Plant Pathology Circular No. 270 Fla. Dept. Agric. & Consumer Serv.
April 1985 Division of Plant Industry

CERCOSPORA LIQUIDAMBARIS LEAF SPOT OF SWEETGUM

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Liquidambar styraciflua L. or sweetgum, as it is commonly known, is an important hardwood tree of the eastern United States both for its wood qualities and ornamental value. Sweetgum grows quite rapidly, can be propagated by seed or sprouts and produces beautiful autumn foliage (4).

CAUSE: There are several fungal leaf spot diseases which occur on sweetgum. The most common is caused by Cercospora liquidambaris Cooke & Ellis (1) (Cercospora liquidambaris Sawada) (2). Recent taxonomic revision within the genus Cercospora may place this fungus in the newer, more appropriate genus, Pseudocercospora (3).

SYMPTOMS: The leaf spots this fungus produces are angular to subcircular (2-10mm), dark brown in color and are usually enclosed by a narrow raised border (Fig. 1). Fungal sporulation occurs on both sides of affected leaves (1).

Fig. 1. Cercospora leaf spot (Cercospora liquidambaris Cooke and Ellis) causing angular to subcircular leaf spots on sweetgum (Liquidambar stryaciflua L.) (DPI Photo ##850012-5)

CONTROL: In the natural forest environment, this sweetgum disease rarely, if ever, becomes serious enough to warrant any particular control measures (5). This leaf spot is, however, of concern to nurserymen whose customers demand clean healthy-looking trees. Control of Cercospora leaf spot can be achieved through the application of the systemic fungicide benomyl. This fungicide should be applied at the first sign of disease. Symptoms are usually more prevalent on older foliage; however, under heavy inoculum pressure, infection may appear on younger leaves. Additionally, good sanitation through the removal of infected, fallen leaves would help to reduce the inoculum level and aid in control.

SURVEY AND DETECTION: Cercospora liquidambaris on sweetgum is easily recognized by its characteristic, rather angular dark brown leaf

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spots. Inspection of affected foliage with a hand lens may reveal minute greyish-colored tufts produced on both sides of the foliar lesions.

LITERATURE CITED:

1. CHUPP, C. A. 1953. A monograph of the fungus genus Cercospora. Ithaca, New York. p. 259.
2. COMMONWEALTH MYCOLOGICAL INSTITUTE. 1949. Index of fungi. 1:238.
3. DEIGHTON, F. C. 1976. Studies on Cercospora and allied genera. VI. Pseudocercospora Speg., Pantospora Cif., and Cercoseptoria Petr. CMI Mycol. Pap. 140. 168 pp.
4. DEIGHTON, F. C. 1979. Studies on Cercospora and allied genera. VII. New species and redispositions. CMI. Mycol. Pap. 144. 56 pp.
5. HEPTING, G. H. 1971. Diseases of forest and shade trees of the United States. USDA For. Serv. Handbk. No. 386. pp. 216-217.
6. PIRONE, P. P. 1978. Diseases and pests of ornamental plants. (5th edition). John Wiley & Sons, New York. p. 348.

Contribution No. 578, Bureau of Plant Pathology.