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# Oregon State Agricultural College Extension Service

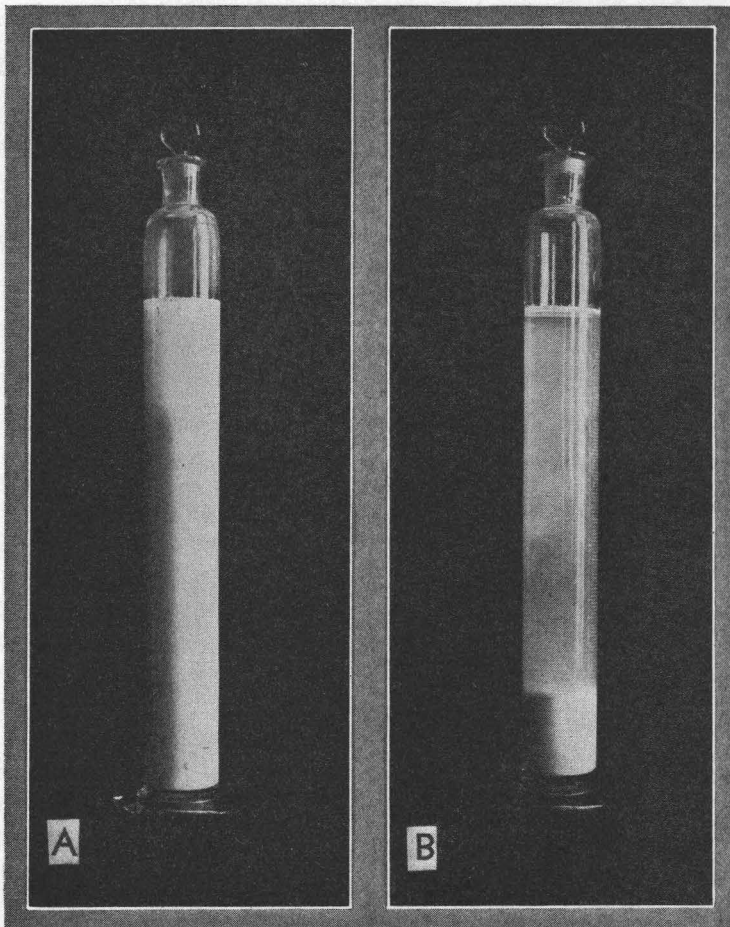
Corvallis, Oregon

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## Preparation of Bordeaux Mixture

By

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A settling test will indicate the quality of home-made bordeaux. *A* Good bordeaux, properly made, remains in suspension for several hours after preparation. *B* Poor bordeaux, improperly made or prepared with low grade materials, starts to settle immediately.

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Cooperative Extension Work in Agriculture and Home Economics  
Wm. A. Schoenfeld, Director

Oregon State Agricultural College and United States Department of Agriculture, Cooperating  
Printed and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914

## PREPARATION OF BORDEAUX MIXTURE

**H**OME-MADE bordeaux mixture, properly prepared, is superior to any commercial brand. It is very important that directions for its preparation be followed carefully.

The home-made bordeaux mixture is produced when dilute solutions of copper sulfate (bluestone) and milk of lime are poured together. Formulas are generally designated by the proportions of the materials used. For example, the formula used in blight control is known as the 2-2-50 formula and is as follows:

### 2-2-50 FORMULA

Copper sulfate (bluestone) .....	2 pounds
Quicklime (stone lime or processed lime).....	2 pounds
Water .....	50 gallons

Other formulas are frequently advised such as 1-1-50 and 4-4-50. The first number always indicates the amount of copper sulfate to use in such formulas.

For convenience in handling, stock solutions of both the copper sulfate and lime should be prepared. A convenient concentration of each is 1 pound to a gallon of water. These are prepared as follows:

(A) **Copper sulfate solution** may be made by suspending in a fifty gallon barrel of water *near the surface*, 50 pounds of bluestone in a burlap sack. Wooden barrels must be used.

(B) **Lime solution** may be made by slacking 50 pounds of high-grade quicklime and then adding water to make 50 gallons of the milk of lime.

### Preparation

To prepare 50 gallons of the 2-2-50 formula, proceed as follows:

1. Add to the tank about 25 gallons of water and start the agitator.
2. Stir up stock solution B thoroughly and dip out 2 gallons of the milk of lime. Pour through strainer into spray tank.
3. Arrange a water inlet to the tank so that the water runs down a trough into the tank. Turn on water full force and pour slowly into the running water, 2 gallons of stock solution A, copper sulfate, so that it will be diluted as much as possible.
4. As the last portion of bluestone is being poured into the intake water the last of the water should have been added.

### Precautions

1. Use fresh quicklime of highest purity and avoid burning or drowning by adding too little or too much water. Good hydrated lime if fresh and of high quality (95 per cent pure), may be substituted for the quicklime provided one third more by weight is used.
2. Avoid mixing the concentrated solutions together at any time.
3. Bordeaux mixture should be used immediately after preparation. If the bordeaux is not to be used the day it is made, one eighth of an ounce of sugar should be added for each pound of copper sulfate. For a fifty-gallon lot of 2-2-50, one teaspoonful of sugar should be used.
4. Clean water should be forced through spray machine at the end of each day's run to avoid corrosion of metal parts by the bordeaux.

For more detailed information regarding the preparation of bordeaux mixture, see Oregon Experiment Station Bulletin 259.