

## **Azoxystrobin, Solatenol and Adepidyn to Manage Leaf Spot and Stem Rot**

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Leaf spot (*Cercospora arachidicola* and *Cercosporidium personatum*) and stem rot (*Sclerotium rolfsii*) are important diseases that affect the peanut crop in the United States. Programs that integrate different fungicides for management of these diseases are deployed by growers. Since 2015, multiple field trials were conducted at the Attapulgus Research and Education Center to assess combinations of azoxystrobin and solatenol (Elatus, 7.13 and 9.5 fl oz/A) and adepidyn (Miravis, 3.4 fl oz/A) to control stem rot and leaf spot and to improve yields. Trials were planted to 'Georgia-06G' and managed according to guidelines from UGA Extension. The experimental design was a randomized complete block with four replications. Elatus, two or three applications, was compared to programs that included three applications of penthiopyrad (Fontelis, 16 fl oz/A) and four applications of prothioconazole + tebuconazole (Provost, 8 fl oz/A). Elatus programs (7 total applications) were also compared to combinations of adepidyn (Miravis, 3.4 fl oz/A) + Elatus in four, five and seven spray programs. Plots were assessed for leaf spot and stem rot severity and were taken to yield. Data was analyzed using ANOVA and Fisher's protected LSD.

Elatus was compared directly to popular Provost and Fontelis programs in 2015 and 2016. In 2015, leaf spot ratings, stem rot ratings and yields were significantly better for treated plots than for untreated plots. Disease ratings and yields were better in plots treated with Elatus than in those treated with Fontelis; however differences were only significant for stem rot ratings for Provost versus Elatus. In 2016, all treated plots had significantly lower leaf spot and stem rot ratings and higher yields than the untreated plots. Leaf spot and stem rot ratings and yields were generally similar among fungicide treatments; however plots treated with Fontelis had significantly lower leaf spot ratings than the 3-Elatus programs. Elatus programs had numerically less stem rot than did the Provost or Fontelis programs. Three trials were conducted where seven-spray programs that included two or three applications of Elatus (9.5 and 7.3 fl oz/A, respectively) were compared to Elatus + Miravis (2 application) in 4 and 5-spray programs. In two of three trials, use of Miravis in either program significantly reduced leaf spot, despite reductions in number of applications. Yields were not significantly different between treatments; however in two of the trials, yields in plots treated with Miravis were numerically best in the trial. From these trials, programs that include Elatus, two or three applications per season, performed as well or better than Fontelis and Provost programs. Reduced in-put programs (four or five applications) that included Miravis and Elatus were as good as seven-spray programs that included only Elatus.