

Apple Tree Aphis, also called the Green Aphis, and Apple Tree Louse. These eggs are deposited in the autumn, and when first laid are of a light yellow or green color, but gradually become darker and finally black. As soon as the buds begin to expand in the spring, these eggs hatch very tiny lice, which locate themselves upon the swelling buds and the small tender leaves, and inserting their beaks feed upon the juices. All of the lice then hatched are females, and reach maturity in ten or twelve days, when they commence to give birth to living young, producing about two daily for two or three weeks, after which the older ones die. The young locate about the parents as closely as they can stow themselves, and they also mature and become mothers in ten or twelve days, and are as prolific as their predecessors; they thus increase so rapidly, that as fast as new leaves expand, colonies are ready to occupy them. As the season advances, some of the lice acquire wings, and dispersing found new colonies on other trees. When cold weather approaches, males as well as females are produced, and the season closes with the deposit of a stock of eggs for the continuance of the species another year. The leaves of trees infested by these insects become distorted and twisted backwards, often with their tips pressing against the twig from which they grow, and they thus form a covering for the Aphis, protecting them from rain. An infested tree may be distinguished at some distance by this bending back of the leaves and young twigs. It is stated that the scab on the apple often owes its origin to the punctures of these plant lice.

#### REMEDIES.

Very much can be accomplished in the destruction of the eggs that have been deposited upon the bark and in the crevices of the trees during the winter months while the trees are in a dormant condition, by scraping the dead bark off the trees, and washing or spraying them with a solution of lye water, made by dissolving one pound of Gillet's concentrated lye in five gallons of water, care being observed not to use this strength of wash after the buds have commenced to swell; this strength of wash will also remove the moss from the limbs and bark of the tree, as well as destroying the larvæ of the Codlin moth which may be reached by it. A frost occurring after a few days of warm weather will kill millions of them. In the egg state, the insect can endure any amount of frost, but the young Aphis quickly perishes when the temperature falls below the freezing point.

The Lady Bird or Lady Bug is one of the most beneficial of the insect tribes to the horticulturist, from the fact that they prey on other insects in all stages of their growth, from the larvæ to the perfect beetle. These should be propagated and protected so far as possible in orchards afflicted with the Aphis, for myriads of them are devoured by the Lady Bird and their larvæ.

#### KEROSENE EMULSION.

In making the kerosene emulsion for spraying trees for lice, be sure and follow the correct method: Dissolve in 2 qts. of water 1 qt. of soft soap or