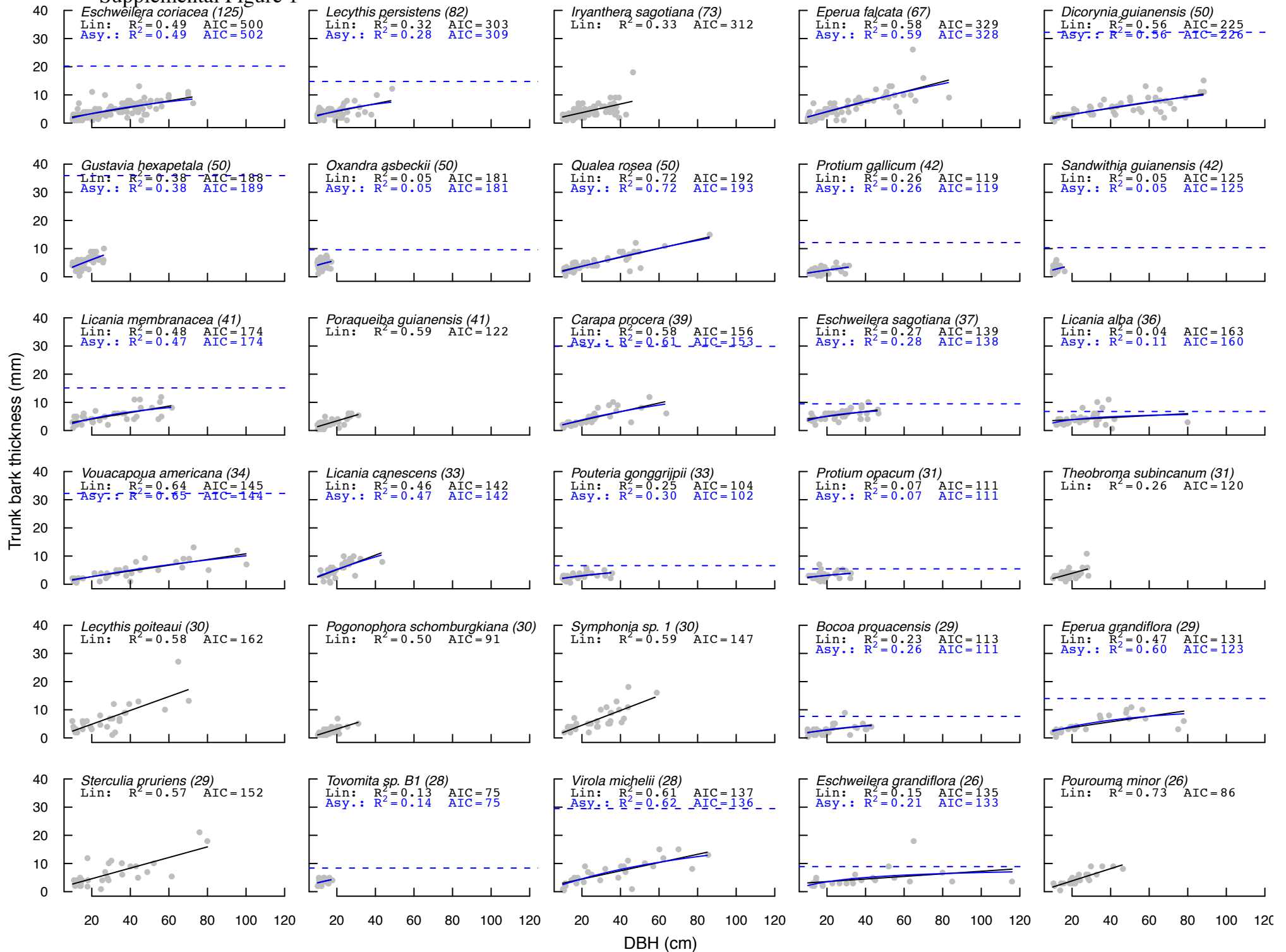


Supplemental Figure 1 The relationship between diameter at breast height (DBH) and trunk bark thickness was evaluated with linear (black) and asymptotic (blue) models for the 30 most common species in the forests of French Guiana. For some species, the asymptotic model would not converge; only linear models were fit for those species. Only for one species (*Carapa procera*) was an asymptotic model preferred on the basis of Akaike's information criterion (AIC). For those species to which an asymptotic model could be fit, the estimated asymptote is shown as a dashed blue line. The estimated asymptotic bark thickness was frequently substantially greater than the maximum bark thickness observed for that species.

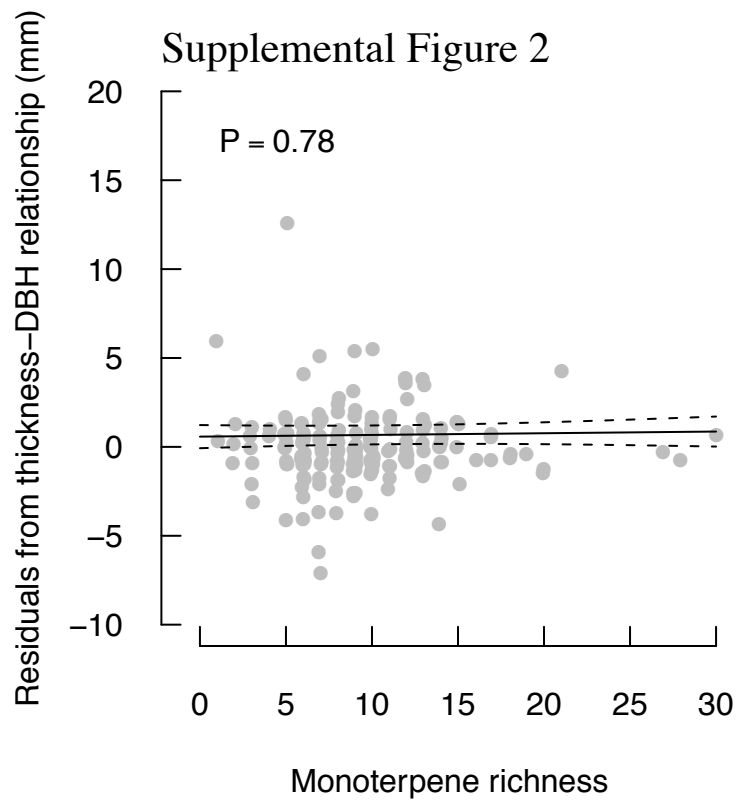
Supplemental Figure 2 There is little evidence that defense against herbivory explains variation in bark thickness in the forests of French Guiana. Species-mean residuals from the bark thickness-diameter relationship are unrelated to the number of volatile terpenes (monoterpenes + sesquiterpenes) expressed upon wounding trunk bark.

Supplemental Figure 3 Increased bark thickness does not appear to limit trunk respiration. Bark thickness was uncorrelated with the efflux of CO₂ from tree trunks.

Supplemental Figure 1



Supplemental Figure 2



Supplemental Figure 3

