

IV. SEED STOCKS PROPAGATED AND RECEIVED

This past summer most of the material propagated involved the growing of cultures from old seeds which were in danger of losing viability, incorporating genes into new linkage testers and reselecting within previously-made hybrids. In addition, inbred lines were outcrossed to certain weak stocks to obtain more vigorous combinations.

In the following inventory is listed the stocks of genes and gene combinations which are now available at Cornell. Only stocks later than 1944 are included since eight years is about the maximum time viability can be maintained under our storage conditions.

It may be assumed that genetic stocks other than those listed here have been lost or have never been incorporated into our connection.

A ₁	48-23,36; 49-10,11,14,15,16,17,21,81,93,106; 50-11,54,57,114,115; 51-35,65,66,68,69,70
A ₂	48-21; 49-17,50,93; 50-43
a	44-163; 45-68,147,151; 47-23,26; 48-72,90; 49-08,09,20,53; 50-70,71,72,82; 51-25,26,35,65,66,86
a ₂	45-78,92; 47-44,173; 48-21,47,48,49,75; 49-12; 51-75
a ₃	45-127,102; 47-102; 49-13; 50-123
a	49-107; 50-67
ad	47-100; 50-124
ag	47-76,77; 48-76,77; 49-27,96; 50-30,31,32; 51-99 (grasshopper resistant gene)
aI	49:105; 50-66
an	47-6,13,101; 48-19,27; 50-47,48,87,89,109; 51-60,71,76,82
an ₂	48-61,62,63
ar	45-95; 47-58; 50-125; 51-107
as	48-109,110,111,112,113,114; 49-17; 50-43
at	45-94; 47-103
au	47-64; 48-64
b	45-11; 47-171; 49-11,15,21,93; 50-11,54,114; 51-35
B	47-17; 48-23; 49-14,106,107; 50-67; 51-65,66,86
B ^W	44-205; 47-159
ba	45-42; 45-96; 49-45; 50-73,126,127
ba ₂	45-97; 49-45
BB	50-99,100,101
Bb	50-103
bd	45-82; 47-49,52
bk	45-98; 48-65
bk ₂	47-65; 50-128
bl ₃	50-49,50
bm	47-76; 47-43; 48-14,15,46,47,48,49,55,75,103; 49-12,36,37,38; 50-69; 50-21,22,23,47,48,87,88,109,124; 51-32
bm ₂	45-56,58; 47-4,5,8,10,11,12,13; 48-19,25,27,30,31,88; 49-04,20,21,22,27,70,94,96; 51-71,74,75,76,82
bm ₃	45-99,143; 49-83,84,85; 50-64,65,129; 51-34
bm ₄	49-87; 50-52
Bn	47-54; 48-55,56
bp	44-163; 48-57; 49-17; 50-38
br	45-56,57; 47-4,6,8,10,11,13; 48-25,27,30,31; 49-22,27,70,79,80; 50-30,31,32,109; 51-76
bt	46-107; 47-42; 48-21,75; 49-12,50; 51-75
bt ₂	45-13; 48-22; 50-131
bv	45-94; 46-107; 48-75,21; 49-12,50; 51-75
C	48-23,47,49,57; 49-08,11,14,15,16,17,53,93,106; 51-25,26,35,65,66,68,69,70
c	44-174,206; 47-56,59; 48-36,20; 49-05,06,07,10,21; 50-04,05,24,25,38,57,68,115; 51-24
Ch	47-105
cl	47-106
cr	44-159; 45-100,122; 47-30,31,48,39,41,42; 49-21
d	44-75; 45-67,69; 47-25,29,32,107; 48-12,13,37,38,40,43; 49-25,26; 50-106,107; 51-84
d ₂	44-154; 45-102; 47-121

d₃ 44-72,97,146,122; 49-111; 50-58
d₅ 44-40; 48-66
da 45-88; 47-58; 51-107
de₁₇ 49-75; 50-51
Dt 44-163; 45-68; 47-24
du 47-174; 49-108
f 45-57,150; 47-6,8,10,11,13; 48-25,27,30,31; 49-27,70; 50-30,31,109; 51-76
fl 45-61; 46-104; 47-20,21,67; 48-9; 49-69; 50-37
fl₂ 45-103; 50-130
fn from S. Horowitz (phenol reaction)
fs 45-104; 47-68
g 44-90; 45-12,90; 47-62,63,173; 48-60,78,79; 49-20,21
g₂ 44-76; 47-123; 51-74
g₃ 48-67
g₄ 44-41; 48-68; 50-41,77
gl 44-159; 45-80,82,84,98,122; 47-50,51,52,53,173; 48-26,53,54,56,60,65; 49-20,87,98; 50-18,52,131; 51-12
gl₂ 45-8,9,10; 47-14,18,19,20,21,71; 48-9,26,32,33,35,69; 49-11,15,35; 50-37,104,105,130,114; 51-18,19,68,69
gl₃ 45-71,72,73; 47-36,38,39; 48-45,67; 49-73; 50-74,111; 51-17,21,22,23,31
gl₄ 45-20,51,52,89,103,106; 47-56,59; 48-20; 49-05,06; 50-04,05,24,25,68,134; 51-15,24,51
gl₅ 44-5,36; 49-68
gl₆ 45-107; 47-109
gl₇ 45-139; 48-69; 49-95; 50-09
gl₈ 44-88,89; 47-125
gl₉ 47-126
gl₁₀ 45-109; 47-110; 50-35
gl_x 44-66
gm (mutable golden) 49-102; 51-104
ge 47-12,13; 48-27; 49-04,27; 50-21,22,30,31,32,109; 51-76
ge₂ 45-11; 47-15,16,127; 48-34
h 45-110; 47-128
hf 45-111; 47-111; 48-16,17,70
hm 50-120,121
Hm 50-122
He 45-112; 47-112
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i 51-70
ij 45-82; 47-49,51,52,113; 48-54; 49-98; 50-18; 51-12
in 44-170; 45-151; 48-72; 49-08,21,53; 50-70,71,72,82; 51-25,26,35
it 50-78
j 47-55,173; 49-20,21,55,99; 50-55,83,84; 51-13
j₂ 44-191; 45-72; 48,73; 50-48,74,110,111; 51-17,21,22,23
Kn 45-113; 49-54
l 43-26; 44,6,7,42,43; 49-55
l₂ 48-60,79
l₃ 44-95; 47-129
l₄ 45-140; 49-56; 50-45
l₆ 44-156; 48-11; 50-59,60,85
l₇ 43-128; 44-8,44,45,77; 48-58
la 47-131; 49-73; 50-74
lg 44-69,76,92; 45-9,10,11,61,106,145,149; 47-14,15,16,17,18,19,20,21,22,173; 48-9,32,33,34,35; 49-11,15,20,35,69,73,106; 50-37,104,105,114; 51-18,19,30; 51-74
lg₂ 44-177,178; 45-18,65,68,69; 44-163; 45-68; 47-23,27,32; 48-12,13,43,90; 49-25,26; 50-107; 51-84
Lg₃ 44-162; 45-63; 48-37,38
lg_x 48-52
li 45-12,91; 47-61; 48-59; 50-83,84
lo 47-133
lu 50-102
mg 44-9,10,11,12,46; 49-58; 50-86
mi 44-13,47,78; 47-134,135,136; 49-80
ms₂ 45-73; 48-81,58,81
ms₃ 44-107; 47-137,138
ms₅ 47-139,140; 49-79

ms₆ 44-99; 47-142
ms₇ 44-157; 45-116; 47-143,144
ms₈ 44-10; 47-145,146; 48-99; 50-55,56; 51-13
ms₉ 48-82
ms₁₀ 44-101; 48-83
ms₁₁ 45-117; 49-32
ms₁₂ 44-102; 47-147,148; 49-34
ms₁₃ 45-118; 47-87
ms₁₄ 45-119; 47-88
ms₁₇ 47-9; 48-29; 49-74; 50-36; 51-40,41,42,43,45,92
ms₁₈ 44-108,137; 48-84
ms₂₀ 48-85; 51-20
ms₃₄ 43-48,49,50; 47-149,150
ms₃₇ 45-120
ms₃₉ 48-86
ms₄₂ 44-158; 45-43,44,121; 49-33
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nl 47-62
nl₂ 48-88
o 45-124; 47-74
o₂ 45-86; 47-50; 48-26; 51-18
Og 45-126,127,137; 47-1; 49-101; 50-123
p 49-57,80; 51-65,66,68,69,99
P 47-8; 50-11,54,82; 49-79,107; 51-35,86
P^{mo} 47-99; 48-29,92
P^{oo} 49-79,80
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P^{vv} 45-132; 47-114; 49-21,49
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pg₂ 45-67; 47-29,30,31,152; 48-40,41,42
pk 44-38; 44-69,91,92,107; 45-14
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pm 45-64
po 45-129; 49-31
pr 45-78,151,153; 47-42,45; 48-14,15,21,46,47,48,49,75; 49-08,12,21,36,37,38,50,53; 51-25,26,32,35,70,75
Pr 48-23; 49-20,23,24,93,104,105,106; 50-17,66
py 44-87; 47-46,154; 48-50; 50-11,12,54; 51-36
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R^{gg} 44-201; 45-149; 47-89,90; 48-37,38; 49-21,47,106; 51-25,26
r^{gg} 47-171; 49-11,15,16; 50-111; 51-68,69
r^{gr} 44-170; 45-5; 49-48; 50-62,63
R^{mb} 45-130; 47-115; 49-44
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rs₂ 47-78
rt 47-157; 48-24
Sx 45-149; 47-116
sa 45-88; 47-58; 51-107
sb 45-135; 48-91
sh 44-67,68,107,134,174; 45-150; 47-56,57; 48-20,36,57,58,64; 49-05,06,07,10,17,58,111; 50-04,05,24,25,38,43,57,68,115; 51-15,24,68,69
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sk 45-136; 49-29,30; 50-06,07,08; 51-50
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 ts 44-124; 45-9,10; 47-14,17,161,162; 48-33,35,83; 49-35; 50-104,105
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 Ts₃ 47-175; 49-04; 50-21,22,23
 ts₄ 44-64,85,122; 45-69; 47-28,32; 48-12,13,39,43; 49-25,26; 50-107; 51-84
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 Ts₆ 44-160; 45-45,137; 49-24,105; 50-66
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 v₂ 45-78; 47-94; 48-14,15,46,47,48,49; 49-36,37,38; 50-69; 51-32
 v₃ 45-79; 47-166
 v₄ 45-61; 45-8,9,10; 47-14,16,17,21,22,171; 48-9,32,33,34,35; 49-
 11,15,35,69; 50-37,104,105,114
 v₅ 44-159; 45-84,85,86,122; 47-50,53; 48-26,53,54,55,56; 49-98; 50-18; 51-
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 v₆ 44-21,22,52,53,80; 48-98; 49-61,62
 v₇ 47-117; 50-13,44
 v₈ 44-23,54,55,81; 48-99; 51-73
 v₉ 44-24,56; 48-100
 v₁₂ 44-25; 48-101; 49-63; 50-132
 v₁₃ 45-138; 47-95
 v₁₄ 49-111
 v₁₆ 49-86,99; 50-55; 51-13
 v₁₇ 45-139; 47-97
 v₁₈ 45-91,140; 47-98; 48-59; 49-56; 50-45,85
 v₁₉ 47-79
 v₂₀ 44-20; 48-102; 51-16
 va 44-109; 49-64,
 va₂ 47-80
 Vb 49-112
 Vg 44-103; 49-39,40; 51-46,47,48,49
 vi 50-103
 vp 44-57; 44-26,82; 49-65
 vp₂ 44-93,141,143,144; 48-7; 50-133
 vp₄ 44-58; 48-8
 vp₅ 48-7
 w 44-27,28,29,30,59,60,61; 49-76; 50-12
 w₂ 44-83; 48-116; 50-91,108; 51-33
 w₃ 44-32,62; 51-14
 w₁₁ 44-33; 45-46; 49-18,19
 WW 51-40,41,42,43,45
 wa 47-99
 We 50-135
 Wc 45-142
 Wh 47-118
 wL 44-86; 47-34,167; 49-72
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 ws₂ 47-39; 48-45,55,56
 ws₃ 45-60; 47-18,19; 51-18; 51-19
 wx 44-156,170,174,206; 45-88,95,141,146,148,150,154; 47-56,58,59; 48-
 20,36,57,68,72; 49-05,06,07,08,10,17,20,21; 51-15,24,25,26,107
 y 45-68,133,149; 47-173; 48-50,52,72; 49-08,20,21; 50-10,11,54; 51-
 25,26,30,36,38,39,86
 yx 50-78
 yg 48-103
 yg₂ 44-174; 45-20; 48-20; 49-05,06,07; 50-04,05,24,25,68; 51-24

yg ₃	45-143; 47-168
ys ₁	47-43; 48-14,15,46; 49-36,37,38; 50-69; 51-32
Y	49-53,105,109; 50-66,70,71,135; 51-35
zb	44-38,73,112; 48-105
zb ₂	44-74; 48-106
zb ₃	44-39,98; 48-107
zb ₄	45-57; 44-63,104; 47-7,10,11; 48-28,30,31; 49-28,39,57,70; 51-40,41,42,43,45,47
zb ₅	49-92,109
zb ₆	45-144; 47-120; 50-113
zg ₃	43-192; 44-94; 49-66,67
zl	47-9; 48-29; 49-74,92
zn	49-101 (zebra necrosis)

Dominant inhibitor or partial inhibitor of yellow endosperm.
(1947, Meyer and Richey)

Several types from Rurrenabaque, lowland Boliva, (H. C. Cutler, 1947).

Linkage Testers

Chromosome 1

bm ₂ br P ^{rr}	47-4; 48-25
br f an gs	47-6; 50-30,31; 51-79
ms ₁₇ zl	47-9
br f an gs bm ₂	47-13; 48-27; 49-27
P ^{rr} br fl gs bm ₂ an	49-27; 50-32,109; 51-76,78,80
gl ₁₀	50-35
P ^{rr} br bm ₂	49-22
gs br f ₁ an ₁ ms ₁₇	51-77

Chromosome 2

lg gl ₂ v ₄ ts	47-14,22; 48-35; 49,35; 50-104,105; 51-81
lg gs ₂ v ₄	47-16; 48-34
ws ₃ lg gl ₂	47-19
lg gl ₂ v ₄ fl	47-21; 48-9; 49-69

Chromosome 3

Rg d	47-25; 48-37,38; 50-106; 51-83
na ts ₄	47-28; 48-39
lg ₂ d ts ₄	47-32; 48-12,43; 50-107

Chromosome 4

su gl ₃ j ₂	48-73; 50-111; 51-89
su Tu gl ₃	47-36; 51-96
Ts ₅ su wl	47-34; 49-72
su gl ₃ la	50-74
J ₂ su	50-110; 51-88
zb ₆ su	50-113

Chromosome 5

yg ₁ bm ₁	48-103
bm v ₂ Pr ys	47-43; 49-36,37,38
pr v ₁₂	47-45
a ₂ bt ₁ bv pr bm ₁	48-75; 51-97

Chromosome 6

w ₁ py ₁	90-12
(AbP) Pl sm py y	47-46; 48-50; 50-11
si ₁ su ₂ Y	50-10; 51-93

Chromosome 7

ra v₅ ge o₂ 47-50; 48-26
gl ij bd 47-52
ij Tp gl ra v₅ 47-53; 48-53,54

Chromosome 8

j v₁₆ ms₈ 47-55; 50-55; 51-102
ms₈ 50-56

Chromosome 9

A R c sh wx v₁ 50-57; 51-105
a sh wx gl₄ yg₂ 47-56; 51-06,07,108,109
wx da sa ar 47-58
C sh wx bp 48-57

Chromosome 10

g₁ l₂ 47-63; 48-60
gl nl zb₅ 51-95

Mangelsdorf's multiple tester:

p bm₂ lg₁ a su Pr y gl j wx g - 47-173; 49-20; 50-26,27,28; 51-11

Randolph's multiple tester:

ACRPr B Pl - 48-23; 49-14; 50-34; 51-08,09,85

Randolph's multiple recessive:

$\frac{Cr}{cr}$ P^v bm₂ b lg A su pr in y pl j c wx R^g g - 49-21; 50-29,33

4n - 50-95,96,97,98

a CRB Pl lg - 51-28,29,64

The following stocks were received recently from M. G. Nuffer, University of Missouri, Columbia, Missouri.

1. a^m-1:Cache/same, CC, dt dt, RR
2. a^m-1:Cache/same, CC, Dt Dt, RR
3. A^{lt} m-Sh₂/a^s-sh₂, Dt Dt
4. a^m-1:Cache/same, b, y-pl, pr, dt-sh₁-wx, R^g
5. a, Su su, Dt-sh₁ wx
6. a^s-et, Dt Dt
7. AA, RR, dt-C/c-bz-wx-v₁
8. dt-C-bz-wx-v₁/g₄-wx

Julian P. Craigmiles