

Powdery Mildew of Grape, Apple, Peach and Rose.—Apply first just as buds are bursting, and continue at intervals throughout the season. Each fruit-grower must demonstrate for himself just how many sprayings he needs, for this is governed largely by seasons, location and prevalence of diseases the previous year.

Peach-leaf Curl.—Apply just as buds are bursting, and two or three more times through the early season. Instead of Bordeaux, the lime-sulphur salt spray can be used for the first spraying with excellent effect.

Apple Canker or Anthracnose.—Professor Cordley, of the Oregon Station, says:—"Spray as soon as possible after crop is gathered, and repeat in two weeks." For all spraying, in the dormant season or fall, whether for this disease or others, best results are obtained by increasing the amounts of both bluestone and lime to six pounds.

Copper Sulphate Solution:—

Copper sulphate	2 or 3 lbs.
Water	50 gallons.

This spray is much endorsed by experiment stations both Eastern and Western, to take the place of Bordeaux during the dormant season. Though of equal efficiency with Bordeaux, and more easily made and applied, it is of so corrosive a nature when coming in contact with any iron or steel parts as to make its use very disagreeable. Iron nuts about the waggon or pump become in a few days so soldered to the bolts as to make it next to impossible to loosen them. Metal parts of the harness, and even tools employed, are soon rendered unsightly or even spoiled. Copper sulphate solution renders its best service in the treatment of grain, though formalin is largely displacing it.

No. 10.—Ammoniacal Copper Carbonate:—

Copper carbonate	5 ounces.
Ammonia (ammonia water of commerce)	3 or 4 pints.
Water	50 gallons.

Dissolve the copper carbonate in the ammonia and dilute with water to 50 gallons. The concentrated solution should be poured into the water. Keep the ammonia in glass or stone jar tightly corked.

Home Manufacture of Copper Carbonate.—As the precipitated form of carbonate of copper is not always obtainable, the following directions are given for its preparation:—

In a vessel capable of holding two or three gallons, dissolve $1\frac{1}{2}$ lbs. of copper sulphate in 4 pints hot water. In another vessel dissolve $1\frac{3}{4}$ lbs. sal soda (washing soda) in 4 pints hot water. When both are dissolved, pour the second solution into the first and stir briskly. When effervescence ceases, fill the vessel with water and stir thoroughly. Allow this to stand 5 or 6 hours, when a precipitate or sediment will have settled at the bottom. Now pour off the clear liquid without disturbing this sediment, fill up the vessel again with water and stir as before, then allow this to stand until the sediment has again settled, and then pour off the clear liquid carefully as before; the residue or sediment is carbonate of copper, and from the quantities given there should be formed 12 ounces weight. Instead of drying this (which is a slow process),