

**Report on 2001 Funded Activities
National Peanut Board through TPPB**

ID #69
2001
Final

Final

Reviewed
02-06-02

1. Subject Area:

Plant Pathology

2. Title:

Leafspot and Web Blotch Control in an Increasing Acreage of Spanish Peanut

3. Personnel:

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4. Agency:

Texas Cooperative Extension

5. Introduction:

The Spanish Peanut is seeing a renewed interest in Texas. The new high oleic line being developed by Dr. Charles Simpson should increase this interest even more. With a significantly greater susceptibility to both leaf spot and web blotch, the Spanish Peanut needs more attention to control these problems than does the Runner type. Even though the previous four years have been very dry and little leafspot has developed, a significant outbreak of pepper spot happened in two of four locations in 2001. When we again experience favorable conditions, all leafspot will again be a problem. Texas growers will need to know the best alternatives for foliage disease control in Spanish Peanut.

6. Summary:

2001 was another very dry year with little disease development of any kind. However, in most plots several treatments out yielded the control. This indicates that even in the absence of significant detectable disease, fungicides may be helpful. When this dry cycle is over we may again be surprised at just how helpful.

7. Materials and Methods:

In order to compare foliage fungicides on Spanish Peanut, plots were planted at Lamesa, Wellington, Plains, Olton and Dublin, Texas. Six foliar fungicides and or combinations of fungicides were used at the Dublin location and seven at all other locations. All were

compared to untreated check plots. All plots were sprayed throughout the season and all plots harvested except the Olton location which was prematurely threshed by a custom harvester 3 hours before we arrived with our plot combine.

8. Results and Discussion:

Due to dry conditions, no Leafspot developed in the Dublin plot and only a minor outbreak of Southern Blight developed after October 1. No disease developed in the other plots until after September 1. A pepper spot outbreak in Olton and Plains was the most disease in any plot. A small amount of Rhizoctonia pod rot developed at Plains and all other locations were disease free. The accompanying data sheets show resultant ratings, quality and yield. Even though the Board did not think it feasible to again fund this work in 2002, Growers must remain diligent if they produce Spanish types. Past experience in higher moisture years reminds us that the Spanish type is much more susceptible to the various leaf spot fungi.

**2001 Leaf Spot
Erath County**

Treatment	Product	Rate/A	DAP Timing
1	Bravo 720	24 oz.	30-100-114
	BAS 500 F	6 oz.	44-58-72-86
2	Bravo 720	24 oz.	30
	BAS 500 F	9 oz.	44-65-86-107
3	Bravo 720	24 oz.	30-100-114
	BAS 500 F	9.14 oz.	44-58-72-86
4	AMS 21619	4.99 oz.	58-72-86-100
	Chlorothalon 720	23.95 oz.	30-44-114
5	AMS 21619	5.7 oz.	58-72-86-100
	Chlorothalon 720	23.95 oz.	30-44-114
6	Bravo 720	24 oz.	Full Season
7	Untreated Check		

2 Rows 100' - 3 Reps

Variety - "Florunner"

Planted - May 15th

Harvested - October 23rd

No disease was observed in the plot until late in the season (October 1st) when Southern Blight showed up. There was very minor damage to the crop before harvest.

2001 Leafspot
Erath County

Treatment	Yield/Rep			#/A	Total Smk + SS/Rep			Average	% DK			% OK			Average \$/Ton	Value \$/A	
	1	2	3		1	2	3		Smk + SS	1	2	3	1	2			3
1	3659	3659	4646	3988	56	66	65	62				14	8	7	10	\$543.91	1085
2	3891	4124	4066	4027	60	68	64	64				11	7	8	9	\$559.61	1127
3	4182	3949	3659	3930	63	59	69	64				10	12	5	9	\$559.61	1100
4	3833	3427	3369	3543	59	59	67	62				12	13	7	11	\$545.31	966
5	3311	3252	3020	3194	57	64	61	61				14	9	11	14	\$536.77	857
6	4008	3369	3020	3466	59	66	63	63				12	8	9	10	\$552.46	957
7	3020	3427	3194	3214	54	65	64	61				15	10	9	11	\$536.77	862

**2001 Web Blotch - Leafspot
Peanuts
Collingsworth - Dawson - Yoakum Counties**

Treatment	Product	Rate/A	Timing
1	Abound 2.08 SC	18 oz.	All Treatments Aug. 1-15-30
2	Abound 2.08 SC Bravo 720	18 oz. 1.5 pt.	
3	Tilt 3.6 E + Bravo 720	2 oz. 1 pt.	
4	Bravo 720	1.5 pt.	
5	Folicur 2.6 F	7.2 oz.	
6	Bravo 720 BAS 500 F 250 EC	24 oz. 9 oz.	
7	AMS 21619	5.7 oz.	
8	Untreated Check		

2 Rows 100' - 3 Reps

Collingsworth : "Tamspan 90"

Planted - April 21st

Harvested - September 13th

Yoakum : "Florunner"

Planted - May 5th

Harvested - October 9th

Dawson : "Tamspan 90"

Planted - May 3rd

Harvested - October 8th

This same plot was done in all three of the above counties. No disease was observed in any of the plots until late in the season when Pepper Spot showed up in Yoakum County. Yoakum County also had some Rhizotonia Pod Rot when the peanuts were dug. Ratings are indicated in the text. No other incidences of disease was observed.

2001 Yield Data
Collingsworth County
Web Blotch

Treatment	Yield/Rep			#/A Average	Total Smk + SS/Rep			Average Smk + SS	% DK			Average % DK	% OK			Average % OK	\$/Ton	Value \$/A
	1	2	3		1	2	3		1	2	3		1	2	3			
1	2904	2614	3078	2865	63	58	62	61					4	6	4	5	\$ 525.74	753
2	3020	3078	3020	3039	61	62	57	60					5	5	5	5	\$ 517.24	786
3	3311	1975	3252	2846	61	62	65	63					6	4	4	5	\$ 542.75	777
4	2846	2614	2788	2749	64	62	59	62					4	5	6	5	\$ 534.25	734
5	3194	2846	2904	2981	65	63	61	63					4	3	5	4	\$ 541.35	807
6	3311	2497	2614	2807	65	62	61	63					4	4	4	4	\$ 541.35	760
7	3311	2730	3369	3137	64	60	62	62					4	6	6	5	\$ 534.25	838
8	3136	2788	3020	2981	63	65	60	63					4	3	5	4	\$ 541.35	807

None

2001 Yield Data
 Dawson County
 Web Blotch

Treatment	Yield/Rep			#/A Average	Total Smk + SS/Rep			Average Smk + SS	% DK			Average % DK	% OK			Average % OK	\$/Ton	Value \$/A
	1	2	3		1	2	3		1	2	3		1	2	3			
1	3267	3528	3398	3398	70	69	69	69	69				2	4	4	3	\$ 590.95	1004
2	2614	3332	3398	3115	64	69	69	67					5	5	3	4	\$ 535.37	834
3	3463	4116	3267	3615	67	70	71	69					5	3	3	4	\$ 592.38	1071
4	3594	3528	3659	3594	69	67	69	68					4	5	3	4	\$ 583.87	1049
5	3332	3463	3528	3441	68	70	68	69					4	3	4	4	\$ 592.38	1019
6	3332	3332	3332	3332	66	68	69	68					5	5	4	5	\$ 585.27	975
7	3463	3659	3659	3594	67	69	69	68					4	4	3	4	\$ 583.87	1049
8	2744	3659	3202	3202	71	69	71	70					3	4	3	3	\$ 599.48	960

None

2001 Yield Data
 Yoakum County
 Web Blotch

Treatment	Yield/Rep			#/A Average	Total Smk + SS/Rep			Average Smk + SS	% DK			Average % DK	% OK			Average % OK	\$/Ton	Value \$/A
	1	2	3		1	2	3		1	2	3		1	2	3			
1	3463	3136	3006	3202	72	70	71	71					2	3	3	3	\$607.98	973
2	3006	3920	3136	3354	72	71	71	71					3	4	4	4	\$609.38	1022
3	3267	3332	3136	3245	71	71	71	71					3	3	3	3	\$607.98	986
4	3790	3463	2875	3376	72	68	72	71					2	5	2	3	\$607.98	1026
5	3855	2940	3855	3550	73	70	68	70					3	3	5	4	\$600.88	1067
6	3071	2744	2744	2853	72	72	72	72					2	3	3	3	\$616.49	879
7	2875	3528	3202	3202	72	69	68	70					3	4	5	4	\$600.88	864
8	3006	2744	3136	2999	71	73	68	71					4	2	4	3	\$607.98	912

NONE

**2001 Disease Ratings
Yoakum County**

Disease ratings were taken on the plot when they were dug. Rhizoctonia Pod Rot was the primary pathogen rated. Ratings are disease hit's per 200 row ft.

Treatment	Rep 1	Rep 2	Rep 3	Avg Hits
1	5	9	2	5.3
2	1	4	3	2.7
3	7	6	6	6.3
4	15	5	7	9
5	5	3	2	3.3
6	1	3	5	3
7	2	10	5	5.7
8	7	9	12	9.3

Pepper Spot showed up in late season on this plot. Some of the treatments controlled this disease better than others. Ratings are based on severity of Pepper Spot. 1 being none and 10 being severely infected.

Treatment	Rep 1	Rep 2	Rep 3	Avg Hits
1	3	4	3	3.3
2	2	2	2	2
3	2	2	2	2
4	2	2	2	2
5	4	3	2	3
6	2	2	2	2
7	4	4	4	4
8	6	7	5	6

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