

Table S1. Both gaster width and gaster mass are correlated with head width (a proxy for exoskeletal size), so first-order partial correlations between these three intercorrelated variables were calculated to determine the correlation between gaster width and gaster mass when the effect of head width is removed

First-order partial correlations	$r$	$r^2$	$t$	$P$
Gaster width $\times$ gaster dry mass (excluding head width)	0.74	0.54	9.5	<0.0001
Head width $\times$ gaster width (excluding gaster dry mass)	0.43	0.19	4.2	0.0001
Head width $\times$ gaster dry mass (excluding gaster width)	0.10	0.01	0.9	0.37

Correlation between head width and gaster width ( $r=0.53$ ,  $N=80$ ,  $P<0.0001$ ).  
Correlation between head width and log-transformed gaster dry mass ( $r=0.35$ ,  $N=80$ ,  $P<0.01$ ).  
The correlation between gaster width and gaster dry mass remains strong and significant even when adjusted to control for the effects of correlation with head width:  $r=0.74$ ,  $N=80$ ,  $P<0.000$ .