GLOSSARY OF TERMS
2-PAM  Medical antidote used for emergency treatment of acute organophosphate poisonings only.

abrasive  Tending to rub or wear away.

acaricide  Pesticide used to control mites, spiders, and ticks.

accumulative pesticide  Pesticide that tends to “build up” in animals or the environment.

active ingredient  Ingredient that “does the work” in a pesticide formulation.

acute toxicity  Toxicity producing sudden and dramatic symptoms from a single dose of pesticide.

adhesive  Substance that will cause spray material to stick to sprayed surface, often referred to as “sticking agent.”

adjuvant  Chemical or agent, such as wetting agent or spreader, added to a pesticide mixture to help the active ingredient do a better job.

agitate  To keep pesticide chemical mixed; to prevent from settling.

agitator  Device using a paddle, air, or hydraulic actions to keep a pesticide mixed in the sprayer.

antagonism  When two or more pesticide chemicals are used in combination or mixed together (the opposite of synergism), resulting in decreased toxicity.

anticoagulant  Chemical used in bait to kill rodents by preventing normal blood clotting.

antidote  Practical, immediate treatment, including first aid, in case of poisoning; remedy used to counteract effects of poison.

atropine sulfate  Medical antidote used for emergency treatment of acute organophosphate and carbamate poisonings.

backsiphoning  Action in which fluid or spray material moves from the sprayer back to the original source.

band application  Application to a continuous, defined area, such as in or along a crop row, rather than over the entire field.

biennial  Plant that completes its life cycle in two years, producing leaves and storing food in the first year and producing fruit and seeds in the second.
bioaccumulation  Exponential accumulation of chemicals through food chain. Also called “bioconcentration.”

biological insecticide  Biological control agent that kills insects.

biological magnification  Process where pesticides move up the food chain.

botanical pesticide  Pesticide derived from plants.

brand name  The trademark name used by a chemical company for a pesticide product.

buffer zone  Area set aside around a school, day care, health center, or residence where exposure to highly toxic or odoriferous pesticides is restricted. Buffer zones differ for aerial and ground applications. Check with state regulatory agencies for specific areas.

carbamates  Group of chemicals which are salts or esters of carbonic acid. Carbamates include insecticides, herbicides, and fungicides.

carcinogen  Substance or agent capable of producing cancer.

caution  On pesticide label, the signal word for slightly toxic pesticides, as defined by the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

certified applicator  Any individual certified to apply or supervise application of any restricted-use pesticide covered by that individual’s certification.

chemical name  Scientific name of the active ingredient of a pesticide, derived from its physical structure.

cholinesterase  Enzyme produced by the body to control transmission of nerve impulses. This enzyme is inhibited or “tied up” by organophosphate and carbamate chemicals.

chronic toxicity  Toxicity producing less specific symptoms than acute toxicity, usually occurring with small, repeated exposures to chemicals on a regular basis over an extended period of time.

commercial applicator  Person paid to apply or supervise application of pesticides for any purpose on property that person does not own.

common name  A shortened name that EPA recognizes as a substitution for a product’s chemical name.

compatibility  Ability of two or more chemicals to be mixed together or used in combination without affecting each other’s properties.
Glossary of Terms

**cultural control**  Control measures used to prevent pest damage rather than eliminating an existing infestation. Cultural practices reduce pest populations by altering the environment, the condition of a host plant, or the behavior of the pest.

**commercial applicator**  Person paid to apply pesticides on agricultural land that belongs to someone else.

**danger**  Signal word on pesticide labels, for highly toxic pesticides, often associated with a skull and crossbones.

**decontaminate**  To safely remove any pesticide from equipment or other surface as directed on a pesticide label or by a regulatory authority.

**direct supervision**  *See under the direct supervision of.*

**dosage**  Specific amount or rate of pesticide.

**drift**  Uncontrolled airborne movement of spray droplets, dust particles, or vapor away from the target area of application.

**dust**  Dry mixture consisting of pesticide and some inert carrier such as clay or talc.

**economic threshold**  The pest density at which control measures should be applied to prevent an increasing population from causing economic damage.

**emergence**  Action of a young plant breaking through soil surface or an insect emerging from an egg or pupa.

**emulsifiable concentrate**  Produced by dissolving toxicant and emulsifying agent in organic solvent. Solvents substantially insoluble in water are usually selected because water-miscible solvents have not, in general, proved satisfactory.

**endangered species**  Species of arthropod, animal, mammal or plant that is considered close to extinction and protected by law; habitat may also be protected.

**environment**  Interrelationships existing between water, air, land, plants, people, and other living organisms.

**EPA (Environmental Protection Agency)**  The Federal agency responsible for administering the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

**FIFRA**  Federal Insecticide, Fungicide and Rodenticide Act (amended); the Federal pesticide law.
**fumigant** Substance or mixture of substances producing a gas, vapor, fume, or smoke, intended to control pests. Fumigants may be volatile solids, liquids, or gases.

**gpa** Gallons per acre. A measure of liquid moved by a pump.

**gpm** Gallons per minute. A measure of liquid moved by a pump.

**granular pesticide** Pesticide mixed with or coating small pellets or sand-like materials; often applied with seeders or spreaders to soil.

**growers permit** Permit required by state law for persons applying pesticides to their commercial agricultural land.

**hazard** Risk of a pesticide causing injury to the applicator, workers, the public, or the environment.

**herbicide** Pesticide used to kill plants or inhibit plant growth. Weed or grass killer.

**illegal residue** Pesticide residue in excess of a pre-established, legally-safe level.

**inert ingredient** Inert liquid or solid material added to active ingredient to prepare a pesticide formulation. These ingredients are usually carriers.

**inhalation toxicity** Poisoning through the respiratory system.

**inorganic pesticides** Naturally-occurring pesticide substance, usually in elemental form.

**insect growth regulator (IGR)** Synthetic pesticide that mimics insect hormonal actions preventing the exposed insect from completing its normal development cycle and becoming an adult.

**label** All written, printed, or graphic matter on or attached to the pesticide container, the outside container, or the wrapper of the pesticide retail package.

**labelling** Information and other written, printed, or graphic matter accompanying a pesticide; the containers, wrappers, or supplemental literature that come with the pesticide.

**larva** Wormlike or grublike immature stage of an insect. Stage between egg and pupa of moths, butterflies, and beetles.

**LD<sub>50** Estimated dosage necessary to kill 50% of a test species population under stated conditions; expressed in milligrams per kilogram of body weight (mg/kg).

**leach** To move downward through soil with rain or irrigation water.
low-pressure boom sprayer  A machine which can deliver low to moderate volumes of pesticide at pressures of 30-60 psi.

metamorphosis  Series of changes through which an insect passes in its growth from egg through larvae and pupa to adult.

microencapsulation  Method of encasing active ingredients in fine, granular material (often polyvinyl) to produce sustained, even release of pesticide.

mist blower  Sprayer in which hydraulic atomization of liquid at the nozzle is aided by air blast past the source of the spray.

mollusicide  Pesticide used to control slugs and snails.

nematicide  Pesticide, often soil fumigant, used to control nematodes infesting roots of plants.

nonaccumulative  Not building up or accumulating in organisms or the environment.

nonpersistent pesticide  Pesticide lasting a few weeks or less; usually broken down by light, microorganisms, or evaporation.

nonselective pesticide  Pesticide generally toxic to plants or animals without regard to species. Usually refers to a herbicide.

nontarget organism  Plant or animal other than the one targeted by the pesticide application.

nozzles  Devices that control drop size, angle, rate uniformity, and thoroughness of a pesticide application.

oral toxicity  Ability of a pesticide or chemical to sicken or kill an animal or human when eaten or swallowed.

orifice  Opening or hole in a nozzle through which liquid material is forced out and broken up into a spray.

pathogen  Any organism which can cause disease. Pathogens include fungi, bacteria, viruses, mycoplasmas, and nematodes.

perennial  Plant normally living for more than two years (e.g., trees and shrubs).

persistent pesticide  Pesticide remaining active in the environment more than one growing season. Pesticide with a long half-life.
pest  By law, forms of plant, animal life, and viruses, when they exist under circumstances that make them injurious to plants, man, domestic animals, and other useful vertebrates and invertebrates.

pesticide tolerance  See tolerance.

pheromones  Chemicals produced by insects and other animals to communicate with and influence the behavior of others of the same species.

phytotoxic  Injurious or toxic to plants.

plant growth regulator  Substance that alters the growth of plants. The term does not include substances intended solely for use as plant nutrients or fertilizers.

postemergence  Applied after the appearance of a specified weed or crop.

preemergence  Applied to emergence of a specified weed or crop.

preharvest interval (PHI)  Minimum number of days permitted by law between the final pesticide application and harvesting of crop.

private applicator  Person who applies or supervises application of restricted-use pesticides to produce agricultural commodities on land owned or rented by that person or his/her employer.

personal protective equipment (PPE)  Clothing or any other materials or devices that shield the applicator from unintended exposure to pesticides.

protective equipment  See personal protective equipment.

pyrethroids  Synthetic insecticides that mimic natural pyrethrins found in the flowers of plants belonging to the chrysanthemum family.

rate  Amount of active ingredient of pesticide applied per unit area (e.g. lb/ac).

reentry interval  Length of time that must elapse between pesticide application and reentry into application area.

registration  Approved by Environmental Protection Agency for use of a pesticide as specified on the pesticide label.

residue  Amount of chemical that remains on harvested crops.
resistance  Ability of an organism to suppress or retard the injurious effects of a pesticide.

respiratory exposure  Exposure to a pesticide through breathing.

restricted use pesticide (RUP)  Pesticide classified for restricted use under provisions of the Federal Insecticide, Fungicide and Rodenticide Act (FIRFA), amended.

rodenticide  Pesticide used to control rodents.

selective pesticide  Pesticide more toxic to some species of plant, insect, animal, or organism than to others.

seller’s permit  Permit required by state law for an individual or firm to sell or deliver quantities of restricted-use pesticides greater than 1 gallon liquid or 15 pounds dry, or pesticides and fertilizers combinations over 50 pounds.

sex attractant  See pheromone.

signal word  Word that must appear on pesticide labels to denote the relative toxicity of the product. Signal words are DANGER, WARNING, and CAUTION.

soil application  Application of chemical to soil rather than to the vegetation.

soil fumigant  Pesticide that, when added to soil, forms a gas to kill pests in soil. Usually a tarpaulin, plastic sheet, or soil layer is used to tap the gas within the soil.

soluble powder  Powder formulation that dissolves and forms a solution in water.

spillage  Leaking, running over, or dripping of pesticide chemical. Spillage should be contained and cleaned up immediately for safety.

spray drift  The movement of airborne dust or spray particles from the intended area of application.

stomach poison  Pesticide that must be ingested in order to kill a target insect or animal.

summer annuals  Plants that germinate in spring, make most of their growth in summer, and die in fall after flowering and seeding.

surface water  Water located above ground in rivers, lakes, ponds, streams, irrigation canals, and ditches.

suspension  Very finely divided solid particles evenly dispersed in liquid.
**symptom**  Indication of disease or poisoning in a plant or animal.

**systemic pesticide**  Pesticide applied in one area and translocated or moved to another part of the organism. For example, systemic insecticide is applied to soil and watered in, the insecticide is absorbed by the roots, then travels throughout the plant, killing organisms feeding on the plant.

**tank agitator**  See agitator.

**tolerance**  Maximum amount of pesticide chemical that can legally remain in or on raw agricultural commodity.

**toxicant**  A poison.

**toxicity**  Natural capacity of a substance to produce injury or death. Toxicity is measured by oral, dermal, and inhalation studies on test animals.

**trade name**  See brand name.

**translocated pesticide**  Pesticide that moves within a plant or animal from entry site. Systemic pesticides are translocated.

**ULV**  Ultra Low Volume. ULV sprayers apply chemical concentrate with a minimum of liquid carrier.

**under the direct supervision of**  Application of a pesticide is made by a person acting under the instruction and control of a certified applicator, responsible for the actions of that person. The certified applicator is available if and when needed, even though the certified applicator is not physically present at the time and place of the pesticide application.

**vertebrate**  Animal with a bony spinal column. Vertebrates include fish, mammals, birds, and snakes.

**virus**  Microscopic pathogen that requires living cells for growth and is capable of causing diseases in plants and animals. Plant viruses are often spread by insects.

**warning**  The signal word on a label of a pesticide containing moderately toxic pesticides as defined by the FIRFA, amended.

**water soluble**  Capable of being dissolved in water.

**weed**  Plant that is undesirable due to certain characteristics or to its presence in certain areas. “A plant out of place”. 
**weed control**  Process of inhibiting weed growth and limiting weed infestations so that crops can be grown profitably or other operations can be conducted efficiently.

**wettable powder**  A powder formulation that, when added to water, forms a suspension.

**winter annual**  Plants that germinate in the fall and complete their life cycle by early summer.

**Worker Protection Standard (WPS)**  Federal regulations designed to protect agricultural workers and pesticide handlers.