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 Aphids). 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. "Black Leaf 40" and "Nicotine" are very satisfactory commercial preparations, which can be obtained at the large seed-stores, with directions for use. When added to a soap-wash they are very effective.

### 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 plants.

COOK'S CARBOLIC SOAP WASH.

Hard soap, one pound, or soft soap	
Crude carbolic acid	1 pint.
Water (boiling)	1 gallon.

Dissolve the soap in the boiling water; while still hot add the earbolic acid; emulsify thoroughly. This is the stock solution. For use, dilute with 30 to 50 times its bulk of water. Very effective against root-maggets of cabbage, radish and onion.

#### HELLEBORE.

White hellebore	(fresh)	
Water		 2 gallons.

#### PYRETHRUM OR INSECT POWDER.

Pyrethrum powder (fresh)	. 1 ounce.
Water	. 3 gallons.

Or, Pvi

Mix thoroughly, allow to stand over night in a closed tin box, then dust on plants through cheesecloth.

# THE POISONED BRAN MASH.

## For Cutworms and Grasshoppers.

Bran	
Paris Green	1 pound.
Molasses	1/2 gallon.
Water	About 2 gailons.
Lemons	

Mix thoroughly the bran and Paris Green dry in a tub or any large receptacle. This may be done the night before. On the morning of using squeeze the juice of the lemons into the water, run the pulp and rind through a meat chopper, and add this and also the molasses to the water. Stir well, and then pour the liquid upon the poisoned bran, and mix so thoroughly that every part is moist and will fall like sawdust through the fingers.

For eutworms in small gardens use the quart of bran, one teaspoonful of Paris green, one tablespoonful of molasses, with enough water to moisten the bran.

The mash should be applied in the evening for cutworms, and in the early morning for grasshoppers.