

# Charcoal Rot Appearing On Soybean In Dry Areas Of Southern Illinois

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Symptoms of charcoal rot, caused by the soilborne fungus *Macrophomina phaseolina*, are beginning to appear in dry areas of southern Illinois. Symptoms in affected fields appear as individual plants or patches of wilted and dead plants. In affected plants, gray to black “specks” will be apparent on the lower

grated approach. Although no soybean varieties have complete resistance to the disease, varieties can differ in their levels of susceptibility. *Macrophomina* has a wide host range, which includes corn, sorghum, and sunflower, so crop rotation alone may not provide complete management. Practices that reduce drought stress may help, including avoiding high seeding rates and using conservation tillage practices that conserve soil moisture. Foliar and seed treatment fungicides do not provide protection against charcoal rot.  $\Delta$



**Photo Above:** Dark specks (microsclerotia) can be observed inside the lower stems of soybean plants affected by charcoal rot.

**Photo on Right:** Wilted soybean plants affected by charcoal rot.



stem when the epidermis is shaved off with a knife. These “specks” are the survival structures of *Macrophomina* known as microsclerotia. Charcoal rot thrives in hot and dry weather, and it may exist in other areas of the state where these conditions prevail.

Management of charcoal rot requires an inte-

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