

Name	Formulation description
Aqueous concentrate	A liquid formulation in which solid particles of the active ingredient are dissolved.
Aqueous suspension	A liquid formulation in which solid particles of the active ingredient are dispersed in water, not dissolved.
Capsule suspension	Active ingredient enclosed in tiny polymer capsules suspended in liquid; provides controlled release.
Capsule suspension plus soluble concentrate	A capsule suspension combined or tank-mixed with a soluble concentrate which involves mixing a polymer-encapsulated liquid or solid active ingredient with a fully dissolved, true solution concentrate in water.
Continued release dispenser	A device or formulation designed to emit insect sex pheromones slowly and continuously over weeks or months, creating a stable pheromone cloud for mating disruption.
Dispenser unit	A device or formulation system that releases insect pheromones into the environment at a controlled rate for mating disruption, mass trapping, or monitoring.
Dispersible concentrate	A liquid pesticide formulation in which a water insoluble active ingredient is dissolved in a polar, water miscible solvent, together with surfactants that allow it to form a stable suspension of fine solid particles when diluted in water.
Dustable powder	Pre-formed granules applied directly to soil; no mixing with water.
Emulsifiable concentrate	Liquid active ingredients mixed with a solvent and an emulsifier so they can blend smoothly with water.
Encapsulated granules	A controlled-release pesticide formulation in which the active ingredient is enclosed within a polymer capsule or coating and the entire capsule is presented as a granular product for soil application
Flo-soluble concentrate	A flowable, water-soluble concentrate. A liquid or viscous product in which the active ingredient is either dissolved in water or finely suspended in a liquid carrier so that it can be easily mixed with water and applied by spray equipment.
Flowable concentrate	Granules, pellets or coarse powders that break into fine particles when added to water; cleaner and less dusty than WP.
Flowable seed treatment	A water-based suspension of finely milled, insoluble active ingredient designed specifically for coating seed.
Flowable suspension concentrate	Granules, pellets or coarse powders that break into fine particles when added to water; cleaner and less dusty than WP.

Name	Formulation description
Fogging concentrate	A specialised liquid pesticide formulation designed to be atomised into very fine droplets (“fog”) using thermal foggers or ULV (ultra-low-volume) cold foggers.
Fumigant gas	Active ingredient released as a gas for enclosed-space pest control.
Fumigant liquid	A liquid product that becomes a gas during application, producing a true fumigant atmosphere inside an enclosed space
Gas generating product	A product that releases a toxic gas as its pesticidal mode of action, either immediately or after reacting with moisture, typically inside a sealed or enclosed space.
Granules	Heavy, dry particles coated with an active ingredient meant for direct soil or ground spreading.
Granules (dry flowable)	A granular pesticide formulation that behaves like a water-dispersible granule (WG)
Liquid concentrate	A pesticide formulation supplied as a liquid that must be diluted before use.
Living macro-organism	A biological control agent that consists of whole, living organisms large enough to be seen without a microscope
Micro-emulsion	A clear, thermodynamically stable liquid formulation in which the pesticide active ingredient is solubilised in a mixture of water, oil, and high-efficiency surfactants, forming extremely small droplets
Oil dispersion	Solid active ingredient dispersed in oil rather than water; used when water causes instability.
Oil in water emulsion	Oil-based active ingredient emulsified into water; lower solvent content than EC.
Oil-based emulsion	Oil-based active ingredient emulsified into water; lower solvent content than EC.
Paste	A semi-solid formulation containing a very high proportion of active ingredient or inert carrier, with a thick, dough-like consistency.
Pelleted bait	A solid pesticide formulation made as uniform, ready-to-use pellets that contain an active ingredient mixed with food attractants and binders.
Pheromone trap	A monitoring or mass-trapping device that uses a synthetic insect sex pheromone to attract a specific pest species into a trap where they are captured and counted (monitoring) or killed (mass trapping).
Pure liquid concentrate	A product consisting of a single substance - without contaminants or coformulants.

Name	Formulation description
Ready-to-Use	Low-concentration solutions packaged for direct use without any mixing or dilution
Seed treatment concentrate	A high-strength pesticide formulation specifically designed to be applied to seeds, usually after dilution
Smoke generator unit	A pesticide fumigation device that produces insecticidal or fungicidal smoke through combustion or a heat-activated chemical reaction, releasing the active substance as fine airborne particulates that fill an enclosed space.
Soluble liquid	Active ingredient fully dissolved in water; forms a true solution when diluted.
Suspension concentrate	A water-based liquid containing finely milled, insoluble solid active ingredient dispersed in a stable suspension.
Suspension emulsion concentrate	A hybrid liquid pesticide formulation that contains both an aqueous suspension of solid active ingredient together with an emulsion of oil-based active ingredient in the same product.
Ultra-low-volume concentrate	A high-strength liquid pesticide formulation designed to be applied at extremely low spray volumes, typically 0.5–5 L/ha, using specialised ULV equipment.
Vapour releasing powder	A dry pesticide formulation that slowly emits active ingredient vapour into the surrounding air after application.
Water dispersible granules	Granules that break into fine particles when added to water; cleaner and less dusty than WP.
Water soluble granules	A solid pesticide formulation that dissolves completely in water to form a true solution.
Water soluble powder	A solid pesticide formulation that dissolves completely in water to form a true solution.
Water-based formulation	An aqueous liquid formulation where particles may be dissolved or in suspension
Wettable granules	Dry granules that mix with water to form a suspended cloud requiring agitation.
Wettable powder	Fine dry powders that mix with water to form a suspended cloud requiring agitation.
Wettable powder/granules	A dry powder or granules that mix with water to form a suspended cloud requiring agitation.

arrangement, is owned by the University of Hertfordshire and is protected by copyright and other laws. Except as otherwise expressly permitted under copyright law or within the database Conditions of Use document, the content of this site may not be copied, reproduced, republished, downloaded, posted, broadcast or transmitted in any way without first obtaining the University of Hertfordshire's written permission. By using our databases the user is deemed to have agreed to comply with all of the terms and conditions as described above and within all relevant documentation.

Developed by the [Agriculture and Environment Research Unit \(AERU\)](#) at the University of Hertfordshire, UK.