

Shear-sensitive adhesion enables size-independent adhesive performance in stick insects. (Supplemental Information)

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Table S1: Scaling coefficients were obtained with both ordinary least squares and major axis regression. The effect of shear forces on the scaling of adhesive forces is consistent across both regression models, although the exact scaling coefficients differ slightly.

<i>Ordinary least squares regression</i>	Slope	Elevation	Experimental condition
Single pad adhesion against mass	0.34 (0.27, 0.40)	-1.63 (-1.77, -1.49)	No shear force
Single pad adhesion against mass	0.71 (0.61, 0.82)	-1.91 (-2.13, -1.69)	Area-scaled shear force
Single pad adhesion against mass	0.86 (0.70, 1.03)	-0.56 (-0.69, -0.42)	Mass-scaled shear force
Whole body adhesion against mass	0.68 (0.61, 0.75)	-2.22 (-2.55, -1.90)	Shear force not controlled
Single pad adhesive stress against mass	0.31 (0.15, 0.46)	0.40 (0.11, 0.69)	Mass-scaled shear force
Contact area against mass	0.68 (0.62, 0.74)	3.12 (3.00, 3.24)	Area-scaled normal load
<i>Reduced major axis regression</i>	Slope	Elevation	Condition
Single pad adhesion against mass	0.43 (0.37, 0.50)	-1.82 (-1.96, -1.68)	No shear force
Single pad adhesion against mass	0.76 (0.7, 0.88)	-2.01 (-2.23, -1.80)	Area-scaled shear force
Single pad adhesion against mass	0.94 (0.79, 1.23)	-0.62 (-0.76, -0.49)	Mass-scaled shear force
Whole body adhesion against mass	0.71 (0.65, 0.79)	-2.36 (-2.69, -2.04)	Shear force not controlled
Single pad adhesive stress against mass	0.45 (0.33, 0.62)	0.13 (-0.16, 0.43)	Mass-scaled shear force
Contact area against mass	0.70 (0.64, 0.76)	3.08 (2.96, 3.20)	Area-scaled normal load

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