Accent In landscape design, a dominant or focal point.

Active ingredient In a pesticide formulation, the chemical that

actually kills the pests.

Aerosols Very low concentrate solutions, usually applied as a

fine spray or mist.

Aggregate fruits Fruits from a single flower with many ovaries that

are fertilized separately and independently.

Aggregates The name for structural pieces formed when soil

particles are grouped together in the formation

processes. Also called a ped.

Alternate An arrangement of leaves in which the alternate or

spiral leaves are arranged in alternate steps along

the stem with only one leaf at each node.

Angiosperms All flowering plants.

Annual flowers Flowers that live only one growing season.

Annuals Plants that pass through their entire life cycle, from

seed germination to seed production, in one

growing season and then die.

Anther In a flower, a pollen sac, part of the stamen

Asexual propagation Propagation in which a vegetative part of the parent

plant is made to regenerate itself into a new plant.

Bacillus popilliae Bacterial insecticide that that controls grubs of

Japanese beetles in the eastern U.S.

Bacillus thuringiensis Bacterial insecticide that provides effective control

of the larvae of several moths or butterflies.

Bacteria Single-celled microscopic organisms that reproduce

very rapidly.

Baits Formulation made by adding the active ingredient

to an edible or attractive substance. (B)

Balance In landscape design, balance refers to an

aesthetically pleasing integration of elements in the

landscape.

Balled-and-burlapped plants Plants, primarily trees and some shrubs, that are

grown in nursery rows for some time and are root pruned so that the root system within the balls is

compact and fibrous.

Banding	A method of applying fertilizer in which narrow
	bands of fertilizer are applied in furrows 2 to 3
	inches from vegetable garden seeds and 1 to 2

inches from vegetable garden seeds and 1 to 2 inches deeper than the seeds or plants to be planted.

41 1 6 1 1 6 4 11 1 1 1 1

Bare-root plants Plants that have had the soil washed or shaken from

their roots after digging.

Bermuda grass Warm season turfgrass with almost no shade

tolerance. The most widely used turfgrass in Texas.

Biennials Plants that pass through their entire life cycle in two

years, producing vegetative structure and food storage organs in the first season. They complete their life cycle in the second year and then die.

Binomial nomenclature The scientific system of giving a double name to

each plant or animal (genus + species) developed by

Linnaeus.

Biological control Control of insects by conserving and enhancing

natural enemy populations.

Blade The expanded, thin structure of a leaf on either side

of the midrib.

Blight A general term used to describe the rapid and

general killing of leaves, flowers or stems.

Blood meal Dried, powered blood collected from cattle

slaughterhouses, a rich source of nitrogen.

Branch A stem that is more than one year old.

Brand name Name used by a company to identify its product.

Broadcasting A method of applying fertilizer; it is spread over the

growing area and left to filter into the soil, or is incorporated into the soil with a rototiller or spade.

Brownpatch Fungus disease that damages St. Augustinegrass in

spring and early fall.

Bud An undeveloped shoot from which embryonic

leaves or flower parts arise.

Budding One of the major methods of asexual plant

propagation involving joining two plant parts from

different varieties.

Buffalograss The only turfgrass native to the North American

Great Plains from Texas to Canada. It is a warm-

season turfgrass that spreads by stolens.

Bulb 1. A shortened compressed underground stem

surrounded by fleshy scales (leaves) that envelop a

central bud located at the tip of the stem. 2. A complete or nearly-complete miniature of a plant encased in fleshy, modified leaves called scales which contain food reserves. In the broadest sense, bulbs included corms, tubers, tuberous roots and rhizomes, as well as true bulbs.

Calibration When applying pesticides, this involves adjusting

your equipment to apply the desired rate of

pesticide.

Cambrium A meristem that is the site of cell division and

active growth.

Canes 1. Stems that have a relatively large pith and usually

live only one or two years. 2. Tops of blackberry

bushes.

Canker A dead area on a stem surrounded by living tissue.

Capillary water Water in the soil held against gravity in the pore

spaces of the soil; it is the most important water for

plant growth.

Centipedegrass Warm season turfgrass with a creeping growth habit

and medium-wide leaves. Produces only surface runners, so it is easy to control in a landscape.

Chewing insects

Insects that take their food by chewing off the

external parts of a plant.

Chinch bug Insect that causes damage to St. Augustine grass.

Chlorosis Yellowing of normally green tissue due to partial

failure of chlorophyll to develop.

Clay One of the six principle soil classes in Texas. Clay

overpowers sand or silt; the clay content is 55

percent or greater.

Clay loam One of the six principle soil classes in Texas. Silt

and sand are usually present in noticeable amounts,

but they are overshadowed by clay.

Clays The finest soil particles.

Climate In landscape design, climate includes sunlight,

wind, temperature and all forms of precipitation.

Cloche Originally a bell-shaped glass jar set over delicate

plants to protect them; now, a portable structure which shelters plants from drying winds and cold.

Common name Shorter name given to a formulation to make it

easier to identify.

Compaction A physical process that slowly reduces the amount

of oxygen (or air) contained in the soil.

Companion planting The orderly mixing of crop plants aimed at

controlling insect populations.

Complete fertilizer Fertilizer that contains nitrogen, phosphorus and

potassium.

Complete metamorphosis Metamorphosis consisting of four stages: egg, larva,

pupa, adult.

Composite inflorescence Inflorescence made up of numerous, stemless

florets, characteristic of daisy inflorescence. Also

called a head.

Compost A dark, crumbly and earthy-smelling form of

organic matter that has gone through a natural

decomposition process.

Compound leaf A leaf composed of several separate leaflets arising

from the same petiole.

Container habit In the case of container-grown plants, the roots are

contained in a limited space and may be tightly coiled around one another in the container.

Container-grown plants Plants that are usually grown in the container in

which they are sold.

Cool season grasses Turfgrass with ideal growing temperatures ranging

from 60 degrees to 75 degrees F.

Corm A compressed stem plate and closely spaced buds

and fleshy leaves.

Corolla The name for the petals regarded collectively

Corymb An inflorescence made up of florets whose stalks or

pedicels are randomly arranged along the peduncle in such a way that the florets create a flat, round

top.

Cottonseed meal A by-product of cotton manufacturing, used as a

fertilizer.

Cotyledon The seed leaves that encase the embryo.

Cover crops Crops such as annual rye, perennial ryegrass or

"Elbon" cereal ryegrass planted in the garden in the

fall and incorporated in the spring.

Crown A region of compressed stem tissue from which

new shoots are produced, generally found near the

soil surface.

waxy layer called the cutin, which protects the leaf from dehydration and prevents penetration of some

disease causing organisms.

Cuttings One of the major methods of asexual plant

propagation involving rooting a severed piece of the

parent plant (tip or root cuttings).

Cyme Inflorescence in which the top floret opens first and

blooms downward along the peduncle.

Damping-off A disease of seedling plants that kills individual

plants, usually caused by fungi.

Day-neutral plants Plants that form flowers regardless of day length.

Deadheading Removing old flowers to maintain vigorous plant

growth and to assure neatness.

Dicotyledons Plants producing two seed leaves (cotyledons).

Dieback Progressive death of branches, shoots and roots

beginning at the tips. Dieback may occur on roses after repeated defoliation by the black spot fungus.

Digger Small digging tool consisting of a long (10 inches –

14 inches) metal rod with a two-pronged blade opposite the handle. Also called a weeder,

cultivator or asparagus knife.

Disbudding Removing small side buds to allow the plant to

concentrate its energy on producing one or a few

large blooms.

Dischasium cyme A cyme that has florets opposite each other along

the peduncle.

Disease triangle A triangle that illustrates the three conditions that

must exist at the same time for plant disease to develop: presence of a pathogen, availability of susceptible host, favorable environmental

conditions for infection to occur.

Division A type of asexual propagation in which mature

clumps of perennials are divided every three years

or so.

Don't Bag It An education program initiated by the Texas

Cooperative Extension in the late 1980s, targeting the practice of bagging lawn clippings and leaves and encouraging composting of all yard waste.

Drip irrigation Controlled application of water at a very low flow

over a prolonged period.

Dripline The area directly below the outermost reaches of the

branches of a tree.

Dry wilt As a result of drought stress in turfgrasses, leaves

roll and turn a dull purplish color.

Dusts Formulations made by adding the active ingredient

to a fine inert power or talc; generally used dry.

Earth-Kind An educational program implemented by Texas

Cooperative Extension to promote environmental

awareness.

Effective soil depth The vertical distance into the soil from the surface

to a layer that essentially stops the downward

growth of plant roots.

Embryo Part of a seed, a miniature plant in an arrested state

of development.

Emitters Small, water-releasing mechanisms used by some

drip systems.

Emulsifiable concentrates In a pesticide, a concentrate formed when the active

ingredient is mixed with an oil base; must be diluted

with water for application.

Endosperm Part of a seed that contains a built-in food supply

such as proteins, carbohydrates, or fats.

Epidermis The layer of tough, thickened cells on the top and

bottom of the leaf blade.

Fall (Annual) Planting System System for planting strawberries in which the plants

are set in the fall for harvest the following spring.

Fallowing Leaving the garden fallow (idle).

Fertilization The union of the male sperm nucleus from the

pollen grain and the female egg found in the ovary. Also, the term used when materials containing plant nutrients are supplied to the environment around the

plant.

Fibrous root system Root system in which the primary root ceases to

elongate.

Field capacity

The amount of water a soil with hold against gravity

when allowed to drain freely.

Fish emulsion A well-rounded fertilizer, a partially decomposed

blend of finely pulverized fish,

Florets Individual flowers in an inflorescence.

Floricanes Fruit-producing canes that appear on the blackberry

plant the second year.

Flowables Liquid that can be mixed with water to form a

suspension in a spray tank.

Flower The part of the plant that has sexual reproduction as

its sole function; it is generally showy, often

attractive with fragrance.

Flower bud Bud composed of a short stem with embryonic

flower parts.

Flower, complete A flower with stamens, pistils, petals, and sepals.

Flower, imperfect A flower lacking either of the essential parts for

seed producing (functional stamens and pistils).

Flower, incomplete A flower missing one of the parts of a complete

flower.

Flower, perfect A flower containing functional stamens and pistils.

Foliage The most common and conspicuous type of leaf;

serves as manufacturing centers for photosynthesis.

Foliar absorption Spraying a dilute solution of nutrients on the leaves

of a plant, where they are absorbed.

Foliar feeding. A nutrient spray for the foliage.

Frass Droppings consisting of partially digested wood or

plant tissue.

Fruit thinning Removing excess fruit, which is necessary to ensure

satisfactory development of the remaining fruit and prevent limb breakage and shortened tree life from

overcropping.

Fruit The fertilized and mature ovules (seeds) and the

ovary wall of a plant.

Fruits, simple Fruits that develop from a single ovary.

Gall A pronounced localized swelling on roots, stems or

branches.

Garden shovel Hand tool for cultivating consisting of a dish-

shaped pointed blade mounted at an angle to a long

handle.

Girdling root Condition that occurs when some of a plants' larger

roots coil back around the trunk. Also called *root*

strangulation.

Gradual metamorphosis Metamorphosis consisting of three stages: egg,

nymph, and adult.

Grafting One of the major methods of asexual plant

propagation involving joining two plant parts from

different varieties.

Granules Granular formulations made by adding the active

ingredient to coarse particles (granules) of inert

material, such as fired clay particles.

Gravitational water Water in the soil that moves in response to gravity,

usually under saturated conditions.

Green lacewings The larvae of these beneficial insects are known as

aphid lions and prey on many garden pests

including aphids, spider mites, leafhoppers, thrips,

moth eggs and small larvae.

Green manures See *cover crops*.

Groundcovers Very low growing, spreading vines and shrubs. In a

broader sense, can include any material that

prevents rain from directly striking the ground and

that covers the ground's surface.

Gymnosperms All conebearing plants.

Hardening Hardening is the process of altering the quality of

plant growth to withstand changes.

Harmony In landscape design, a pleasing arrangement of the

parts.

Head See *composite inflorescence*.

Heeling in Digging a shallow trench to put plants in if you are

not ready to plant them. Cover with moist soil to

protect them until planting.

Helicoid cyme A cyme in which the lower florets are all on the

same side of the peduncle.

Herbaceous perennials Flowers that live for several years in the landscape;

the tops of the plants, the leaves, stems and flowers die back to the ground each fall with the first frost or freeze and new stems grow from the roots each

spring.

Hill Soil configuration for planting certain larger

vegetables. Soil is mounded to a foot or so in

diameter at the recommended spacing.

Honeydew A sticky, sugary substance exuded by some sap-

sucking insects.

Humus The portion of organic matter that remains after

most decomposition has taken place.

Hygroscopic water Water held so tightly by individual soil particles

that roots cannot extract it (unavailable water).

Hyopcotyl The portion of the seedling between the radicle and

the first leaflike structure.

Hyphae Fungal strands of which most fungi are composed.

Incomplete fertilizer A fertilizer that is missing one of the major

components: nitrogen, phosphorus or potassium.

Incomplete metamorphosis Metamorphosis consisting of three stages: egg,

naiad and adult.

Inert ingredients In a pesticide, the added chemicals that make the

product easy and safe to formulate or apply.

Infiltration Process by which water moves into the soil surface.

Inflorescence A cluster of flowers on a floral stem.

Ingredient In a pesticide formulation, the chemical that

actually kills the pests.

Instar The stage of life between each molt.

Integrated Pest Management Program that involves applying pesticide treatments

only when and where monitoring shows that pest populations exceed an acceptable level. (IPM)

Intensive gardening Method of gardening designed to harvest the most

produce possible from a given space; uses raised

beds.

Internal feeders Insects that feed within plant tissues during a part or

all of their destructive stages.

Internode The area between nodes on the stem.

Interplanting Growing two or more types of vegetables in the

same place at the same time.

IPM See Integrated Pest Management

Kentucky bluegrass Cool season rhizomatous perennial turfgrass used

mainly in the Panhandle in Texas.

Labeling All printed information about a pesticide product,

including the product label, brochures and flyers

from the company or its agent.

Landscape design Organizing and enriching the outdoor space through

the placement of plants and structures in an agreeable and useful relationship with the natural

environment.

Landscape horticulture Horticulture that encompasses landscape design,

plant selection, planting and maintenance.

Lateral buds Buds borne on the sides of the stem.

Lateral root A side or braches root that arises from another root.

Layering One of the major methods of asexual plant

propagation involving root a part of the parent plant

and then severing it.

Leaching Process to remove salts collecting in or on soil;

usually applied to potted plants, leaching is done by pouring a large amount of water on the soil and

letting it completely drain.

Leaf axil The smaller angle formed between the petiole and

the stem.

Leaf bud Bud composed of a short stem with embryonic

leaves.

Leaf spot diseases Diseases that cause considerable damage to both St.

Augustine and bermudagrass lawns, causing spots

or blotches on leaf blades.

Lesion A localized spot of diseased tissue.

Light duration The amount of time a plant is exposed to sunlight.

Light quality The color or wavelength of light reaching the plant

surface.

Light quantity The intensity or concentration of sunlight that varies

with the season of the year.

Limb spreaders Sharpened metal rods or short pieces of wood with

nails in each end that spread limbs of a fruit tree to encourage earlier fruit production and better tree

shape.

Living area See *Private area*.

Loam A textural class of soils that has moderate amounts

of sand, silt and clay

Loamy sand One of the six principle soil classes in Texas. It

contains very low amounts of silt and clay, and does

not hold together very well when moist.

Long-day plants Plants that form flowers only at day lengths

exceeding 12 hours.

Manure A complete fertilizer.

Maturation zone The part of the root where cells undergo changes to

become specific tissues, such as epidermis, cortex

or vascular tissue.

Mechanical control devices Preventive devices for managing insects, such as

paper collars for cutworm control, sticky traps and

barriers for caterpillars, etc.

Meristem Internal part of the root, located at the tip, which

manufactures new cells.

Mesophyll The middle layer of the leaf located between the

upper and lower epidermis, where photosynthesis

occurs.

Metamorphosis A marked or abrupt change in form or structure of

insects.

Mildew A whitish or grayish coating of fungal strands and

spores appearing on a leaf surface infected by the powdery mildew fungus or the downy mildew

fungus.

Mineralization The process of conversion of organic nutrients into

plant-available nutrients (inorganic).

Molting Shedding of the outer skeleton at various growth

stages.

Monecious plants Plants that have separate male and female flowers

on the same plant.

Monocotyledons Plants producing one seed leaf (cotyledon).

Mosaic Alternate light and dark green areas occurring in

leaves. Viruses such as tobacco mosaic cause

mosaic patterns in leaves.

Mulch 1. A layer of nonliving material covering the soil

surface around plants. 2. Any material spread on the garden to protect root plants from heat, cold, or drought; to reduce problems with weeds; and to

keep fruit clean.

Mulching Placing a layer of organic or inorganic material on

top of the soil.

Multiple fruits Fruits derived from a tight cluster of separate,

independent flowers borne on a single structure.

Necrosis Dead tissue.

Nectarine A fuzzless mutation of the peach.

Nematodes Microscopic roundworms possessing a spear-like

stylet in their mouthpart for puncturing cells; they are members of the animal kingdom and reproduce

by eggs.

Net-veined leaves Leaves that branch from the main rib or ribs and

then subdivide into finer veinlets that unite in a complicated network. Also called *reticulate-veined*.

Nicotine Botanical insecticide, a tobacco extract that is

highly toxic to warm blooded animals. Used

primarily for piercing-sucking insects.

Node An area of the stem where leaves are located.

Nonpathogenic diseases Conditions that usually occur when a plant interacts

with some unfavorable aspect of the environment (environmental stresses, physiological stresses or

cultural stresses).

Nonselective pesticides Pesticides that are nontarget, so beneficial

organisms are also sometimes affected.

Normal plant A plant that functions at its highest level of genetic

potential without interference from limiting external

forces.

Nosema locustae A spore (protozoan) used to control grasshoppers.

Nymph An immature insect.

Opposite leaves Leaves positioned across the stem from each other,

with two leaves at each node.

Organic As applied to fertilizers, organic means that the

nutrients contained in the product are derived solely from the remains (or a by-product) of a once-living

organism.

Organic gardening Gardening based on building the vitality of the soil

with the addition of organic matter and natural rock

minerals.

Organic matter In soil, organic matter consists of the remains of

plants and animals.

Ovary In a flower, the part that contains the eggs, which

reside in the ovules.

Oxidation In a plant, the chemical process by which sugars

and starches produced by photosynthesis are

converted to energy.

Palisade The dense upper later of the leaf.

Palmate A type of venation in which the principal veins

extend outward from the petiole.

Parallel-veined leaves Leaves with numerous veins that run essentially

parallel to each other and are connected laterally by

minute, straight veinlets.

Parasites Forms of living organisms that live on or in the

bodies of other living organisms (the hosts) from which they feed during at least one stage of their

existence.

Parthenogenesis A method of insect reproduction in which

fertilization of the egg by sperm is not necessary. An example of insects that can reproduce by

parthenogenesis is aphids.

Pathogenic diseases Plant diseases caused by the interaction of certain

pathogens (fungi, bacteria, nematodes, viruses, mycoplasmas, spiroplasmas or rickettsia-like

organisms) with a host plant.

Ped See *aggregates*.
Pedicel Stalk of a floret.

Peduncle An elongated flower stem.

Percolation Process through which water moves downward

through the soil.

Perennial plants Plants that live for may years and typically produce

flowers and seeds each year after reaching maturity.

Perennials Plants that live year after year.

Perfect flowered Self-fruited grape vines that will also pollinate the

pistillate varieties.

Petals The brightly-colored portions of the flower.

Petiole The stem-like appendage that supports the leaf

away from the stem; it is attached to the stem at the

node.

pH 1. Measurement of the acidity or alkalinity. In the

case of plants, this is a measurement of the soil.

2. Soil pH is a measurement of the hydrogen (acid forming) ion activity of soil or growth media.

Phloem tubes The food conducting channels in the stem.

Photosynthesis Food production in a plant.

Piercing-sucking insects

Insects that take their food by piercing the

epidermis (skin) and sucking sap from cells.

Pinnate A type of venation in which the veins extend

laterally from the midrib to the edge.

Pistil The female part of the plant, generally located in the

center of the flower.

Pistillate Female grape vines that require a pollinator.

Pistillate flowers Flowers (female) that possess functional pistils but

lack stamens.

Pistillate plants Plants that bear only female flowers.

Plant disease Any malfunctioning of plant cells or tissues that

results from continuous irritation by a pathogen or environmental factor that leads to symptom

1 1

development.

Plant nutrition The needs and uses of the basic chemical elements

in the plant.

Play area In landscape design, an area for children to play that

is incorporated into the private or living area.

Pollarding A pruning technique in which trees are pruned back

to large diameter branches; follow-up thinning is

performed year or two later.

Pollination The transfer of pollen from an anther to a stigma, by

wind or by pollinators.

Pore space Open space between the solid material in soil.

Precautionary statement A part of the label that states ways in which the

product may be poisonous to people and animals.

Predators Insects (or other animals) that catch and devour

other creatures (the prey).

Pregermination Sprouting seeds before they are planted in pots or in

the garden.

Primocanes Vegetative growth produced by blackberry plants

the first year.

Private area In landscape design, the area for the family, which

may include patios, decks or porches. Also called

living area.

Properties of a soil Those characteristics that can be seen with the eye

or felt between the thumb and the fingers; they include texture, structure, drainage and depth.

Public area In landscape design, the area seen by the passerby.

Pyrethrum Botanical insecticide derived from the flowers of a

chrysanthemum.

Raceme An inflorescence in which the florets are borne on

small stems attached to the peduncle.

Racemose inflorescence Arrangement of flowers on a floral stem in which

the individual flowers bloom from the bottom of the

stem and progress toward the top.

Radicle The first part of the seedling to emerge from the

seed, which will develop into the primary root.

Relative humidity The ratio of water in the air divided by the water air

could hold, at constant temperature and pressure.

Repetition In landscape design, the subtle repetition of design

elements.

Respiration Controlled oxidation in a living cell.

Restricted use pesticide A pesticide that can damage the environment even

when applied as directed.

Rhizome 1. A specialized stem which grows underground

horizontally and acts as a storage organ and means of propagation in some plants. 2. Thickened stem that grows horizontally below the soil surface and

that sends stems above ground at intervals.

Rhythm In landscape design, rhythm is the repetition of

elements which directs the eye through the design.

Root cap The outermost tip of the root that consists of cells

that are sloughed off as the root grows.

Root hairs Hairs found along the main root; they perform much

of the actual water-nutrient absorption.

Root, primary A root originating at the lower end of a seedling

plant.

Rosulate A type of leaf arrangement around the stem in

which the basal leaves form a rosette around the

stem with extremely short nodes.

Rot Decayed or decaying tissue caused by

microorganism activity.

Rotenone Botanical insecticide extracted from the roots of

derris plants in Asia and cube plants in South America. Slow acting general garden insecticide is harmless to plants. Acts as both a contact and

stomach poison for insects.

Runner A specialized stem which forms a new plant at one

or more of its nodes.

Ryegrass Cool season turfgrass available in perennial and

annual forms; suited for temporary cool-season turfgrasses throughout Texas. Ryegrass spreads by

tillers.

Sabadilla Botanical insecticide obtained from the seeds of a

lily-like plant, acts as both a contact and stomach poison for insects and is not particularly toxic for mammals. Causes irritation to the eyes and

respiratory tract.

Sand The coarser mineral particles of soil.

Sandy loam One of the six principle soil classes in Texas.

Contains some silt and a small amount of clay.

Scale leaves Leaves found on rhizomes; also the small leathery

protective leaves that enclose and protect the bud.

Scale In landscape design, refers to the proportion

between two sets of dimensions.

Scion The portion of the cultivar that is to be propagated.

Scorpiod cyme A cyme in which the florets are opposite each other

along the peduncle.

Secondary root See *lateral root*.

Seed coat Hard outer covering of the seed.

Seed leaves Modified leaves found on the embryonic plant and

which commonly serve as storage organs. Also

called cotyledons.

Seed scarification Breaking, scratching or softening the seed coat so

that water can enter and germination can begin.

Seed stratification Simulating winter by giving seeds an artificial cold

period.

Seeds In a plant, the mature ovules.

Semidwarf trees In apple growing, trees propagated on one of the

clonal (vegetatively-propagated) rootstocks that produce trees about three-quarters the size of standard trees, if both are grown under similar

circumstances.

Sepals Small, green leaf-like structures of the base of the

flower that protect the flower.

Service area In landscape design, a storage and work area that

provides a place for garbage, garden tools, supplies, and so forth. It may be screened off from the other

areas.

Sewer sludge A recycled byproduct of municipal sewage

treatment plants. Available in activated or

composted forms.

Sexual propagation The union of pollen from the male with the egg

from the female in order to produce a seed.

Sexual reproductive parts Parts of the plant involved in seed reproduction.

Shoot A young stem with leaves present. Compare *twig*.

Short day plants Plants that form their flowers only when the day

length is less than about 12 hours in duration.

Shrubs Perennial woody plants that may have one or

several main stems, which at maturity are usually

less than 12 feet tall.

Shrubs Woody plants that remain quite low and produce

shoots or stems from the base with usually more than a single trunk (height of 15 feet or less).

Side dressing Applying dry fertilizer as a side dressing after the

plants are up and growing by scattering fertilizer on both sides of the row 6 to 8 inches from the plants.

Silt Relatively fine soil particles that feel smooth and

floury; feels smooth but not slick or sticky when

wet.

Silty clay loam One of the six principle soil classes in Texas.

Noticeable amounts of both silt and clay are present, but silt is still a dominant part of the soil.

Simple leaf Leaf in which the leaf blade is a single continuous

unit.

Simplicity In landscape design, avoiding clutter and creating

open spaces.

Soil amendment Any addition to the soil that improves its physical

or chemical condition.

Soil depth, deep Soil extends 36 to 60 inches to a layer that retards

root development.

Soil depth, moderately deep Soil extends 20 to 36 inches to a layer that retards

root development.

Soil depth, shallow Soil extends 10 to 20 inches to a layer that retards

root development.

Soil depth, very deep Soil extends 60 inches or more to a layer that

retards root development.

Soil depth, very shallow Soil extends less than 10 inches to a layer that

retards root development.

Soil drainage The rate and extent of water movement in the soil,

across the surface as well as downward through the

soil.

Soil horizon, A The mineral soil horizon, mixed with humus and

dark colored.

Soil horizon, B Horizon of alluviation (materials have been

transported into this horizon) of silicate clays, iron

and aluminum oxide, etc.

Soil horizon, C Horizon of unconsolidated, unweathered geologic

material (parent material).

Soil horizon, E Horizon of eluviation of silicate clays, iron and

aluminum oxide.

Soil horizon, O The O horizon is organic, slightly to highly

decomposed; typical in lawns, gardens and flower

beds.

Soil horizon, R Consolidated, unweathered geologic material that

cannot be dug with a shovel when moist (parent

material).

Soil microorganisms Microscopic plants and animals living in the soil.

Soil moisture tension A measurement of the energy or the force in which

water is held by the soil and is expressed by units of

pressure.

Soil solarization Heat treating the soil by laying clear plastic mulch

over the garden in July or August for one month.

Solitary flowers One flower per stem. Compare *inflorescence*.

Soluble powders Formulations made by combining an active

ingredient with a fine powder; will dissolve and form true suspensions when mixed with water.

Solution Premixed, ready to use formulation.

Space dividers In landscape design, space dividers define spaces

and create privacy.

Spike An inflorescence in which many stemless florets are

attached to an elongated flower stem or peduncle.

Spines Specialized modified leaves that protect the plant.

Spongy parenchyma layer The lower layer of cells in a leaf.

Spring (Biennial) Planting System System for planting strawberries in which the plants

are set one spring and the strawberries harvested the

following spring.

Spur A compressed fruiting branch arising from the main

stem.

Spur-type strains In apple growing, strains with fruit spurs and leaf

buds more closely spaced than on non-spur trees.

St. Augustine decline (SAD)

Virus disease that uses chlorotic mottling of the leaf

blade and a general decline in lawn vigor.

St. Augustinegrass Warm season turfgrass native to the West Indies

and the Texas Gulf Coast, widely grown in humid

areas and has outstanding shade tolerance.

Staking Supporting tall growing annuals by stakes large

enough to hold the plants upright but not so large as

to be conspicuous.

Stamen Male reproductive organ of a plant.

Staminate flowers Flowers (male) that contain stamens but no pistils.

Staminate plants Plants that bear only male flowers.

Standard trees In apple growing, trees that are propagated on

seedling rootstock and produce large trees that can

grow to 30 feet tall.

Starter solution A liquid fertilizer high in phosphorus as a starter

solution.

Stems Structures that support buds and leaves and serve as

conduits for carrying water.

Stigma In a flower, the part located at the top of the pistil

and connected by the style to the ovary.

Stolon 1. A horizontal stem that is fleshy or semi-woody

and lies along the top of the ground. 2. Above

ground lateral stem.

Stone fruit Fruit such as peaches, plums, apricots, nectarines

and almonds.

Storage leaves Leaves found in bulbous plants and succulents that

serve as food and storage organs.

Strain Mutation of a variety that has been selected and

propagated for an improved characteristic.

Stunting Reduced plant size caused by the action of

pathogenic organisms.

Style In a flower, the part of the pistil that connects the

stigma to the ovary.

Subterranean Insects Insects that attack plants below the surface of the

soil.

Surface features of a soil Features such as stoniness, slope and erosion.

Surfactant A substance that, when added to a pesticide, reduces

the surface tension between two unlike materials to

help give ideal coverage.

Symptoms The plant's response to infection.

Take-all Patch A serious fungus disease of St. Augustinegrass.

Can also cause problems on bermudagrass.

Tall fescue Cool-season or northern turfgrass, which can

tolerate southern summers and be used as a

permanent lawn. It is a bunch grass and spreads by

tillers and is shade tolerant.

Taproot A root formed when the primary root continues to

reach downward into the soil and becomes the central and most important feature of the root

system.

Tendrils Specialized leaves that assist in supporting the

stems.

Terminal buds Buds located at the apex of a stem.

Texture In a soil, the relative amounts of differently-sized

soil particles, or the fineness or coarseness of the

mineral particles in the soil.

Thermoperiod A daily temperature change.

Thinning A means to reduce the size of a tree by cutting

unwanted branches back to their point of origin.

Tillering Method of vegetative reproduction whereby a new

plant is produced at the base of the original plant.

Topping The process whereby a tree is cut back to a few

large branches.

Transpiration The process by which a plant loses water primarily

from leaf stomata.

Trap crops Crops that trap insects, such as 'Elbon' cereal

ryegrass to trap nematodes.

Trees 1. Perennial woody plants with one or several main trunks, which at maturity are usually more than 12 feet tall. 2. Woody plants that produce one main trunk and a more or less distinct and elevated head (height of 15 feet or more). Trench composting Digging trenches so that leaves can decompose in the place where the organic matter is needed. Trichogramma wasp Tiny wasps that attack the eggs of more than 200 pest species. Trunk A main stem of a woody plant. Tuber An enlarged portion of an underground stem that stores food. It differs from the true bulb or corm in that it has no covering of dry leaves and no basal plant from which roots grow. Tuberous root The only bulb form that is a true root. **Turfgrass** Grass with the ability to stand low, frequent mowing. Used in home lawns. Turgor pressure Water pressure in a plant. Twig A stem that is one year old or less and has no leaves. Compare *shoot*. Umbel A type of inflorescence in which the pedicels all arise from one point on the peduncle. Unity In landscape design, grouping or arranging different parts of the design to appear as a single unit. Vaporization The evaporation of an active ingredient during or after application. Vegetative The parts of the plant that are not directly involved in reproduction. Patterns in which the veins of a leaf are distributed Venation in the blade. Use of trellises, nets, strings, cages or poles to Vertical gardening support growing plants. Vine 1. A plant that develops long trailing stems, which either grow along the ground or must be supported by another plant or structure. 2. Woody or semiwoody climbing or trailing plant. Viruses Pathogens that are too small to be seen by the

cells.

human eye. They multiply only inside living plant

W.I.N. Water insoluble nitrogen. Sometimes referred to as

slow release nitrogen.

W.S.N. Water soluble nitrogen. Dissolves readily and is

usually in a very simple form.

Warm season grass Turfgrass with optimum or ideal growing

temperatures that range from 80 degrees to 95

degrees F.

Watersprouts Vigorous upright shoots.

Wet wilt Results when water is applied too frequently to

turfgrass, soil becomes saturated, and the movement of oxygen into the soil and carbon dioxide out of the

soil stops.

Wettable powders Formulation made by combining the active

ingredient with a fine powder; made to mix with

water.

Woody perennials Plants in which the top persists, as in shrubs or

trees. Compare with herbaceous perennials.

Xeriscape A comprehensive approach to landscaping for water

conservation.

Xylem tubes The water and mineral conducting channels in the

stem.

Zone of elongation An internal part of the root behind the meristem

where cells increase in size through food and water

absorption.

Zoysiagrass A turfgrass native to the Orient that is not as shade

tolerant as St. Augustine, but is wear-resistant and more cold tolerant than bermudagrass. Spreads by

both rhizomes and stolens.