

10/19/2015 (15-Nachurs-PeanutIF) ARM 2014.7 Site Description Page 1 of 4										
Tidewater Agronomics, Inc.										
2015 Nachurs In-Furrow Peanut Protocol										
Trial ID:	15-Nachurs-PeanutIF	Location:	Belvidere, NC	Trial Year:	2015					
Protocol ID:	15-Nachurs-PeanutIF	Investigator:	Matt Winslow							
Project ID:		Study Director:	Keith Flaniken							
		Sponsor Contact:								
General Trial Information										
Study Director:	Keith Flaniken									
Investigator:	Matt Winslow	Title:	Director of Research							
Discipline:	D	fertilizer								
Trial Status:	F	one-year/final	Trial Reliability:	GOOD						
Initiation Date:	5/18/2015									
Completion Date:	10/9/2015									
Trial Location										
City:	Belvidere, NC		Country:	USA	United States					
State/Prov.:	North Carolina									
Postal Code:	27944	Climate Zone:	EPPOSE	EPPO South East						
Latitude of LL Corner °:	36.3236 N									
Longitude of LL Corner °:	-76.4827 W									
Directions:										
Directions from Raleigh to Tidewater Ag Research Farm										
From Raleigh take 64 East to Williamston										
From Williamston take 17 North to Hertford										
Follow 17 across Perquimans River										
Go thru New Hope Road Intersection										
Watch for DOT on left. Turn left just past DOT										
Immediately turn right onto Lake Rd and follow for 2 miles										
Turn left onto Swamp Road and follow to stop sign (approx. 5 miles)										
Turn right onto Sandy Cross and follow for about 5 miles										
Just after passing W 5 Winslow Store turn right onto Turnpike										
Tidewater Ag Research Farm is one mile on left.										
Office is in a white two story farm house.										
Conducted Under GLP: No										
Conducted Under GEP: No										
Contacts										
Study Director:	Keith Flaniken									
Organization:	NACHURS Alpine Solutions									
Investigator:	Matt Winslow	Title:	Director of Research							
Organization:	Tidewater Agronomics, Inc.									
Address:	313 Turnpike Road			Phone No.:	2522972010					
City+State/Prov:	Belvidere, NC			Mobile No.:	2523128495					
Postal Code:	27919	E-mail:	matt.winslow@tidewaterag.com							
Country:	USA	United States								
Cooperator/Landowner										
Cooperator:	Stan Winslow		Role:	FALDOW						
Organization:	Tidewater Agronomics, Inc.									
Address 1:	307 Turnpike Road									
City:	Belvidere		Phone No.:	252-297-2010						
State/Prov:	NC		Fax No.:	252-297-2010						
Postal Code:	27919	Mobile No.:	252-333-0212							
Country:	USA	United States								
E-mail:	stan@tidewaterag.com									
Crop Description										
Crop 1:	ARHHY		Arachis hypogaea				Peanut			
Variety:	Champs						BBCH Scale:	BPNT		
Planting Rate, Unit:				6 S/FT			Planting Date:	5/18/2015		
Depth, Unit:	2 IN						Planting Method:	PLANTD planted		
							Planting Equipment:	PP Plot Planter		

Row Spacing, Unit:		38 IN									
Spacing Within Row, Unit:		2 IN						Harvest Date:		10/9/2015	
								Harvested Width, Unit:		6.34 FT	
Soil Temperature, Unit:		92 F						Harvested Length, Unit:		30 FT	
Soil Moisture:		FAIR		fair				Harvest Equipment:		HOBBS	
								% Standard Moisture:		10	
								Weighing Equipment:		PELOUZE HANGING	
Site and Design											
Treated Plot Width:		12.68 FT				Site Type:		FIELD		field	
Treated Plot Length:		30 FT									
Treated Plot Area:		380.4 FT2		Treatments:		12		Tillage Type:		CONTIL conventional-till	
Replications:		4						Study Design:		RACOBL Randomized Complete B	
Untreated Arrangement:		INCLUDED		single control randomized in each block							
Maintenance											
No.	Date	Maintenance Product Name	Rate	Unit	Tank Mix						
1	4/9/2015	10-15-24-8s	300	LB/A							
2	5/19/2015	Roundup	24	OZ/A	yes						
3	5/19/2015	Valor	2	OZ/A	yes						
4	5/19/2015	Brawl	20	OZ/A	yes						
5	6/4/2015	Dual	16	OZ/A							
6	7/2/2015	Abound	8	OZ/A	yes						
7	7/2/2015	Tebustar	8	OZ/A	yes						
8	7/14/2015	Bravo	24	OZ/A	yes						
9	7/14/2015	Folicur	8	OZ/A	yes						
10	7/29/2015	Apogee	8	OZ/A							
11	8/5/2015	Headline	12	OZ/A							
12	8/12/2015	Belt	2	OZ/A	yes						
13	8/12/2015	8% Mn	40	OZ/A	yes						
14	8/19/2015	Abound	19	OZ/A	yes						
15	8/19/2015	Tilt	4	OZ/A	yes						
16	8/21/2015	Volunteer	16	OZ/A							
17	9/2/2015	Bravo	24	OZ/A							
Field Prep./Maintenance:											
Trial was tilled, cultivated, and rowed in December 2014											
Soil Description											
Description Name:		Sand									
% Sand:	88.4	% OM:	1.511	Texture:	FSL	fine sandy loam					
% Silt:	8.8	pH:	6.2								
% Clay:	2.8	CEC:	9.4	Fert. Level:	G	good					
				Soil Drainage:	E	excellent					
Analyzed By:											
Waters Ag Labs 10/8/2014											
Moisture and Weather Conditions											
Overall Moisture Conditions:		GOOD		good							
Closest Weather Station:		Elizabeth City		Distance, Unit:		7 mi					
No.	Date	Amount	Unit	Type	Type Description	Min Temp	Max Temp	Temp Unit	Relative Humidity		
1	5/4/2015		0 IN	RAIN	rain		53	80 F		56	
2	5/5/2015		0 IN	RAIN	rain		57	80 F		61	
3	5/6/2015		0 IN	RAIN	rain		54	75 F		77	
4	5/7/2015		0 IN	RAIN	rain		62	77 F		70	
5	5/8/2015		0 IN	RAIN	rain		62	73 F		87	
6	5/9/2015		0 IN	RAIN	rain		64	80 F		81	
7	5/10/2015		0.2 IN	RAIN	rain		70	81 F		82	
8	5/11/2015		0.8 IN	RAIN	rain		69	76 F		90	
9	5/12/2015		0 IN	RAIN	rain		70	87 F		76	
10	5/13/2015		0 IN	RAIN	rain		61	74 F		68	
11	5/14/2015		0 IN	RAIN	rain		54	69 F		62	
12	5/15/2015		0 IN	RAIN	rain		50	73 F		74	
13	5/16/2015		0 IN	RAIN	rain		58	80 F		74	
14	5/17/2015		0 IN	RAIN	rain		63	84 F		73	
15	5/18/2015		0 IN	RAIN	rain		68	88 F		73	
16	5/19/2015		0.7 IN	RAIN	rain		69	88 F		81	
17	5/20/2015		0 IN	RAIN	rain		63	76 F		77	
18	5/21/2015		0.3 IN	RAIN	rain		59	78 F		80	
19	5/22/2015		0 IN	RAIN	rain		54	74 F		66	

20	5/23/2015		0 IN	RAIN	rain	55	71 F		65			
21	5/24/2015		0 IN	RAIN	rain	54	78 F		70			
22	5/25/2015		0 IN	RAIN	rain	59	81 F		70			
23	5/26/2015		0 IN	RAIN	rain	61	84 F		74			
24	5/27/2015		0 IN	RAIN	rain	70	84 F		73			
25	5/28/2015		0 IN	RAIN	rain	69	83 F		71			
26	5/29/2015		0 IN	RAIN	rain	63	82 F		79			
27	5/30/2015		0 IN	RAIN	rain	65	83 F		79			
28	5/31/2015		0 IN	RAIN	rain	65	85 F		76			
29	6/1/2015		0 IN	RAIN	rain	69	87 F		78			
30	6/2/2015		0 IN	RAIN	rain	68	86 F		78			
31	6/3/2015		0.2 IN	RAIN	rain	65	73 F		92			
32	6/4/2015		2.4 IN	RAIN	rain	66	80 F		86			
33	6/5/2015		0.2 IN	RAIN	rain	65	72 F		90			
34	6/6/2015		0 IN	RAIN	rain	61	80 F		81			
35	6/7/2015		0 IN	RAIN	rain	63	77 F		68			
36	6/8/2015		0 IN	RAIN	rain	56	85 F		76			
37	6/9/2015		0 IN	RAIN	rain	71	86 F		75			
38	6/10/2015		0 IN	RAIN	rain	69	85 F		76			
39	6/11/2015		0 IN	RAIN	rain	72	90 F		76			
40	6/12/2015		0 IN	RAIN	rain	73	90 F		73			
41	6/13/2015		0 IN	RAIN	rain	73	93 F		73			
42	6/14/2015		0 IN	RAIN	rain	73	90 F		82			
43	6/15/2015		0 IN	RAIN	rain	71	95 F		73			
44	6/16/2015		0 IN	RAIN	rain	75	97 F		67			
45	6/17/2015		0 IN	RAIN	rain	74	86 F		69			
46	6/18/2015		0.4 IN	RAIN	rain	72	93 F		76			
47	6/19/2015		0.1 IN	RAIN	rain	72	92 F		71			
48	6/20/2015		0 IN	RAIN	rain	72	90 F		78			
49	6/21/2015		0 IN	RAIN	rain	77	93 F		67			
50	6/22/2015		0 IN	RAIN	rain	75	91 F		68			
51	6/23/2015		0 IN	RAIN	rain	78	94 F		75			
52	6/24/2015		0 IN	RAIN	rain	73	86 F		80			
53	6/25/2015		2.8 IN	RAIN	rain	69	86 F		74			
54	6/26/2015		0 IN	RAIN	rain	69	86 F		78			
55	6/27/2015		0 IN	RAIN	rain	73	88 F		81			
56	6/28/2015		0 IN	RAIN	rain	66	84 F		73			
57	6/29/2015		0 IN	RAIN	rain	65	84 F		69			
58	6/30/2015		0.7 IN	RAIN	rain	71	89 F		72			
59	7/1/2015		0 IN	RAIN	rain	71	86 F		73			
60	7/2/2015		0 IN	RAIN	rain	72	87 F		72			
61	7/3/2015		0.5 IN	RAIN	rain	71	84 F		81			
62	7/4/2015		0 IN	RAIN	rain	73	87 F		81			
63	7/5/2015		0.3 IN	RAIN	rain	73	87 F		80			
64	7/6/2015		0 IN	RAIN	rain	71	87 F		79			
65	7/7/2015		0.4 IN	RAIN	rain	75	90 F		75			
66	7/8/2015		0 IN	RAIN	rain	76	89 F		81			
67	7/9/2015		0.2 IN	RAIN	rain	73	92 F		75			
68	7/10/2015		0.4 IN	RAIN	rain	73	92 F		73			
69	7/11/2015		0.9 IN	RAIN	rain	72	87 F		83			
70	7/12/2015		0 IN	RAIN	rain	70	83 F		82			
71	7/13/2015		0.2 IN	RAIN	rain	69	81 F		87			
72	7/14/2015		0 IN	RAIN	rain	70	87 F		83			
73	7/15/2015		0 IN	RAIN	rain	71	88 F		74			
74	7/16/2015		0 IN	RAIN	rain	71	82 F		79			
75	7/17/2015		0 IN	RAIN	rain	70	84 F		77			
76	7/18/2015		0.1 IN	RAIN	rain	68	90 F		82			
77	7/19/2015		0 IN	RAIN	rain	72	91 F		82			
78	7/20/2015		0 IN	RAIN	rain	74	93 F		77			
79	7/21/2015		0 IN	RAIN	rain	77	93 F		79			
80	7/22/2015		0 IN	RAIN	rain	70	85 F		83			
81	7/23/2015		0 IN	RAIN	rain	69	85 F		74			
82	7/24/2015		0 IN	RAIN	rain	65	85 F		67			
83	7/25/2015		0 IN	RAIN	rain	62	85 F		67			
84	7/26/2015		0 IN	RAIN	rain	60	86 F		72			
85	7/27/2015		0 IN	RAIN	rain	70	86 F		76			
86	7/28/2015		0 IN	RAIN	rain	70	88 F		78			
87	7/29/2015		0 IN	RAIN	rain	70	88 F		75			
88	7/30/2015		0 IN	RAIN	rain	71	90 F		82			
89	7/31/2015		0 IN	RAIN	rain	71	88 F		69			
90	8/1/2015		0 IN	RAIN	rain	68	90 F		72			
91	8/2/2015		0 IN	RAIN	rain	70	92 F		69			
92	8/3/2015		0 IN	RAIN	rain	71	87 F		80			
93	8/4/2015		0 IN	RAIN	rain	76	90 F		75			

10/19/2015 (15-Nachurs-PeanutIF) ARM 2014.7 Assessment Data Summary Page 2 of 4						
Tidewater Agronomics, Inc.						
2015 Nachurs In-Furrow Peanut Protocol						
Trial ID:	15-Nachurs-PeanutIF	Location:	Belvidere, NC	Trial Year:	2015	
Protocol ID:	15-Nachurs-PeanutIF	Investigator:	Matt Winslow			
Project ID:		Study Director:	Keith Flaniken			
		Sponsor Contact:				
Pest Type						
Pest Code						
Pest Scientific Name						
Pest Name						
Crop Code		ARHHY	ARHHY	ARHHY	ARHHY	ARHHY
BBCH Scale		BPNT	BPNT	BPNT	BPNT	BPNT
Crop Scientific Name		Arachis hypogaea	Arachis hypogaea	Arachis hypogaea	Arachis hypogaea	Arachis hypogaea
Crop Name		Peanut	Peanut	Peanut	Peanut	Peanut
Crop Variety						
Description		Stand	Stand	Stand	Weight	Yield
Part Rated						
Rating Date		5/27/2015	5/27/2015	6/2/2015	6/2/2015	10/9/2015
Rating Type		COUPLA	COUPLA	COUPLA	COUPLA	WEIGHT
Rating Unit		NUMBER	NUMBER	NUMBER	NUMBER	kg/plot
Sample Size, Unit						LB
Collection Basis, Unit						
Number of Subsamples		1	1	1	1	1
Crop Stage Majority						
Crop Stage Scale						
Crop Density, Unit						
Pest Stage Majority						
Pest Density, Unit						
Footnote Number						
Assessed By						
SE Name						
Rating Timing						
Days After First/Last Applic.		9 9	9 9	15 15	15 15	144 144
Trt-Eval Interval		9 DA-A	9 DA-A	15 DA-A	15 DA-A	144 DA-A
Plant-Eval Interval		9 DP-1	9 DP-1	15 DP-1	15 DP-1	144 DP-1
Days After Emergence						
ARM Action Codes			T1	ET10	ET10 T2	TY3
Sort Order for View						
Number of Decimals			1		1	1
Trt	Treatment	Rate	Unit	Appl		
No.	Name	Rate	Unit	Code	Plot	
1	Rhyzo-Link 3-10-13-15-0.1Zn	1.5	GAL/A	A	108	46
					203	37
					301	36
					406	42
Mean =					40.3	55137
						48.8
						66780.8
						12.827
						4445.4*
						4317.5
2	Rhyzo-Link 3-10-13-15-0.1Zn	2	GAL/A	A	104	44
					205	44
					307	45
					412	40
Mean =					43.3	59246.6
						49.3
						67465.8
						13.738
						4624.1
3	HKW6 (2-6-16)	1	GAL/A	A	110	33
					201	46
					303	40
					411	36
Mean =					38.8	53082.2
						47.5
						65068.5
						14.56
						4901
4	HKW6 (2-6-16)	1.5	GAL/A	A	101	33
					204	33
					302	42
					409	42
Mean =					33.8	57534.3
						56
						76712.3
						13.6
						4577.9

2015 Nachurs In-Furrow Peanut Protocol

Trial ID: 15-Nachurs-PeanutIF Location: Belvidere, NC Trial Year: 2015
 Protocol ID 15-Nachurs-PeanutIF Investigator: Matt Winslow
 Project ID: Study Director: Keith Flaniken
 Sponsor Contact:

Pest Type	ARHHY	ARHHY	ARHHY	ARHHY	ARHHY	ARHHY		
Pest Code	BPNT	BPNT	BPNT	BPNT	BPNT	BPNT		
Pest Scientific Name	Arachis hypogaea	Arachis hypogaea	Arachis hypogaea	Arachis hypogaea	Arachis hypogaea	Arachis hypogaea		
Pest Name	Peanut	Peanut	Peanut	Peanut	Peanut	Peanut		
Crop Code	Stand	Stand	Stand	Stand	Weight	Yield		
BBCH Scale	Stand	Stand	Stand	Stand	Weight	Yield		
Crop Scientific Name	Stand	Stand	Stand	Stand	Weight	Yield		
Crop Name	Stand	Stand	Stand	Stand	Weight	Yield		
Crop Variety	Stand	Stand	Stand	Stand	Weight	Yield		
Description	Stand	Stand	Stand	Stand	Weight	Yield		
Part Rated	Stand	Stand	Stand	Stand	Weight	Yield		
Rating Date	5/27/2015	5/27/2015	6/2/2015	6/2/2015	10/9/2015	10/9/2015		
Rating Type	COUPLA	COUPLA	COUPLA	COUPLA	WEIGHT	YIELD		
Rating Unit	NUMBER	NUMBER	NUMBER	NUMBER	kg/plot	LB		
Sample Size, Unit								
Collection Basis, Unit								
Number of Subsamples		1	1	1	1	1		
Crop Stage Majority								
Crop Stage Scale								
Crop Density, Unit								
Pest Stage Majority								
Pest Density, Unit								
Footnote Number								
Assessed By								
SE Name								
Rating Timing								
Days After First/Last Applic.	9 9	9 9	15 15	15 15	144 144	144 144		
Trt-Eval Interval	9 DA-A	9 DA-A	15 DA-A	15 DA-A	144 DA-A	144 DA-A		
Plant-Eval Interval	9 DP-1	9 DP-1	15 DP-1	15 DP-1	144 DP-1	144 DP-1		
Days After Emergence								
ARM Action Codes		T1	ET10	ET10 T2		TY3		
Sort Order for View								
Number of Decimals			1		1	1		
Trt Treatment								
No. Name Rate Rate Unit Appl Code								
			1	2	3	4		
			5	6				
1 Rhyzo-Link 3-10-13-15-0.12n	1.5 GAL/A	A	40.3 ab	55137 ab	48.8 a	66780.8 a	12.827 bc	4317.5 bc
2 Rhyzo-Link 3-10-13-15-0.12n	2 GAL/A	A	43.3 a	59246.6 a	49.3 a	67465.8 a	13.738 abc	4624.1 abc
3 HKW6 (2-6-16)	1 GAL/A	A	38.8 ab	53082.2 ab	47.5 a	65068.5 a	14.56 a	4901 a
4 HKW6 (2-6-16)	1.5 GAL/A	A	37.5 b	51369.9 b	48.5 a	66438.4 a	13.99 ab	4709 ab
5 HKW6 (2-6-16)	2 GAL/A	A	39.5 ab	54109.6 ab	51 a	69863 a	13.9 ab	4678.8 ab
6 G24 (6-24-6)	1 GAL/A	A	40.8 ab	55821.9 ab	47.8 a	65411 a	13.163 abc	4430.6 abc
7 G24 (6-24-6)	1.5 GAL/A	A	41.5 ab	56849.3 ab	46.5 a	63698.6 a	14.325 ab	4821.9 ab
8 G24 (6-24-6)	2 GAL/A	A	36.5 b	50000 b	50.3 a	68835.6 a	13.563 abc	4565.2 abc
9 EXP 7K	1 GAL/A	A	42 ab	57534.3 ab	48.8 a	66780.8 a	12.222 c	4114.1 c
10 EXP 7K	1.5 GAL/A	A	38.8 ab	53082.2 ab	42	57534.3	13.963 ab	4699.9 ab
11 EXP 7K	2 GAL/A	A	39.5 ab	54109.6 ab	48.5 a	66438.4 a	13.5 abc	4544.2 abc
12 Check			40.3 ab	55137 ab	45.3 a	61986.3 a	14.438 ab	4859.8 ab
LSD P=.10	5.52		5.52	7567.55	6.03	8266.34	1.6536	556.61
Standard Deviation	4.6		4.6	6306.5	5.03	6888.84	1.3764	463.31
CV	11.55		11.55	11.55	10.4	10.4	10.06	10.06
Replicate F		0.41		0.41	0.841	0.841	25.359	25.359
Replicate Prob(F)		0.7467		0.7467	0.4821	0.4821	0.0001	0.0001
Treatment F		0.677		0.677	0.41	0.41	0.99	0.99
Treatment Prob(F)		0.7499		0.7499	0.931	0.931	0.4776	0.4776

Means followed by same letter do not significantly differ (P=.10, LSD)
Missing data estimates are included in columns:Yates=5,6

Crop Code

ARHHY, BPNT, Arachis hypogaea, = US

Rating Type

COUPLA = count - plant / emergence - objective

WEIGHT = weight

YIELD = yield

Rating Unit

NUMBER = number

kg/plot = kilograms per plot

LB = pound

Plant-Eval Interval

9 DP-1 = 1 ARHHY 5/18/2015

15 DP-1 = 1 ARHHY 5/18/2015

144 DP-1 = 1 ARHHY 5/18/2015

ARM Action Codes

ET10 = Excluded treatment 10

T1 = [1]/.00073

T2 = [3]/.00073

TY3 = 336.6066*[5]

2015 Nachurs In-Furrow Peanut Protocol

Trial ID: 15-Nachurs-PeanutIF Location: Belvidere, NC Trial Year: 2015
 Protocol ID 15-Nachurs-PeanutIF Investigator: Matt Winslow
 Project ID: Study Director: Keith Flaniken
 Sponsor Contact:

Trial Map Treatment Description

Trt	Code	Description
1		Rhyzo-Link 3-10-13-15-0.1Zn 1.5 GAL/A
2		Rhyzo-Link 3-10-13-15-0.1Zn 2 GAL/A
3		HKW6 (2-6-16) 1 GAL/A
4		HKW6 (2-6-16) 1.5 GAL/A
5		HKW6 (2-6-16) 2 GAL/A
6		G24 (6-24-6) 1 GAL/A
7		G24 (6-24-6) 1.5 GAL/A
8		G24 (6-24-6) 2 GAL/A
9		EXP 7K 1 GAL/A
10		EXP 7K 1.5 GAL/A
11		EXP 7K 2 GAL/A
12	CHK	Check

