

showers, or can jar the trees when the rains are very frequent. For the apples we can use London purple, one pound to 200 gallons of water. For the plums we must use Paris green, one pound to two or three hundred gallons of water. If the carbolated plaster is preferred, we use one pint of crude carbolic acid to fifty pounds of land plaster. This is thrown freely over the trees, so as to strike every plum on the tree which is being treated.

Care must be taken not to spray the plum trees until the blossoms are all fallen, as otherwise it will kill all bees that visit the poisoned flowers. He suggested that it be made contrary to law to spray the trees with arsenites before the falling of the blossoms. Respecting the injury done the foliage by the use of arsenites, he said: London purple is more injurious to the foliage than is Paris green, and white arsenic—arsenious acid—is more harmful than is either London purple or Paris green. This is doubtless owing to the soluble arsenic which is quite abundant in London purple and almost absent in Paris green. London purple may be used on apple, plum, cherry, pear and most ornamental trees, but on these should never be stronger than one pound to two hundred gallons of water. If the application is to be repeated, as it must be for the curculio, to prove effective, or if it is to be used in June or July, Paris green should be used, in the same proportion as above, or else we should only use one pound of London purple to three hundred gallons of water. I now think that this necessity is more due to time of application than to the fact of increased

quantity of the poison. If the arsenites are to be used on the peach, to defend against the curculio, Paris green only should be used, and that not stronger than one pound to three hundred gallons of water.

The injury done to the foliage is never immediately apparent. It usually shows somewhat the second day, but the full injury is frequently not manifest till the fifth day, and often not till the tenth. He likewise demonstrated that there is no danger of cattle being poisoned by eating the grass under the sprayed trees.

Prof. Clarence M. Weed, of Columbus, O., read a paper on a similar subject—remedies for the plum curculio. An experiment with cherries was made, spraying half an orchard with London purple (1 lb. to 160 gals. of water.) He then picked cherries from sprayed trees and unsprayed trees, and in every case there were more wormy cherries on the unsprayed than on the sprayed trees. The average was:—Unsprayed trees, eight per cent. of wormy cherries; sprayed trees, three per cent. of wormy cherries. The benefit from the spraying, hence, was 75 6-10 per cent. Experiments were also made with plums, when an orchard of plums was sprayed with London purple several times. An enormous crop was the consequence, although two untreated trees had their entire yield destroyed. He concluded that very much of the damage done by the curculio could be safely and cheaply prevented by the use of arsenites. Prof. Saunders, of Ottawa, expressed his opinion that Paris green was a better arsenite to use than London purple.