

loam. These old plums had evidently been buried for some time in the soil, as last year's plums were still on the surface of the ground. When the apothecia were gathered it was observed that the asci in the more mature ones were discharging their spores. The blossoms at this time had nearly all fallen.

On May 29th, the writer paid a visit to Fruitland, in the Niagara district, Ontario, in search of the apothecial stage. A well cultivated plum orchard (chiefly Lombards) was visited. The soil was a fairly heavy clay loam. Numbers of apothecia were found growing from sclerotia in old dried mummied plums covered by moist earth or lying on the surface of the ground in low spots where water had lain for some time. A closer examination revealed the stipes of numerous apothecia that had evidently withered up as soon as the mummied fruit from which they were growing had been dried by the sun. In another plum orchard, the soil of which varied from clay loam to light sandy loam, many more apothecia were observed, and countless withered stipes indicated how prevalent the apothecial stage had been. When the apothecia were disturbed, the spores were discharged in fine brown dust-like clouds. The petals by this time had nearly all fallen but most of the calices were still intact.

A peach orchard on light, sandy loam was next inspected. In this orchard a heavy cover crop of winter rye was growing. Very few mummied fruits were found on the surface of the soil. A number of apothecia were found, however, growing from the mummies buried in the sand. These were most abundant where the cover crop was heaviest and the soil dampest.

This was the first year that the apothecial stage was observed in Ontario. The continual wet weather during May without doubt accounted for the abundance of this stage of the fungus. It was observed that the apothecia were not produced except after heavy rains, and that they dried up and disappeared within a few hours after the weather became dry and warm. The very brief duration of the apothecia probably accounts for the fact that this stage has not been more generally observed by pathologists.

On the same dates that the apothecia were found in such abundance, mummied fruits and blighted twigs were examined to see if the mycelium was producing spore pustules. Though large numbers of mummies and twigs were examined none showed signs of spore pustules. These were not observed until a much later date. As the blossoms had nearly all fallen at this time, it would appear that the source of blossom infection is either conidia adherent to the bud scales or the apothecial stage produced from mummied fruits beneath the trees. It would seem