

## PLUM GROWING AT BERLIN.



HE past season's plum crop in this neighborhood was exceptionally fine, although not quite so abundant as the previous season's; the fruit was better in quality, larger in size, and the darker varieties finer in color, and with but a slight percentage of rotting. Hitherto it was almost impossible to get a good crop of Victorias and Pond's Seedling, on account of their rotting propensities. The past season was an exception; the fruit colored finely, and fancy prices obtained on account of their beauty for canning purposes. The plum rot may be mainly attributed to the curculio, from punctures made usually at the apex of the fruit. This is done after the time of depositing the eggs and after the spraying is finished. From the incisions made, a gum exudes, which in appearance resembles diamonds; these excrescences become pasty during moist weather, and life being ever on the alert to invade matter when in a proper state for inception, takes immediate possession, hence the appearance of the fungus; the cherry may be affected in a similar manner. Hitherto I have used aloes to ward off the plum curculio with good success, but, running short of that drug, had to fall back on Paris green very reluctantly; but was agreeably disappointed, having found it equally effective, not only in checking the curculio, but in preventing the fruit from rotting. This may be attributed to both the arsenical and coppery ingredients which are well known in science as preventives of fermentation and decomposition. The use of copper sulphate was known by the farmers and foresters of Britain nearly a century ago, for preventing the smut in wheat and the dry rot in the Scotch pine timber.

Acting from the experience of my neighbors who had almost defoliated their trees by using too much Paris green and without an admixture of lime—which is absolutely necessary in order to neutralize the effects of the poison on the foliage—I found that a teaspoonful of Paris green to a three gallon pailful of water and a handful of slacked lime thrown in was sufficient for the purpose. Lime even used alone is a fungicide and will clear trees of lichens, which are closely related to fungi. It may not be out of place to remark, that since the use of Paris green to kill the potato beetle has been made, a perceptible lessening in the potato rot has been effected. It may be also noticed that since spraying is now generally practised, by either using Paris green or sulphate of copper (blue vitriol), the black-knot which has hitherto been so destructive to plum and cherry trees, has almost disappeared.

The black-knot fungus appears to belong to a genera indigenous to this continent, affecting many of our forest trees, such as black ash, pine, cedar (*Arbor vite*), cherry, etc.; but exotics of both *Cerasus* and *Prunus*, even the hardy sloe (*Prunus spinosa*) suffer the worst, probably due to climate extremes. Internal decay or fungoid decomposition expels the resin or gum through fissures and cracks upon the surface, and on these substances the fungus spores are deposited, and not directly on the bark as some suppose.

Berlin.

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