

**Table S1.** Soil nutrient concentration (mean  $\pm$  sd) for Cerrado (savanna) and Cerradão (transition forest) permanent plots in Nova Xavantina, Brazil. V (%) = base saturation level; SOM = soil organic matter; ECC = effective cation exchange capacity.

| Soil layer<br>(cm) | V (%) | pH<br>(H <sub>2</sub> O) | Clay          | Silt             | Sand            | SOM<br>(g dm <sup>-3</sup> ) | P<br>(mg dm <sup>-3</sup> ) | Fe<br>(mg dm <sup>-3</sup> ) | K                | Ca              | Mg              | Al              | ECC             |                       |
|--------------------|-------|--------------------------|---------------|------------------|-----------------|------------------------------|-----------------------------|------------------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|
|                    |       |                          |               |                  |                 |                              |                             |                              |                  |                 |                 |                 |                 | (g kg <sup>-1</sup> ) |
| Forest             | 0-10  | 13.3 $\pm$ 14.3          | 5.2 $\pm$ 0.2 | 172.4 $\pm$ 14.2 | 80.0 $\pm$ 11.2 | 747.6 $\pm$ 13.1             | 19.7 $\pm$ 2.9              | 4.6 $\pm$ 0.4                | 189.0 $\pm$ 25.9 | 0.13 $\pm$ 0.02 | 0.09 $\pm$ 0.03 | 1.10 $\pm$ 1.7  | 1.30 $\pm$ 0.23 | 8.7 $\pm$ 1.50        |
|                    | 10-20 | 12.5 $\pm$ 15.0          | 5.4 $\pm$ 0.2 | 207.2 $\pm$ 27.7 | 65.2 $\pm$ 29.0 | 727.6 $\pm$ 28.3             | 11.8 $\pm$ 1.1              | 2.2 $\pm$ 0.5                | 199.3 $\pm$ 30.8 | 0.09 $\pm$ 0.03 | 0.02 $\pm$ 0.01 | 0.85 $\pm$ 1.4  | 1.31 $\pm$ 0.15 | 6.4 $\pm$ 1.40        |
| Savanna            | 0-10  | 7.7 $\pm$ 1.7            | 5.5 $\pm$ 0.1 | 132.8 $\pm$ 11.6 | 89.6 $\pm$ 14.2 | 777.6 $\pm$ 14.2             | 16.6 $\pm$ 1.1              | 3.8 $\pm$ 0.4                | 150.5 $\pm$ 22.9 | 0.14 $\pm$ 0.04 | 0.09 $\pm$ 0.03 | 0.24 $\pm$ 0.06 | 1.03 $\pm$ 0.12 | 6.2 $\pm$ 0.36        |
|                    | 10-20 | 5.4 $\pm$ 1.5            | 5.4 $\pm$ 0.1 | 147.6 $\pm$ 13.1 | 80.0 $\pm$ 11.2 | 772.4 $\pm$ 14.2             | 11.1 $\pm$ 0.3              | 2.3 $\pm$ 0.2                | 194.1 $\pm$ 13.9 | 0.10 $\pm$ 0.02 | 0.02 $\pm$ 0.01 | 0.12 $\pm$ 0.04 | 1.06 $\pm$ 0.15 | 4.5 $\pm$ 0.20        |

**Table S2.** Species and basal area contribution (BA, %) for Cerradão (transition forest) and typical Cerrado (savanna) permanent plots in Nova Xavantina, Brazil.

| <b>Cerradão</b>                                 | <b>BA (%)</b> | <b>Typical Cerrado</b>                | <b>BA (%)</b> |
|---|---------------|---------------------------------------|---------------|
| <i>Hirtella glandulosa</i> Spreng               | 28.82         | <i>Qualea parviflora</i> Mart.        | 18.28         |
| <i>Tachigali vulgaris</i> L.G .Silva & H.C.Lima | 19.51         | <i>Davilla elliptica</i> A. St.-Hil.  | 14.04         |
| <i>Emmotum nitens</i> (Benth.) Miers            | 9.94          | <i>Roupala montana</i> Aubl.          | 9.86          |
| <i>Xylopia aromatica</i> (Lam.) Mart.           | 6.13          | <i>Byrsonima pachyphylla</i> A. Juss. | 9.67          |
| <i>Chaetocarpus echinocarpus</i> (Baill.) Ducke | 3.52          | <i>Eriotheca gracipiles</i>           | 9.48          |
| <i>Tapirira guianensis</i> Aubl                 | 2.84          | <i>Qualea grandiflora</i> Mart.       | 8.12          |
| <i>Myrcia splendens</i> (Sw .) DC               | 2.66          | <i>Aspidosperma tomentosum</i> Mart   | 7.71          |

**Figure S1.** Macronutrients (N, P, K, Ca and Mg) concentration (%) for different plant organ (leaf, branch, outer bark, inner bark, soft wood, hard wood and fine roots) across the most representative species from Cerrado (savanna, left column) and Cerradão (transition forest, right column) vegetation. Species abbreviation refer to the first three letters of the genera followed by the first three letters of the specific epithet, according to Table A2.

