

1922-1930. These investigators also reported that during this period the losses from Phoma rot were decidedly higher in tomatoes shipped from Florida than from any other state and that it was the most important single cause of spoilage in tomatoes shipped from Florida.

In his study of the origin and spread of tomato fruit rots in transit, Rosenbaum (6) found that bruises or injuries to the skin and the presence of the disease in the field were important factors favoring the development of Phoma rot in transit. He also reported that Phoma rot does not penetrate the wrappers and infect adjacent healthy fruits. Even with this information, plant pathologists could not appraise the losses caused by Phoma rot in transit and in storage until after the inauguration of the food-products inspection service of the Bureau of Agricultural Economics and that of the work in market pathology by the Bureau of Plant Industry in 1917 (7). Also, prior to this time the grower and shipper did not realize the condition in which their tomatoes reached the market and why they sometimes got little or no returns for them. Since fruits free from mechanical injuries do not develop Phoma rot in the field and since Florida tomatoes are shipped in the mature-green stage, growers and shippers believed that the disease originated in transit. Furthermore, since plant pathologists had difficulty in distinguishing Phoma spot on the foliage from certain other common diseases in the field, they were unable to evaluate properly the amount of damage it caused.

After the inspectors had obtained information on condition of tomatoes at destination of car-lot shipments, shippers were informed of the cause of spoilage or depreciation. Reports of inspection also informed the shipper of the time of year and the locality in which Phoma rot was most severe. After obtaining this information for a few years the Florida shippers recognized that greatest losses were occurring in the fruit shipped during the winter and early spring months from the southern part of the state. This conclusion has been verified by examination of copies of inspection certificates covering 590 car-lot shipments of tomatoes from Florida during the seven-year period 1922-1928. Certificates covering shipments made during December, January, and February showed a higher percentage of Phoma rot than did those covering shipments made during other months. Having learned the cause of this spoilage, shippers requested that a study of the disease be made in an effort to