

Kerosene emulsions may also be made conveniently by using an equal amount of sour milk instead of the soap and water in the above formula, and churning for the same time to get the stock emulsion.

Another method is to use lime, which will hold the kerosene in suspension, or the following, where lime cannot be obtained:

The requisite amount of kerosene is placed in a dry vessel and flour added in the proportion of 8 ounces to one quart of kerosene. It is then thoroughly stirred and two gallons of water added for every quart of kerosene; the whole is then vigorously churned for from two to four minutes, and the emulsion is ready for use. It has been found that by scalding the flour before adding the kerosene, an excellent emulsion which does not separate in the least after standing for a week, can be prepared with 2 ounces of flour, by mixing the resulting paste with one quart of kerosene and emulsifying with two gallons of water.

TOBACCO WASH (for destroying Aphis).

Soak 4 pounds of tobacco waste in 9 gallons of hot water for four or five hours (in cold water for four or five days); dissolve one pound of whale-oil soap in one gallon of hot water; strain the decoction into the dissolved soap and apply with a spray pump as forcibly as possible.

SOAP WASHES.

Dissolve one pound of whale-oil soap in four gallons of warm water for black or brown Aphis, and one pound in six gallons for green Aphis.

Another remedy for Aphis is the following: Boil 8 pounds of quassia chips in 8 gallons of water for an hour, dissolve 7 pounds of whale-oil soap in hot water; strain the quassia decoction and mix with the soap solution; then dilute to make 100 gallons. Spray forcibly while hot; this will kill the plant-lice and not injure the trees.

FUNGICIDES.

BORDEAUX MIXTURE.

This is made with four (or six) pounds of copper sulphate (bluestone) and four pounds of fresh lime thoroughly mixed in 40 gallons of water. The larger quantity of bluestone is recommended by many practical fruit-growers, as an equal amount of lime causes the mixture to act more slowly, and to be more liable to clog the machinery. In a wet season it may be of advantage by causing the mixture to retain its efficiency longer. The best quality of quicklime should be used.

In many cases it is better to use the poisoned Bordeaux mixture, which is made, as described above, by the addition of four ounces of Paris