

## **Molecular and morphological clocks for estimating evolutionary divergence times**

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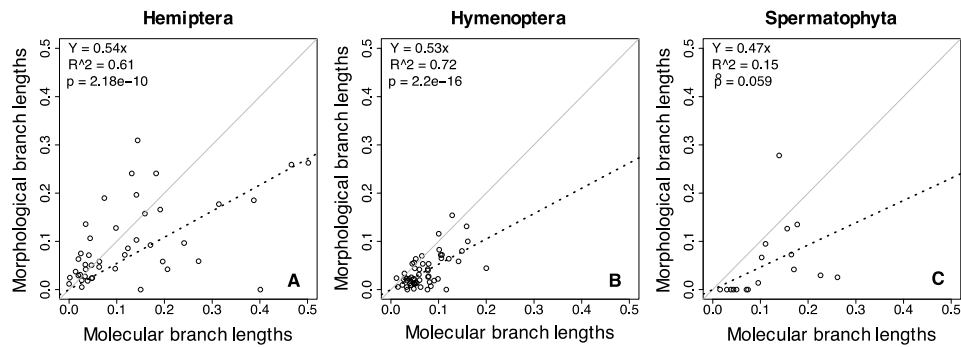
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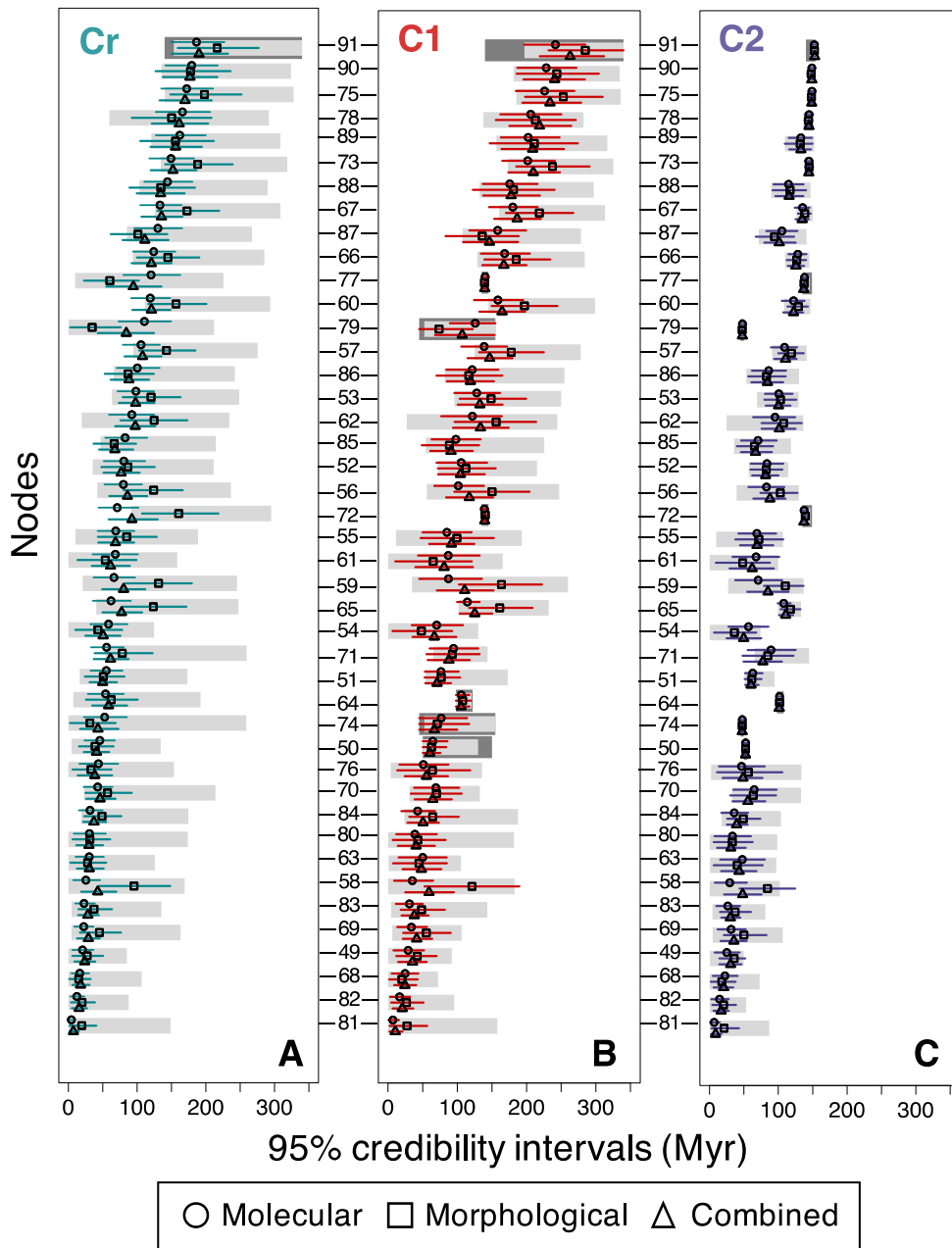
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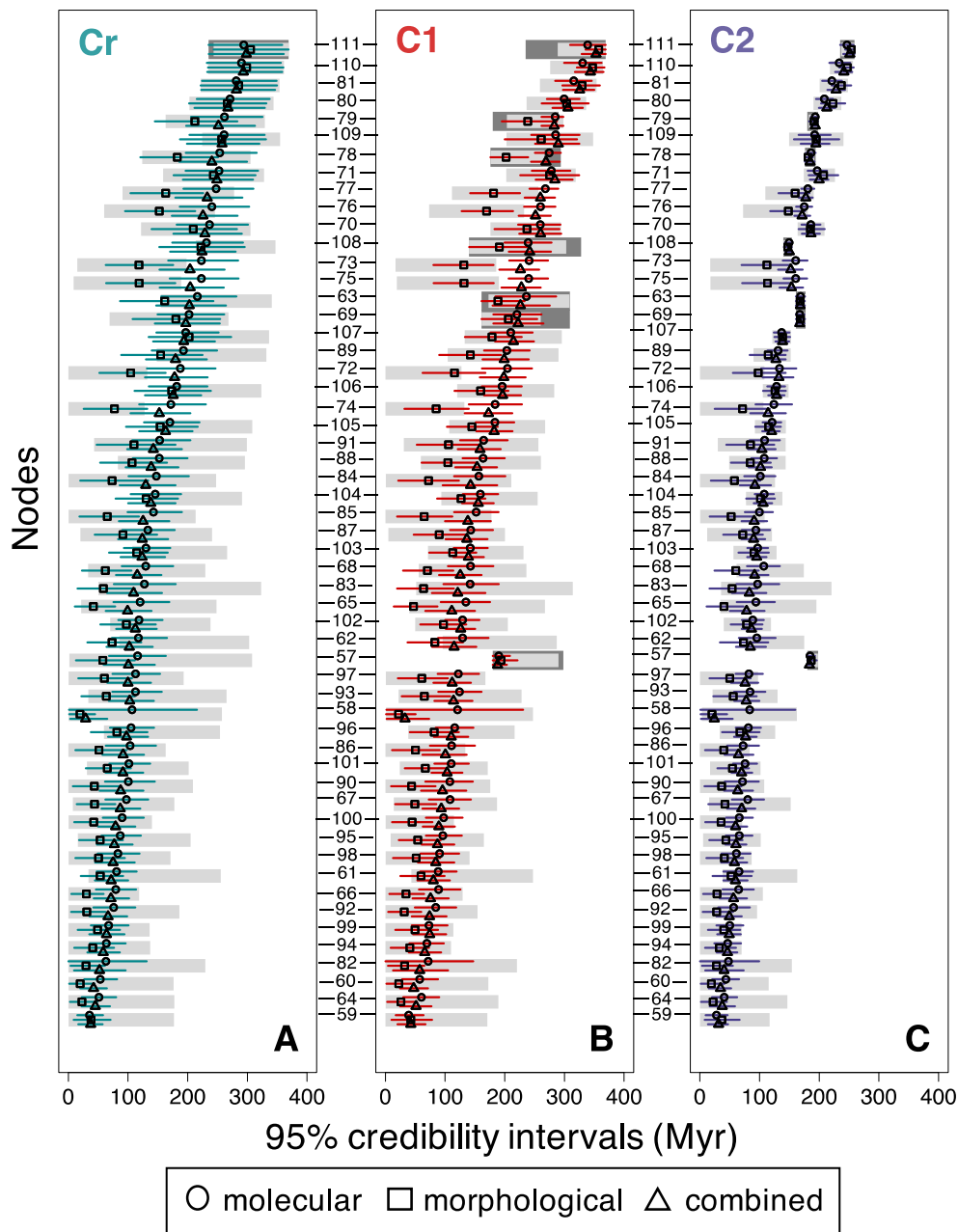
## Supplementary figures



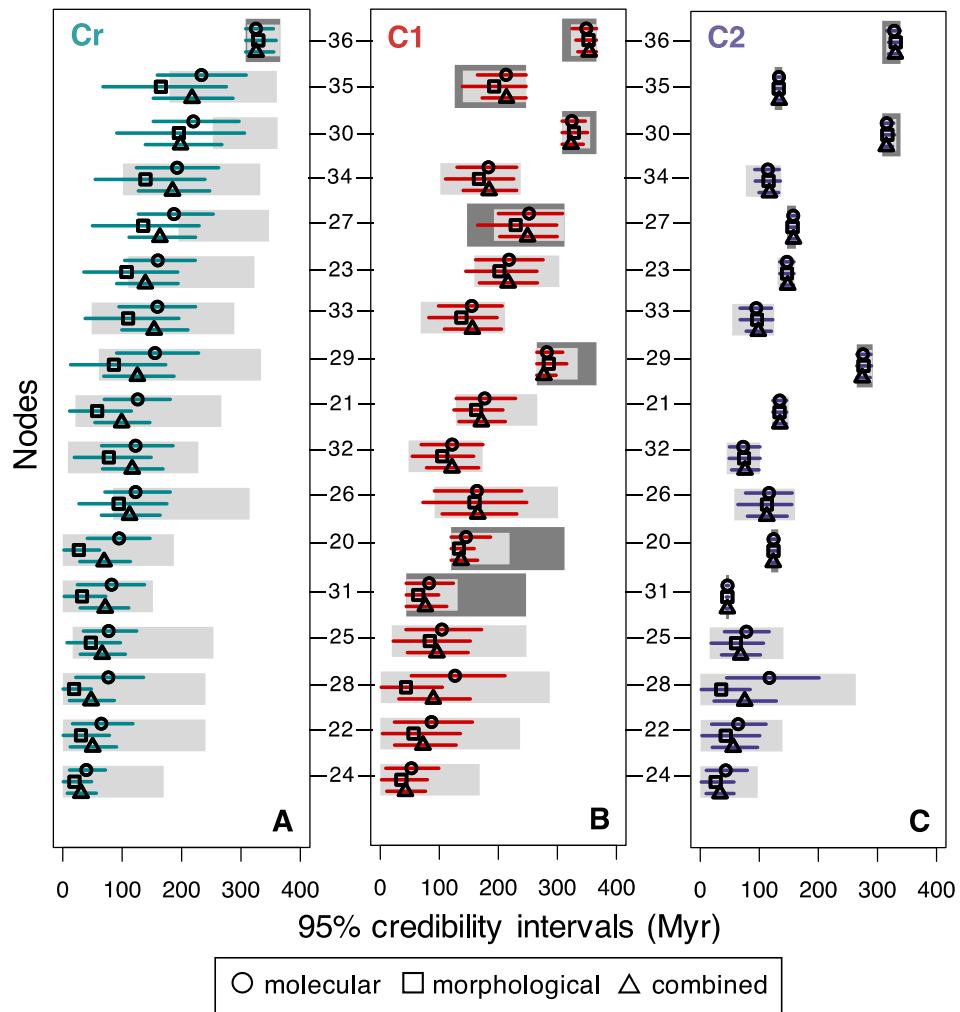
**Figure S1.** The linear relationship between internal branch lengths obtained from molecules versus morphology (excluding terminal branches) for (A) Hemiptera, (B) Hymenoptera, and (C) Spermatophyta. The slope, coefficient of determination ( $R^2$ ) for the linear regression through the origin and p-values are shown. The black dashed line represents the best-fit linear regression through the origin. The solid grey line represents equality between estimates.



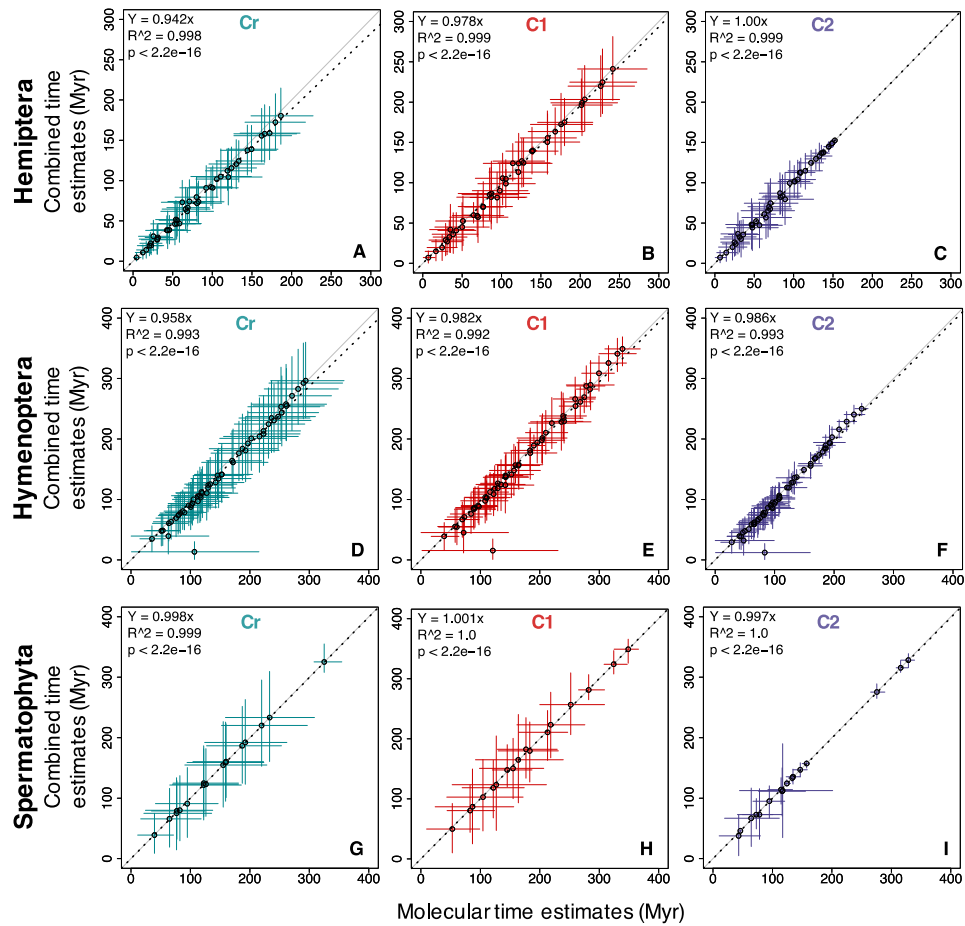
**Figure S2.** Calibration densities (dark grey bands), 95% HPD-CIs in the time prior (light grey bands), and posterior (colored lines) for 47 nodes in the Hemiptera timetrees under calibration strategies (A) Cr-green, (B) C1-red and (C) C2-purple. Calibrated nodes are numbered as in Figure 8.



**Figure S3.** Calibration densities (dark grey bands), 95% HPD-CIs in the time prior (light grey bands), and posterior (colored lines) for 55 nodes in the Hymenoptera timetrees under calibration strategies (A) Cr-green, (B) C1-red and (C) C2-purple. Calibrated nodes are numbered as in Figure 8.



**Figure S4.** Calibration densities (dark grey bands), 95% HPD-CIs in the time prior (light grey bands), and posterior (colored lines) for 17 nodes in the Spermatophyta timetrees under calibration strategies (A) Cr-green, (B) C1-red and (C) C2-purple. Calibrated nodes are numbered as in Figure 8.



**Figure S5.** The posterior mean times (empty black dots) and 95% HPD-CIs under calibration strategies Cr (green lines), C1 (red lines) and C2 (purple lines) for the molecular subsets are plotted against the combined from Hemiptera, Hymenoptera and Spermatophyta datasets using linked clock models. The slope, coefficient of determination ( $R^2$ ) for the linear regression through the origin and p-values are shown. The black dashed line represents the best-fit linear regression through the origin. The solid grey line represents equality between estimates.