

ing use warm water. These are the stock solutions. Each gallon of milk of lime contains one pound of lime, and each gallon of bluestone contains one pound of bluestone. When we wish to make up a barrel of Bordeaux mixture we take out 4 gallons of milk of lime and 4 gallons of bluestone solution, and either dilute each in separate barrels in 20 gallons of water before mixing in the barrel attached to the spray-pump, or else pour each separately into the barrel in which are already 32 gallons of water. The first method is the preferable one. 2. Never mix the concentrated stock solutions together. If the milk of lime and bluestone are mixed in the concentrated form, just as they are taken from the stock solution, a precipitate of a flakey nature will soon settle out, and either fall to the bottom or clog the nozzle. 3. Test the Bordeaux to find out whether sufficient milk of lime has been added. This is most easily done by means of the ferrocyanide test. A saturated solution of this substance can be purchased at any druggist's for a few cents. In testing, place some of the Bordeaux, which has been thoroughly stirred, into a saucer, and add a few drops of the ferrocyanide. If sufficient lime has been used, no discoloration will appear, but if insufficient, a deep bark brown color will be produced. 4. Always strain the milk of lime to prevent gritty particles from clogging the nozzles. 5. Use a fine nozzle; do not soak or drench the tree. 6. The stock solutions will keep, but the Bordeaux mixture becomes useless after standing for a day or two.

2. THE COMBINATION BORDEAUX AND PARIS GREEN MIXTURE—(For Fungous Diseases and Leaf-Eating Insects). This mixture is prepared like the Bordeaux, but 4 ounces of Paris green are added and thoroughly stirred before spraying. Copper sulphate (bluestone), 4 lbs.; quick lime (fresh), 4 lbs.; Paris green, 4 oz.; water (1 barrel), 40 gallons. In small quantities it may be

made as follows: Bluestone, 4 level tablespoonfuls; quick lime, 4 level tablespoonfuls; Paris green, 1 level tablespoonful; water, 1 pail (2 gallons).

3. COPPER SULPHATE—(Bluestone or Blue Vitrol). For destroying mustard or charlock or Herrick in grain fields. Copper sulphate, 9 lbs.; water (1 barrel), 45 gallons. This quantity is sufficient for an acre.

4. AMMONIACAL COPPER CARBONATE SOLUTION.—Copper carbonate, 1 oz.; strong ammonia sufficient to dissolve the copper carbonate, usually more than $\frac{1}{2}$ pint; water, 10 gallons. This solution is not much used, and is recommended only in cases where the fruit is so far advanced that it would be disfigured by using the Bordeaux mixture.

5. POTASSIUM SULPHIDE—(Liver of Sulphur). Used to control gooseberry mildew. Dissolve 4 oz. in 8 gallons of water.

6. PARIS GREEN MIXTURE—(Liquid). For leaf-eating insects. Paris green, 1 lb.; water, 150 gallons; lime, 2 lbs. freshly slacked; or, Paris green, 1 teaspoonful (level); water, 1 pail (2 gallons); quick lime, 1 teaspoonful (level). Paris green mixture—dry: Paris green, 1 lb.; flour or dust, 100 lbs.

7. POISON BAIT—(For Cutworms, Wireworms and Grasshoppers in gardens and cornfields). Wheat bran, 50 lbs.; molasses (any kind), 2 quarts; Paris green (good grade), 1 lb.; water, enough to make a thick mash. Handfuls of the bait are scattered about the garden at the base of the plants and among the corn rows in the evening.

8. HELLEBORE—White hellebore (fresh), 1 oz.; water, 2 gallons.

9. PYRETHRUM, or Insect Powder—Pyrethrum powder (fresh), 1 oz.; water, 3 gallons. Or, Pyrethrum powder, 1 oz.; flour (cheap), 5 oz. Mix thoroughly, allow to stand over night in a closed box, then dust on plants through cheese cloth. Recommended for green cabbage worm.

10. KEROSENE EMULSION—(For Bark lice