		7546⑧ I ×	7546⑧ II	7546⑨ I	7566B ×	7567 I ×	7535-10 ×	7536-9 ×	7569-① I	7569① II
		7535-31	7535-31	7535-31	7535-2	7535 4	7567 ⑧ I	7567	7535-13	7535-2
Uniformly pigmented	BI									
	Wx	35	9	46	31	10	25	22	37	29
	M	16	12	9	3	12	4	9	6	5
" "	bP									
	Wx	3	0	8	6	0	2	2	8	6
	M	0	1		0	0	0		0	1
Reflex-vacuolated	BI									
	Wx	0	0	0	0	0	0			
	M	0	0	0	0	0	0			
" "	bP									
	Wx	0	0	0	0	0	0			
	M	0	0	0	0	0	0			
$a_2 \to A_2$	BI 2spM									
	Wx	48	29	13	18	28	89	94	13 ↑	7
	M	44	19	40	8	26	37	84	40 ↑	11
	4 SpM									
	Wx	10	26	4	36	53	10		↓	6
	M	30	18	35	50	63	48			27
"	bP Wx	3	0	2	12	6	12	3	2	1
	M	5	3	4	9	6	11	0	6	2
Colorless	BI									
	Wx	9	4	7	35	36	11	16	4	12
	M	9	6	5	24	20	10	14	5	16
Colorless bP	Wx + M	190	116	179	166	227	240	215	82	95

Transposed Spm from Wx + / wx Spm parent. $a_2^{m1}(A_2)$ Bt/$a_2$bt × $a_2$bt wx no Spm
" C.O. selected

	Uniformly pigmented Bt		bt		Diffuse-mottled Bt		bt		$a_2 \to A_2$ Bt		bt		Colorless Bt		bt
	Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx + wx
7560 ③ I	70	56	2	4	7	15	0	1	12	10	0	1	4	6	185
" ③ II	33	44	4	3	0	0	0	0		1			3	4	85
" ③ I	22	21	1	0	0	0	0	0	22	23			2	4	54 + dwarf
7560-6	31	31	4	3	0	0	0	0	28	36	2	0	6	5	136
7563-2 I	58	46	3	1	0	0	0	0	52	57	1	0	4	7	198
" -2 II	38	38	4	2	0	0	0	0	28	28	1	2	2	6	126
7569 ⑤ I	27	28	4	0	1	4	4	7	14	13			11	10	75
7570 A-7 I	6	3	1	0	0	0	0	0	11	7	0	3	3	1	20
" -7 II	7	3	0	1	0	0	0	0	2	7	3	3	3	0	20
			Wx Wx plus 1 Spm, not linked to wx or Wx												
7591 B ④ I	43	43	2	7	0	0	0	0	12	14	4	0	5	6	110
" ④ II	19	20	1	0	0	0	0	0	24	21	2	3	5	6	104
7597 B-3	48	45	2	4	0	0	0	0	48	45	5	1	8	8	175
" B-4	47	57	10	5	6	7	0	0	31	30	0	2	11	8	145

Wx wx plus 1 Spm

7777 a_2^{m1} (A_2) BI / $a_2$bt Wx Spm/Sw4 ♀ × $a_2$bt wx Spm ♂

A+B

		uniformly Pigmented BI		bt		Breakdown BI		bt		variegated $a_2 \to A_2$ BI		bt		Colorless BI		bt	
♀	♂	Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx + wx	Totals
7777A-1^I	7815-7	83	136	9	8	10	0	0	0	18	1	1	0	9	12	241	
" A-1^II	7815-33	10	12	0	0	0	0	0	0	7	0	0	0	0	1	20	
" A-1^t-1	7814-12	1	83	0	4	8	0	0	0	61	1	5	0	2	2	157	
" 1^t-2	7815-8	sectorial ear, see below															
" 1^t-3	7815-	9	93	2	4	15	0	1	0	71	3	2	0	12	5	158	
" A-2^t	7815-33 ^7131	3	32	0	2	1	0	0	0	38	2	2	0	3	4	61	
" A-3^I	7815-33^7131	32	73	6	10	13	1	0	0	22	1	3	0	10	12	161	
" A-4^t	" -13	4	51	1	2	3	0	0	0	52	5	2	0	8	4	96	
" B-1^t	7815-8	0	28	0	1	0	0	0	0	18	0	0	1	1	0	63	
" B-2^I	" -13	20	111	0	3	12	1	1	0	75	3	5	0	12	11	229	
" B-2^t-1	" -33	3	82	1	1	0	0	0	0	79	1	4	1	3	5	182	
" B-2^t-2	" "	2	74	0	6	0	0	0	0	90	1	5	0	6	4	157	
" B-3^I	" "	12	50	0	2	3	0	0	0	29	0	2	0	2	5	126	
" B-4^I	" "	27	103	0	5	17	0	1	0	56	3	6	0	11	6	211	
" B-4^II	" "	29	58	4	5	5	0	1	0	21	0	2	0	4	3	120	
" B-4^t	" -8	1	35	0	1	0	0	0	0	55	1	1	0	3	3	92	
Sectorial	Ear.																
7777A-1^t-2	Intense spm	0	3	0	0	4	0	0	0	4	0	1	0	0	2	8	
	Mutable "	34	30	2	2	0	0	0	0	0	0	0	0	1	2	58	
		[illegible]				9	2	1	6	636	22	41	2				

7777 wx spm / wy + ♀ a2bt wy 1 spm or spm/spm o7

	7777A-3 × 7818B-5 7/25 Spm/Spm o7	7777A-4 × 7/26 7818B-8 1 Spm o7	7777B-1 × 7/25 7818B-5 Spm/Spm o7	Totals	7777C-1 × 7/26 7818B-8 1 Spm	7777D-1 × 7/26 7818B-8 1 Spm	7777D-3 × 7/26 7818B-8 1 Spm	Totals	7777D-4 × 7/25 7818B-4 Spm/Spm	Totals
Uniformly Pigmented BZ wx	3	51	4		76	38	51	165	0	
wy	2	38	4		71	31	52	154	8	
" " bt wx	0	5	1		1	2	5	8	0	
wy	0	8	0		3	7	4	14	0	
Diffuse-mottled BZ wx	0	1	1		0	0	0	0	0	
wy	0	0	0		0	0	0	0	0	
" " bt wx	0	0	0		0	0	0	0	0	
" " wy	0	0	0		0	0	0	0	0	
Var. BZ 1 Spm wx	3	1	1	5	2	0	0	2	2	4
wy	56	28	74	158	69	37	36	142	91	233
2&3 Spm wx	58	32	98	188	51	30	32	113	113	226
wy	3	3	2	8	4	0	2	6	7	13
" bt 1 Spm wx	0	0	0	0	1	0	0	1	0	1
wy	0	2	1	3	3	3	5	11	4	15
2+3 Spm wx	3	3	4	10	-	1	-	1	8	9
wy	1	0	-	1	-	0	-	0	0	0
Colorless BZ wx	2	6	3	11	7	7	10	24	2	26
wy	2	4	7	13	6	5	7	18	5	23
Colorless bt wx+wy	161	171	181		233	134	163	530	215	

7777C, D. a_2 m1 (A_2) BI / a_2 bt Wx Spm / wx + ♀ × a_2 bt wx wSpm ♂

♀	♂	A_2 BI		A_2 bt		diffuse mottled BI		diffuse mottled bt		variegated BI		variegated bt		Colorless BI		Colorless bt	Totals
		Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx + wx	
7777C-2[I]	7815-33	111	114	6	4	0	0	0	0	1	0	0	0	3	12	187	
" -2[I]	7814-12	68	56	3	2	1	0	0	0	4	0	0	0	2	4	144	
" C-3	7815-33	69	69	3	4	0	0	0	0	1	0	0	0	6	5	152	
" C-3[I]	" -18	22	21	0	0	1	0	0	0	1	0	0	0	0	2	46	
" C-4[I]	" - 3	88	87	5	4	0	0	0	0	0	0	0	0	3	9	158	
" D-1[I-1]	" -18	23	22	1	3	0	0	0	0	0	0	0	0	2	1	57	
" D-1[I-2]	" -18	23 (viola)	22	2	0	0	0	0	0	0	0	0	0	1	0	29	
" D-2	" -33	104	71	6	7	0	0	0	0	0	0	0	0	5	5	192	
" D-3[I]	" -18	27	19	1	0	0	0	0	0	0	0	0	0	0	1	28	
" D-4[I]	" -33	2	7	0	0	0	0	0	0	0	0	0	0	0	0	8	
Totals		537	488	27	24	2	0	0	0	7	0	0	0	22	39	1001	

7306 B-1

(Ac)
Spm (Ac) Bz Pr / + a2s bt pr   Wx+ / wx Spm

Part of plant	Type of cross		Uniform Pigmented Bz Wx	wx	bt Wx	wx	variegated Bz Wx	wx	bt Wx	wx	Colorless Bz Wx	wx	bt Wx + wx	
I	1		9	-	0	-	181	-	10	-	13	-	185	398
II	2		4	3	1	0	68	80	3	3	2	7	189	360
tiller-1	2		7	2	0	0	69	63	2	3	4	10	152	312
tiller-2	2		19	1	0	0	8	22	0	0	3	0	42	95
tiller-3	2		3	1	0	0	31	40	1	5	4	4	86	175
Totals - type-2			33	7	1	0	176	205	6	11	13	21	469	942

variegated Bz

		2 Spm Wx	wx	4 Spm Wx	wx	Total
7306B-(1)	II	51	22	17	58	148
"	t-1	54	15	12	51	132
"	t-2	8	16	0	6	30
"	t-3	26	16	5	24	71
Totals		139	69	34	139	381
Totals, minus t-2		131	53	34	133	351

Verbs Tables

7312 a_2^{mi} (pale) BI / a_2^{mi} (A$_2$) BT

7312
7313
7582
Tables.

Plant	Position	Type	unfert pale		unfert A$_2$		var. pale state		var. A$_2$ state				
number	ear	cross	Wt	un	Wt	un	Wt	un	Wt	un			
7312-1	I	1	9	-	9	-	0	-	0	-			
" - 3	I	1	95	-	89	-	0	-	0	-			
" - 4	I	1	3	-	1	-	5	-	3	-			
" - 5		2	62	5	55	2	7	68	4	49			
" - 6		1	31	-	27	-	0	-	1	-			
" - 6	Tiller-1	2	16	23	22	21	0	0	0	1			
" - 6	Tiller-2	2	33	26	35	26	1	3	0	1	plus 1 Brachiacron un (A$_2$) state		
Total	S, t-1 + t-2		49	49	57	47	1	3		2	1		

Plant no.	Type of Cross	Ear location	Pigmented Bt Wx	Pigmented Bt wx	Pigmented bt Wx	Pigmented bt wx	Colorless, spots or specks of pigment Bt Wx	Colorless, spots or specks of pigment Bt wx	Colorless, spots or specks of pigment bt Wx	Colorless, spots or specks of pigment bt wx	Colorless Bt Wx	Colorless Bt wx	Colorless bt Wx + wx
7313A-1	1	1st ear, main stalk	123	-	5	-	26	-	1	-	6	-	164
" A-2	1	"	256	-	11	-	6	-	2	-	16	-	234
" " "	2	tiller	83	5	2	1	6	67	0	3	3	3	193
" B-1	2	1st ear, main stalk	53	22	6	2	5	18	0	1	3	2	121
" B-2	1	"	195	-	15	-	5	-	2	-	22	-	226
" B-3	2	"	81	54	6	3	0	13	0	1	2	2	135
" B-4	2	"	29	24	1	0	74	58	4	1	5	7	206
" " "	1	tiller-1	64	-	4	-	46	-	2	-	4	-	125
" " "	2	tiller-2	25	2	1	0	8	35	0	0	1	0	45
" B-5	1	1st ear, main stalk	101	-	10	-	98	-	4	-	17	-	228
" B-5	2	2nd ear, main stalk	53	-	5	-	45	-	0	-	6	-	100
7582A	2	1st ear, main stalk	113	88	[illegible]		0	0	0	0	9	5	185
7582A-T	3 1 spm	tiller	45	29	1	1	1 spm 36	3	0	0	11	6	138
					3 spm =		1	42	0	3			
7582B-1	3 1 spm	1st ear, main stalk	34	45	1	1	33	49*	1	2	3	5	140
" B-2	3 1 spm	"	65	64	3	8			9	6	15	11	266
					1 spm		56		4				
					3 spm		9		58				
7582B-3[T]	3 spm + spm	"	27	24	2	0	75	98*	6	10	16	28	225

~~Table 20~~

Phenotype of kernel

A.

Plant number	Position of ear	uniform pig Bt Wx	uniform pig Bt wx	uniform pig bt Wx	uniform pig bt wx	variegated Bt Wx	variegated Bt wx	variegated bt Wx	variegated bt wx	colorless Bt Wx	colorless Bt wx	colorless bt Wx + wx	Totals		% recombination
7309A-3	1st, main	38	11	0	1	5	32	1	2	4	4	93	191		
" A-3	tiller	45	11	3	0	7	41	0	3	7	3	112	232		
" A-4	tiller-1	57	2	1	0	8	60	0	4	2	5	118	257		
" A-5	tiller-1	76	10	5	1	11	68	2	3	4	5	158	343		
" A-8	1st, main	41	2	4	0	5	34	0	6	4	6	98	200		
Totals		257	36	13	2	36	235	3	18	21	23	579	1223		12.8%

~~Table 21~~ A

♀ a_2^{m-1} (class II) Bt | a_2^{m-1} (class II) Bt Wx +| wx Spm × ♂ a_2 bt/ a_2 bt, wx/wx, no Spm

Plant number	Position of ear	uniform pig Bt Wx	uniform pig Bt wx	uniform pig bt Wx	uniform pig bt wx	variegated Bt Wx	variegated Bt wx	variegated bt Wx	variegated bt wx	colorless Bt Wx	colorless Bt wx	colorless bt Wx	colorless bt wx	Totals		% recombination
7308B-4	2nd, main	107	14	-	-	12	117	-	-	0	0	-	-	250		
" B-2	1st, main	186	32	-	-	23	162	-	-	0	1	-	-	404		
" B-4	1st, main	21	1	-	-	0	15	-	-	0	0	-	-	37		
" B-4	tiller-1	28	2	-	-	2	26	-	-	0	0	-	-	58		
" B-4	" -2	13	4	-	-	0	11	-	-	1	0	-	-	29		
Totals		355	53	-	-	37	331	-	-	1	1			778		11.5%

B.

♀ a_2^{m-1} (class II) Bt | a_2 bt; Wx +| wx Spm × ♂ a_2 bt/ a_2 bt, wx/wx, no Spm

Plant number	Position of ear	uniform pig Bt Wx	uniform pig Bt wx	uniform pig bt Wx	uniform pig bt wx	variegated Bt Wx	variegated Bt wx	variegated bt Wx	variegated bt wx	colorless Bt Wx	colorless Bt wx	colorless bt Wx + wx	Totals		% recombination
7308B-1	tiller-1	46	10	2	1	6	64	1	2	5	6	83	226		
" B-1	tiller-2	29	10	3	1	4	39	2	4	3	6	89	190		
" B-1	tiller-3	17	2	2	1	3	18	0	1	0	2	47	93		
Totals		92	22	7	3	13	121	3	7	8	14	219	509		15.3%

Table 21 D

		A_2		Colorless, spots of A_2			Colorless			
				BT		bt				
		BT	bt	2 spm	[illegible] spm		BT	bt		Totals
7308B-3	1st, main	4	5	75	43	8	36	176		347
" C-1	1st, main	52	6	49	42	10	12	132		303
" C-1	2nd, "	8	3	24	5	3	6	45		94
" C-1	tiller-1	40	3	53	36	11	20	143		306
" C-1	tiller-2	12	2	40	41	6	27	88		216
Totals for C-1		112	14	166	124	30	65	408		919
"C-2	1st, main	0	–	6	68	–	51	–		125
"C-3	1st, main	10	2	149	15	10	15	166		367
" "	2nd	6	0	149	4	3	10	163		335
	Totals for C-3									
"C-4	1st, main	45	3	59	34	10	28	169		348
"C-5	1st, main	0	–	0	6	–	10	–		16
"C-6	1st, main	8	–	158	158	–	4	–		328
" "	2nd, main	5	–	95	114	–	5	–		219
" "	tiller	2	–	41	59	–	0	–		102
Totals C-6		15	–	294	331	–	9	–		649

7554A. a_2^{m1} (A_2) Bt | a_2 bt; Wx + | wx Spm-inactive ♀ × $a_2$bt/$a_2$bt, wx/wx, no Spm ♂

Plant number	Ear location	A_2 Bt Wx	A_2 Bt wx	A_2 bt Wx	A_2 bt wx	Break-down Bt Wx	Break-down Bt wx	Break-down bt Wx	Break-down bt wx	Colorless spots of pigment Bt Wx	Colorless spots of pigment Bt wx	Colorless spots of pigment bt Wx	Colorless spots of pigment bt wx	Colorless Bt Wx	Colorless Bt wx	Colorless bt Wx + wx	Total
7554A-1	1st, main stalk	109	103	8	3	0	4	0	0	0	1	0	0	8	2	196	
" -1	2nd " "	74	73	7	1	1	1	0	0	0	1	0	0	2	2	144	
" -1	tiller	78	67	3	2	0	7	0	0	0	2	0	0	3	4	179	
Totals		261	243	18	6	1	12	0	0	0	4	0	0	13	8	519	
7554A-3	tiller	21	15	1	0	0	0	0	0	0	0	0	0	1	0	29	
7554A-4	1st, main	88	92	0	5	0	0	0	0	1	0	0	0	9	4	160	
" "	2nd, "	12	16	1	1	0	0	0	0	0	4	0	0	1	0	43	
" "	tiller	24	8	0	0	0	3	0	1	0	6	0	0	1	1	49	
Totals	-A-4	124	116	1	6	0	3	0	1	1	10	0	0	11	5	252	
7554A-5	1st, main	52	32	4	2	0	0	0	0	0	0	0	0	6	4	106	
" "	tiller-1	107	104	3	7	0	3	1	0	0	3	0	1	11	5	209	
" "	tiller-2	12	15	2	0	0	3	0	1	0	1	0	0	1	1	33	
Totals	, A-5	171	151	9	9	0	6	1	1	0	4	0	1	18	10	348	
Totals	1 Spm kernels					1	21	1	2	1	18	0	1	= 3 Wx :		42 wx =	6.6% Recombination

		A_2 Bt Wx	A_2 Bt wx	A_2 bt Wx	A_2 bt wx	$a_2 \to A_2$ Bt 1 Spm Wx	$a_2 \to A_2$ Bt 1 Spm wx	$a_2 \to A_2$ Bt high dose Wx	$a_2 \to A_2$ Bt high dose wx	$a_2 \to A_2$ bt 1 Spm Wx	$a_2 \to A_2$ bt 1 Spm wx	$a_2 \to A_2$ bt high dose Wx	$a_2 \to A_2$ bt high dose wx	Colorless Bt Wx	Colorless Bt wx	Colorless bt Wx + wx
7554A-3 I ♀ × 7538② ♂ $a_2$bt wx Spm-active		14	10	0	2	81	11	16	72	5	1	2	5	1	4	185

For table 3 A

1 = a2b8Wx no spur
2 = " wy " "
3 = a2b8wy spur

Type of cross

Cross

7309	~~ear~~		I	II	tiller-1	tiller-2	tiller-3	pollen		
A-1			2	2						
A-2			2							
A-3			2		2					
A-4				2	2	2				
A-5			2		2	1				
A-6			2	2						
A-7			2							
A-8			2							
A-9			2							
B-1			3		1			1		
B-2			3					1		
B-3			3					1		
B-4			3					1		

For Table 3 B

Type of cross

1 = a₂bt Wx no Spw
2 = " " Ury " "
3 = " " " Spw

Cross

7308			I	II	t-1	t-2	t-3	pollen		
A-1			3	1						
A-2			3							
A-3			3		2					
A-4			3	2	3					
A-5								1		
A-6			3							
B-1			1		2	2	2			
B-2			2							
B-3			1							
B-4			2		2	2				
B-5	(no spw)		2		1	2				
C-1			1	1	1	1				
C-2			1							
C-3			1	1						
C-4			1							
C-5			1							
C-6			1	1	1					
7570										
A-1			2	2	2	3	3			
A-2			2	2	2	3				
A-3			2	2						
A-4			2		2	3				
A-5			2		2	2				
A-6			2	2	2					
A-7			2	2						
A-8			2	2						
B-1			2	2	2					
B-2			2			(x)		many - are to 2, 3		
B-3			2		2	2				
C			2	3	2	2		-2		

7554 Types of cross of

Type – 1 = a_2 bt Wt no Spm
" – 2 = " " wh " "
" – 3 = " " " Spm
" – 4 = a_{2n-1} bt wh no Spm

Cross

			I	II	t-1	t-2	t-3			
A-1			2	2	2					
A-2	bo spm &		3	3						
A-3			3		2					
A-4			2	2	2					
A-5			2		2	2				
B-1			2	2	2					
7563										
A-1			2		2	2				
A-2			2	2						
A-3			2	2	2					
A-4			2	2	3	2				
A-5			2	2						
B-1			2		3					
B-2			2	2	2	2	2			
B-3	contamination		2		2	3				
7546										
1			2	3						
2			2	3						
3			2	2	2					
4			2							
5			2	3	2					
6			2	2	2					
7			2	3	2					
8			2	2						
9			2	3 do						
10			2							
11			2							
12			2	3						
7573 A-1			2							
" A-2			4	2						
" A-3			2	4						
" A-4			2							
" A-5			2							
" A-6			2							
" B-1			2							
" B-2			2							
" B-3			4	4	2					
" B-4			4	2						
" B-5			2							
7576			2	2	3					

Spm/spm

♀ × a_2m-1 noSpm ♂

$a_2$bt/$a_2$bt

			unf. pycnutes	Break-down	var.					% nospm
7538-1	(pale ♂)		2	0	75					
" -6	(A_2 ♂)		19	0	238	(228 = 2spm : 10 = "4spm")				
" -10	(pale ♂)		7	0	182					
" R-2	(A_2 ♂)		28	0	207	(190 = 2spm : 17 = "4spm") all = 2spm endosperm				
" R-4	(A_2 ♂)		2	0	304					
7818A (1) 2-1	(pale ♂)		11	1	200					
" A-(1) 2-2	(pale ♂)		5	0	94					
" B-(3) 2-?	(pale ♂)		5	0	213					

TO a_2m-1 noSpm ♀ × 7538 spm/spm ♂

7538-1			62	-	482
" -6			34	-	346
" -10			175	-	1484
" -R-4			93	-	769

a_2m-1 noSpm ♀ × 7818 Spm/Spm ♂.

7818B-3			19		164
7818B-4			28		429
7818B-5			14		310

7570C	♀		7		322
" C	♂		10		329

spm/spun plants · From 7308D-2
7570C.

1958										
7538-1										
" -6										
" -10										
" -R-2										
" -R-4										
7570C										
1960										
7818A-1										
" B-3										
" B-4										
" B-5										
" B-9										
" B-11										

7570C

a_2m-1 Bt Pr / $a_2$bt pr   Wx Spm / wx Spm

♀	♂	date	uniformly pigmented Bt Wx	Bt wx	bt Wx	bt wx	colorless, spots of pigment Bt Wx	Bt wx	bt Wx	bt wx	colorless Bt Wx	Bt wx	bt Wx + wx		Totals
7570 C-I	7535-2	8/5	0	0	0	0	53	39	11	6	9	12	100		230
" C II	7538-14	8/8	0	0	0	0	55	59	6	5	2	2	81		210
" t-1	7536-34	8/15	0	1	0	0	14	16	1	1	0	3*	40		76
" t-2	7536-34	8/15	3	2	1	0	20	29	3	4	6	13	70		151
Totals			3	3	1	0	142	143	21	16	17	30	291		667

* 1 plant grown from 3 kernels (7816-2) = a_2m1 Bt / a_2s bt plus ≥ 3 Spm.

ears I, t-1, t-2   Bt class of variegated kernels:

	no Spm	1 Spm	2 Spm	triple dose Spm
ear I	0	0	92	0
t-1	1	1	17	3
t-2	6	1	42	6

♀	♂	date	A2 Bt	bt	colorless, spots of pigment Bt	bt	Colorless Bt	bt
7535-6^{I}	7570C	8/6	3	0	130	12	16	122
" -24	"	8/6	3	0	86	11	16	101
" -28	"	8/6	0	0	25	5	6	23
" -29	"	8/6	3	1	58	2	10	55
Totals			9	1	299	30	48	301

candy

A. Table 24 Phenotypes of kernels on ears of plants in culture 7570 resulting from test cross type-2.

Row I ♀ $a_2 m_{-1}$ (class II) Bt / a_2 bt; Wx + / wx Spm (active) ; Row II, Wx Spm / wx + + III

070

Plants numbers.	Number of ears.		Uniform BT Wx	Uniform BT wx	Pigmented bt Wx	Pigmented bt wx	Spots of pigment in non-pigmented background BT Wx	Spots of pigment in non-pigmented background BT wx	Spots of pigment in non-pigmented background bt Wx	Spots of pigment in non-pigmented background bt wx	Colorless BT Wx	Colorless BT wx	Colorless bt Wx and wx	Totals	Recombination
7570 A	13		318	50	46	11	62	319	9	40	75	65	698	1693	15.4
7570 B [16]	♀ ~~♂~~ 6		19	224	3	28	253	15	42	3	35	29	505	1156	6.8
7570 B-2	♂ 6		41	459	3	56	462	51	41	3	61	66	987	2230	8.7
7570 C	♀ 3		3	3	1	0	87	85	15	11	15	27	210	457	—
"	♂ 4		5	4	1	0	139	157	16	13	23	24	303	685	—
7570 A-7	2		13	6	1	1	13	14	3	6	6	1	40		
7570 A-8	2		49	3	7	0	34	79	5	14	14	17	155		

B.		Uniform pigmented BT Wx	Uniform pigmented BT wx	Uniform pigmented bt Wx	Uniform pigmented bt wx	Diffuse - mottled BT Wx	Diffuse - mottled BT wx	Diffuse - mottled bt Wx	Diffuse - mottled bt wx	Varicated BT Wx	Varicated BT wx	Varicated bt Wx	Varicated bt wx	Colorless BT Wx	Colorless BT wx	Colorless bt Wx and wx	Totals bt Wx + wx
7570 A-1	1st ear	7	3	0	1	1	2	0	0	0	3	0	2	2	1		20
" A-1	2nd "	22	10	1	1		2	0	0	0	3	0	1	2	3		23
" A-4	1st ear.	14	16	5	4	0	0	0	0	0	0	0	1	2	3		47

Plant Number		Uniformly Pigmented Bt		bt		Colorless, spots of pigment Bt 1 spm		Hundreds spm		bt		Colorless Bt		bt
		Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx	wx	Wx & wx
7570A-1	tiller-3	18	2	4	0	25	3	4	38	3	14	11	18	68
" A-4	tiller-2	18	2	0	1	19	2	8	35	0	6	11	6	60
Totals		36	4	4	1	44	5	12	73	3	20	22	24	128

Tester type-3, 1 active Spm, as pollen parent in cross

R2bt m1 1spm ♀ × 7570B-2 ♂

♀	Date	uniformly pigmented Bt Wt	uniformly pigmented Bt m	uniformly pigmented bT Wt	uniformly pigmented bT m	spots of pigment in colorless background BT 1 spm Wt	spots of pigment in colorless background BT 1 spm m	BT 3 spm Wt	BT 3 spm m	bT Wt	bT m	colorless BT Wt	colorless BT m	colorless bt Wt and m
7538-13	8/10	2	23	1	1	22	22	30	0	3	2	3	1	98
〃 -14	8/9	1	16	0	0	10	12	10	2	4	0	3	3	57
	Totals	3	39	1	1	32	34	40	2	7	2	6	4	155

7570 A-7, A-8 × a_2 bt wx wx-Spm

7570C

♀	♂	date	uniformly Pigmented BT Wx	uniformly Pigmented BT wx	uniformly Pigmented bt Wx	uniformly Pigmented bt wx	spots of pigment in colorless background BT Wx	spots of pigment in colorless background BT wx	spots of pigment in colorless background bt Wx	spots of pigment in colorless background bt wx	Colorless BT Wx	Colorless BT wx	Colorless bt Wx + wx		Totals
7570 C-I	7535-2	8/5	0	0	0	0	53	39	11	6	9	12	100		230
" C-II	7536-34	8/15	0	1	0	0	14	17	1	1	0	2	40		76
" C-I-2	" "	8/15	3	2	1	0	20	29	3	4	6	13	70	151	~~457~~
	Totals		3	3	1	0	87	85	15	11	15	27	210		~~463~~ 457
7535-6	tiller 7570C	8/6	2	1	0	0	61	69	5	7	8	8	122		
" -24	"	8/6													
" -28	"	8/6													
" -29	"	8/6													
Totals															
7570A-7 I	7535-31	8/7	6	3	1	0	11	7	0	3	3	1	20		
" " II	7535-37	8/10	7	3	0	1	2	7	3	3	3	0	20		
	Totals		13	6	1	1	13	14	3	6	6	1	40		
7570A-8 I	7535-37	8/10	27	0	4	0	9	38	1	5	5	9	70		
" " II	" -31	8/7	22	3	3	0	25	41	4	9	9	8	85		
	Totals		49	3	7	0	34	79	5	14	14	17	155		

Summary tables.

Phenotype of Kernel.

Year 1957 Origin	Year 1958 Culture	No. of ears.	Uniformly Pigmented BT Wx	Uniformly Pigmented BT wx	Uniformly Pigmented bt Wx	Uniformly Pigmented bt wx	Colorless, spots of Pigment BT Wx	Colorless, spots of Pigment BT wx	Colorless bt Wx	Colorless bt wx	Colorless BT Wx and wx	Totals	Percent Recombination
(From 7109B-2)													
7308A-4 I	7546	12	650	76	45	5	81	633	10	36	1464	3125	11.1
	7570B	12	60	683	6	84	715	66	83	6	1492	3386	8.1
" II	7563	17	141	1419	20	124	1484	121	93	10	3121	6812	8.5
7308D-1	3	16	967	122	84	15	114	974	10	76	2114	4651	11.0
7308D-2	5	35	1073	163	130	23	158	1033	18	131	2369	5448	13.2
7308C-6	7573B	3	159	13	9	2	8	137	0	10	299	663	6.7
	7576	2	109	19	8	2	9	138	0	6	241	553	10.3
	Totals	5	268	32	17	4	17	275	0	16	540	1216	8.4
(From 7109B-1)													
7306A-1 II	7560	4	18	255	1	11	291	29	17	1	561	1224	7.8
7307A-3 I	7561	4	34	315	2	26	295	18	21	0	657	1420	7.6
7307A-5 II	7562	4	26	203	1	12	186	5	7	1	456	927	7.4
7307B-2	7572	6	281	58	18	2	60	285	2	13	674	1447	16.9

Linkage of Spm with Wx+ or wx+ in Wx+ Spm/wx+ or Wx+/wx Spm plants;

a_2 mi BT/a_2 bt ♀ × a_2 bt/a_2 bt; wx+/wx, no Spm or

Class II state

From 7109B-2 Wx spm / wx + and Wx + / wx spm. Class I and class II states of a_2^{m-1}

	Number of ears	Uniformly pigmented Bt Wx	Uniformly pigmented Bt wx	Uniformly pigmented bt Wx	Uniformly pigmented bt wx	Colorless, spots of pigment Bt Wx	Colorless, spots of pigment Bt wx	Colorless, spots of pigment bt Wx	Colorless, spots of pigment bt wx	Colorless Bt Wx	Colorless Bt wx	Colorless bt Wx + wx	Total	% Recombination	
7309A	5	257	36	13	2	36	235	3	18	21	23	579	1223	12.8	
7308A,B	5	355	53	-	-	37	331	-	-	0	1	- -	777	11.8	
" B-1	3	92	22	7	3	12	121	3	7	8	15	219	509	14.9	
7546	12	650	76	45	5	81	633	10	36	55	70	1464	3,125	11.2	
7570B	12	60	683	6	84	715	66	83	6	96	95	1492	3,386	8.1	
7563	17	141	1419	20	124	1484	121	93	10	132	147	3121	6,812	8.5	
7308C-61															
7573B	3	159	13	9	2	8	137	0	10	17	9	299	663	6.8	
7576	2	109	19	8	2	9	138	0	6	7	14	241	553	10.3	
7308D-1	16	967	122	84	15	114	974	10	76	76	99	2114	4651	11.0	"A1" state
" "	21	1220	177	101	19	157	1245	12	115	133	126	2820	6148	11.9	pale a_2^{m-1}
	3	171	14	117	9	18	168	7	114	-	-	-	620	7.7	pale a_2^{m-1}
7308D-2	35	1073	163	130	23	158	1033	18	131	207	143	2369	5448	13.2	"A1" state
	18	409	59	47	3	54	412	4	47	75	53	977	2145	11.5	pale
	2	144	23	103	16	15	160	18	143	-	-	-	624	11.5	
7768															
7769	1	74	17	9	0	9	100	1	12	21	21	205	469	7.7	
7780B	14	301	29	39	4	26	260	4	33	52	53	576	1377	9.0	
7781A (7308D-1)	4	14	182	0	17	183	12	25	1	29	48	421	932	6.2	pale a_2^{m-1}

Summary of recombination values for spm linked to wx allele derived from plant 7109B-2

7456B-5 a_2-m1 (class II) Bt | a_2 bt; Wx + | wx Spm
7456C-3

(Table C)

Phenotype of kernel	7456B-5 Intear; ♀ / 7308D-1 ♂	7456B-5 t-1 ♀ / a_2 bt Wx no Spm ♂	7456B-5 t-2 ♀ / a_2 bt wx no Spm ♂	7456C-3 I × 7308D-2 / a_2 bt wx 1 Spm	II × / a_2 bt wx no Spm	t-1 × / a_2 bt Wx no Spm	t-2 × / a_2 bt wx no Spm	t-3 × / a_2 bt wx no Spm
Uniformly dark pigmented kernels.								
Bt Wx	49	101	85	27	52	106	61	79
Bt wx	44	—	35	25	29	—	17	10
bt Wx	7	13	15	1	1	6	1	3
bt wx	7	—	3	3	0	—	0	
"Diffuse-mottled" kernels (see figure-)								
Bt Wx	1	13	2	0	6	31	6	0
Bt wx	6	—	24	0	30	—	46	13
bt Wx	0	1	0	0	0	1	0	1
bt wx	0	—	0	0	1	—	1	0
Colorless with large and small (see figure-) pigmented areas.								
Bt Wx	39	10	0	10	0	0	0	0
Bt wx	10	—	0	4	0	—	0	0
bt Wx	6	0	0	1	0	0	0	0
bt wx	2	—	0	0	0	—	0	0
Colorless with only specking of pigment (see fig-)								
Bt Wx	7	19	8	2	2	59	4	9
Bt wx	39	—	37	20	6	—	28	43
bt Wx	2	1	0	0	0	6	0 (1)	0
bt wx	4	—	8	2	1	—	0	3
Colorless Bt								
Wx	18	16	6	2	3	10	9	4
wx	16	—	10	3	5	—	5	0
Colorless bt, Wx and wx	211	113	209	102	141	198	166	152

Table D. 7455 A② and C⑤ a2 m (class II) Bt / a2 bt Wx wx ; 1 Spm

	7455A ① I × / a2 bt wx no Spm ♂	7455A② t-1 ♀ / a2 bt Wx no Spm ♂	7455A-2 t-2 ♀ / 7308D-1 a2 bt wx 1 Spm	7455A-2 t-3 ♀ / 7308D-2 a2 bt wx 1 Spm	7455C-5 I ♀ / 7308D-2 ♂	7455C-5 II / a2 bt Wx no Spm ♂	7455C-5 ♀ / a2 bt wx no Spm ♂
Uniform dark pigment							
Bt Wx	233	150	53	73	27	97	34
Bt wx		–	48	84	39	–	
bt Wx	12	11	7	7	5	13	6
bt wx		–				–	
"Diffuse-watery" pigment							
Bt Wx	0	38	4		0	0	4
Bt wx	0	–	7		0	–	5
bt Wx	0		0		0	0	
bt wx	0	–	0		0	–	
Colorless with both large and small areas of color							
Bt Wx	0	0	26	44	31	0	0
Bt wx	0	0	35	35		–	0
bt Wx	0	0	1	[illegible]	4	0	0
bt wx	0	0				–	0
Colorless with only small specks or speckling pigment							
Bt Wx	0	39	32	42	24	0	3
Bt wx	0	–	29	41		–	
bt Wx	0	0 ¹⁾	[illegible]	1	2	0	1
bt wx	0	–				–	
Colorless Bt							
Wx	17	15	8	17	6	10	6
wx		–	7	4	5	–	5
Colorless bt, Wx and wx	220	208	227	321	145	93	170