

CHOOSE YOUR FORMULATION

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Pesticides are powerful weapons against diseases, insects and weeds — but they are not interchangeable. Use this table to select the most useful formulation and maximize your applications.

Pesticide Formulations

| Formulation | Advantages | Disadvantages | General Comments |
|---|---|--|---|
| Wettable Powder (WP) | Relatively high concentration of pesticides. Low cost. Easy to store, transport and handle. Safe on tender foliage. Usually not absorbed rapidly through skin. | Requires good mechanical agitation. Abrasive. Can cause pump and nozzle wear. Has inhalation hazard during mixing. Dried spray drift more visible on off-target objects. | High safety factor to plants during stressful conditions. Applicable for most pests and in most equipment. Good choice when skin absorption is a major concern. |
| Emulsifiable concentrate (EC) | Easy to measure. Price per pound of active ingredient usually low. Requires only moderate agitation. Won't settle out. Non-abrasive. Low residue visibility. | Easy to over- or under-apply. Combinations of ECs tend to be more phytotoxic. Easily absorbed through skin. May contain solvents that deteriorate hoses, gaskets, etc. | Very adaptable to many sprayer types. New products have low odor. |
| Flowable (F) | Easy to measure. Low phytotoxicity. Stays in suspension longer than WPs. Is pre-wet. Does not usually clog nozzles. Good applicator safety when mixing. | Premium cost. Abrasive. Can cause pump and nozzle wear. Dried spray residue is visible. | Advantage in handling vs. WPs. More adaptable to non-mechanical agitation equipment. Saves time by eliminating the need to pre-wet powder. |
| Soluble Powder (SP) | Dissolves in water. Requires no agitation once mixed into solution. Usually has high pesticide concentration. | Applicator exposure in mixing stage. Few products available. | Most pesticides are insoluble in water and, therefore, true soluble powder products are few. |
| Granular (G) | Good applicator safety (except when products are dusty). Less drift. Does not stick to foliage. (Can be disadvantage.) Uniform product. Low potential for spill loss. | Low concentration of pesticide. Not suitable for foliage treatment. Easy to store and handle. More expensive on an active ingredient basis. Sometimes difficult to calibrate due to low concentration. | Generally easy to account for in inventory. Fairly inexpensive application equipment. Applicator training is easy. |
| Water-dispersible solution (WDS) or dispersible granule (DG) | Easy to handle. Easy to mix. Good applicator safety when mixing. No inhalation problems. | Abrasive. Requires agitation. Cost may be a factor. Should not be mixed with WPs or other clay-containing formulations. | Adaptable to most sprayers. |