

are troublesome to grapes. The *C. viticolum*³ occurs on *Vitis labrusca*, and *V. vinifera*. A species was common in New York, in Clinton,⁴ according to Mr. Fairchild. *C. roesleri*, Catl. on the European cultivated grape (*Vitis vinifera*) in Europe.⁵ The Apple Scab (*Fusicladium dendriticum*) is a fungus closely related to the plum fungus,⁶ and without doubt will seriously threaten plum culture.

The spots are visible in half ripe plums as small pale greenish or yellowish patches not larger than a pin head. They increase in size, becoming in some cases half an inch across. Some of the older spots may become confluent, forming one large more or less radiating patch. Patches may be formed in nearly mature plums. In old specimens which have been kept moist for some time the spot becomes darker in colour, almost black, more irregular and raised.

Microscopic examination of the affected portions of the plum shows a nearly colourless mycelium creeping over the surface or vegetating between the cuticle and the remainder of the epidermal cells. In the darker portions occur the septate hyphæ, these occasionally come through the cracks in the cuticle. In older material a dense stroma of short brown hyphæ appears between the cuticle and cellulose layers of the epidermal cells. The small spores are oval in shape, pointed at the end and usually two-celled, and are borne at the end of the conidiophore, or laterally. They germinate readily when placed in water.

The chief injury caused by this fungus is the cracking of the plums, allowing *Monilia fructigena* a chance to work. The injury, however, does not extend much beyond the point of attack and only a small number of the plum cells become brown. The fungus, no doubt, also, checks the development of the plum, and in the severer cases it causes a shrivelling of the fruit. The fungus seems to occur on all

3. Soraner Pflanzen Krankheiten, Vol. II., p. 401.

4. Jour. of Mycology, Vol. VI., p. 99. Scribner, Diseases of the grape vine. Bull. 2, Dept. of Agricul., Rep. 1886, p. 3. Galloway, Jour. of Mycology, Vol. V, p. 93.

5. Soraner Pflanzen Krankheiten, Vol. I., p. 401.

6. See Bailey. The cultivated native plums and cherries, Bull. 38, Cornell University, Agrl. Experiment Station, p. 54. Pammel, Jour. of Mycology, Vol. VII., p. 99.