

## **Residual Control of Leaf Spot from Single Applications of Pydiflumetofen.**

**A.K. CULBREATH\***, T.B. BRENNEMAN, R.C. KEMERAIT and K.L. STEVENSON,  
Department of Plant Pathology, Univ. of Georgia, Tifton, GA 31793-5766

Control of early leaf spot (*Passalora arachidicola*) and late leaf spot (*Nothopassalora personata*) of peanut (*Arachis hypogaea*) in the southeastern U.S. is heavily dependent on the use of fungicides. The newly registered succinate dehydrogenase inhibiting (SDHI) fungicide pydiflumetofen (Adepidyn, Miravis 1.67 SC) has shown outstanding field efficacy against early and late leaf diseases with potential for providing excellent control when applied at longer than the standard 14-day intervals. The objective of this study was to determine the effect of one application of pydiflumetofen on leaf spot epidemics. Field experiments were conducted in 2017 and 2018 in Tifton, GA in which treatments included pydiflumetofen at 50 g a.i./ha applied once, 58 days after planting (DAP) in 2017, and 63 DAP in 2018; chlorothalonil (Bravo WeatherStik) at 1.26 kg a.i./ha applied six or seven times on an approximate 14-day schedule; and a nontreated control. Late leaf spot was the predominant foliar disease, and epidemics were intense. In 2017, Florida 1-10 scale leaf spot severity ratings 118 DAP were 7.9, 7.4, and 4.0 (LSD = 0.7) for the nontreated, chlorothalonil, and pydiflumetofen treatments, respectively. In 2018, severity ratings 140 DAP were 9.2, 8.1, and 4.0 (LSD = 0.7) for those respective treatments. These trials demonstrated remarkable residual control of late leaf spot with one application of pydiflumetofen. However, pydiflumetofen should be used in integrated application regimes that include fungicides with different modes of action.