Table E

| Phenotype of kernel | | 7308B-1 I ♀ a2bt wx no spin ♂ | 7308B-1 t-1 ♀ a2bt wx no spin ♂ | 7308B-1 t-2 ♀ a2bt wx no spin ♂ | 7308B-1 t-3 ♀ a2bt wx no spin ♂ | 7308B-2 I ♀ a2bt wx no spin ♂ | 7308B-4 I ♀ a2bt wx no spin ♂ | 7308B4 t-1 ♀ a2bt wx no spin ♂ | 7308B-4 t-2 ♀ a2bt wx no spin ♂ |
|---|---|---|---|---|---|---|---|---|---|
| uniform dark pigmented | | | | | | | | | |
| | BI wx | 95 | 46 | 29 | 17 | 186 | 21 | 28 | 13 |
| | BI wx | – | 10 | 10 | 2 | 32 | 1 | 2 | 4 |
| | bt wx | 7 | 2 | 3 | 2 | – | – | – | – |
| | bt wx | – | 1 | 1 | 1 | – | – | – | – |
| "Diffuse-mottled" pigment | | | | | | | | | |
| | BI wx | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | BI wx | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | bt wx | 0 | 0 | 0 | 0 | – | – | – | – |
| | bt wx | 0 | 0 | 0 | 0 | – | – | – | – |
| Colorless with large and small pigmented areas | | | | | | | | | |
| | BI wx | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | BI wx | – | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | bt wx | 0 | 0 | 0 | 0 | – | – | – | – |
| | bt wx | – | 0 | 0 | 0 | – | – | – | – |
| Colorless with small spots or speckling pigment | | 37 | | | | | | | |
| | BI wx | | 6 | 4 | 3 | 23 | 15 | 2 | 0 |
| | BI wx | – | 64 | 39 | 18 | 162 | 0 | 26 | 11 |
| | bt wx | 1 | 1 | 2 | 0 | – | – | – | |
| | bt wx | – | 2 | 4 | 1 | – | – | – | |
| Colorless BI | | | | | | | | | |
| | wx | 14 | 5 | 2 | 2 | 1 | 0 | 0 | 1 |
| | wx | – | 6 | 7 | | 0 | 0 | 0 | 0 |
| colorless bt wx and wx | | 143 | 83 | 89 | 47 | – | 0 | – | – |

~~table 5 - C~~ active spm in ♀

7308 = shows high rate of transposition in tiller of 7109B ②. t-1

| | | I | II | t-1 | t-2 | t-3 | pollen |
|---|---|---|---|---|---|---|---|
| ✓ 7308A-4 | Wx+/wx spm | 3 | 2 | ~~2~~ 1 | | | X |
| 7308A-1 | Wx Wx no spm | 3 | 1 | | | | |
| " A-2 | Wx wx; no spm | 3 | | | | | |
| " A-3 | Wx wx; no spm | 3 | | | 2 | | |
| " A-6 | Wx Wx; no spm | 3 | | | | | |
| " B-1 | Wx+/wx spm | 1 | | 2 | 2 | 2 | |
| " B-2 | " " | 2 | | | | | |
| " B-4 | " " | 2 | | 2 | 2 | | |
| " B-5 | " " | 2 | | 1 | 2 | | |
| 7308C-6 | | 1 | 1 | 1 | | | |

♂ in cross: 1 = $a_2bt/a_2bt$ Wx Wx no spm

2 = " " wx wx no spm

3 " " wx+/wx spm - active phase

Crosses of $a_2^{m1}$ BI / $a_2^s$ bt no spur plants of culture 7456
to $a_2$ bt no spur testers.

| | | A2 | | Colorless | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Plant no | | BI | bt | BI | bt | | Totals | | | |
| 7456A-1 | II | 193 | 10 | 8 | 206 | | 417 | | | |
| " -1 | t | 154 | 11 | 10 | 154 | | 329 | | | |
| " A-3 | pollen | 178 | 6 | 10 | 195 | | 389 | | | |
| " " | " | 100 | 6 | 6 | 72 | | 184 | | | |
| " A-4 | II | 184 | 6 | 10 | 163 | | 363 | | | |
| " " | t-1 | 88 | 3 | 9 | 98 | | 198 | | | |
| " " | t-2 | 156 | 8 | 8 | 195 | | 367 | | | |
| " B-1 | t | 3 | 0 | 0 | 1 | | 4 | | | |
| " B-2 | t | 166 | 7 | 5 | 156 | | 334 | | | |
| " B-3 | t | 116 | 8 | 5 | 137 | | 266 | | | |
| " B-6 | | 77 | 4 | 8 | 77 | | 166 | | | |
| Totals | | 1415 | 69 | 79 | 1454 | | 3017 | | | |

Phenotypes of

Table 7. Test crosses conducted with ears of plant 7308A-4 that was $a_2$ m-1 (class II) BI / $a_2$ m-1 (class II) BI ; Wx + / ex Spm

Phenotypes of kernels.

| Part of plant tested | Constitution of or in test cross. | Uniformly Pigmented. | | Colorless with spots or specks of Color: 1 Spm pattern | | 2 Spm pattern | | Highdose Spm ~~3 Spm~~ pattern. | | Colorless. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Wx | ux | Wx | ux | Wx | ux | Wx | ux | |
| First ear, main stalk. | $a_2$ bt ux 1 active Spm. | 70 | 6 | 69 | 9 | 10 | 68 | 3 | 75 | 0 |
| 2nd ear, main stalk | $a_2$ bt ux no Spm | 107 | 14 | 0 | 0 | 12 | 115 | 0 | 2 | 0 |
| tiller ear | $a_2$ bt Wx no Spm. | 142 | — | 1 | — | 135 | — | 4 | — | 0 |

↙ From 7308D ①$^{t-1}$

Wx + 1 wx Spm - active + 1 inactive Spm ♀ × $a_2$ bt wx no Spm ♂

| | 7595A ⑥I | 7597A ①I | 7597A ⑤I | 7597A ⑤II | | Totals |
|---|---|---|---|---|---|---|
| | 7535-14 | 7535-4 | 7535-2 | 7535-14 | | |
| Uniformly dark pigmented BI | | | | | | |
| Wx | 27 | 82 | 87 | 89 | | 285 |
| wx | 7 | 8 | 10 | 21 | | 46 |
| " " " bt | | | | | | |
| Wx | 6 | 9 | 5 | 5 | | 25 |
| wx | 1 | 2 | 1 | 0 | | 4 |
| $a_2 \to A_2$ BI 2 Spm | | | | | | |
| Wx | 16 | 5 | 1 | 7 | | 29 |
| wx | 27 | 43 | 45 | 37 | | 152 |
| " BI 4 Spm | | | | | | |
| Wx | 6 | 3 | 0 | 4 | | 13 |
| wx | 22 | 38 | 43 | 36 | | 139 |
| $a_2 \to A_2$ bt | | | | | | |
| Wx | 7 | 2 | 2 | 1 | | 12 |
| wx | 7 | 6 | 3 | 5 | | 21 |
| Colorless BI | | | | | | |
| Wx | 2 | 6 | 5 | 5 | | 18 |
| wx | 5 | 8 | 6 | 7 | | 26 |
| Colorless bt Wx + wx | 123 | 196 | 183 | 234 | | 736 |
| Totals | 256 | 408 | 391 | 451 | | 1506 |

= 333

331 $A_2$ BI : 181 var BI "2 Spm" : 152 var BI "4 Spm" : 44 colorless BI
29 $A_2$ bt : 33 var BI* : 736 colorless bt.

* some "4 Spm" kernels in var. class not easily detected.

7538 crosses to $a_2^{m1}(A_2)$ BI | $a_2$ bt

| Cross. | No. of ears. | Uniform dark color Bt | Uniform dark color bt | Colorless BI with: Many spots of color | Colorless BI with: Few spots or speck of color | Colorless bt with colored spots | Colorless BI | Colorless bt | Totals |
|---|---|---|---|---|---|---|---|---|---|
| 1 7538-9 | 1 spm (6 ears) ♀ no spm | 494 | 44 | 439 | 6 | 33 | 75 | 898 | 1989 |
| 2 " -12 | 1 spm (2 ears) ♀ no spm | 170 | 12 | 182 | 1 | 9 | 21 | 360 | 755 |
| ♀ W+W+ 1 inactive spm (7 ears) | ♂ = 1 spm | 771 | 60 | 389 | 405 | 55 | 107 | 1629 | 3416 |
| ♀ W+ ex; 1 inactive spm (4 ears) | ♂ = 1 spm | 359 | 18 | 188 | 158 | 19 | 47 | 722 | 1511 |
| ♀ W+ W+ or W+ ex; ♂ = spm/spm (3 ears) | 1 inactive spm | 40 | 4 | 172 | 193 | 27 | 38 | 376 | 850 |
| ♀ no spm | ♂ spm/spm (1) | 1 | 1 | 41 | 0 | 3 | 6 | 32 | 84 |

| | Wx | ex | Wx | ex | Wx | ex | Wx | ex | Wx | ex | Wx | ex | Wx+ex | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ♀ W+ +1 ex spm - inactive ♂ = 1 spm (8 ears) | 324 | 330 | 29 | 29 | 245 | 37 | 40 | 233 | 21 | 25 | 57 | 53 | 1240 | |
| ♀ W+ +1 ex spm - active ♂ = 1 spm | 228 | 41 | 32 | 3 | 197 | 42 | 58 | 411 | 23 | 56 | 70 | 66 | 914 | 2141 |
| ♀ W+ active spm / ex + ♂ 1 spm (2 ears) | 7 | 65 | 1 | 1 | 3 | 65 | 129 | 16 | 4 | 3 | 16 | 7 | 256 | |
| ♀ W+ +1 ex spm inactive ♂ spm/spm | 9 | 4 | 0 | 2 | 42 | 5 | 16 | 56 | 5 | 5 | 5 | 2 | 150 | 301 |
| ♀ W+ +1 ex spm - active + 1 inactive (24 ears) ♂ no spm | 285 | 46 | 25 | 4 | 2 spm 29 | 152 | 4 spm 13 | 139 | 12 | 21 | 18 | 26 | 736 | 1506 |

Table.

Crosses to or by $a_2$ bt pr y W+ no Spm.

$a_2$ m1 ($A_2$) BT | $a_2$ s bt

| Plant | Location of ~~ear~~ part tested | 1956 Kernel type: Colored | colorless with colored spots | colorless | Culture no. 1957 | 1958 | 1960 |
|---|---|---|---|---|---|---|---|
| 7109B-1 | 1st ear, main stalk [W++/wx Spm] | 110 | 19 | 139 | 7456 | | |
| | ear, first tiller | 102 | 87 | 225 | 7306 | | |
| | ear, 2nd tiller | 98 | 97 | 149 | 7307 | | |
| | ear, third tiller | 127 | 130 | 241 | | | |
| | pollen from tiller | 89 | 82 | 191 | | | |
| 7109B-2 | 1st ear, main stalk [W++/wx Spm] | 136 | 118 | 240 | 7309 | | |
| | ear, 2nd tiller | 132 | 141 | 273 | | | |
| ✓✓ | ear, tiller-1, self pollinated | 88 | 259 | | 7308 | | |
| | pollen from main stalk | 250 | 256 | 559 | 7310, 7311 | | |
| 7109C-1 | 1st ear, main stalk | 149 | 87 | 226 | | | |
| | ear, tiller-1 | 96 | 71 | 167 | | | |
| | ear, tiller-2 | 128 | 132 | 250 | | | |
| | ear, tiller-3 | 78 | 80 | 179 | | | |
| 7109C-2 | 1st ear, main stalk W+/W+ | 181 | 86 | 294 | | | |
| | ear, tiller | 141 | 129 | 237 | | | |
| | pollen from tiller | 183 | 165 | 360 | | | |
| 7109C-3 | 1st ear, main stalk | 229 | 8 | 240 | | | |
| | ear, tiller-1 | 131 | 115 | 250 | | | |
| | ear, tiller-2 | 116 | 108 | 231 | | | |
| | pollen from main stalk | 192 | 103 | 323 | | | |
| 7109C-4 | 1st ear, main stalk | 134 | 99* | 234 | 7455 | | |

* pattern is "delayed" action type - breakdown - spk with specks appearing first in ~~[illegible]~~ side of kernel [illegible]

7455 = From 7109C ④ I × $a_2$ bt pr Wx no Spm ♂ | Very long inactive cycle of Spm.
Plants in culture were non-vaporated.

7455 A From early "breakdown" class:

A ① I × $a_2$ bt pr Wx = all $A_2$
t × 7308 D ② t-2 = inactive Spm in A① is partially active

A ② I × $a_2$ bt pr Wx = all $A_2$
t-1 × " " " Wx = delayed action Spm from ♀
t-2 × 7308 D ② t-1 = very " " " " ♀ - good closing, cats
t-3 × " D ② t-2 = " " " " " " - " "

A ③ I × 7308 D ① t-2 = inactive Spm in ♀
③ II × $a_2$ bt pr Wx no Spm = very delayed action " " ♀

A ④ I × $a_2$ bt pr Wx = very delayed action Spm in ♀
t-1 × 7308 D ② t-1 = delayed action " " ♀
t-2 × $a_2$ bt pr Wx = " " " " ♀

7455 B = from Advanced Breakdown Kernels.
B ① I × $a_2$ bt pr Wx no Spm = delayed action Spm = see for pattern [like some pale $a_2$ ...
B ② I × 7308 D ② t-1 1 inactive Spm in ♀ see 7591 - see plant [illegible]
② II × $a_2$ bt pr Wx no Spm " " " " ♀ see 7592 - [illegible]
② t × " " " Wx " " late acting Spm in ♀ see 7593 see plant [illegible]
B ③ I × 7308 D ① inactive Spm in ♀
II × $a_2$ bt pr Wx no Spm inactive " " "
B ④ I × 7308 D ① t-2 very delayed action Spm in ♀
B ⑤ I × " " " delayed action Spm in ♀
II × $a_2$ bt pr Wx no Spm = inactive Spm in ♀

7455 B(6)$^{I}$ × 7308 D(1)$^{t-1}$ = inactive Spm in ♀

7455 C = from $a_2 \to A_2$ kernels – "2 Spm" pattern

C(1)$^{I}$ × 7308 D(2)$^{t-1}$ = inactive Spm in ♀

pollen to $a_2$ bt fr Wx no Spm = late acting Spm (delayed)

---

C(2)$^{I}$ × 7308 D(1)$^{t-1}$ inactive Spm in ♀ See 7597

---

C(3)$^{I}$ × " D(2)$^{t-2}$ delayed acting Spm in ♀

pollen of t to $a_2$ bt fr Wx active Spm in ♂

C(4)$^{I}$ × 7308 D(2)$^{t-2}$ nearly inactive Spm in ♀

t × $a_2$ bt fr Wx no Spm = active Spm with few Breakdown kernels

---

C(5)$^{I}$ × 7308 D(2)$^{t-1}$ inactive Spm in ♀ See 7595 { all plants but A(3) are var.

$^{II}$ × $a_2$ bt fr Wx inactive Spm in ♀ See 7594 no plants are var.

t × " " " wx very delayed acting " " ♀ See 7596 { no evidence of Spm in plants

---

D = from early Breakdown kernels.

(1)$^{I}$ × 7308 D(2)$^{t-1}$ inactive Spm in ♀

(2)$^{I}$ × " D(2)$^{t-1}$ inactive Spm in ♀

(3)$^{I}$ × " D(2)$^{t-1}$ inactive " " ♀

(3) pollen to $a_2$ bt fr Wx = inactive " " ♀ + few very delayed acting kernels.

Class II

$a_2^{m-1}$ ($A_2$) BI / $a_2$ bt

Wx + / wx Spm - active

Progeny of 7308 D-1

Year 1958

| Culture | no. of Ears | | uniformly pigmented $A_2$ BI Wx | BI wx | bt Wx | bt wx | colorless, spots of color BI Wx | BI wx | bt Wx | bt wx | colorless BI Wx | BI wx | bt Wx and wx | Totals | Recombination |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7566A | 3 | | 241 | 34 | 34 | 9 | 21 | 253 | 3 | 31 | 31 | 38 | 480 | 1175 | 10.7 % |
| 7588 | 10 | | 529 | 68 | 35 | 3 | 80 | 528 | 3 | 36 | 32 | 47 | 1206 | 2567 | 12.0 |
| 7597A | 3 | | 197 | 20 | 15 | 3 | 13 | 193 | 4 | 9 | 13 | 14 | 428 | 909 | 8.8 |
| Totals | 16 | | 967 | 122 | 84 | 15 | 114 | 974 | 10 | 76 | 76 | 99 | 2114 | 4651 | |

1051 $A_2$Wx : 137 $A_2$ wx : 124 var. Wx : 1050 var. wx = 2362 = 11.0 % recombination

" " 10.5 % of variegated class

Progeny of 7308 D-2

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7569 | 6 | | 301 | 58 | 40 | 2 | 45 | 296 | 5 | 46 | 54 | 34 | 658 | 1539 | [illegible] |
| 7575A | 1 | | 81 | 7 | 3 | 0 | 11 | 72 | 0 | 1 | 6 | 2 | 151 | 334 | 10.3 |
| 7591 | 7 | | 215 | 31 | 23 | 3 | 25 | 208 | 1 | 25 | 39 | 24 | 516 | 1110 | [illegible] |
| 7595 | 8 | | 158 | 17 | 18 | 7 | 15 | 138 | 3 | 19 | 33 | 18 | 346 | 772 | 11.2 |
| 7570A | 13 | | 318 | 50 | 46 | 11 | 62 | 319 | 9 | 40 | 75 | 65 | 698 | 1693 | [illegible] |
| Totals | 35 | | 1073 | 163 | 130 | 23 | 158 | 1033 | 18 | 131 | 207 | 143 | 2369 | 5448 | |

1203 $A_2$Wx : 186 $A_2$ wx : 176 var. Wx : 1164 var. wx = 2729 = 13.2 % recombination

" 13.1 % of variegated class.

♀ $a_2^{m-1}$ (class II) BI / $a_2$ bt × $a_2$ bt / $a_2$ bt, wx / wx, no Spm ♂

Wx + / wx Spm

class I

$a_2$ tm (pale-spotted) BI / $a_2$ bt ♀ spm from 7308 D-1

Wx+ / wx spm-active

| Plant | | | uniform pale | | | | colorless; spots of deep pigment | | | | colorless | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $A_2$BI | BI | | bt | | BI | | bt | | BI | | bt | | |
| number | Ear | | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx and wx | Totals | |
| 7564-① | I | 1 wx | 29 | 2 | 0 | 0 | 2 | 41 | 0 | 4 | 4 | 2 | 63 | 148 | |
| " -① | t-1 | 1 wx | 46 | 4 | 4 | 0 | 3 | 37 | 0 | 4 | 2 | 0 | 89 | 190 | |
| 7564 ② | I | 3 wx | 75 | 11 | 1 | 1 | 6 | 60 | 0 | 3 | 9 | 6 | 137 | 312 | |
| " ③ | I | 1 wx | 73 | 16 | 3 | 4 | 6 | 76 | 0 | 6 | 4 | 4 | 150 | 343 | |
| " ④ | I | 1 Wx | 37 | 3 | 8 | 0 | 6 | 44 | 1 | 1 | 4 | 3 | 106 | 214 | |
| " ④ | I | 1 Wx : 1 wx | 48 | 15 | 3 | 2 | 4 | 60 | 1 | 5 | 4 | 11 | 120 | 275 | |
| " ⑤ | I | 3 wx | 42 | 3 | 2 | 0 | 3 | 39 | 0 | 1 | 1 | 4 | 107 | 205 | |
| Totals | | 2 Wx : 10 wx | 350 | 54 | 21 | 7 | 30 | 357 | 2 | 24 | 28 | 30 | 772 | 1687 | |
| 371 | pale Wx : | 61 pale wx : | | | 32 var. | | Wx : | 381 var. | | | wx = 845 | | = 11.0% recombination | | |
| ♀ 7564-① | t-2 ♂ × 7538-14 1 spm. | 1 wx | 41 | 4 | 0 | 0 | 59 | 106 | 3 | 1 | 8 | 3 | 234 | 460 | |
| 7564-② I | × 7537C-1 | 0 | 43 | 5 | 30 | 2 | 4 | 49 | 2 | 36 | 2 | 0 | 35 | 208 | = 7.6% recomb. |
| 7565A-③ II | × 7537C-1 | 0 | 57 | 7 | 40 | 3 | 7 | 57 | 3 | 35 | 1 | 2 | 43 | | 9.5% recomb. |
| " -3 | teller | 1 Wx : 3 wx | 80 | 7 | - | - | 8 | 71 | 0 | 4 | 3 | 5 | 166 | 348 | |
| " A-5 | I | 0 | 83 | 4 | 4 | 0 | 6 | 112 | 0 | 7 | 8 | 5 | 184 | 413 | |
| A-5 teller / A-5 Totals | | 1 Wx : 3 wx | 163 | 11 | 4 | 0 | 14 | 183 | 0 | 11 | 11 | 10 | 350 | 761 | 7.0% recomb. |
| 7585 A-1 | teller | 0 | 19 | 0 | 0 | 0 | 3 | 18 | 0 | 0 | 4 | 1 | 25 | 70 | |
| " A-2 | I | 0 | 40 | 2 | 7 | 0 | 6 | 56 | 1 | 6 | 3 | 6 | 104 | 231 | |
| " A-5 | I | 0 | 66 | 14 | 12 | 0 | 7 | 61 | 0 | 9 | 11 | 4 | 146 | 330 | |
| " B-1 | teller-2 | 2 wx (1 bt) | 43 | 7 | 2 | 0 | 12 | 40 | 0 | 3 | 9 | 8 | 137 | 263 | |
| " B-5 | I | 0 | 83 | 9 | 6 | 0 | 5 | 92 | 0 | 8 | 9 | 8 | 178 | 398 | |
| | Totals | 2 wx 1 BI 1 bt | 251 | 32 | 27 | 0 | 33 | 267 | 1 | 26 | 36 | 27 | 590 | 1292 | 10.3% recomb. |
| 7585B-3 II | 7538-2 ♂ spm + spm | 0 | 25 | 21 | 3 | 0 | 66 | 77 | 5 | 8 | 6 | 12 | 149 | | |
| 7585B-1 t-1 | × 7537C-1 ♂ | 4 Wx | 29 | 13 | 23 | 7 | 70 | 78 | 50 | 60 | 4 | 3 | 34 | | |
| " B-5 II | × 7537C-1 ♂ | 1 BI wx 1 bt Wx | 71 | 2 | 47 | 4 | 7 | 62 | 2 | 43 | 2 | 0 | 38 | | |

Progeny 7308D-1 cont.

| | | | uniform pale. | | | | colorless with $A_2$ spots | | | | colorless | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $A_2$ | BI | | bt | | BI | | bt | | BI | | bt | | |
| q | Ear | | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx and wx | Totals | |
| 7601B-(1) | I | 0 | 69 | 11 | 3 | 2 | 8 | 69 | 0 | 8 | 11 | 9 | 196 | 386 | |
| 7601B-3 | I sector | 0 | 13 | 3 | 1 | 1 | 1 | 26 | 1 | 1 | 4 | 0 | 35 | 86 | |
| | " | | 76 | 91 | 5 | 7 | 0 | 0 | 0 | 0 | 7 | 9 | 186 | 381 | |
| 7601B-4 | I | 1 BI wx | 110 | 10 | 7 | 1 | 9 | 101 | 0 | 8 | 12 | 14 | 236 | 509 | |
| 7601B-7 | I | 1 BI wx : 1 bt wx | 59 | 8 | 10 | 3 | 7 | 38 | 2 | 6 | 14 | 11 | 120 | 280 | |
| " B-7 | II | 1 BI wx | 63 | 12 | 9 | 2 | 12 | 51 | 2 | 12 | 3 | 6 | 134 | 307 | |
| " B-8 | I | 0 | 70 | 22 | 11 | 2 | 27 | 74 | 4 | 11 | 5 | 11 | 194 | 431 | |
| " B-9 | I | 1 BI wx | 72 | 14 | 8 | 1 | 16 | 79 | 0 | 8 | 9 | 8 | 193 | 409 | |
| Totals (minus - sector) | | 4 BI wx : 1 bt wx | 456 | 80 | 49 | 12 | 80 | 438 | 9 | 54 | 58 | 59 | 1108 | 2408 | 15.3% |

Summaries

Totals for cross of $A_2$ bt wx, no Spur

| | $A_2$ BI Wx | $A_2$ BI wx | $A_2$ bt Wx | $A_2$ bt wx | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7564 | 2 | 10 | 0 | 0 | 350 | 54 | 21 | 7 | 30 | 357 | 2 | 24 | 28 | 30 | 772 | 1687 | 11.0 |
| 7565 | 1 | 3 | 0 | 0 | 163 | 11 | 4 | 0 | 14 | 183 | 0 | 11 | 11 | 10 | 350 | 761 | 7.0 |
| 7585 | 0 | 1 | 0 | 1 | 251 | 32 | 27 | 0 | 33 | 267 | 1 | 26 | 36 | 27 | 590 | 1292 | 10.3 |
| 7601 | 0 | 4 | 0 | 1 | 456 | 80 | 49 | 12 | 80 | 438 | 9 | 54 | 58 | 59 | 1108 | 2408 | 15.3 |
| Totals | 3 | 18 | 0 | 2 | 1220 | 177 | 101 | 19 | 157 | 1245 | 12 | 115 | 133 | 126 | 2820 | 6148 | 11.9 |

Totals for cross with 7537C-1

| | | | | | | | | | | | | | | | Totals | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7564-2 I | 0 | 0 | 0 | 0 | 43 | 5 | 30 | 2 | 4 | 49 | 2 | 36 | | | 171 | | |
| 7565A(3) II | 0 | 0 | 0 | 0 | 57 | 7 | 40 | 3 | 7 | 57 | 3 | 35 | | | 209 | | |
| 7585B(5) II | 0 | 1 | 1 | 0 | 71 | 2 | 47 | 4 | 7 | 62 | 2 | 43 | | | 240 | | |
| Totals | 0 | 1 | 1 | 0 | 171 | 14 | 117 | 9 | 18 | 168 | 7 | 114 | | | 620 | | 7.7% |

$a_2^{m1}$ (pale) BI / $a_2$ bt

Summaries Wx+ / wx Spm - from 7308 D-2

Year 1958

I ♂ = $a_2$ bt wx no spm

| | A2 BI | | A2 bt | | pale BI | | pale bt | | Colorless spots of A2 BI | | Colorless spots of A2 bt | | Colorless BI | | Colorless bt | | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx and wx | Totals | Recombination |
| 7571 | 0 | 0 | 0 | 0 | 106 | 18 | 13 | 2 | 14 | 109 | 1 | 18 | 17 | 10 | 205 | 513 | 12.4 |
| 7583 | 1 | 1 | 0 | 0 | 214 | 20 | 25 | 1 | 33 | 212 | 1 | 21 | 47 | 32 | 531 | 1139 | 10.8 |
| 7602 | 1 | 1 | 1 | 0 | 89 | 21 | 9 | 0 | 7 | 91 | 2 | 8 | 11 | 11 | 241 | 493 | 13.1 |
| Totals | 2 | 2 | 1 | 0 | 409 | 59 | 47 | 3 | 54 | 412 | 4 | 47 | 75 | 53 | 977 | 2145 | 11.5 |

II ♂ = 7537C-1

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7571 | 0 | 2 | 0 | 0 | 144 | 23 | 103 | 16 | 15 | 160 | 18 | 143 | | | Totals 624 | | 11.5 |

III $a_2^{m1}$ (class II) BI / $a_2$ bt

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| × $a_2$ bt wx ♂ | | | | | 1073 | 163 | 130 | 23 | 158 | 1033 | 18 | 131 | 207 | 143 | 2369 | 5448 | 13.2 |

$a_2$ m-1 (pale-spotted) BI / $a_2$ bt
Wx +/ wx Spm-active

Progeny of 7308 D-2

| | | | uniformly pale | | | | colorless, spots of $A_2$ | | | | colorless | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $A_2$ | BI | | bt | | BI | | bt | | BI | | bt | | |
| ♀ | Ear | | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx + wx | Totals | |
| 7571-1 | II | 0 | 19 | 1 | 3 | 0 | 1 | 19 | 0 | 2 | 4 | 2 | 25 | 76 | |
| " -1 | t-1 | 0 | 10 | 1 | 3 | 0 | 1 | 9 | 0 | 3 | 4 | 3 | 26 | 60 | |
| " -1 | t-2 | 0 | 23 | 3 | 2 | 1 | 4 | 47 | 1 | 7 | 4 | 1 | 66 | 159 | |
| 7571-2 | I | 0 | 16 | 2 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 13 | 38 | |
| 7571-4 | I | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 4 | 7 | |
| 7571-4 | teller Sectoral brows | 0 | 28 | 24 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 50 | 107 | |
| | brows | 0 | 33 | 10 | 3 | 1 | 8 | 20 | 0 | 5 | 2 | 2 | 61 | 145 | |
| 7571-5 | I | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 4 | 9 | |
| " -5 | II | 0 | 4 | 0 | 0 | 0 | 0 | 7 | 0 | 1 | 0 | 1 | 6 | 19 | |
| Totals (mus - sector) | | 0 | 106 | 18 | 13 | 2 | 14 | 109 | 1 | 18 | 17 | 10 | 205 | 513 | 12.4% recombinations |
| 7571-4 t-2 | x 7537C-1 | 2BI wx | 59 | 12 | 36 | 5 | 3 | 53 | 6 | 62 | 1 | 0 | 33 | 272 | |
| 7571-5 t-1 | x " | | 85 | 11 | 67 | 11 | 12 | 107 | 12 | 81 | 3 | 2 | 48 | 439 | 11.9% |
| Totals | | 2BI wx | 144 | 23 | 103 | 16 | 15 | 160 | 18 | 143 | 4 | 2 | 81 | 711 | 11.5 |
| 7583A-2 | I | 1BI wx | 10 | 2 | 2 | 0 | 6 | 13 | 0 | 0 | 4 | 2 | 26 | 66 | |
| " " | II | 0 | 54 | 4 | 9 | 0 | 13 | 55 | 0 | 8 | 13 | 9 | 147 | 312 | |
| " A-3 | I | 1BI Wx | 31 | 6 | 9 | 1 | 1 | 22 | 1 | 5 | 12 | 8 | 73 | 170 | |
| " A-4 | teller | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | |
| " A-5 | I | 0 | 12 | 1 | 1 | 0 | 0 | 9 | 0 | 0 | 0 | 2 | 22 | 47 | |
| " B-2 | I | 0 | 60 | 4 | 2 | 0 | 10 | 74 | 0 | 3 | 10 | 7 | 173 | 343 | |
| " B-4 | I | 0 | 27 | 0 | 1 | 0 | 2 | 19 | 0 | 3 | 4 | 4 | 50 | 110 | |
| " B-5 | I | 0 | 18 | 3 | 1 | 0 | 1 | 19 | 0 | 2 | 4 | 0 | 40 | 88 | |
| Totals | | 1Wx : 1wx | 214 | 20 | 25 | 1 | 33 | 212 | 1 | 21 | 47 | 32 | 531 | 1139 | |
| 7583A-2 t | x 7538-14 | 1BI Wx | 22 | 5 | 7 | 1 | 33 | 54 | 6 | 14 | 16 | 17 | 131 | 306 | |
| | 1Spm | 1BI wx | | | | | | | | | | | | | |
| 7602-1 | | 0 | 17 | 6 | 2 | 0 | 1 | 17 | 1 | 2 | 1 | 1 | 68 | 116 | |
| " -2 sec | | 1BI Wx 1bt Wx 1 wx | 72 | 15 | 7 | 0 | 6 | 74 | 1 | 6 | 10 | 10 | 173 | 377 | |
| " -3 sec | Totals | 2Wx : 1wx | 89 | 21 | 9 | 0 | 7 | 91 | 2 | 8 | 11 | 11 | 241 | 493 | 13.1% = record |

1957 $a_2^{2m}$(A2) BE | $a_2^{s}$ bf Wx+/ wx-spm defic × $a_2$ bf wx wo spm ♂.

| ♀ | | Uniformly Pigmented BE Wx | wx | bf Wx | wx | Colorless, splits of BE Wx | wx | bf Wx | wx | BE Colorless Wx | wx | | | Totals | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7306 A① II | | 31 | 7 | 0 | 2 | 10 | 38 | 0 | 1 | 1 | 1 | 77 | | 168 | ♀ records: 18.3% |
| " " I | | 63 | 13 | 1 | 0 | 11 | 58 | 0 | 0 | 1 | 5 | 156 | | | |
| " A⑥ II | | 7 | 3 | 3 | 1 | 1 | 8 | 0 | 0 | 0 | 1 | 15 | | | |
| 7307 A② t-1 | | 71 | 8 | 5 | 0 | 7 | 58 | 0 | 4 | 4 | 6 | 152 | | | |
| " A① t-2 | | 23 | 4 | 1 | 0 | 2 | 20 | 0 | 1 | 0 | 1 | 58 | | | |
| " A③ I | | 80 | 12 | 6 | 0 | 16 | 77 | 0 | 10 | 11 | 10 | 187 | | | 13.9% c.o. |
| " A④ | | 74 | 8 | 7 | 2 | 5 | 97 | 4 | 4 | 5 | 6 | 214 | | | |
| " A④ t | | 63 | 5 | 1 | 0 | 8 | 57 | 0 | 7 | 3 | 7 | 116 | | | |
| " A⑤ II | | 42 | 2 | 1 | 0 | 3 | 33 | 0 | 1 | 0 | 2 | 62 | | | 6.1% c.o. |
| " A⑤ II | | 43 | 13 | 1 | 0 | 6 | 39 | 0 | 2 | 3 | 4 | 76 | | | |
| " A⑥ | | 47 | 7 | 2 | 0 | 5 | 59 | 0 | 3 | 4 | 5 | 130 | | | |
| " B① I | | 39 | 4 | 1 | 0 | 9 | 40 | 1 | 4 | 6 | 7 | 79 | | | |
| " B① t | | 61 | 10 | 6 | 1 | 6 | 57 | 3 | 5 | 4 | 5 | 127 | | | |
| 7308 B① t | | 46 | 10 | 2 | 1 | 6 | 64 | 1 | 2 | 5 | 6 | 83 | | | |
| " B① t-2 | | 29 | 10 | 3 | 1 | 3 | 39 | 2 | 4 | 3 | 7 | 89 | | | |
| " B① t-3 | | 17 | 2 | 2 | 1 | 3 | 18 | 0 | 1 | 0 | 2 | 47 | | | |
| 7309 B② I | | 38 | 11 | 0 | 1 | 5 | 32 | 1 | 2 | 4 | 4 | 93 | | | |
| " A③ t | | 45 | 11 | 3 | 0 | 7 | 41 | 0 | 3 | 7 | 3 | 112 | | | |
| " A④ t-1 | | 57 | 2 | 1 | 0 | 8 | 60 | 0 | 4 | 2 | 5 | 118 | | | |
| " A⑤ t-1 | | 76 | 10 | 5 | 1 | 11 | 68 | 2 | 3 | 4 | 5 | 158 | | | |
| " A⑧ I | | 41 | 2 | 4 | 0 | 5 | 34 | 0 | 6 | 4 | 6 | 98 | | | |
| 7313 B② t | | 83 | 5 | 2 | 1 | 6 | 67 | 0 | 3 | 3 | 3 | 193 | | | |
| 7313 A② t | | | | | | | | | | | | | | | |
| Totals | wo genes = 22 | 1076 | 159 | 57 | 12 | 143 | 1064 | 14 | 70 | 71 | 101 | 2359. | | | |

1133 A, Wx : 171 A2 wx : 157 rec. Wx : 1134 rec. wx. = 2595 $a_2^{2m}$ females

= 12.6% recombination

$a_2^{2m}$(A2) BE | $a_2^{2m}$(A2) BE Wx+/ wx spm defic × $a_2$ bf wx wo spm ♂

1957

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7308 A④ II | | 107 | 14 | - | - | 12 | 117 | - | - | collected | | | Totals | | |
| " B② I | | 186 | 32 | | | 23 | 162 | | | 1 | | | Tot 250 | = | 10.4% c.o. |
| " B④ I | | 21 | 1 | | | 0 | 15 | | | | | | 404 | | |
| " B④ t-1 | | 28 | 2 | | | 2 | 26 | | | | | | 37 | | |
| " B④ t-2 | | 13 | 4 | | | 0 | 11 | | | | | | 58 | | |
| Totals | | 355 | 53 | | | 37 | 331 | | | 1 | | | 28 | | |
| | | | | | | | | | | | | | 777 | | |
| | | | | | | 11.8% recombination | | | | | | | | | |
| 1958 | | | | | | | | | | | | | | | |
| 7563 B③ | | 146 | 27 | | | 6 | 136 | | | | | | 315. | | |
| " B③ t-1 | | 166 | 43 | | | 36 | 182 | | | | | | 427 | | |
| Totals | | 312 | 70 | | | 42 | 318 | | | | | | 742 | | |
| | | | | | | 15.2% recombination | | | | | | | | | |

For reference to B of table 2. Year. 1957 $a_2$ mi BI / $a_2$ bt Wx+/wx spm - active + $a_2$ bt wx no spm.

| | | Uniformly Pigmented BI | | bt | | variegated BI | | bt | | Colorless BI | | bt | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plant no. | | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx+wx | | Totals | |
| 7306A-1 II | + $a_2$ bt wx no spm | 31 | 7 | 0 | 2 | 10 | 38 | 0 | 1 | 1 | 1 | 77 | | 168 | |
| " " 1 I | " " | 63 | 13 | 1 | 0 | 11 | 58 | 0 | 0 | 1 | 5 | 156 | | 308 | |
| " " 6 II | " " | 7 | 3 | 3 | 1 | 1 | 8 | 0 | 0 | 0 | 1 | 15 | | 39 | |
| Totals | 3 ears. | 101 | 23 | 4 | 3 | 22 | 104 | 0 | 1 | 2 | 7 | 248 | | 515 | |

105 $A_2$ Wx : 26 $A_2$ wx ; 22 var. Wx : 105 var. wx = 258 = 18.5% recombination

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7306A-3 I | | 7 | 7 | 0 | 1 | 5 | 7 | 1 | 0 | 1 | 1 | 33 | | | |

~~7306B-1 4 ears. + $a_2$ bt wx 07~~ =

For reference to B of table 2. Year 1957

| | uniformly Pigmented Bt | | bt | | var. | | colorless | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Wx | wx | Wx | wx | Bt | bt | Bt | bt | | Totals |
| 7306B ① II × a₂bt wx, no spm | 4 | 3 | 1 | 0 | 148 | 6 | 9 | 189 | | |
| " ① t-1 | 7 | 2 | 0 | 0 | 132 | 6 | 14 | 152 | | |
| " ① t-2 | 19 | 1 | 0 | 0 | 30 | 0 | 3 | 42 | | |
| " ① t-3 | 3 | 1 | 0 | 0 | 71 | 6 | 11 | 86 | | |
| Totals | 33 | 7 | 1 | 0 | 381 | 18 | 37 | 469 | | |
| 7306 B ① I × a₂bt Wx no spm | 9 | – | 0 | – | 181 | 10 | 13 | 185 | | |
| | Wx | wx | Wx | wx | Wx wx | Wx wx | Wx wx | | | |
| 7306B ② t × a₂bt wx, no spm | 28 | 2 | 1 | 0 | 24 60 | 1 1 | 7 1 | 133 | | |
| 7306B ② I × a₂bt Wx no spm | 34 | – | 4 | – | 151 – | 8 – | 16 – | 205 | | |
| Totals | 64 | | 5 | | 235 | 10 | 24 | 338 | | |

For Table 2 - C Year 1957

$a_2$ mi BI / $a_2$ bt Wx + / wx spm - active ♀ × $a_2$ bt wx no spm ♂

| Plant no. | | uniformly Pigmented BI Wx | BI wx | bt Wx | bt wx | variegated BI Wx | BI wx | bt Wx | bt wx | Colorless BI Wx | BI wx | bt Wx + wx | | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7307A(2) | t-1 | 71 | 8 | 5 | 0 | 7 | 58 | 0 | 4 | 4 | 6 | 152 | | 315 |
| " " | t-2 | 23 | 4 | 1 | 0 | 2 | 20 | 0 | 1 | 0 | 1 | 58 | | 110 |
| " A-3 | I | 80 | 12 | 6 | 0 | 16 | 77 | 0 | 10 | 11 | 10 | 187 | | 409 |
| " A-4 | I | 74 | 8 | 7 | 2 | 5 | 97 | 4 | 4 | 5 | 6 | 214 | | 426 |
| " " | t | 63 | 5 | 1 | 0 | 8 | 57 | 0 | 7 | 3 | 7 | 116 | | 267 |
| " " 5 | I | 42 | 2 | 1 | 0 | 3 | 33 | 0 | 1 | 0 | 2 | 62 | | 146 |
| " " | II | 43 | 13 | 1 | 0 | 6 | 39 | 0 | 2 | 3 | 4 | 76 | | 187 |
| " " 6 | I | 47 | 7 | 2 | 0 | 5 | 59 | 0 | 3 | 4 | 5 | 130 | | 262 |
| " B-1 | I | 39 | 4 | 1 | 0 | 9 | 40 | 1 | 4 | 6 | 7 | 79 | | 190 |
| " " | t | 61 | 10 | 6 | 1 | 6 | 57 | 3 | 5 | 4 | 5 | 127 | | 285 |
| Totals | 10 ears | 543 | 73 | 31 | 3 | 67 | 537 | 8 | 41 | 40 | 53 | 1201 | | 2597 |

574 $A_2$ Wx : 76 $A_2$ wx : 75 var. Wx : 578 var. wx = 1303 = 11.5% recombination

Wx ++ / wx spm spm ♀ × $a_2$ bt wx no spm ♂

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7307B-2 | I | 74 | 15 | 8 | 5 | 19 | 90 | 1 | 4 | 4 | 14 | 206 | | 440 |
| " " | t-1 | 28 | 4 | 3 | 1 | 6 | 29 | 1 | 5 | 4 | 5 | 63 | | 149 |
| " " | t-2 | 43 | 8 | 2 | 0 | 10 | 46 | 0 | 0 | 4 | 0 | 103 | | 216 |
| Totals | 3 ears | 145 | 27 | 13 | 6 | 35 | 165 | 2 | 9 | 12 | 19 | 372 | | 805 |

158 $A_2$ Wx : 33 $A_2$ wx : 37 var. Wx : 174 var. wx = 402 = 17.4 % recombination

Wx + / wx spm plus 1 spm

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7307B-3 | I | 24 | 4 | 6 | 1 | 31 | 50 | 1 | 4 | 3 | 5 | 155 | | 284 |
| " | II | 33 | 2 | 1 | 0 | 32 | 50 | 2 | 1 | 5 | 4 | 151 | | 281 |
| " " | t-2 | 25 | 2 | 1 | 0 | 19 | 33 | 2 | 2 | 2 | 4 | 70 | | 160 |
| " " | t-3 | 58 | 7 | 3 | 0 | 55 | 93 | 3 | 3 | 8 | 10 | 189 | | 429 |
| Totals | 4 ears | 140 | 15 | 11 | 1 | 137 | 226 | 8 | 10 | 18 | 23 | 565 | | 1154 |

151 $A_2$ Wx : 16 $A_2$ wx : 145 var. Wx : 236 var. wx = 548

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7307B-4 | I | 45 | 4 | 4 | 0 | 52 | 70 | 3 | 0 | 6 | 14 | 159 | | 357 |
| " 4 | t-1 | 47 | 3 | 4 | 2 | 68 | 94 | 2 | 4 | 8 | 15 | 227 | | 474 |
| Totals | 2 ears | 92 | 7 | 8 | 2 | 120 | 164 | 5 | 4 | 14 | 29 | 386 | | 831 |

100 $A_2$ Wx : 9 $A_2$ wx : 125 var. Wx : 168 var. wx = 402

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7307B(4) | t-2 × $a_2$ bt Wx no spm | 53 | – | 3 | – | 145 | | 11 | | 29 | | 232 | | 473 |

7307B-2 : variegated kernels have specks only of $A_2$ with few exceptions.

7307B-3 and B-4. : 2 Spin and 4 Spin patterns - in 4 Spin patterns, few specks of $A_2$ only.

Linkages - BT kernels in 7307B ③ $^{I}$ ear =

| | 2 Spin pattern | | 4 Spin pattern | |
|---|---|---|---|---|
| | W × BT | wx BT | W × BT | wx BT |
| 7307B ③ $^{I}$ | 21 | 26 | 10 | 24 |
| 7307B ④ $^{I}$ | 42 | 12 | 10 | 58 |
| " ④ $^{t-1}$ | 58 | 16 | 10 | 78 |
| totals 7307B ④ | 100 | 28 | 20 | 136 |
| | 128 | | 156 | |

Reference for D, Table 2. $a_2$ m-1 BI / $a_2$ s bt Wx + / wx spm - active + $a_2$ bt wx no spm

| | | uniformly Pig. BI | | bt | | var. BI | | bt | | colorless BI | | bt | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx + wx | | Totals |
| 7313 A-2 t | | 83 | 5 | 2 | 1 | 6 | 67 | 0 | 3 | 3 | 3 | 193 | | 366 |
| " B-4 t-2 | | 25 | 2 | 1 | 0 | 8 | 35 | 0 | 0 | 1 | 0 | 45 | | 117 |
| Totals | | 108 | 7 | 3 | 1 | 14 | 102 | 0 | 3 | 4 | 3 | 238 | | 483 |

111 $A_2$ Wx : 8 $A_2$ wx : 14 var. Wx : 105 var wx = 238 9.2% recombination

Year 1957

Reference for A, table 3.

$a_2$ mi BI / $a_2$ bt Wx+ / wx Spin - active × $a_2$ bt wx no Spin

| | | uniformly Pigmented | | | | variegated | | | | colorless | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BI | | bt | | BI | | bt | | BI | | bt | | |
| Plant no. | | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx+wx | | Totals |
| 7309A-3 | I | 38 | 11 | 0 | 1 | 5 | 32 | 1 | 2 | 4 | 4 | 93 | | 191 |
| " " 3 | I | 45 | 11 | 3 | 0 | 7 | 41 | 0 | 3 | 7 | 3 | 112 | | 232 |
| " " 4 | I-1 | 57 | 2 | 1 | 0 | 8 | 60 | 0 | 4 | 2 | 5 | 118 | | 257 |
| " " 5 | I-1 | 76 | 10 | 5 | 1 | 11 | 68 | 2 | 3 | 4 | 5 | 158 | | 343 |
| " " 8 | I | 41 | 2 | 4 | 0 | 5 | 34 | 0 | 6 | 4 | 6 | 98 | | 200 |
| Totals | 5 ears | 257 | 36 | 13 | 2 | 36 | 235 | 3 | 18 | 21 | 23 | 578 | | 1223 |

270 $A_2$ Wx : 38 $A_2$ wx : 39 var. Wx : 253 var. wx = 600 12.8 % recombination

Table 15

Year 1957

$a_2$ mi (class II) BI | $a_2$ bf Wx + / cm Spm-detroit ♀ × $a_2$ bf cm No Spm of

$a_2$ mi BI (class II) BI | $a_2$ mi-1 (class II) BI " " " × "

(7308 A-4, B-2, B-4)

| | | | Uniformly Pigmented | | | | Colorless, spots of color | | | | Colorless | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Table | No. of | BI | | bf | | BI | | bf | | BI | | bf | | % |
| Culture | reference. | cars. | Wx | cm | Wx | cm | Wx | cm | Wx | cm | Wx | cm | Wx and cm | Totals | Recombination |
| 7456 | A, Table 2 | see Table 10A | | | | | | | | | | | | | 11.1 |
| 7306A B | B Table 2 | 3 | 101 | 23 | 4 | 3 | 22 | 104 | 0 | 1 | 2 | 7 | 248 | 515 | 18.5 |
| 7307A, B-1 | C Table 2 | 10 | 543 | 73 | 31 | 3 | 67 | 537 | 8 | 41 | 40 | 53 | 1201 | 2597 | 11.5 |
| 7307B-2 | " " | 3 | 145 | 27 | 13 | 6 | 35 | 165 | 2 | 9 | 12 | 19 | 372 | 805 | 17.4 |
| " B-3 | " " | 4 | 140 | 15 | 11 | 1 | 137 | 226 | 8 | 10 | 18 | 23 | 565 | 1154 | |
| " B-4 | " " | 2 | 97 | 7 | 8 | 2 | 120 | 164 | 5 | 4 | 14 | 29 | 386 | 831 | |
| 7313 | D " " | 2 | 108 | 7 | 3 | 1 | 14 | 102 | 0 | 3 | 4 | 3 | 238 | 483 | 9.2 |
| 7306B-2 | B Table 2 | 1 | 28 | 2 | 1 | 0 | 24 | 60 | 1 | 1 | 7 | 1 | 133 | 258 | |
| 7309A | A, Table 3 | 5 | 257 | 36 | 13 | 2 | 36 | 235 | 3 | 18 | 21 | 23 | 579 | 1223 | 12.8 |
| 7308A4, B-2, B-4 | B Table 3 | 5 | 355 | 53 | — | — | 37 | 331 | - | - | 0 | 1 | — | 777 | 11.8 |
| 7308B-1 | B Table 3 | 3 | 92 | 22 | 7 | 3 | 12 | 121 | 3 | 7 | 8 | 15 | 219 | 509 | 14.9 |
| " | " " | | | | | | | | | | | | | | |

7572

| | uniform pigmented BI | | bt | | variegated - BI Wx | | wx | | var. bt* | | colorless BI | | bt | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Wx | wx | Wx | wx | 2Spm | 3Spm | 2Spm | 3Spm | Wx | wx | Wx | wx | | | Totals |
| 7572-1 | 91 | 13 | 3 | 1 | 1 | 21 | 3 | 96 | 1 | 2 | 4 | 1 | 219 | | 456 |
| " -2 I | 47 | 10 | 4 | 1 | 0 | 8 | 0 | 45 | 1 | 2 | 11 | 11 | 114 | | 254 |
| " -2 II | 24 | 10 | 2 | 0 | 0 | 6 | 0 | 30 | 0 | 0 | 0 | 6 | 65 | | 143 |
| " -3 I | 59 | 17 | 2 | 0 | 0 | 14 | 0 | 73 | 0 | 7 | 11 | 3 | 154 | | 340 |
| " -6 | 7 | 1 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 1 | 26 | | 43 |
| " -7 I | 53 | 7 | 7 | 0 | 0 | 6 | 0 | 34 | 0 | 2 | 3 | 3 | 96 | | 211 |
| Totals | 281 | 58 | 18 | 2 | 1 | 59 | 3 | 282 | 2 | 13 | 29 | 25 | 674 | | 1447 |

299 $A_2$ Wx : 60 $A_2$ wx : 62 var Wx : 298 var wx = 719 16.9 % recombinant wx

7572-3 II x 7537 C-① $a_2$ mi (class I) bt / $a_2$ s bt, wx wx, no Spm

see other sheet

| | | uniflowers Pigmented | | | | variegated | | | | Colorless | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BI | | bt | | BI | | bt | | BI | | bt | | | |
| Plant no. | | Wt | | wt | | Wt | | wt | | Wt | | wt | | Wt + wt | Totals |
| 7560-1 | I | 3 | 78 | 0 | 5 | 78 | 8 | 4 | 0 | 7 | 15 | | | 166 | |
| " -1 | I-1 | 7 | 98 | 0 | 5 | 113 | 10 | 8 | 8 | 9 | | | | 218 | |
| " -5 | I | 7 | 79 | | 1 | 98 | 11 | 5 | | 7 | 5 | | | 176 | |
| Totals | | | | | | | | | | | | | | | |
| 75603 | ~~pollen~~ t | 22 | 21 | 1 | 0 | 22 | 23 | 0 | 0 | 2 | 4 | | | 54 * | |
| 7560-6 | | 31 | 31 | 4 | 3 | 28 | 36 | 2 | 0 | 6 | 5 | | | 136 | |
| | totals | 53 | 52 | 5 | 3 | 50 | 59 | 2 | 0 | 8 | 9 | | | 190 | |
| 75604-1 | I | 7 | 13 | 0 | 0 | 76 | 56 | 2 | 1 | 1 | 8 | | | 161 | |
| " -4 | I-1 | 23 | 18 | 1 | 1 | 88 | 76 | 2 | 4 | 5 | 8 | | | 210 | |
| Totals | | 30 | 31 | 1 | 1 | 164 | 132 | 4 | 5 | 6 | 16 | | | 371 | |

7

F02

Table 15

| | Uniformly Pigmented BI | | bt | | var. BI | | bt | | Colorless BI | | bt | | | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx | wx | Wx+wx | | Totals | C.O. |
| 7313A② t | 83 | 5 | 2 | 1 | 6 | 67 | 0 | 2 | 3 | 3 | 193 | | 365 | 7.8 |
| 7313B-4 I | 39 | 14 | 1 | 0 | 74 | 58 | 4 | 1 | 5 | 7 | 206 | | 409 | |
| " B-4 t-2 | 25 | 2 | 1 | 0 | 7 | 35 | 0 | 0 | 1 | | 45 | | 116 | |
| Totals | 64 | 16 | 2 | 0 | 81 | 93 | 4 | 1 | 6 | 7 | 251 | | 525 | |
| 7312-5 | 117 1) | 7 2) | – | – | 11 3) | 117 4) | – | – | 0 | 0 | – – | | 252 | 7.1 |
| 7547A① t-1 (a2 w/c pale-spotted) | 1 | 21 | 0 | 1 | 12 | 1 | 0 | 0 | 1 | 2 | 23 | | 62 | |
| " A② I | 11 | 75 | 0 | 4 | 101 | 7 | 11 | 1 | 9 | 8 | 184 | | 411 | |
| " A② t | 5 | 73 | 0 | 3 | 78 | 4 | 8 | 0 | 10 | 8 | 142 | | 331 | |
| " A③ I | 11 | 72 | 3 | 13 | 70 | 2 | 9 | 0 | 13 | 10 | 145 | | 348 | |
| Totals. | 28 | 241 | 3 | 21 | 261 | 14 | 28 | 1 | 33 | 28 | 494 | | 1152 | 7.7 |
| 31 pale Wx : | 262 pale wx : 289 var Wx : 15 var. wx = 597 | | | | | | | | | | | | | |
| 7547C② (A2) | 0 | 25 | 0 | 2 | 28 | 2 | 1 | 0 | 2 | 1 | 49 | | 110 | 5.1 |

1) 55 A2 : 62 pale
2) 2 A2 : 5 pale
3) 4 A2 state : 7 pale state
4) 49 " " : 68 " "