

The effect of temperature on motility of the nauplius and cypris stages of the acorn barnacle *Semibalanus balanoides*

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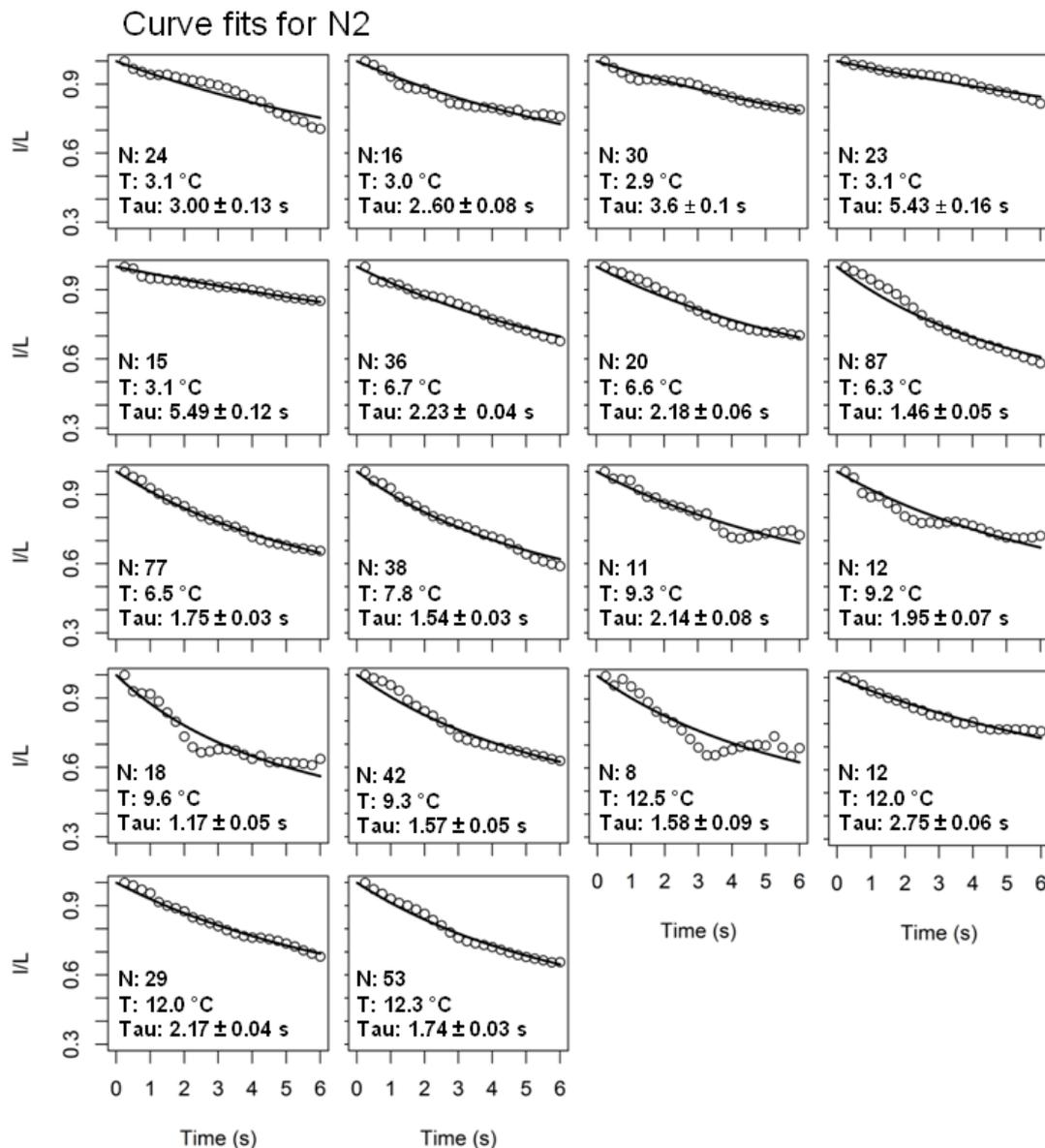


Figure S1. Relationships between the ratio of rms distance to gross distance travelled and time for each video recording of stage 2 nauplii. The open circles represent the data, and the black line represents the curve fit from the correlated random walk model (Eq. 2), from which the persistence time was estimated. Within each panel, the sample size (N), temperature (T), and estimated persistence time (Tau ± SE) are specified.

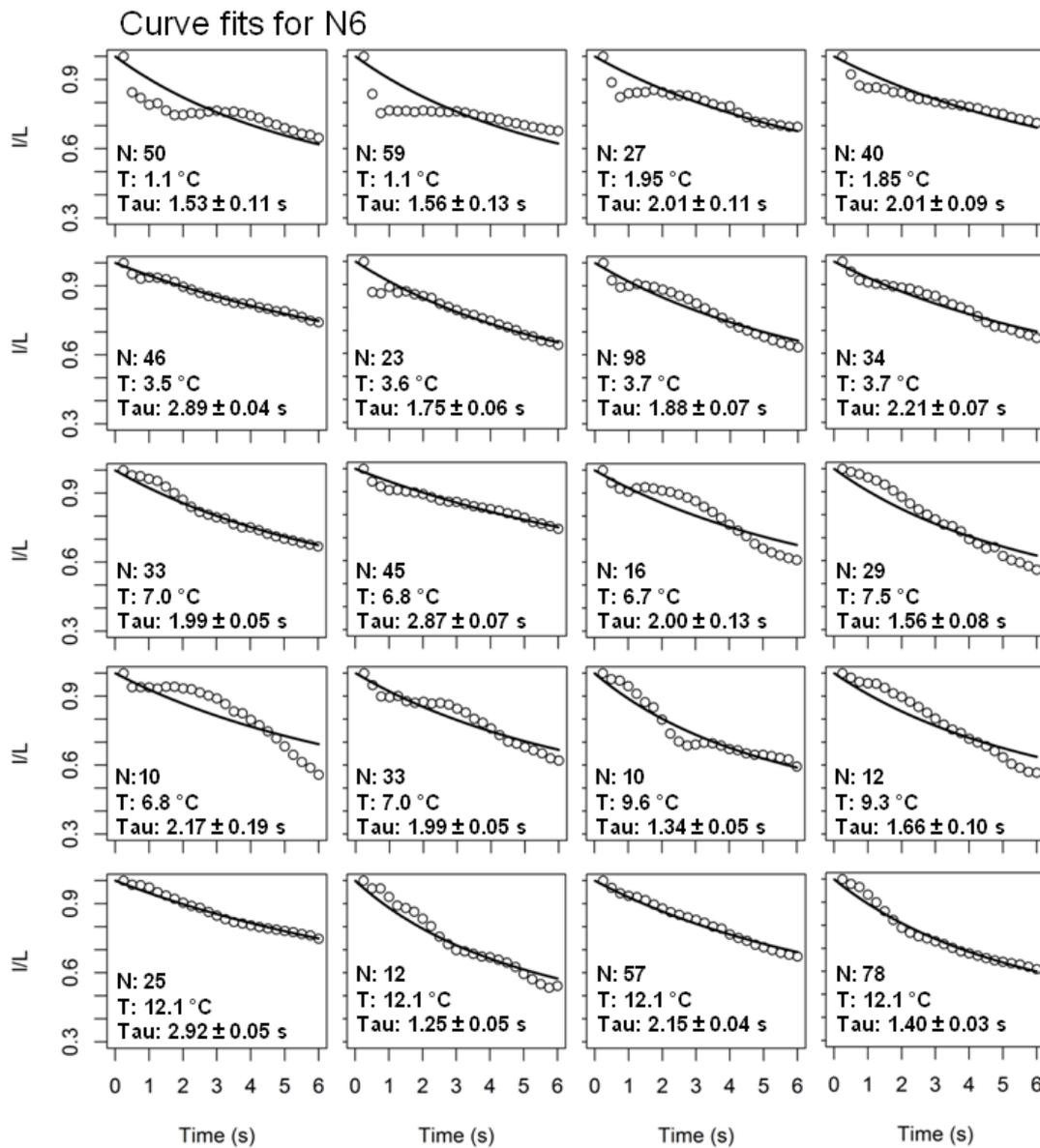


Figure S2. Relationships between the ratio of rms distance to gross distance travelled and time for each video recording of stage 6 nauplii. The open circles represent the data, and the black line represents the curve fit from the correlated random walk model (Eq. 2), from which the persistence time was estimated. Within each panel, the sample size (N), temperature (T), and estimated persistence time (Tau ± SE) are specified.

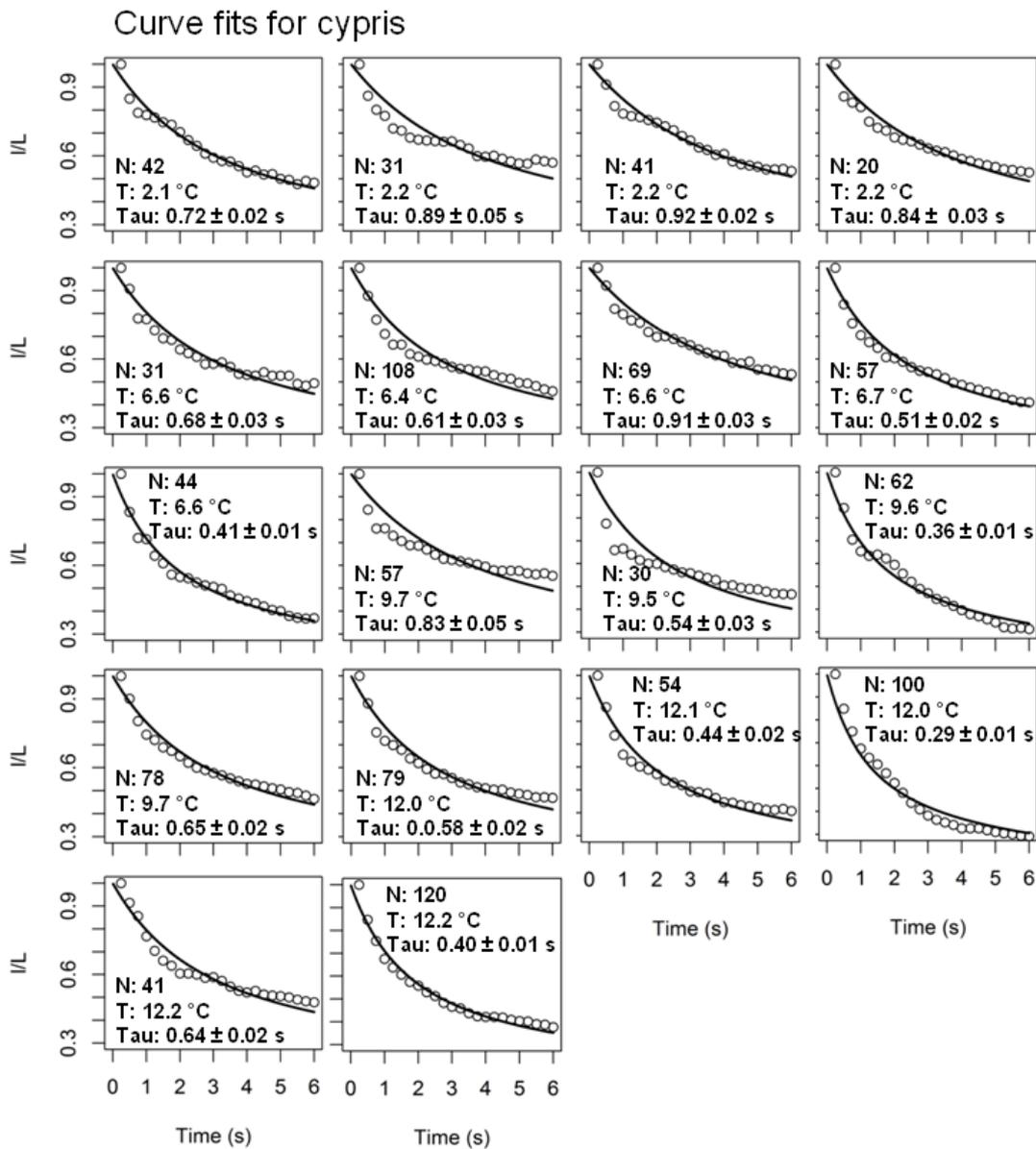


Figure S3. Relationships between the ratio of rms distance to gross distance travelled and time for each video recording of cyprids. The open circles represent the data, and the black line represents the curve fit from the correlated random walk model (Eq. 2), from which the persistence time was estimated. Within each panel, the sample size (N), temperature (T), and estimated persistence time (Tau ± SE) are specified.

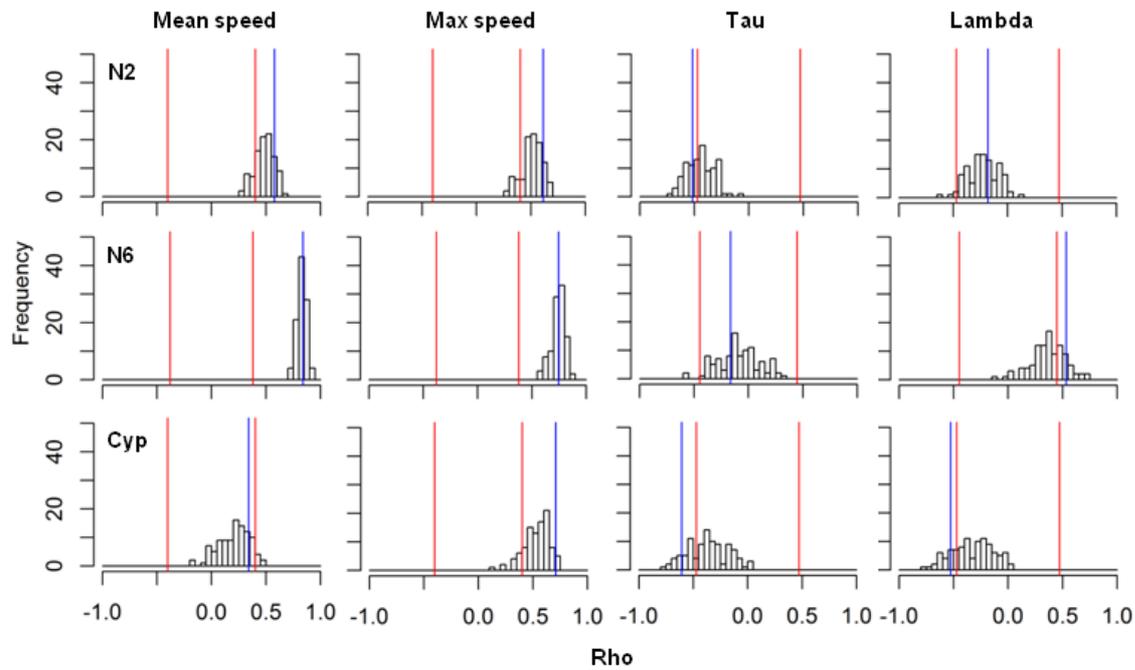


Figure S4. The distribution of Spearman rank coefficients (Rho) obtained from the relationship between swimming metrics (mean swimming speed, max swimming speed, persistence time [tau], and persistence length [lambda]) obtained from the xz plane and temperature from 100 subsets of paths for each Stage (second nauplius, N2, sixth nauplius, N6, and cypris, Cyp). The number of paths within each path subset was set as the minimum number of paths observed from a video-recording in the stage of interest. The red lines indicate critical values of Rho, whereas the blue line indicates the value of Rho obtained using all available paths.

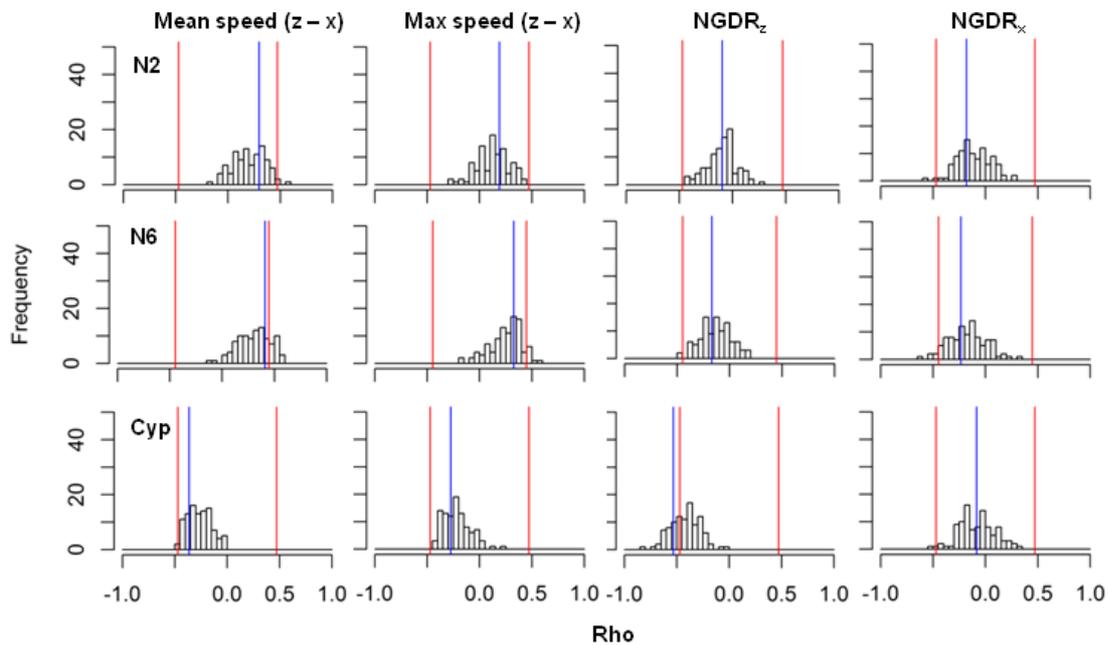


Figure S5. The distribution of Spearman rank coefficients (Rho) obtained from the relationship between swimming metrics (difference between z and x components of the mean and maximum swimming speed, and ratios of the net displacement to gross distance travelled in the x and z directions) and temperature from 100 subsets of paths for each Stage (second nauplius, N2, sixth nauplius, N6, and cypris, Cyp). The number of paths within each path subset was set as the minimum number of paths observed from a video-recording in the stage of interest. The red lines indicate critical values of Rho, whereas the blue line indicates the value of Rho obtained using all available paths.