8. Tobacco Decoction.

Refuse tobacco	2 pounds.
Water	5 gallons.

Boil the mixture for 30 minutes or more, until a dark brown tea-colored solution is obtained. Keep it covered until cool. It may then be used undiluted for spraying infested plants.

Notes.

1. When there is danger of disfiguring fruit with the Bordeaux mixture use the ammoniacal copper carbonate solution.

2. Experience in spraying during the past three years indicates that it is best to use the combined insecticide and fungicide, commencing as soon as the buds begin to swell, again when the leaves appear, and continue it at intervals of 10 to 15 days, until the trees have been sprayed 3 to 5 times, which will depend upon the weather. In the case of a rainy season, it may be necessary to spray at least five times, while if dry, and the mixtures have been allowed to remain on the foliage, then three or four times may be sufficient.

In no case spray while the trees are in bloom, but immediately after. It is contrary to law, and punishable by a fine of from $1 to $5.

3. The combined insecticide and fungicide, containing Paris grain and Bordeaux mixture, is to be used for insects that chew and injurious fungi, but kerosene emulsion alone for those insects that suck the juices of plants, such as aphis, thrip, red spider, clover mite, oyster-shell bark-louse, San Jose scale, etc.

4. A stock solution for the preparation of Bordeaux mixture may be prepared as follows: Dissolve 25 pounds of copper sulphate in 25 gallons of water. One gallon of this contains one pound of the copper sulphate. In another barrel slake 25 pounds of good lime, and add 12½ gallons of water. One gallon of this contains two pounds of lime. To make the mixture, take four gallons of the copper sulphate solution and two of the lime If there is any doubt about there not being sufficient lime, try the test already referred to under Bordeaux mixture. Now fill up the amount to 40 gallons with water. Add four ounces of Paris green.

5. Prepare the mixtures well, apply them at the proper time, and be as thorough as possible in the work. Three-fourths of the so-called spraying done is not spraying at all. The trees are only drenched. When spraying is properly done, the mixture is broken up like a mist and settles on every part of the plant. A great deal more of the mixture will remain on the plant when applied in this way, and there is also a saving of material, as every drop which falls to the ground is lost.

6. No mixture should be left in the pump or barrel, and, after using, clean water should be pumped so as to clean the outfit. This is important, as some of the mixtures act chemically on the metal of the pump.