

fresh lime with as many gallons of water. Spread a piece of coarse sacking, held in place by a hoop, over the top of the barrel in which the Copper Sulphate has been dissolved. Strain through this the creamy mixture of lime and water. Paris Green may then be added, after which the barrel should be filled with water. This forms an excellent insecticide as well as fungicide and therefore useful to destroy Codling worm, bud moth, and canker worm. It should be used soon after being prepared.

2. *Ammoniacal Copper Carbonate.*

Copper Carbonate.....	5 oz.
Ammonia.....	2 qts.
Water.....	50 gallons.

This is more expensive than the former, is more easily applied and is used as a substitute, especially in the case of grapes, where the Bordeaux mixture might, by adhering to the fruit, injure its sale.

It is prepared by dissolving the Copper Carbonate in the ammonia and diluting with water to fifty gallons. The concentrated solution should be poured into the water. Care should be taken to keep the ammonia tightly corked in glass or stone jars.

HOME MANUFACTURE OF COPPER CARBONATE.

As the precipitated form of Carbonate of Copper is not always obtainable from druggists, and unless freshly precipitated may not be readily soluble, directions are herewith appended for the easy preparation of this material at less than the usual wholesale price.

In a vessel capable of holding two or three gallons, dissolve  $1\frac{1}{2}$  pounds of copper sulphate (blue vitrol) in 2 quarts of hot water, using the crystalline form. This will be entirely dissolved in fifteen or twenty minutes. In another vessel dissolve  $1\frac{3}{4}$  pounds of sal soda (washing soda), also in 2 quarts of hot water. When completely dissolved pour the second mixture into the first, stirring briskly. When effervescence has ceased fill the vessel with water and stir thoroughly; then allow it to stand five or six hours, when the sediment will have settled to the bottom. Pour off the clear liquid without disturbing the precipitate, fill with water again and stir as before; then allow it to stand until the sediment has settled again, which will take place in a few hours. Pour the liquid off carefully as before, and

the residue  
Copper Sulphate  
copper carbonate

Instead  
quarts of str  
to bring the  
ordinary two

Each qua  
when added  
of the same  
dried carbonate  
kept ready for

3. *Potash*

Potash  
Water

Preparation

1. Before  
sulphate 1 lb  
applied after

2. Just before  
mixture (No. 1)  
a third applica  
wet and rainy

Without b  
recommended  
of Copper 3 o  
mixture to wh  
checking attac  
as is sometime  
again with S  
Carbonate.