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Coyne Lab *Drosophila* Stocks

(The "checked" designation means that the was mutation found in crossing tests to be identical with the *D. melanogaster* mutation of the same name.)

D. simulans

X chromosome

y	yellow (1-0.0 [Sturtevant]) Outcrossed to Florida City stock
y^{2H}	yellow-2 (darker yellow, with gray wing veins; spontaneous). Original in hybrid with D. mauritiana , so may have some *mauritiana* genome.
mauve males, C(1)RM, yw females	"mauve" virtually same position as yellow, extracted from Russian stock #245 procured by Kondrashov. Female-sterile, kept with attached-X
rst males, C(1)RM RM yw females	roughest (female-sterile)
w^{XD1}	white (Mel Green) (1-8.4 [Barker] or 4.1 [Sturtevant]). Checked
w^{R}	white-Riverside (Yamomoto). Checked
w^{N1G}	white (Japan; Yamomoto). Checked
w^{cr}	white-cream (Yamomoto). Checked
w^{a}	white-apricot (Mel Green). Checked
w^{mky}	white-milky (Yamomoto) Checked
w^{S}	white-Saito (Yamomoto) Checked
w^{le}	white-lemon (from Khovanova)
rb	ruby (1-9.7 [Sturtevant]) Checked
tb	tiny bristles (not checked, but probably same as *tb* in *melanogaster* (1-35.8? 7.3 centimorgans from v, 3.7 from m)
m^{82}	miniature 82 (Mel Green) (1-35.4) Not checked
g	garnet (spontaneous) (1-42.3 [Sturtevant]) Checked
v	vermilion (Dan Hartl) (1-43.1 [Barker]). Checked.
v	vermilion (Ashburne)
In(1)2, f^{66}	Inversion on X with forked. Indiana.
f^{2}	forked-2 (J.S.F. Barker) (1-56.0 [Sturtevant]) Checked

Bx	Beadex (1-62.2). Dominant, homozygous-viable, Checked
m, v	miniature, vermilion
y, w	yellow, white. We have three stocks: detached-X, Russian, and plain y, w
v, f^2	vermilion, forked
pn(2)	prune
y, f^2	yellow, forked-2
y, w, m, f^2	yellow, white, miniature, forked-2

C(1)RM y, w females X + males; attached-X stock (Russia)
C(1)RM y, w /lz (eyes smooth and reduced in size, almond shaped (Khovanova)
C(1)RM y, w females X y np v m males
C(1)RM y, w females X y v tb males
C(1)RM y, w females X m^{82} males
C(1)RM y, w females X y v m males
C(1)RM y, w females X Russian 27 incised males
y, v, m, g, f^2 males X C(1)RM y, w females
y, np, v, m-2 males X C(1)RM y, w females
orange, incised males X C(1)RM y, w females Russian stock 276 (not localized)
"wine" unmapped X-chromosome eye mutant
C(1)RM, y w/C(1;Y)A13, y^+/O Attached X, O yw females, wild-tye males with X attached to Y. provided by T. Yamamoto

Second chromosome

nt	net (2-0; J.S.F. Barker) Checked
Cy^{NC}	Curly (2-6.1 in melanogaster ; North Carolina; Watanabe)
b^2	black-2 (45; J. S. F. Barker [43: Sturtevant]) Checked
cn	cinnabar (spontaneous) (2-63.4 [using stw from Sturtevant] or 54.4 [using stw from Barker]) Checked
Ro/+	Rough eyes (roughly at 69, dominant, homozygous lethal, kept as heterozygote by selection)
Lhr	lethal hybrid rescue (2-95) (Ashburner)
bw(1)	brown
pm	plum (108 [J. S. F. Barker] or 103 [Sturtevant]. Same as Punch locus in melanogaster.
nt, pm	net, plum (0, 108) (see "pm" above)

nt, b, py, sd, pm	net, black, pearly, spread, plum (0, 45, 74, 80, 108). (see "pm" above)
rippled	rippled wing; on second but unmapped. Very close to dimpled (5.5 mu)
rpl, dp cn	rippled, dimpled, cinnabar
b^2 cn	black, cinnabar
rpl, cn	rippled, cinnabar
pom	pomegranate (purple eye; wings sometimes wrinkled). Poor viability. unlocalized on second
pur	purple, sechellia -> simulans
brown	extracted from Sawamura
"dumpy"	wings truncated and blunt, poor penetrance. Unlocalized on the second.

Third chromosome

se	sepia (3-7 [Sturtevant]) Checked. From Hartl.
$se^{Orlando}$	sepia Orlando (from a Mel Green stock)
prd	pale red, Aquadro, Cal #56 (probably about 34; needs relocalization)
st	scarlet (34; J.S.F. Barker) Checked. Valparaiso, Ind. (Noor)
st	scarlet from Sawamura
ry^{i83}	$rosy^{i83}$ (3-52 in melanogaster ; Hartl). Insertion from *D. melanogaster* by Hartl Not checked
e	ebony (61; J.S.F. Barker; we map at about 72) Checked
$e^{Khovanova}$	ebony (Khovanova) Checked
e^{David}	(spontaneous; Jean David) Checked
Sw/+	short wing; dominant, 0.007 cM from ebony, homozygous lethal.
H/+	Hairless (3-61 according to Sturtevant; we map as 1.3 map units from e . From Aquadro. Dominant, homozygous lethal, kept as heterozygote with selection.)
Ubx^m/D	Ultrabithorax (3-71; mapped by Barker); Delta (3-64). Balanced; Sniegowski sees inversion from 81F1-89E1 on *D. melanogaster* map plus small included inversion from 84B1-84E1.
os^3	outspread-3 (wings spread; spontaneous,6.8 map units from ebony; about 67.8 if ebony at 61, or 78.8 if ebony at 72)
cutsy	cutsy (3-74(?) according to Grell). Wings incised. Indiana.
sienna	brown eyes, 14.7 map units from Delta (side not yet determined).
cd	cardinal (formerly called orB [orange-Beecham] (checked; at 75.7 in *melanogaster*)
bar-3	bar-3 (same as melanogaster bar-3, located at 3-79.1 in melanogaster)

pur	purple eyes (spontaneous, 20 map units from ebony, about 81), from Upt dp stock
cu^S	curled of Saito (3-90; Yamomoto)
pk	pink eyes (probably about 92; needs finer mapping)
car^2	carnation-2; 3-130. Not checked. (**Checked**?) Indiana.
jv, st, pe	javelin, scarlet, peach (0, 34, 106; from Hartl)
st, e	scarlet, ebony (Barker)
st, ca	scarlet, claret (ca does not cause nondisjunction).
st, e, os^3	scarlet, ebony, outspread (34, 72, 78.8)
os, pur	outspread, purple
pur, e	purple, ebony
cd, cu^S	cardinal, curled-Saito
or-3(3)	orange (cardinal)
Serr/+	Serrate. Not checked; probably at about 125. From Aquadro. Dominant, homozygous lethal, kept as heterozygote by selection.
ro	rough eyes, extracted from Russian "orange, nicked" stock (not localized--on 3rd, 30.6 map units from Hairless. 91.6 or 30.4?). Poor expressivity.
je	jumbled eye; on third but not yet mapped
melon	reddish-brown eyes, unlocalized on third.
bw (v red Bar)	brown from v red bar. Probably on third but not localized
terracotta	dull brown eye color; unlocalized on third
jv, st, e, pe	javelin, scarlet, ebony, peach (pink in color)

Fourth chromosome

ey from Bx	eyeless (Does not appear allelic to melanogaster eyeless) Possibly allelic to ey^2; redo Poor expressivity; many look nearly wild-type.

Multichromosomal

w; e	white, ebony (X, 3)
nt; dp	net, dimpled (2, 3)
nt; e	net, ebony (2, 3). For mapping new mutants (esp. eye colors)
f^2 ; nt, pm; st, e	forked-2; net, plum; scarlet, ebony (all major arms marked)
f^2 ; nt, pm; st, e; ey	forked-2; net, plum; scarlet, ebony; eyeless (all chromosomes marked)
g; cn; e, H/+	garnet, cinnabar, ebony, Hairless/+

g; cn; e	garnet; cinnabar; ebony - skewed sex ratio
g; cn; e; ey	garnet; cinnabar; ebony; eyeless (all chromosomes marked)
g; cn; e; rp	garnet, cinnabar, ebony, ripple
f^2; st, e	forked-2; scarlet, ebony (X, 3)
os; dp	outspread; dimpled (2, 3)
g; cn; e	garnet; cinnabar; ebony (Russian X, 2, 3)
v; red bar	(Khovanova)
bw st	brown, scarlet (from Sawamura)
cn; e	cinnabar, ebony (Russian)
cn; e(D)	cinnabar, David ebony
g; cn; e Sw /e+	garnet, cinnabar, ebony, short wing

Translocations

T(Y;2)3, +/nt b (Grell) (Females net; b, males wild-type).

Wild stocks

Yaounde
Morven, GA (isofemale). Collected June 5, 1985 by JAC
Florida City, FL (isofemale). Collected June 1, 1985, by JAC.
Ottawa. (Isofemale) Collected Sept. 22-Oct. 4, 1985 by Don Hickey.
Spieth D

D. mauritiana

X chromosome

y(1)	yellow
zl	"zestelike" from Russians. 43.8 units from forked. Probably "zeste", which is located at 1.0 in *melanogaster*
pn	prune (spontaneous) (1-2.9 in simulans) Checked
w	white (Bowling Green) (1- 4.1 or 8.4 in simulans). Checked
w^a	white from bordeaux
w^{pch}	white-peach (Hartl) (1-1.5 in melanogaster). Checked
pur	purple (spontaneous; six map units from yellow)

rb	ruby
bo	bordeaux (spontaneous) (1-12.5 in melanogaster) Checked
sn	singed (Hartl) (1-21.1 in simulans [Sturtevant]) Checked
g	garnet (Hartl) (1-42.3 in simulans) Checked
v	vermilion (from mau syn stock) (1-43.1 in simulans) Checked
f	forked, checked with simulans forked. (1-56 in simulans)
pn, v	prune, vermilion (1-2.9, 43.1)
w, f	white, forked (Hartl)
y, w	yellow, white
y, f	yellow, forked
y, w, f	yellow, white, forked
f, zl	forked, zeste (check z to see if on X)
"plum"	unlocalized on X
y, pm	yellow, plum
sn, violet	singed, violet

Chromosome 2

ri	short wing vein (Woodruff)
b	black (Woodruff) (2-43 in simulans) Checked
j	jaunty wing (2-48.7 in melanogaster) From Alahiotis. Checked
j, cn, bw	jaunty, cinnabar, brown (Woodruff) (2-48.7, 57.5, 104.5) Checked
cn bw	cinnabar, brown
j, bw	jaunty, brown
ww	warped wings (not localized to map position)
dahmer	dahmer (wing extended; low pentrance; found by M. Noor) Unlocalized
j cn	jaunty, cinnabar
j cn (bw segregation)	jaunty, cinnabar

Chromosome 3

ir	irregular (unlocalized) May be rugose (III-109) reported by Sturtevant in *D. simulans*
br	brown (unlocalized; close to irr)
cur	curled wing (unlocalized; low penetrance, apparently at least 50 cM from irregular)
ir, cur	irregular, curled (> fifty cM apart)

se^{sim}	sepia (introduced from simulans by backcrossing). Checked
se^{sim}, irr	sepia (introduced from simulans); irregular

Fourth chromosome

$ey^{sim \rightarrow maur}$	Entire fourth chromosome (including *eyeless* allele) from *simulans* introduced into *mauritiana* .

Multichromosomal

j; irr	jaunty; irregular (2, 3)
pn; j; ir	prune; jaunty; irrregular (1,2,3)
sn; j; ros	singed; jaunty; rose (1, 2, 3)
sn; j; irr	singed; jaunty; irregular (1,2,3)
sn; ros	singed, rose (1;3)
cn; ir	cinnabar; irregular (2, 3)
j, cn, bw; ir	jaunty, cinnabar, brown; irregular (2,3)
net, jy (?) cn bw	net, jaunty (?; called "cy" by Hartl not checked), cinnabar, brown

Isofemale lines

BG (from Bowling Green), and lines 72, 75, 152, 197, and 207. Collected on Mauritius by O. Kitagawa in 1981.

"synthetic" Davis #105	Combination of David's isofemale lines 72, 92, 102, 127, and 152

D. sechellia

X chromosome

white	(same as *melanogaster* white; from Japan). Checked
zn	zinfandel X-linked, not same as *simulans* prune or garnet. 17.6 centimorgans from v, 23.7 centimorgans from yellow , and 35.5 centimorgans from forked, so about 25.5. (Check to see if same as "ruby" locus)
v	vermilion; same as *simulans* vermilion; 15.31 from *zn* so about 40.81. Checked.

f	forked. Located at 1-56 in *D. simulans* . 27.1 from v, 37.6 from *zn*, so about 65.5. Checked
zn, v	zinfandel vermilion (orange eye when together) (25.5, 43.1)
zn, v, f	zinfandel vermilion forked (25.5, 43.1, 56).
w, f	white, forked (1-4, 56 [*D. simulans* locations]
zn, f	zinfandel, forked

Second chromosome

j	jaunty
cn	cinnabar (same as simulans cn, 54.4 or 63.4 in *simulans*). Checked.
pur	purplish-brown eye (recombines freely with cn; unlocalized on 2nd)
cn, pur	orange eye
j, cn	jaunty, cinnabar. 17.8 cM apart
pur, j, cn	purple, jaunty, cinnabar

Multichromosomal

zn; cn (X,2) zinfandel cinnabar

Isofemale lines:

"Robertson": sent by Hugh Robertson, the original isofemale line of *D. sechellia* collected by Tsacas on Cousin Island in 1980.

Lines 4, 15, 21, 22, 24, 81: collected in 1985 on Cousin Is.

SS77 25X Collected by Kyoski Kimura on Praslin Island, Seychelles, July 24-25, 1987.

D. melanogaster

Wild Stocks

Rodriguez lethal CyO/2LR
Mauritius line D CyO/2LR
Mauritius line K CyO/2LR
Ives
Davis line 3

Tai 2 (from Ivory Coast)
Rod 26 lethal CyO/2LR
France CyO/Pm
8/86 Bettsville Col 8, 100 female lines
Oregon R NIG

"Mutant" Stocks

w
w Carosa in Ives
al, dp 2LR p x sp
al, dp; st; px, sp
st
vg
cn
v
b, cn, vg
cn, sr,, e
y, w, f(2)
whd
black (+Adh)
spa^{pol} 2LR/2LR Line 4
Rod 12 CyO/2LR(1)
Mauritius Line K 2LR Rod
Line 5 2LR/2LR spa^{pol}
In(1) AB, f(M1) / C1(M4), y2
In(1) AB

D. Yacuba (One Line)