## DISEASES.

## (Michigan Bulletin No. 163.)

STRAWBERRY LEAF BLIGHT (Spherella fragarie-Sace).—While subject to the attack of but few diseases, nearly all varieties of strawberries are more or less injured by the fungous disease commonly known as strawberry rust or leaf blight. This attacks not only the leaves, but the fruit stalks and the calyx, or husk, about the berries, and the injury is then so severe that the crop fails to ripen. It appears first as a purplish spot upon the leaves, but as this enlarges the centre becomes brown and finally white. If these spots are numerous upon the leaves, the tissue finally dries out and the entire leaf will be destroyed. The injury is even more severe when upon the fruit stems, as a very small spot will be sufficient to girdle them, and the shrivelling and

drying of the fruit will follow.

There is a marked difference in the susceptibility of the different varieties to attack by this disease, and in selecting varieties for planting those that are least subject to attack should be chosen. Some of the kinds that when free from disease are very productive, become almost worthless when the conditions favour the development of the fungus. When grown under conditions that favour a normal growth, and when they are not subjected to a check, even the kinds that are most subject to injury frequently escape. Experiments have frequently shown that all varieties can be kept practically free from the attack of this disease if properly sprayed with Bordeaux mixture. In setting out a new plantation, care should be taken to obtain plants that are practically free from disease, and all leaves that show signs of an attack should be removed and burned. As there may be spores of the disease upon the remaining leaves, it will be well to dip the plants into Bordeaux mixture, and after they have been set in the field, after a week or ten days, they should receive a spraying with the same material. One or two other applications at intervals of two weeks will also be advisable, and still another should be made about the 1st of August, in case diseased leaves can be found at that time. The following spring the plants should be sprayed as soon as growth has started, and a second application should be made after the flower buds have formed, but before they open. As noted above, the use of Bordeaux mixture at this time will have a marked effect against the strawberry weevil, especially if Paris green is added. This treatment will ordinarily carry through the varieties that are most subject to the attack of leaf blight without serious injury. If the plantation is to be kept for another year, it will be well to burn it over, and to spray as soon as the new leaves have formed.

## (Central Experimental Farm Bulletin 21.)

LEAF BLIGHT RUST.—The purplish or reddish-brown spots which appear on the leaves of strawberry plants during the growing season and in greatest abundance just after midsummer, are the evidence of the presence of the above injurious fungous disease. The spots, at first small and few in number, increase in size till the entire leaf is involved, and the foliage shows the effect of the parasite's presence by shrivelling and withering. This loss of foliage is a very serious matter, often coming early enough to materially lessen the crop, and taking place at a time when the plant should be making new

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