

Table S11. *PcG* and *lama* genes function in transdetermination

Genotype	Disc: vgBE- <i>lacZ</i> (frequency)	Disc: vgBE- <i>lacZ</i> (proportion)*	Cuticle: leg to wing (frequency)
<i>y^{flp}; vgBE-LacZ/+ ; Act>>wg/+</i>	33/104 (31.7%)	<i>n</i> =23 (5%)	17/69 (25%)
<i>y^{flp}; vgBE-LacZ/+ ; Act>>wg, Scm^{+/+}/Scm^{D1}</i> (heterozygous loss of function)	28/85 (33%) <i>P</i> =0.99	<i>n</i> =28 (5%) <i>P</i> =0.17	14/40 (35%) <i>P</i> =0.25
<i>y^{flp}; vgBE-LacZ/+ ; Act>>wg, E(z)^{+/+}/E(z)⁶¹</i> (heterozygous loss of function)	41/51 (80%) <i>P</i> ≤0.001	<i>n</i> =41 (6%) <i>P</i> =0.10	14/42 (33%) <i>P</i> =0.32
<i>y^{flp}; vgBE-LacZ/+ ; Act>>wg, P^c^{+/+}/P^c^l</i> (heterozygous amorph)	29/58 (50%) <i>P</i> ≤0.05	<i>n</i> =29 (5%) <i>P</i> =0.14	9/36 (25%) <i>P</i> =0.97
<i>y^{flp}; vgBE-LacZ/+ ; Act>>wg, E(P^c)^{+/+}/E(P^c)^l</i> (heterozygous)	22/37 (59%) <i>P</i> ≤0.01	<i>n</i> =22 (2%) <i>P</i> <0.05	7/21 (33%) <i>P</i> =0.4
<i>y^{flp}; vgBE-LacZ, Su(z)2^{+/+}/Su(Z)2^l; Act>>wg/+</i> (heterozygous antimorph)	0/24 (0%) <i>P</i> ≤0.01		Ø [†]
<i>y^{flp}; vgBE-LacZ, Su(z)2^{+/+}/Su(Z)2^{l,b7}; Act>>wg/+</i> (heterozygous loss of function)	0/27 (0%) <i>P</i> ≤0.01		Ø [†]
<i>y^{flp}; vgBE-LacZ/+ ; Act>>wg, brm^{+/+}/brm²</i> (heterozygous amorph)	23/30 (77%) <i>P</i> ≤0.001	<i>n</i> =23 (2%) <i>P</i> ≤0.0001	24/41 (59%) <i>P</i> ≤0.001
<i>y^{flp}; vgBE-LacZ/+ ; Act>>wg, osa^{+/+}/osa²</i> (heterozygous hypomorph)	13/18 (72%) <i>P</i> ≤0.01	<i>n</i> =13 (3%) <i>P</i> <0.05	11/40 (28%) <i>P</i> =0.74
<i>y^{flp}; vgBE-LacZ/Act>>wg ; lama⁴¹⁰/lama⁴¹⁰</i> (homozygous loss of function)	20/67 (30%) <i>P</i> =0.71	<i>n</i> =20 (2%) <i>P</i> <0.01	5/35 (15%) <i>P</i> =0.2

*Percent of total median area.

[†]No adult survivors.