

water is used in place of milk of lime, and also much less copper sulphate is used.

The method is as follows:—

Formula.	A.	B.
Copper sulphate (crystallized)	2 oz.	1 oz.
Lime water	13½ pts.	6¾ pts.
Water (soft) to make to	9½ gals.	9½ gals.

Dissolve the copper sulphate in a little water and then pour the lime water into it and mix thoroughly. After it stands and settles for a time take a little of the clear liquid from on top, put into a white saucer and add to it a few drops of potassium ferrocyanide solution. If a brown or red colour appears a little more lime water must be added, and the operation of stirring, settling and testing repeated.

To make lime water.—Take 2 or 3 pounds of good stone lime, slake it in a little water and then add this to 120 gallons of soft water. (If hard water is used, use more lime.) Stir the lime and water up 2 or 3 times at intervals of several hours, and leave it to settle till the solution becomes quite clear. Run this clear liquid off and keep it covered from the air. The clear liquid is the lime water.

Formula A gives a spray corresponding in strength with that of ordinary Bordeaux; formula B gives a spray one-half as strong and is the strength now recommended for spraying.

Copper Carbonate.

This valuable fungicide can be readily and easily made at home at much less cost than for what it can be bought on the market. The following method of making is recommended: A barrel is partly filled with water and 25 pounds of copper sulphate are dissolved in it and into this is poured a solution of 30 pounds of sodium carbonate (common washing soda) when the copper is thrown down as a pale green precipitate of "basic" copper carbonate. (This precipitate rapidly settles to the bottom and after a time the clear solution above can be siphoned off. The barrel is filled with water again, the precipitate stirred up and allowed to settle, and the clear solution again drawn off. This washing removes the greater part of the impurities (sodium sulphate) and leaves behind about 12 pounds of basic copper carbonate. This can be removed from the barrel and dried in the air, after which it is ready for use.

The following quantities can be used for spraying:

Copper carbonate	1 pound.
Water	40 gallons.