



Are Dormant Sprays Organic?

We are often asked if the conventional dormant spray materials are considered organic. What people mean by organic varies, but certified organic farmers have very specific regulations they must adhere to. These can be found in the CCOF guidelines, which is available in its entirety at the CCOF website. The materials in question are copper sulfate, lime sulfur, and dormant oils.

All three common dormant spray materials may be accepted in the California Certified Organic Farming certification standards*. They are "regulated" materials which "may be used only if no alternatives are feasible." This means that CCOF inspectors will look at what other actions the grower is taking to mitigate the need for the chemical (pruning, cleanup, etc.). An inspector told me the general principle is that the material must not have been chemically altered in a significant way in production, so copper sulfate is acceptable while copper hydroxide (Kocide) is not (in spite of the note below); sulfur dust is acceptable and widely used, but lime sulfur is borderline.

Both copper and sulfur are widely used in organic farming for disease prevention. The "narrow-range" petroleum oil sprays referred to are the so-called "superfine" oils such as Safe-T-Side or SunSpray oils. The older dormant oils such as Volck oil may not be acceptable.

The following are taken directly from the CCOF Handbook:

Lime-Sulfur.

"Includes Calcium Polysulphide. Foliar application as a fungicide allowed. May be used as an insecticide only if there are no feasible alternatives."

Copper products:

"These include copper compounds that are exempt from tolerance by the EPA: Bordeaux mixes, copper hydroxide, copper sulfates, copper-zinc chromate, copper oxychloride, and copper oxides. These may be used as algicides, bactericides, fungicides, molluscicides, for arthropod control, wood treatment or as micronutrients. Cannot be used as an herbicide. Shall be used in a manner that prevents excessive copper accumulation in the soil. Build-up of copper in soil may prohibit future use. Use with caution. No visible residue is allowed on harvested crops. Copper-chromium arsenate is prohibited -- see 'Arsenate treated lumber'. (See 'Micronutrients'.)"

Petroleum distillates:

"Regulated to narrow-range (415 to 440) petroleum derivatives. Allowed for use in organic production as suffocating or stilet oils on foliage, as dormant or summer oils, and as inert ingredients. Direct application to harvested crop is prohibited. Petroleum distillates may not be used as weed or carrot oils in organic production. Land covered with petroleum derived pavement or road oils cannot be certified for three years following application. (See inerts statement at the end of SS8.2.1.)"