

The substrate as a skeleton: ground reaction forces from a soft-bodied legged animal

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There was an error published in *J. Exp. Biol.* **213**, 1133-1142.

In the original Fig. 5, the scale bar for the fore–aft ground reaction force (fGRF) should be 0.3 body weight (as for the normal ground reaction force). The reaction force in the fore–aft direction is therefore on the same scale as in the vertical direction. In the figure legend, the following sentences should consequently be removed: ‘Note that fGRF (scale bar is 5 BW) is much larger than nGRF (scale bar 0.3 BW).’ and ‘A *Manduca* fifth instar caterpillar covered 33–45% of body length in each crawl.’

This error affects three places in the text but does not change the conclusions or overall message of this paper.

On p. 1138, Results, ‘Prolegs fore-aft loading’, the first sentence should read: ‘The reaction forces in the direction of locomotion (fGRF) are similar in magnitude to the normal loads despite the lack of body dynamics (Fig. 5A).’

On p. 1139, Discussion, ‘Stiff legs push, soft legs pull’, the last sentence should read: ‘Although the nGRFs during horizontal crawling are positive and therefore compress the prolegs (weight-bearing), these forces are fractions of body weight and can be easily supported by baseline body pressure.’

On p. 1140, Discussion, ‘Antagonist stretching and efficiency’, the sentence should read: ‘Forces in the axial direction are responsible for extending the body and restoring muscle length.’

In addition, in Eqns 1 and 3, we only work with the magnitude of acceleration and force. The correct versions of the equations are presented below.

$$|\mathbf{a}| = \frac{d}{t^2} = \frac{8.52(\text{mm})}{1.817^2(\text{s}^2)} = 2.58 \left(\frac{\text{mm}}{\text{s}^2} \right) \quad (1)$$

$$|\mathbf{F}| = m|\mathbf{a}| = 2.5(\text{g}) \times 0.3(\text{BW}) \times 2.58 \left(\frac{\text{mm}}{\text{s}^2} \right) = 1.94(\mu\text{N}) \quad (2)$$

The authors apologize to readers for these errors.