

FORMULA.— Quick lime ..... 4 to 6 pounds.  
Copper sulfate (bluestone)..... 3 to 4 pounds.  
Water..... 40 gallons.

So as to avoid the "burning" of leaves more lime than bluestone must be used.

PREPARATION.—The following equipment is required in the preparation of Bordeaux mixture: 3 wooden barrels (copper injuring iron), one agitator 1 pail, 1 strainer, 1 small bag. The preparation consists in three distinct operations.

1.—*Copper sulfate solution.* In a small bag, place the bluestone which is to be dissolved in water. For this purpose, a *first barrel* is filled with 20 gallons of water; into which the bag containing the bluestone, suspended to a rop, will be immersed: 10 to 12 hours are required to effect the thorough dissolution of copper sulfate.

2. *Lime milk.* A good calcareous solution can only be obtained by slowly and progressively slaking the lime. Lime is placed in a pail, and water is poured upon it, a little quantity at a time, while the whole is stirred until a perfect lime milk is obtained. As lime contains impurities which must be eliminated, a *strainer* (sifter) is placed on the opening of a *second barrel* and the lime milk is poured into it. When this has been done, the 20 gallons of water to be contained, by the barrel are added and the whole is stirred with an agitator.

3. *Mixing the two stock solutions:* If Bordeaux mixture is required for immediate use, the materials contained in the two barrels will be poured into a *third barrel*; and so as to make a thorough mixture, the two stock solutions will be poured together. Then stir this 40 gallon liquid mass so that all constituents will be thoroughly mixed. The mixture will then assume a sky blue color. When this preparation is over the next thing to be done is to fill in the sprayer or watering can.

When the fungicide is needed for later use only, the two solutions are allowed to remain in their respective barrels until spraying-time has come. These may be kept for a fortnight although it is preferable to use the mixture immediately after it has been prepared; it then has its maximum efficiency.

The above method will be useful to most people. But in order to save time, owners of large orchards, and truck growers should rather proceed as follows.

The first operation will consist in dissolving 40 pounds of bluestone in 40 gallons of water or 1 pound of sulfate for each gallon of water.

Equally for the second operation, slake 40 to 60 pounds of lime, strain, and place 40 gallons of water in the barrel; each gallon of water will contain, pound or  $1\frac{1}{2}$  pound of lime.