

two weeks, so that the danger period for codling-moth is from three to four weeks after the blossoms fall. As soon as all the blossoms are off and the fruit has fairly set and still points blossom end up, make your first spraying.

**PLUM CURCULIO.** The first spraying should be made *before* the trees are in bloom, and at least three sprayings should be made afterwards. *Never spray trees while in bloom.* (Bulletin of New Jersey Expt. Station, April 4, 1892)

At last fruit-growers and bee-keepers are getting into right relations with each other. The numerous discussions which have taken place regarding the value of bees as fertilizers of fruit blossoms and of those blossoms of plants grown for their seeds, and regarding the alleged damage to fruit by bees have led to close observation and careful experimentation, the results of which show that the interests of these two classes of producers conflict but in trifling respects—that, in fact, bee keepers and fruit growers are of great help to each other and even indispensable if each is to obtain the best results in his work.

Bee-keepers have never complained but that the growing of fruit in the vicinity of their apiaries was a great benefit to their interests; hence their position has been merely a defensive one, the battle waxing warm only when poisonous substances were set out to kill off the bees, or when fruit-growers sprayed their orchards with poisonous insecticides during the time the trees were in blossom, or again when efforts were made to secure by legislation the removal of bees from a certain locality as nuisances. Fruit-growers at first relented when close observation and experiment showed that wasps bit open tender fruits, birds pecked them, they cracked under the action of sun and rains and hail sometimes cut them, the bees only coming in to save the wasting juices of the injured fruit. The wide publicity given to the results of the experiments made under the direction of the United States entomologist and published in the report of the Commissioner of Agriculture for 1885, have no doubt contributed much to secure this change among fruit-growers. But now it would appear that the bees have not only been vindicated, but that in the future fruit-growers are likely to be generally regarded as more indebted to bee-keepers than the latter are to the fruit-growers, for the amount of honey the bees secure from fruit blossoms comes far short of equalling in value that part of the fruit crop which many accurate observations and experiments indicate is due to the complete cross-fertilization of the blossoms by bees. The observations and researches of Hildebrand, Muller, Delpino, Darwin and others, as well as the excellent explanation of the subject in Cheshire's recent work, have gone far to prove how greatly blossoms depend upon the agency of bees for their fertilization and hence for the production of seeds and fruits. (*Insect Life, April, 1892.*)