programs and employment.