

Glossary

These terms are commonly used in entomology and insect control. Some of these words have several meanings. Those given here are the meanings that relate to insect control.

Absorption – The process by which a chemical is taken into plants, animals, or minerals. Compare with adsorption.

Activator – A chemical added to a pesticide to increase its activity.

Adherence – Sticking to a surface.

Adjuvant – Inactive ingredient added to a pesticide formulation to make it work better.

Adsorption – The process by which chemicals are held on the surface of a mineral or soil particle. Compare with absorption.

Aerobic – Living in air. The opposite of anaerobic.

Aerosol – An extremely fine mist or fog consisting of solid or liquid particles suspended in air. Also, certain formulations used to produce a fine mist.

Agitation – The process of stirring or mixing in a sprayer.

Anaerobic – Living in the absence of air. The opposite of aerobic.

Animal Sign – Evidence of the presence of an animal in an area.

Antagonism – The loss of activity of a chemical when exposed to another chemical.

Antibiotic – A substance which is used to control pest microorganisms.

Antidote – A practical treatment for poisoning. This includes first aid.

Aqueous – A term used to indicate the presence of water in a solution.

Aseptic – Free of disease-causing organisms.

Booting – The growth stage of cereal crops when the upper leaf sheath swells due to the growth of a developing spike or panicle.

Botanical Pesticide – A pesticide made from plants. Also called plant-derived pesticides.

Broadleaf Weeds – Plants with broad, rounded, or flattened leaves.

Brush Control – Control of woody plants.

Carbamate – A synthetic organic pesticide containing carbon, hydrogen, nitrogen, and sulfur.

Carcinogenic – Capable of causing cancer.

Carrier – The inert liquid or solid material added to an active ingredient to prepare a pesticide formulation.

Causal Organism – The organism that produces a specific disease.

Chemosterilant – A chemical that can prevent reproduction.

Chlorinated Hydrocarbon – A synthetic organic pesticide that contains chlorine, carbon, and hydrogen. Same as organochlorine.

Chlorosis – The yellowing of a plant's green tissue.

Cholinesterase – A chemical catalyst or enzyme found in animals that helps regulate the activity of nerve impulses.

Compatible – When two or more chemicals can be mixed without affecting each other's properties, they are said to be compatible.

Concentration – The amount of active ingredient in a given volume or weight of formulation.

Contaminate – To make impure or to pollute.

Corrosion – The process of wearing away by chemical means.

Entomology

Deflocculating Agent – A material added to a suspension to prevent settling.

Degradation – The process by which a chemical is reduced to a less complex form.

Dermal – Pertaining to the skin; through the skin.

Dermal Toxicity – Ability of a chemical to cause injury when absorbed through the skin.

Diluent – Any liquid or solid material used to dilute or carry an active ingredient.

Dilute – To make thinner by adding water, another liquid, or a solid.

Dispersing Agent – A material that reduces the attraction between particles.

Dormant – State in which growth of seeds or other plant organs stops temporarily.

Dose, Dosage – Quantity of a pesticide applied.

Emulsifier – A chemical that aids in suspending one liquid in another.

Emulsion – A mixture in which one liquid is suspended as tiny drops in another liquid, such as oil in water.

Fungistat – A chemical that keeps fungi from growing.

GPA – Gallons per acre.

GPM – Gallons per minute.

Hard Water – Water containing soluble salts of calcium, magnesium, and sometimes iron.

Heading – The growth stage of cereal crops when the seed head is emerging from the upper leaf sheath.

Herbaceous Plant – A plant that does not develop woody tissue.

Host – The living plant or animal a pest depends on for survival.

Immune – Not susceptible to a disease or poison.

Impermeable – Cannot be penetrated. Semipermeable means that some substances can pass through and others cannot.

Jointing – The growth stage of cereal crops when stem internodes begin elongating rapidly.

Larva – The early form of an insect with complete metamorphosis from the time that it leaves the egg until it becomes a pupa.

LC₅₀ – The concentration of an active ingredient in air which is expected to cause death in 50 percent of a group of test animals treated with the active ingredient. A means of expressing the toxicity of a compound present in air as dust, mist, gas, or vapor. It is generally expressed as micrograms per liter in the case of a dust or mist and as parts per million (ppm) in the case of a gas or vapor.

LD₅₀ – The dose of an active ingredient taken by mouth or absorbed by the skin which is expected to cause death in 50 percent of a group of test animals treated with the active ingredient. If a chemical has an LD₅₀ of 10 milligrams per kilogram (mg/kg) it is more toxic than one having an LD₅₀ of 100 mg/kg.

Leaching – Movement of a substance downward or out of the soil as a result of water movement.

Mammals – Warm-blooded animals that nourish their young with milk. Their skin is more or less covered with hair.

Metamorphosis – A change in shape, form, and size in insects. A system of insect development.

Miscible Liquids – Two or more liquids that can be mixed and will remain mixed under normal conditions.

MPH – Miles per hour.

Mutagenic – Capable of producing genetic change.

Necrosis – Localized death of living tissue such as the death of a certain area of a leaf.

Necrotic – Showing varying degrees of dead areas or spots.

Nitrophenols – Synthetic organic pesticides containing carbon, hydrogen, nitrogen, and oxygen.

Noxious Weed – A plant defined as being especially undesirable or troublesome.

Nymph – The early form on an insect with incomplete metamorphosis from the time that it leaves the egg until it becomes an adult. They look like the adult but do not have fully developed wings.

Oral – Pertaining to the mouth; through or by the mouth.

Oral Toxicity – Ability of a pesticide to cause injury when taken by mouth.

Organic Compounds – Chemicals that contain carbon.

Organochlorine – Same as chlorinated hydrocarbon.

Organophosphate – A synthetic organic pesticide containing carbon, hydrogen, and phosphorus; two examples are parathion and malathion.

Ovicide – A chemical that destroys eggs.

Parasite – A plant or animal that lives on or in another plant or animal from which it gets food.

Pathogen – Any disease-producing organism.

Penetration – The act of entering or ability to enter.

Pest – Living things that compete with people for food and fiber, or attack people directly.

Phytotoxic – Harmful to plants.

Pollutant – An agent or chemical that makes something impure or dirty.

PPB – Parts per billion. A way to express the concentration of chemicals in foods, plants, and animals. One part per billion equals 1 pound in 5,000 tons.

PPM – Parts per million. A way to express the concentration of chemicals in foods, plants, and animals. One part per million equals 1 pound in 500 tons.

Predator – An animal that destroys or eats other animals.

Propellant – Liquid in self-pressurized pesticide products that forces the active ingredient from the container.

PSI – Pounds per square inch.

Pupa – The last stage of an immature before becoming an adult in the development of insects having complete metamorphosis.

RPM – Revolutions per minute.

Safener – A chemical added to a pesticide to keep it from injuring plants.

Seed Protectant – A chemical applied to seeds before planting to protect seeds and new seedlings from diseases and insects.

Soil Sterilant – A chemical that prevents the growth of all plants and animals in the soil. Soil sterilization may be temporary or permanent, depending on the chemical.

Soluble – Will dissolve in a liquid.

Solution – Mixture of one or more substances in which all ingredients are completely dissolved.

Solvent – A liquid which will dissolve a substance to form a solution.

Spreader – A chemical which increases the area that a given volume of liquid will cover on a solid or on another liquid.

Sticker – A material added to a pesticide to increase its adherence.

Surfactant – A chemical which increases the emulsifying, dispersing, spreading, and wetting properties of a pesticide product.

Susceptible – Capable of being diseased or poisoned; not immune.

Susceptible Species – A plant or animal that is poisoned by moderate amounts of a pesticide.

Entomology

Suspension – Finely divided solid particles mixed in a liquid.

Synergism – The joint action of two or more pesticides that is greater than the sum of their activity when used alone.

Target Pest – The pest at which a particular pesticide or other control method is directed.

Tillering – The growth stage of cereal crops when additional shoots are developing from the flower buds.

Tolerance – 1) The ability of a living thing to withstand adverse conditions, such as pest attacks, weather extremes, or pesticides. 2) The amount of pesticide that may safely remain in or on raw farm products at time of sale.

Toxicant – A poisonous chemical.

Trade Name – Same as a brand name.

Vapor Pressure – The property which causes a chemical to evaporate. The lower the vapor pressure, the more easily it will evaporate.

Vector – A carrier, such as an insect, that transmits a pathogen.

Viscosity – A property of liquids that determines whether they flow readily. Viscosity usually increases when temperature decreases.

Volatile – Evaporates at ordinary temperatures when exposed to air.

Wetting Agent – A chemical that causes a liquid to contact surfaces more thoroughly.