



Bulloch County Extension

151 Langston Chapel Road, Suite 600 • Statesboro, GA 30458
caes.uga.edu/extension/bulloch
uge3031@uga.edu • 912-871-6130 Phone • 912-871-6955 Fax

I.) Title of Project

On-Farm Research Comparing Efficacy of Fungicide Treatments on Severity of White Mold Disease of Peanut in Bulloch County, GA

II.) Principal Investigator and Cooperator

Bill Tyson, Bulloch County Cooperative Extension; Dr. Bob Kemerait, UGA Extension Peanut Pathologist; Amanda Smith, UGA Extension Economist; Brannen Family Farms (Jackie, Ryne, Jamie & Sean Brannen), Bulloch County farmers.

III.) Objective(s)

1. To collect large plot, on-farm, multi-year data on efficacy of fungicides on soilborne diseases of peanut. The data collected is of real importance to growers in Bulloch County and the southeast.
2. To compare efficacy of fungicide applications against leaf spot and stem rot (white mold).
3. Develop and conduct a relevant, timely soilborne peanut fungicide research trial that will provide data used by farmers statewide. The specific goals of the research trial will be to evaluate nine different fungicide treatments.

IV.) Plan of Action

The peanut fungicide trial was planted to GA-06G on 27 April 2022 and harvested on 26 September 2022. The trial contained three replications in a standard block design. The trial was irrigated and planted on 38" single row peanut spacing. Disease counts were taken for leaf spot and white mold for each of the fungicide treatments. County agent concluded the trial with harvest. Yield was determined by weighing each individual plot. The results are being used by the UGA Peanut Pathologist and county agent for presentation during county production meetings.

V.) Results

The white mold was not terrible in the 2022 peanut fungicide trial with white mold disease counts ranging from 5 to 20 hits per 200 row feet. There was a 457-pound per acre yield difference between the highest and lowest yielding fungicide programs. Leaf spot was well controlled in all fungicide programs. The Priaxor/Excalia/Provysol fungicide program was top yielder at 5688 pounds per acre and also produced the highest ROI at \$883. The lowest ROI was produced by the Aproach Prima/Fontelis/Provost Silver/Tebuconazole fungicide program which totaled \$827 per acre. There was no statistical difference in yield of all the nine different fungicide programs. However, there were statistical differences in white mold; Tebuconazole/ Chlorothalonil 720, Aproach Prima/Fontelis/Provost Silver/Tebuconazole and Alto/Elatus/Convoy/Tebuconazole programs had the highest white mold hits.

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Bulloch County Extension Irrigated Peanut Fungicide Trial

Cooperators: Jackie, Ryne, Jamie and Sean Brannen

Planted: 27 April 2022

Harvested: 26 September 2022

Variety: GA-06G



Bulloch County

Date of Application Days after Planting	10-Jun-22 44	23-Jun-22 57	7-Jul-22 71	22-Jul-22 86	5-Aug-22 100	19-Aug-22 114	2-Sep-22 128
Sipcam	Chlorothalonil 1.5 pts	Tebuconazole 7.2 fl oz Chlorothalonil 720 1 pt	Tebuconazole 7.2 fl oz Chlorothalonil 720 1 pt	Tebuconazole 7.2 fl oz Chlorothalonil 720 1 pt	Tebuconazole 7.2 fl oz Chlorothalonil 720 1 pt	Chlorothalonil 720 1.5 pts	
Bayer	Absolute Max 3.5 fl oz	Provost Silver 13 fl oz	Excalia 2 fl oz Chlorothalonil 720 1.5 pts	Provost Silver 13 fl oz	Excalia 2 fl oz Chlorothalonil 720 1.5 pts	Provost Silver 13 fl oz	Chlorothalonil 720 1.5 pts
Nichino	Priaxor 6 fl oz	Convoy 32 fl oz Chlorothalonil 720 1.5 pts	Tebuconazole 7.2 fl oz Chlorothalonil 720 1 pt	Convoy 32 fl oz Chlorothalonil 720 1.5 pts	Tebuconazole 7.2 fl oz Chlorothalonil 720 1 pt	Chlorothalonil 720 1.5 pts	
FMC	Lucento 5.5 fl oz	Elatus 9.5 oz	Lucento 5.5 fl oz	Convoy 32 fl oz Chlorothalonil 720 1.5 pts	Provost Silver 13 fl oz	Chlorothalonil 720 1.5 pts	
Corteva	Aproach Prima 6.8 fl oz	Fontelis 16 fl oz	Provost Silver 13 fl oz	Fontelis 16 fl oz	Provost Silver 13 fl oz	Tebuconazole 7.2 fl oz Chlorothalonil 720 1 pt	Chlorothalonil 720 1.5 pts
Syngenta	Chlorothalonil 1.5 pts Alto 5.5 oz	Elatus 9.5 oz Miravis 3.4 fl oz		Elatus 9.5 oz Miravis 3.4 fl oz		Tebuconazole 7.2 fl oz Chlorothalonil 720 1.5 pts	
BASF	Priaxor 6 fl oz	Excalia 3.0 oz Chlorothalonil 720 1.5 pts	Tebuconazole 7.2 fl oz Provysol 3.0 fl oz	Excalia 3.0 oz Chlorothalonil 720 1.5 pts	Tebuconazole 7.2 fl oz Provysol 3.0 fl oz	Chlorothalonil 720 1.5 pts	
Valent	Excalia 2 fl oz Alto 5.5 fl oz	Excalia 2 fl oz Chlorothalonil 720 1.5 pts	Provost Silver 13 fl oz	Excalia 2 fl oz Alto 5.5 fl oz	Provost Silver 13 fl oz	Chlorothalonil 720 1.5 pts	
Nichino/Syngenta	Elatus 7.3 fl oz Chlorothalonil 1 pt	Elatus 7.3 fl oz Alto 5.5 fl oz	Tebuconazole 7.2 fl oz Chlorothalonil 720 1 pt	Elatus 7.3 fl oz Alto 5.5 fl oz	Convoy 24 fl oz Chlorothalonil 720 1.5 pts	Tebuconazole 7.2 fl oz Chlorothalonil 720 1 pt	Tebuconazole 7.2 fl oz Chlorothalonil 720 1 pt

Company	Treatment	lbs/A @ 7% Moisture	Leafspot Rating	Avg. White Mold Hits/200 ft.
BASF	Priaxor 1x; Provysol 2x; Excalia 2x; Tebuconazole 2x; Chlorothalonil 720 3x	5688	1	9 b
Valent	Alto 2x; Excalia 3x; Provost Silver 2x; Chlorothalonil 720 2x	5684	1	6 b
Syngenta	Alto 1x; Elatus 2x; Miravis 2X; Tebuconazole 1x; Chlorothalonil 720 2x	5661	1.2	5 b
Nichino	Priaxor 1x; Convoy 2x; Tebuconazole 1x; Chlorothalonil 720 5x	5660	1	8 b
Nichino/ Syngenta	Alto 2x; Elatus 3x; Convoy 1x; Tebuconazole 3x; Chlorothalonil 720 5x	5621	1	12 ab
Bayer	Absolute Max 1x; Provost Silver 3X; Excalia 2x; Chlorothalonil 720 3X	5620	1	9 b
FMC	Lucento 2x; Convoy 1x; Elatus 1x; Provost Silver 1x; Chlorothalonil 720 2x	5518	1.1	5 b
Corteva	Aproach Prima 1x; Fontelis 2x; Provost Silver 2x; Tebuconazole 1x;	5389	1	14 ab
Sipcam	Tebuconazole 4x; Chlorothalonil 720 6x	5231	1	20 a

Summary 2022 Bulloch County Peanut Fungicide Trial

TRMT	Fungicides	Avg WM	Rank	Avg Yield/A	Rank	Fungicide + App Cost/A	Profit/A	Rank
1	Tebuconazole 4x; Chlorothalonil 720 6x	20	7	5231	9	\$63.95	\$864.51	6
2	Absolute Max 1x; Provost Silver 3X; Excalia 2x; Chlorothalonil 720 3X	9	4	5620	6	\$125.89	\$871.74	4
3	Priaxor 1x; Convoy 2x; Tebuconazole 1x; Chlorothalonil 720 5x	8	3	5660	4	\$128.74	\$875.96	3
4	Lucento 2x; Convoy 1x; Elatus 1x; Provost Silver 1x; Chlorothalonil 720 2x	5	1	5518	7	\$137.58	\$841.92	8
5	Aproach Prima 1x; Fontelis 2x; Provost Silver 2x; Tebuconazole 1x; Chlorothalonil 720 2x	14	6	5389	8	\$129.04	\$827.46	9
6	Alto 1x; Elatus 2x; Miravis 2X; Tebuconazole 1x; Chlorothalonil 720 2x	5	1	5661	3	\$125.75	\$879.06	2
7	Priaxor 1x; Provysol 2x; Excalia 2x; Tebuconazole 2x; Chlorothalonil 720 3x	9	4	5688	1	\$141.95	\$867.67	5
8	Alto 2x; Excalia 3x; Provost Silver 2x; Chlorothalonil 720 2x	6	2	5684	2	\$126.24	\$882.62	1
9	Alto 2x; Elatus 3x; Convoy 1x; Tebuconazole 3x; Chlorothalonil 720 5x	12	5	5621	5	\$146.78	\$850.88	7

Profit = USDA loan rate (\$355/ton) – fungicide cost

Cooperators: Brannen Family Farms/Jackie, Ryne, Jamie & Sean Brannen



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