XXXV. FUNGICIDES FOR CONTROL OF SOYBEAN RUST AND COMMON DISEASES OF SOYBEAN IN VIRGINIA (Glenn Hawkins Farm, Skippers, VA)

A. PURPOSE: To collect data needed to recommend fungicides for control of soybean rust, brown spot, anthracnose, frogeye leaf spot, pod and stem blight, and other soybean diseases in Virginia

B. EXPERIMENTAL DESIGN:
   1. Four randomized complete blocks
   2. Five-ft alleyways between blocks
   3. Four, 30-ft rows at 36 in. spacing in each plot

C. APPLICATION OF TREATMENTS: Treatments were applied in a foliar spray with 8002VS nozzles spaced 18 in. apart and delivering a spray volume of 16 gal/A.

D. TREATMENT AND RATE/A: (all treatments sprayed on 20 Jul at R_2- full bloom)
   1. Untreated check
   2. Quilt 1.67SC 14 fl oz + COC 1% v/v
   3. Stratego 250EC 10 fl oz + Induce 0.125% v/v
   4. Headline 2.08EC 4.7 fl oz + Folicur 432SC 3.1 fl oz
   5. Folicur 432SC 4 fl oz
   6. Quadris 2.08SC 6 fl oz + COC 1% v/v
   7. Headline 2.08EC 6 fl oz
   8. Laredo 2EC 7 fl oz + Induce 0.125% v/v
   9. Echo 720 20 fl oz
   10. Echo 720 20 fl oz

E. ADDITIONAL INFORMATION:
   1. Location: Glen Hawkins farm, Skippers, VA
   2. Harvest date: 16 Nov 2005

Note: Plant counts averaged near 18/ft of row which resulted in heavy vegetative growth, reduced pod fill, and poor yield. Test site was stressed heavily in July, August and early September due to lack of rainfall.

Table 119. Incidence of foliar disease in soybeans on Sep 23.

Treatment and rate/A*	Bacterial blight**	Cercospora blight + anthracnose **
Untreated check	4.8 a	47.5 a
Quilt 1.67SC 14 fl oz + COC 1% v/v	1.5 c	6.8 c-e
Stratego 250EC 10 fl oz + Induce 0.125% v/v	2.5 bc	6.0 c-e
Headline 2.08EC 4.7 fl oz + Folicur 432SC 3.1 fl oz	1.8 c	2.5 e
Folicur 432SC 4 fl oz	4.5 ab	13.3 b-d
Quadris 2.08SC 6 fl oz + COC 1% v/v	2.0 c	6.8 c-e
Headline 2.08EC 6 fl oz	2.0 c	5.2 de
Laredo 2EC 7 fl oz + Induce 0.125% v/v	3.0 a-c	22.0 b
Echo 720 20 fl oz	3.5 a-c	16.0 b
Echo 720 20 fl oz	2.5 bc	14.8 bc
LSD	**2.0**	**8.4**

* Treatments applied at R_2 (full bloom) on 20 Jul.
** Data are % leaf area w/disease.
Means followed by the same letter(s) in a column are not significantly different according to Fisher's Protected LSD (P=0.05).

Table 120. Yield and grade characteristics of soybeans.

Treatment and rate/A[1]	Yield[2] (bu/A)	Weight/ 100 seed (g)	% purple seed stain[3]	% phomopsis seed blight[3]
Untreated check	9.4	12.12 e	18.0	2.8
Quilt 1.67SC 14 fl oz + COC 1% v/v	11.6	12.90 a-d	22.0	1.8
Stratego 250EC 10 fl oz + Induce 0.125% v/v	9.7	12.95 a-c	18.3	2.3
Headline 2.08EC 4.7 fl oz + Folicur 432SC 3.1 fl oz	10.6	13.21 ab	23.8	2.0
Folicur 432SC 4 fl oz	9.2	12.40 de	22.3	1.5
Quadris 2.08SC 6 fl oz + COC 1% v/v	10.2	12.84 b-d	25.5	2.5
Headline 2.08EC 6 fl oz	11.0	13.44 a	18.8	3.8
Laredo 2EC 7 fl oz + Induce 0.125% v/v	9.3	12.51 c-e	21.3	1.8
Echo 720 20 fl oz	9.3	12.39 de	21.3	1.0
Echo 720 20 fl oz	9.6	11.99 e	22.3	1.5
LSD	**n.s.**	**0.55**	**n.s.**	**n.s.**

[1] Treatments applied at R_2 (full bloom) on 20 Jul.
[2] Yields are weight of soybeans with 13.5% moisture. One bushel equals 60 lb. Soybeans were harvested on 16 Nov 2005.
[3] Data are percent of 100 seed with symptoms of each disease.
Means followed by the same letter(s) in a column are not significantly different according to Fisher's Protected LSD (P=0.05). "n.s." = not significant.