2/7/2011										page 1 of 6
SUMMA	RY OF SCREI	ENING TRIAL RESULT	S - 2010 FIELD TES	ST		ENTRIES IN FUSARIUM	RACE 4 FIELD SCRE	ENING TRIALS WERE I	PROVIDED BY	
		A COOPERATIVE EX				SEED COMPANIES and	their representativ	00		2/7/20
	CALIFORN		LINSION, USDA-AI	(3, SLLD COIVIP	ANILS	PLEASE NOTE:	their representativ	es		2///20
ern Count	v field screening	trial - Fusarium race 4 seve	re infestation field			Variety names / numb	ers were recorded :	as provided by seed or	omnanies	
		n soil - confirmed Fusarium				NOT FOR REPRODUCTI			Jinpanies	
.010 11010 0	indis sundy loar								nahu	
						Results from co				
evaluatior	ns typically done	about 7-8 weeks after plan	ting			University of CA	A Coop. Exten	sion & USDA -	ARS, WICS - Shafter	
						Hutmacher, Wr	ight, Ulloa, K	eeley, Banuelos	s, Delgado	
						* with cooperat				
						* with support	from Cotton	ncorporated, C	CA Cotton Alliance	
lanting da	te (May 5, 2010)			(0=no symptoms,		QUESTIONS? C	ontact Bob H	utmacher: rbh	utmacher@ucdavis.e	edu
nal field e	valuation date (7	/12/2010)		5=dead, intermediate	#'s are					
				relative indicator of s			1	1		
				damage (both foliar &						
	Variety	Type of	whole plot foliar	average	average	# main stem				
ntry #	Name	Cotton	fusarium damage	foliar	root	nodes on	plant	average	% plant survival	
			rating (0=no visible	symptoms	vascular	plant (lower #	height	number of plants	under disease	
			damage, 5= dead,	on plants	stain rating	may indicate	(cm measured	per field	pressure at site	
			intermediate #'s	also rated for		more stunting	on final	replication at	(calc as % of emergence	
			relative indicator)	vascular symptoms		assoc with disease)	evaluation date)	1st count date	10-12 days after planting)	
			1.00	0.13	0.67	12.07	40.27	F2 C7	97.00	· · · · · · · · · · · · · · · · · · ·
101	DP-360	Pima (aka "OA-360")	1.00			12.87				= average (in bold text)
			0.00	0.35	0.72	1.06	4.51	1.15	8.65	= Std. Deviation (indication of variability in data)
			0.00	0.43	0.73	12.33	52.73	55.33	05 73	,
102	Phy-802RF	Pima (aka "P07X-8212RF")	0.00							
			0.00	0.52	0.59	1.23	4.68	1.53	3.80	
102	Dh., 004DF		2.00	0.33	1.40	12.07	47.73	55.67	/ 85.00	
103	Phy-804RF	Pima (aka "P07X-8244RF")	0.00							
			0.00	0.72	0.91	2.25	8.60	2.52	2.28	
			2.00	0.60	1.60	11.93	42.93	51.33	79.95	
104	Phy-805RF	Pima (aka "P07X-8213RF")								
			0.00	0.91	1.06	1.83	7.87	1.53	4.28	
10-	Dh.: 000	Dime	0.00	0.00	0.73	12.20	53.13	54.00	90.69	
105	Phy-800	Pima				-				
			0.00	0.00	0.59	1.52	3.31	3.00	2.23	
100	Cabalt	Dima	3.67	2.27	3.20	10.80	30.07	48.00	64.22	
106	Cobalt	Pima	0.58	0.70						
			0.58	0.70	0.56	1.97	7.30	4.00	9.65	
107	DP-357	Pima	3.00	1.53	2.60	11.00	33.07	54.00	68.04	
107	DE-221	riilid	0.00							
			0.00	0.83	0.83	1.//	6.42	2.65	4.28	
100	HA-195	hybrid Pima/Upland	1.67	0.87	1.87	12.87	57.33	55.33	91.69	
108	NA-192	nyonu Pina/Opianu	0.58							
			0.58	0.92	0.99	0.99	7.60	1.53	8.22	
109	Phy-72	Acala	2.00	0.87	2.33	12.40	45.93	56.33	86.56	
105	, . =		1.00			-				
			1.00	0.74	1.10	1.04	0.17	2.00	5.25	
			2.00	0.73	1.47	10.80	50.27	49.33	95.21	<u> </u>
110	DP-09R555B2R2	CA Upland	2.00	0.75	1.47	10.80				

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2/7/2011										page 2 of 6	
	1				l						
		ENING TRIAL RESULT				ENTRIES IN FUSARIUM	RACE 4 FIELD SCRE	ENING TRIALS WERE P	ROVIDED BY	2/7/2011	
UNIV. O	F CALIFORN	IA COOPERATIVE EX	TENSION, USDA-AI	RS, SEED COMP	ANIES	SEED COMPANIES and	their representativ	es			
						PLEASE NOTE:					
		g trial - Fusarium race 4 seve		Variety names / numbe			mpanies				
2010 field	trials - sandy loa	m soil - confirmed Fusarium	n race 4 infested site			NOT FOR REPRODUCTI	ON or RELEASE WIT	HOUT APPROVAL			
						Results from co	operative res	earch work doi	ne by:		
*ovaluatio	ns typically dong	e about 7-8 weeks after plan	ting			University of C	A Coon Exten	sion & LISDA -	ARS, WICS - Shafter		
evaluatio		about 7-6 weeks after plan									
						Hutmacher, Wr		1.			
						* with cooperat	tion from par	ticipating seed	companies		
planting da	ate (May 5, 2010)		(0=no symptoms,		* with support	from Cotton I	ncorporated. C	A Cotton Alliance		
	evaluation date (5=dead, intermediate	#'s are				utmacher@ucdavis.	du	
ai neid e		,, 12, 2010,		relative indicator of s		2010/10/10/10					
				damage (both foliar &			+				
	Variety	Type of	whole plot foliar	average	average	# main stem					
	Name	Cotton	fusarium damage	foliar	root	nodes on	plant	average	% plant survival		
			rating (0=no visible	symptoms	vascular	plant (lower #	height	number of plants	under disease		
			damage, 5= dead,	on plants	stain rating	may indicate	(cm measured	per field	pressure at site		
			intermediate #'s	also rated for	Ŭ	more stunting	on final	replication at	(calc as % of emergence		
			relative indicator)	vascular symptoms		assoc with disease)	evaluation date)	1st count date	10-12 days after planting)		
111	DP-09R619B2R2	CA Upland	2.00	0.67	1.47	10.93	50.73	55.33	96.37	= average (i	n bold text)
			0.00	0.62	0.92	0.88	4.48	1.53			tion (indication
										of variabilit	y in data)
112	DP-10R030B2R2	CA Upland	1.33	0.73	1.60	10.20	46.67	58.67	94.28	8	
			1.15	0.88			5.37	3.21	2.10)	
113	DP-10R051B2R2	CA Upland	1.67	0.73	1.40	10.40	47.20	54.33	92.83	5	
			0.58					2.52	6.22	2	
114	DP-10R052B2R2	CA Upland	2.00	0.80	1.47	10.33	44.87	55.00	93.95		
	DI IONOSEDENE		0.00		0.92	1.40		1.00	3.74		
		1	0.00	5.60	5.52	1.40	5.00	1.00	5.7-	1	
115	FM1773LLB2	CA Upland	1.50	0.40	1.30	12.40	48.30	36.00	94.44	L	
			0.71					31.18			
			0.71	0.02	0.07		5.50	51110	512		
116	FM1845LLB2	CA Upland	1.33	0.33	1.47	12.13	47.13	51.67	95.40		
			0.58			1.81		4.16			
			0.50	0.02	0.52	1.01	0.05	4.10	1.55		
117	FM1740B2F	CA Upland	1.67	0.87	1.40	12.00	47.07	56.33	97.57	,	
11/			0.58		-		-	2.52			
-			0.38	0.85	1.00	1.50	5.74	2.52	2.10	1	
110	FM9160B2F	CA Upland	1.33	0.73	1.60	12.47	42.47	59.00	94.89		
110	TWIJ100D2F		1.15					2.00			
			1.15	0.80	0.74	1.00	4.20	2.00	4.40	1	
110	FM9170B2F	CA Upland	0.33	0.00	1.20	12.13	47.33	58.00	99.38		
119	I WIJI/UBZF		0.55					3.46			
			0.58	0.00	0.94	1.50	4.50	5.40	1.07		
120	ST4288B2F	CA Upland	1.00	0.47	1.27	11.47	46.73	54.00	98.04		
120	314200DZF	CA Upland	1.00					2.65			
	1		1.00	0.92	0.88	2.45	10.12	2.65	3.40	/	

2/7/2011										page 3 of 6	
		ENING TRIAL RESULT	S - 2010 FIFI D TES	ST	I	ENTRIES IN FUSARIUM	RACE A FIELD SCRE	ENING TRIALS WERE E		2/7/2011	
									NOVIDED BI		
UNIV. C	OF CALIFORNI	A COOPERATIVE EX	IENSION, USDA-AI	KS, SEED COIMP	ANIES	SEED COMPANIES and	their representativ	es		Bob Hutma	
						PLEASE NOTE:				Univ. California	
		trial - Fusarium race 4 seve				Variety names / numb			ompanies	Cooperativ	e
2010 field	trials - sandy loar	n soil - confirmed Fusarium	race 4 infested site			NOT FOR REPRODUCTI				Extension	
						Results from co	operative res	earch work do	ne by:		
*evaluatio	ns typically done	about 7-8 weeks after plan	iting			University of CA	A Coop. Exten	sion & USDA - A	ARS, WICS - Shafter		
						Hutmacher, Wr	-		-		
				(0=no symptoms,		* with cooperate	tion from par	ticipating seed	companies		
inal field e	evaluation date (7	/12/2010)		5=dead, intermediate	e #'s are				A Cotton Alliance		
				relative indicator of s	everity of	QUESTIONS? C	ontact Bob H	utmacher: rbhi	utmacher@ucdavis.e	edu	
				damage (both foliar &	& vascular)						
	Variety	Type of	whole plot foliar	average	average	# main stem					
ntry #	Name	Cotton	fusarium damage	foliar	root	nodes on	plant	average	% plant survival		
			rating (0=no visible	symptoms	vascular	plant (lower #	height	number of plants	under disease		
			damage, 5= dead,	on plants	stain rating	may indicate	(cm measured	per field	pressure at site		
			intermediate #'s	also rated for		more stunting	on final	replication at	(calc as % of emergence		
			relative indicator)	vascular symptoms		assoc with disease)	evaluation date)	1st count date	10-12 days after planting)		
121	BCSX1010B2F	CA Upland	1.33	0.33	0.93	12.73	52.27	55.67	94.04	– average (in bold text)
121	DC3X1010B21		0.58			-	-				ation (indication
			0.58	0.02	0.00	1.20	0.05	0.58	5.70	of variabilit	
122	BCSX1030B2F	CA Upland	1.00	0.53	1.67	10.93	43.27	57.67	93.00		,,
122	DESKIDSODZI	en opiana	0.00	0.74							
			0.00	0.74	1.11	1.10	0.54	5.75	5.23		
123	BCSX1040B2F	CA Upland	1.00	0.33	1.13	11.87	44.40	53.00	94.95		
125	BEBALD IEBEI	er opland	0.00	0.62	-	-	-		4.69		
124	Phy-367WRF	CA Upland	1.67	0.20	0.80	11.80	45.07	58.67	90.32	2	
	1		0.58	0.41					4.26		
125	Phy-375WRF	CA Upland	1.67	0.33	1.07	11.73	47.27	56.67	95.91		
			0.58	0.49	-	-					
										1	
126	Phy-499WRF	CA Upland	2.00	0.60	1.20	11.87	42.00	57.67	91.36	5	
			0.00	0.74			12.85	1.53	1.51		
										1	
127	Phy-830	Pima	3.67	1.87	2.80	10.27	29.00	57.67	46.33	6	
			0.58	0.83	0.77	1.16	4.87	1.15	6.42	2	
128	HA-211	hybrid Pima/Upland?	0.67	0.07		12.80					
			0.58	0.26	0.59	1.74	6.66	5.86	6.43		
129	HA-222	hybrid Pima/Upland?	1.67	0.73	2.07	12.13	53.67	57.67	74.48		
			1.53	0.80	-				-		
130	BCS1	not identified - Pima?	3.00	1.47	3.07	11.60	35.93	49.67	62.25	5	
			1.00	0.52	0.46	2.03	8.80	3.79	8.09		

2/7/2011										page 4 of 6	i
SUMMA	ARY OF SCRE	ENING TRIAL RESU	JLTS - 2010 FIELD TI	EST		ENTRIES IN FUSARIUM	RACE 4 FIELD SCRE	ENING TRIALS WERE F	ROVIDED BY	2/7/2011	
JNIV. O	F CALIFORN	IIA COOPERATIVE I	EXTENSION, USDA-A	RS. SEED COMP	ANIES	SEED COMPANIES and their representatives					icher
			,		_	PLEASE NOTE:		Univ. California			
ern County field screening trial - Fusarium race 4 severe infestation field						Variety names / numbe	ers were recorded a	is provided by seed co	ompanies	Cooperative	
010 field	trials - sandy loa	ım soil - confirmed Fusari	ium race 4 infested site			NOT FOR REPRODUCTI	NOT FOR REPRODUCTION or RELEASE WITHOUT APPROVAL				
						Results from co	operative res	earch work do	ne by:		
evaluatio	ns typically done	e about 7-8 weeks after p	lanting			University of CA	Coop. Exten	sion & USDA - /	ARS, WICS - Shafter		
						, Hutmacher, Wr					
				(0=no symptoms,		* with cooperat	<u> </u>		, ,		
		(7/42/2010)							A Cotton Alliance		
inal field e	evaluation date	//12/2010)		5=dead, intermediate							
				relative indicator of s		QUESTIONS? C	ontact Bob H	utmacher: rbh	utmacher@ucdavis.e	edu	
	Variaty	Tuno of	whole plot foliar	damage (both foliar &		# main stem					
	Variety Name	Type of Cotton	fusarium damage	average foliar	average root	# main stem nodes on	plant	average	% plant survival		
			rating (0=no visible	symptoms	vascular	plant (lower #	height	number of plants	under disease		
			damage, 5= dead,	on plants	stain rating	may indicate	(cm measured	per field	pressure at site		
			intermediate #'s	also rated for		more stunting	on final	replication at	(calc as % of emergence		
			relative indicator)	vascular symptoms		assoc with disease)	evaluation date)	1st count date	10-12 days after planting)		
131	BCS2	not identified - Pima?	3.0	0 1.27	2.87	10.80	36.27	54.33	61.27	= average (in bold text)
			0.0	0 0.59	0.52	1.82	5.71	2.08			ation (indication
										of variabilit	ty in data)
132	BCS3	not identified - Pima?	0.0	0.00	1.27	13.40	53.80	56.33	94.66		
			0.0	0.00	0.70	1.06	3.93	0.58	3.11		
133	BCS4	not identified - Pima?	1.3 0.5				52.33	52.00 3.61	94.3 3		
			0.5	.8 0.00	0.46	1.13	4.24	3.61	3.51		
134	BCS5	not identified - Pima?	0.6	7 0.00	0.73	12.87	50.87	53.33	93.77	,	
154	6635	not identified - Fillia:	0.5				5.10	2.31	2.08		
			0.5	0.00	5.70				2.00		
135	BCS6	not identified - Pima?	0.0	0.00	0.33	11.47	47.07	51.00	94.77		
			0.0	0.00	0.62	1.46	6.57	0.00	3.00)	
				_							
136	BCS7	not identified - Pima?	1.3					48.00			
			0.5	0.46	0.68	0.94	6.62	1.00	6.22		
107	BCS8	not identified Dime?	0.0	0.00	0.27	11.47	51.80	56.67	94.85		
137	σεσο	not identified - Pima?	0.0				51.80 6.10	2.89			
			0.0	0.00	0.40	0.92	0.10	2.85	4.50	1	
138	Phy-725RF	Acala	2.0	0 0.93	1.73	12.20	46.47	61.67	84.23		
	· · · · · · · · · · · · · · · · · · ·		0.0		-		5.13	3.79			
139	Phy10-FOV01	not identified - Pima?	0.6					55.67			
			1.1	.5 0.35	0.80	0.88	5.85	3.06	5.09		
						42.47	F2 02	F0 (7			
140	Phy10-FOV 02	not identified - Pima?	1.0	0.00	1.00	12.47	53.93	50.67	94.20	'	1

	r		1	1	1	1		1			
2/7/2011										page 5 of 6	
		EENING TRIAL RESULT				ENTRIES IN FUSARIUM	RACE 4 FIELD SCRE	ENING TRIALS WERE F	ROVIDED BY	2/7/2011	
UNIV. C	OF CALIFOR	NIA COOPERATIVE EX	TENSION, USDA-AI	RS, SEED COMP	SEED COMPANIES and	their representativ	es		Bob Hutma	icher	
				PLEASE NOTE:				Univ. Califo	ornia		
Kern Coun	ity field screeni	ng trial - Fusarium race 4 seve	ere infestation field		Variety names / numb	ers were recorded a	as provided by seed co	mpanies	Cooperativ	e	
2010 field	trials - sandy lo	oam soil - confirmed Fusarium	n race 4 infested site			NOT FOR REPRODUCTI	ON or RELEASE WIT	HOUT APPROVAL		Extension	
						Results from co	operative res	earch work do	ne by:		
*evaluatio	ons typically do	ne about 7-8 weeks after plar	nting			University of CA	A Coon Exten	sion & USDA -	ARS, WICS - Shafter		
CVUIDUCIO		le ubout / o weeks utter plur				,					
						Hutmacher, Wr		1.			
				(0=no symptoms,		* with cooperate	tion from par	ticipating seed	companies		
final field	evaluation date	e (7/12/2010)		5=dead, intermediate	e #'s are	* with support	from Cotton I	ncorporated, C	A Cotton Alliance		
				relative indicator of s	everity of	OLIESTIONS? C	ontact Boh H	utmacher: rhh	utmacher@ucdavis.	du	
				damage (both foliar &							
	Variety	Type of	whole plot foliar	average	average	# main stem					
Entry #	Name	Cotton	fusarium damage	foliar	root	nodes on	plant	average	% plant survival		
			rating (0=no visible	symptoms	vascular	plant (lower #	height	number of plants	under disease		
			damage, 5= dead,	on plants	stain rating	may indicate	(cm measured	per field	pressure at site		
			intermediate #'s	also rated for		more stunting	on final	replication at	(calc as % of emergence		
			relative indicator)	vascular symptoms		assoc with disease)	evaluation date)	1st count date	10-12 days after planting)		
141	Phy10-FOV03	not identified - Pima?	3.00	-				54.00			in bold text)
			1.00	0.56	0.74	1.64	4.48	2.65	6.17		ation (indication
			2.00	1.40	2.52	10.00	44.03	56.33	CA 43	of variabili	ty in data)
142	Phy10-FOV04	not identified - Pima?	3.00	-					-		
			1.00	0.74	0.52	1.15	8.56	3.21	18.63		
			0.00	0.00	0.67	40.07	52.40	F 4 33	05.72		
143	Phy10-FOV05	not identified - Pima?	0.33					54.33			
			0.58	0.00	0.62	1.49	2.92	2.31	2.07		
			0.33	0.00	0.80	13.07	53.13	55.67	95.23		
144	Phy10-FOV06	not identified - Pima?	0.33		0.68			2.31	5.33		
	+		0.58	0.00	0.68	1.03	4.21	2.31	5.33	+	
145	Phy10-FOV07	not identified - Pima?	0.33	0.20	1.00	12.33	51.47	56.33	94.67	,	
145	F11910-F0V07	not identified - Plina?	0.58		0.85			1.15	3.51		
	-		0.58	0.41	0.85	1.50	4.00	1.15	5.5		
146	Phy10-FOV08	not identified - Pima?	0.67	0.00	0.80	12.67	54.27	56.33	95.46		
140	111910-10108	not lucitimeu - Fillia:	0.58								-
			0.38	0.00	0.41	0.82	3.75	2.05	7.0-		
147	Phv10-FOV09	not identified - Pima?	0.67	0.13	0.67	12.07	51.53	56.00	97.66		
147	,1010105		0.58			-		2.65			
	1		0.50	5.55	5.02	1.55	5.01	2.05	2.00		1
148	Phy10-FOV10	not identified - Pima?	0.67	0.00	0.73	13.27	51.67	54.33	93.91		
140	,10.0010		0.58			-					
	1		0.50	5.00	5.55	1.10		2.52	1.50		1
149	Phy10-FOV11	not identified - Pima?	0.00	0.00	0.60	13.00	55.80	54.33	96.92		
145	,10.0011		0.00								
			0.00	5,00	0.01	1.00	5.02	1115	2.7.5		1
150	Phy10-FOV12	not identified - Pima?	1.33	0.47	1.47	11.80	47.67	57.00	84.17		
200	/		0.58				-	1.73			

										page 6 of 6	i
2/7/2011											
SUMM	ARY OF SCRE	ENING TRIAL RESUL	TS - 2010 FIELD TES	ST		ENTRIES IN FUSARIUI	M RACE 4 FIELD SCRE	ENING TRIALS WERE P	ROVIDED BY	2/7/2011	L
UNIV. C	OF CALIFORN	IA COOPERATIVE EX	TENSION, USDA-AI	RS, SEED COM	PANIES	SEED COMPANIES and their representatives					acher
						PLEASE NOTE:				Univ. Califo	ornia
Kern Coun	ty field screening	g trial - Fusarium race 4 sev	ere infestation field			Variety names / num	bers were recorded	as provided by seed co	mpanies	Cooperativ	e
2010 field	trials - sandy loa	m soil - confirmed Fusariur	n race 4 infested site			NOT FOR REPRODUC	TION or RELEASE WI	THOUT APPROVAL	·	Extension	
						Results from c	ooperative res	earch work do	ne by:		
*evaluatio	ons typically done	about 7-8 weeks after pla	nting			University of C	A Coop. Exter	sion & USDA - /	ARS, WICS - Shafter		
						· · ·	•	eeley, Banuelos			
						,	0, ,	11	, 0		
				(0=no symptoms,				ticipating seed			
final field	evaluation date (7/12/2010)		5=dead, intermediate #'s are		* with support from Cotton Incorporated, CA Cotton Alliance					
				relative indicator of	severity of	QUESTIONS?	QUESTIONS? Contact Bob Hutmacher: rbhutmacher@ucdavis.				
				damage (both foliar	& vascular)						
	Variety	Type of	whole plot foliar	average	average	# main stem					
Entry #	Name	Cotton	fusarium damage	foliar	root	nodes on	plant	average	% plant survival		
			01	symptoms	vascular	plant (lower #	height	number of plants	under disease		
				on plants	stain rating	may indicate	(cm measured	per field	pressure at site		
				also rated for		more stunting	on final	replication at	(calc as % of emergence		
			relative indicator)	vascular symptoms		assoc with disease)	evaluation date)	1st count date	10-12 days after planting)		
151	Phy10-FOV13	not identified - Pima?	0.33	0.00	0.73	12.1	3 56.53	57.00	96.43	= average (in bold text)
			0.58	0.00	0.59	0.5	52 4.87	1.73			ation (indication
										of variabilit	ty in data)
152	Phy10-FOV14	not identified - Pima?	0.33	0.13	3 0.93	12.6	0 54.67	57.33	93.05		
			0.58	0.35	5 0.46	0.9	9 2.53	0.58	6.24		
153	Phy10-FOV15	not identified - Pima?	0.00								
			0.00	0.00	0.62	0.9	3.74	3.61	0.91		
border	Phy-800	Pima	0.00	0.00	0.80	11.6	0 19.40	59.00	96.07		
boruer	F119-000	Fillia	0.00			-			0.73		