

Target Spot of Soybean

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Target spot is a foliar disease that has been reported in all soybean growing regions of the U.S. Yield losses of 18 to 32% have been reported on susceptible cultivars in some areas of the country when conditions favored disease for a prolonged period of time, but this disease rarely causes significant yield losses in Arkansas.

Leaf lesions are reddish-brown round to irregularly- shaped spots that range in size from 3/8 to 5/8 in. in diameter. Lesions are frequently surrounded by a yellowish green halo. Larger spots on leaves often develop diagnostic zonate patterns, hence the common name target spot (Fig. 1). Infected areas on stems and petiole are dark brown and range from specks to elongated lesions. Lesions on pods are typically small (1/32 in.), circular purple or black spots with brown margins.



Figure 1. Single target-patterned leaf spot surrounded by a yellowish green halo caused by target spot. Other smaller lesions are caused by frogeye leaf spot.

Target spot is caused by the fungus *Corynespora cassiicola* that overwinters on crop debris. Initial infections require high humidity (> 80%) or free moisture. Dry weather conditions will suppress disease development.

Typically, this disease is managed by using high-yielding soybean cultivars, managing surface crop residue, and avoiding soybean monoculture. Fungicides are rarely justified economically.