Report to the Georgia Agricultural Commodity Commission for Peanuts-2025
Adaptation of New Fungicides and Application Strategies for Control of Early and Late Leaf Spot of Peanut

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Many of our leaf spot fungicides have lost much of their efficacy, presumably due to resistance in the early and late leaf spot pathogens. Across trials in 2017-2025, addition of Microthiol Disperss 80WS (dry formulation) or Suffa 6F (liquid formulation) significantly improved leaf spot control with fungicides such as Umbra, Alto, Tebuzol, Abound, Headline, and Elatus. Both liquid flowable and dry formulations of sulfur with particle size averaging ~3 microns have been effective as mixing partners. In 2024-2025, mixtures of sulfur with three different phosphite products (K-Phyte, ProPhyt, and Phiticide) provided good control of leaf spot, whereas neither the sulfur nor the phosphite material was adequate alone.

In-furrow applications of the nematicide/fungicide Velum has provided extended control of late leaf spot and should be able to replace early leaf spot fungicide sprays. In 2023-2025, skipping up to the first three sprays of Bravo after application of Velum was comparable to full season chlorothalonil. In most cases, a fungicide would be needed by the typical timing of the third spray for white mold control, so omitting beyond the first two sprays would not be advisable, even if adequate for leaf spot management.

The SDHI fungicide “Miravis” has not been as effective as it previously was if longer application intervals are used. In extended interval tests in 2022-2025, Provysol or Provost Silver provided leaf spot control superior to that of Miravis. Mixtures of Adepidyn + Difenoconazole (Miravis Top) provided good control of leaf spot.

Provysol is a sterol inhibitor fungicide that provides better leaf spot control than most other sterol inhibitor fungicides such as tebuconazole or cyproconazole. It has not been as consistent as Provost Silver, but it can provide good leaf spot control and serve as a resistance management tool for use with SDHI fungicides or strobilurin fungicides. It should be an effective and versatile mixing partner for several different fungicides. Efficacy is enhanced further when mixed with sulfur. In 2024, the combination of Provysol with tebuconazole provided promising results, compared to either fungicide alone. Across multiple years, Provysol + micronized sulfur has provided excellent leaf spot control, and the addition of sulfur may help delay resistance problems. Multiple generic formulations of prothioconazole have provided good control of leaf spot.

Chlorothalonil continues to be an excellent mixing partner with other fungicides. In most cases, however, micronized elemental sulfur works as well as chlorothalonil as a mixing partner for leaf spot control. Should chlorothalonil become no longer allowed or available, micronized sulfur should be an adequate replacement as a mixing partner. However, sulfur is not as good as chlorothalonil for leaf spot control when each is applied alone. Mixtures with other fungicides will be tested in 2025.