

SOYBEAN (*Glycine max* 'Dynagro 3535')
 Cercospora blight, *Cercospora kikuchii*
 Purple seed stain, *Cercospora kikuchii*
 Anthracnose, *Colletotrichum truncatum*

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Managing soybean diseases with Headline 2.08EC, Quadris 2.08SC, and Topsin-M 70WSB.

Soybean was planted (60 lb/A) 5 May in a Gigger silt loam soil at the Northeast Research Station, Macon Ridge Branch near Winnsboro, LA. The previous crop was corn. Rainfall totals for May, Jun, and Jul were 7.79, 11.27, and 3.99 in., respectively. Standard chemical and cultural practices for soybean production were implemented in accordance with Louisiana Cooperative Extension Service recommendations. Treatments were replicated three times in a randomized complete block and separated by 5 ft alleys. Plots were four rows (40 in. centers) by 20 ft long. Fungicides were applied 7 Jul (R3) and 22 Jul (R5) to the two center rows using a CO₂-charged hand-boom equipped with two Hypro ULD 120-02 nozzles per row, delivering 11 gal/A at 28 psi. *Cercospora* foliar blight severity was assessed on 16 and 22 Sep using a 1-9 rating scale, where 1=no disease, 2=few petiole lesions, 3=10% foliar symptoms, 4=11-20% foliar symptoms, 5=21-40% foliar symptoms and 1-20% defoliation, 6=41-60% foliar symptoms and 21-40% defoliation, 7=61-80% foliar symptoms and 41-60% defoliation, 8=81-100% foliar symptoms and 61-80% defoliation, and 9=81-100% defoliation. On 5 Oct, the center two rows of each plot were machine harvested. A 100 seed sample was collected from each plot during harvest to assess seed weight and purple-stained seed. Data were subjected to analysis of variance and treatment means compared using Fisher's protected least significant difference test (P=0.10).

Disease severity on 16 Sep was less than the non-treated in most fungicide treatments except in soybean treated with Quadris 2.08SC at R5, Topsin M 70WP, TM 85WP at R3, and Laredo applied at 7.0 fl oz/A. By 22 Sep only TM 85WP at R3 and Laredo 7.0 fl oz/A did not suppress disease relative to non-treated. Natural defoliation was delayed in most fungicide treatments. This delay was most evident in treatments receiving two applications. Percent purpled-stained seed did not differ among treatments. Yield and test weight were not increased over the non-treated by any fungicide treatment.

Treatment and rate/A	GS @ Appl ^z	Sep-16 CB (1-9) ^y	Sep-22 CB (1-9) ^y	Sep-22 % Defol ^x	Test Weight (lb)	Oct-5 Yield (bu/A)
Non-treated.....	--	5.8	7.4	81.3	41.0	82.1
Quadris 2.08SC 6.2 fl oz	R3	4.5	5.8	58.8	37.8	82.7
Quadris 2.08SC 6.2 fl oz	R5	5.0	5.9	60.0	35.1	79.7
Quadris 2.08SC 6.2 fl oz	R3R5	4.0	5.5	51.3	38.6	80.8
Quadris 2.08SC 4.0 fl oz	R5					
Topsin M 70WP 0.5 lb	R5	4.5	5.9	60.0	37.3	78.8
Headline 2.08EC 6.2 fl oz.....	R3	4.5	5.4	52.5	35.4	75.9
Headline 2.08EC 6.2 fl oz.....	R5	3.8	5.0	46.3	38.2	83.4
Headline 2.08EC 6.2 fl oz.....	R3R5	3.5	4.9	36.3	44.2	81.5
Topsin M 70WP 0.75 lb	R3	5.0	6.0	63.8	40.0	81.9
Topsin M 70WP 0.75 lb	R5	5.8	6.3	65.0	40.0	82.0
TM 85WP 0.6 lb	R3	5.8	6.9	68.8	41.2	83.5
TM 85WP 0.6 lb	R5	4.8	6.1	65.0	44.8	74.8
Laredo EC 5.5 fl oz.....	R3R5	4.5	6.5	67.5	54.5	82.8
Laredo EC 7.0 fl oz.....	R3R5	6.0	6.8	70.0	50.9	82.4
Laredo EC 7.0 fl oz.....	R3	5.5	6.8	75.0	54.0	86.1
Folicur 3.6F 3.0 fl oz	R3R5	4.5	5.9	60.0	38.4	82.6
Folicur 3.6F 4.0 fl oz	R3R5	3.5	5.9	58.8	37.4	81.9
Stratego 2.08EC 7.0 fl oz.....	R3R5	3.5	5.1	47.5	45.2	80.7
Stratego 2.08EC 10.0 fl oz.....	R3R5	3.3	4.9	36.3	44.9	87.0
Stratego 2.08EC 10.0 fl oz.....	R3					
Folicur 3.6F 4.0 fl oz	R5	4.5	5.5	55.0	40.1	85.2
LSD (P=0.05) ^w		1.1	0.7	11.3	6.2	6.5

^zR3=pod 0.25 in. length, R5=beginning of seed fill.

^y*Cercospora* blight foliar symptoms rated on a 1-9 scale, where 1=no disease and 9=plants completely defoliated.

^xPercent defoliation.

^wTreatment means were compared using Fisher's protected least significant difference test, alpha level 10%.