

Appendix S1. Descriptions on how environmental variables were measured in each of 12 plots in rustic cocoa and 12 plots in forest. Each plot was 25 m x 25 m in size.

1. Leaf litter depth. We used a ruler to measure the distance between the soil surface and the maximum height of the leaf litter layer in a 1 x 1 m quadrat. At the plot level we calculated a mean value based on five quadrats: one in each corner of the plot, and one in its center.
2. Percentage of leaf litter cover. We estimated the litter cover by determining litter presence/absence in each of the four 50 x 50 cm sections of a 1 x 1 m quadrat. Thus, for each quadrat leaf litter cover could take one of five possible values: 0, 25, 50, 75 and 100%. At the plot level we calculated a mean value based on five quadrats (one in each corner and one in the center of the plot).
3. Shrub density. In 3 x 3 m quadrats we counted the number of shrubs. At the plot level we calculated a mean value based on five quadrats (one in each corner and one in the center of the plot). Thus, density = number of shrubs in 9 m².
4. Density of herbaceous plants. In 3 x 3 m quadrats we counted the number of herbaceous plants. At the plot level we calculated a mean value based on five quadrats (one in each corner and one in the center of the plot). Thus, density = number of herbaceous plants in 9 m².
5. Maximum canopy height. One and the same person estimated canopy height visually in the four corners and the center of each plot. At the plot level we calculated a mean value based on the five measurements.
6. Frequency of humus presence. In the center of 1 x 1 m quadrats we removed the leaf litter to determine the presence of a layer of decomposing organic material, i.e., humus. At the plot level, we counted the number of quadrats (of a total of five: one per corner and one in the center) that had presence of humus and then calculated the relative frequency (proportion).
7. Illuminance (lux). We measured this variable in the center of 1 x 1 m quadrats and at 1.2 m height, using an Extech light meter. Measurements were taken at dusk (18:00-18:15 hrs.) to avoid variation due to sunflecks or varying cloudiness among days. At the plot level we calculated a mean value based on five quadrats (one in each corner and one in the center of the plot).
8. Density of trees with DBH (trunk diameter measured at breast height, i.e., 1.3 m) \geq 10 cm. We counted all the trees in each of three 25 x 3 m strip transects, which were established along two of the plot's borders and along its center. At the plot level we calculated a mean value based on the three strip transects, thus density = number of trees in 75 m².
9. Density of fallen logs and postrate lianas with diameters \geq 10 cm. We counted all the fallen logs and postrate lianas in each of the three 25 x 3 m strip transects. At the plot level we calculated a mean value based on the three strip transects, thus density = number of logs/lianas in 75 m².
10. Presence of water bodies. We determined if water bodies occurred within the plot or up to 5 m from the plot's border.
11. Air temperature in the understory. We measured this variable using one data logger (HOBO U23-001 v2) placed in the center of each plot, at 1 m height. Measurements were taken once each hour, for 15 days. At the plot level we calculated an average value.
12. Air relative humidity in the understory. We measured this variable using one data logger (HOBO U23-001 v2) placed in the center of each plot, at 1 m height. Measurements were taken once each hour, for 15 days. At the plot level we calculated an average value.