

Table S1. Complete data for the animals studied.

Animals		Body mass, g	Spatula width, μm	Spatulae density, mm^{-2}	Pad area, mm^2	Number of spatulae*	Total peeling line, m	Data from
Flies	<i>Calliphora vicina</i>	0.05	1.47	72000	0.227	16326	0.024	1
	<i>Drosophila melanogaster</i>	0.0013	1.87	100000	0.050	5000	0.00933	1
	<i>Lucilia caesar</i>	0.02	2.29	13000	0.532	6915	0.0158	1
	<i>Platycheirus angustatus</i>	0.0483	2.35	54544	0.108	5882	0.0138	1
	<i>Sphaerophoria scripta</i>	0.012	1.84	130911	0.144	18820	0.0346	1
	<i>Episyrpus balteatus</i>	0.0233	1.76	88557	0.160	14157	0.025	1
	<i>Eristalis pertinax</i>	0.0788	1.92	92720	0.955	88516	0.17	1
	<i>Myathropa florea</i>	0.0905	1.67	80486	1.31	105296	0.177	1
	<i>Volucella pellucens</i>	0.164	3.83	48481	0.553	26788	0.103	1
Beetles	<i>Cantharis fusca</i>	0.06	1.59	17372	11.5	199258	0.316	1
	<i>Leptinotarsa decemlineata</i>	0.07	7.38	9115	4.54	41380	0.305	1
	<i>Gastrophysa viridula</i>	0.012	3.35	10000	0.755	7546	0.0253	1
	<i>Chrysolina fastuosa</i>	0.023	7.22	8000	1.38	11067	0.08	1
	<i>Phyllobius pomaceus</i>	0.02	4.76	6500	3.08	19990	0.0952	1
Mites	<i>Tetranychus cinnabarinus</i>	0.000024	1.6	-	-	96	0.000154	2
	<i>Tetranychus urticae</i>	0.000023	2	-	-	32	0.000064	3
Spiders	<i>Cupiennius salei</i>	5	0.903	2000000	7.58	15159172	13.7	1
	<i>Aphonopelma seemannii</i>	9	0.535	3967000	71.5	283690216	152	1
Anoles	<i>Anolis carolinensis</i>	5.5	0.87	830000	60.2	49966000	43.5	4,5
	<i>Anolis sagrei</i>	4.4	0.75	1700000	42.8	72760000	54.6	4,5
Geckos	<i>Lepidodactylus lugubris</i>	1.4	0.3	2400000	24.2	58080000	17.4	4,5
	<i>Gehyra mutilate</i>	1.7	0.2	6100000	36.2	220820000	44.2	4,5
	<i>Gehyra oceanica</i>	7.9	0.2	4800000	138	663360000	133	4,5
	<i>Gecko gekko</i>	43	0.22	18000000	454	8175600000	1799	1,4

*Number of spatulae in all animals except mites was calculated by multiplying the spatulae density by the pad area.

Sources:

1. Data collected by the authors.
2. D. Voigt, Unpublished data.
3. K. Mizutani, K. Egashira, T. Toukai and Ogushi, J. *JSME Int. J. C.-Mech. Sy.*, 2006, **49**, 539-544.
4. D. J. Irschick, C. C. Austin, K. Petren, R. N. Fisher, J. B. Losos and O. Ellers, *Biol. J. Linn. Soc.*, 1996, **59**, 21-35.
5. A. M. Peattie and R. J. Full, *Proc. Natl. Acad. Sci. USA*, 2007, **104**, 18595-18600.