

Table 1. *Parameters used in the calculation of induced, profile and inertial power*

Symbol	Parameter	Value
$m_b g$	Weight (μN)	10.3 ± 1.27
R	Wing length (mm)	2.47 ± 0.71
S	Total wing area (mm^2)	3.95 ± 0.18
κ	Rankine–Froude correction factor	1.28
$ \overline{d\hat{\phi}/d\hat{t}} ^3$	Mean cube of dimensionless angular velocity	104.5
$(d\hat{\phi}/d\hat{t})_{\max}^2$	Square of maximum dimensionless angular velocity	30.3
\hat{h}	Dimensionless wing thickness	5.4×10^{-4}
\hat{v}	Dimensionless virtual mass	1.146
$\hat{r}_3^3 (S)$	Third moment of wing area	0.242
$\hat{r}_2^2 (m)$	Second moment of wing mass	0.345
$\hat{r}_2^2 (v)$	Second moment of wing virtual mass	0.342
ρ_w	Wing density (kg m^{-3})	1200
ρ	Air density (kg m^{-3})	1.2

The values for the first three terms represent the means \pm s.d. of all 27 flies. For the last 10 terms, a single value was used for all flies (see Materials and methods section for details).

For definitions, see Ellington (1984a).