

Supplementary information to the manuscript “Towards a dynamic list of Amazonian tree species”

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Amazon Lowland Forest

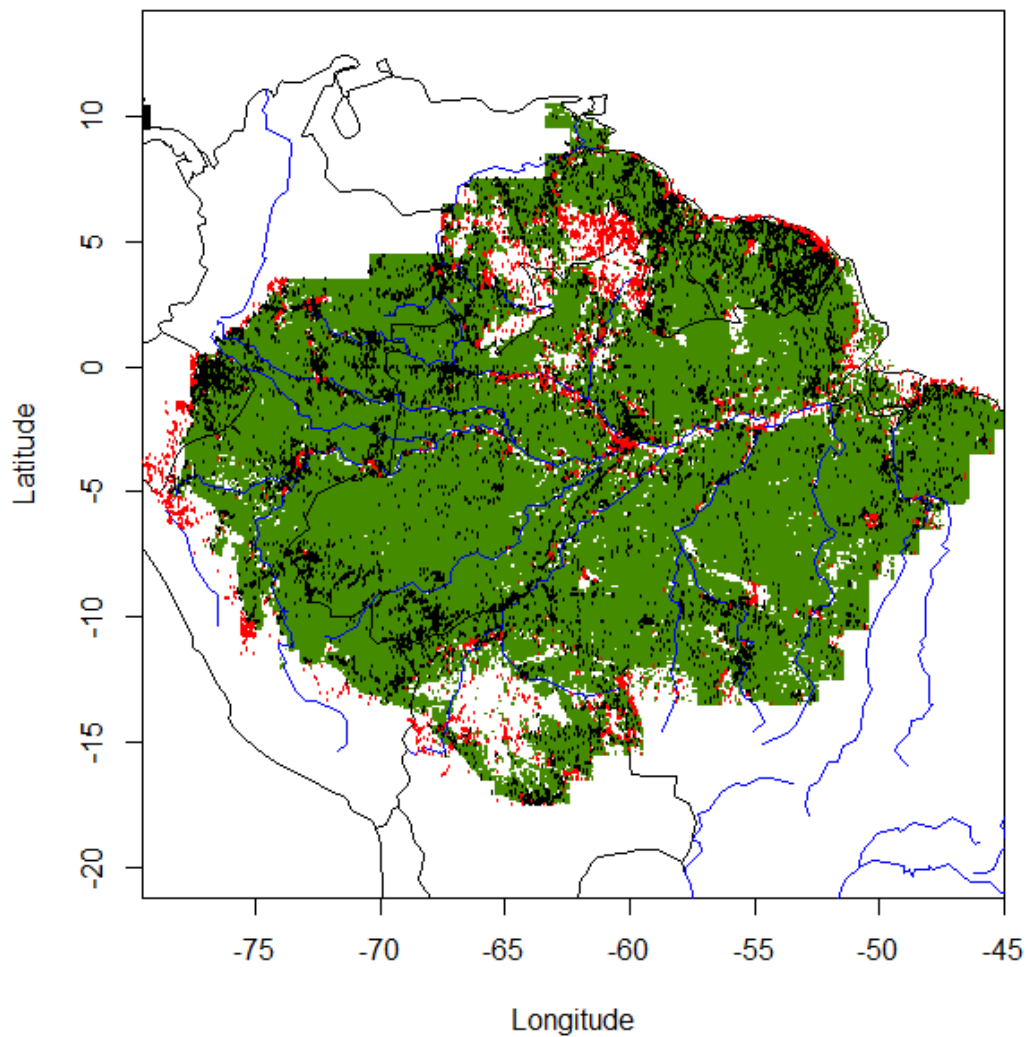


Fig. S1. Map of Amazonian Lowland Forest. The green area represents land area ¹ minus large water bodies ¹, areas over 500 m elevation ², and areas originally without forest ^{3,4}. Black dots: collections used in ⁵ for a checklist of Amazonian trees. Red dots: collections removed based on location outside Amazon lowland forest area. Map created with custom R⁶ script. Base map source (country.shp, rivers.shp): ESRI (<http://www.esri.com/data/basemaps>, © Esri, DeLorme Publishing Company).



Fig. S2. Collections of *Chamaecrista bahiae* (H.S.Irwin) H.S.Irwin & Barneby. **Left:** All collections of *Chamaecrista bahiae* extracted from GBIF (Chamaecrista bahiae (H.S.Irwin) H.S.Irwin & Barneby in GBIF Secretariat (2017). GBIF Backbone Taxonomy. Checklist dataset <https://doi.org/10.15468/39omei> accessed via GBIF.org on 2018-07-14.). **Right:** All collections of *Chamaecrista bahiae* extracted from Herbário Virtual REFLORA (<http://reflora.jbrj.gov.br/reflora/herbarioVirtual/>, accessed February 5, 2018 (CC-BY SA 4.0: <https://creativecommons.org/licenses/by-sa/4.0/>); map data: Google, ©2018 NASA terrametrics).

3. Legend Appendix Checklist Amazon trees 2018

Checklist 2018	Species name in 2018 checklist (bold also in Cardoso et al 2017 ⁷)
Author	Author of Species name in 2018 checklist
Taxonomic verification	1 taxonomically verified presence (1a Cardoso et al; 1b same but other name; 1c other). 2a Reported for Amazonia in Reflora; 2b reported Maranhão, Tocantins in Reflora. 3a identified in ATDN plots, 3b collections in Amazonia in GBIF
new name	Is the name new with respect to the list of ter Steege et al 2016 ⁵ ?
Revised by	revised by ... in Cardoso et al 2017, and others
tree.10cm.DBH Cardoso	Is the species considered a tree by Cardoso et al 2017? (1 = yes)
non.Amazonian Cardoso et al	Is the species considered non-Amazonian by Cardoso et al 2017 (1 = yes)
note	Additional notes
collections in Amazon	Number of GBIF collections (modified from ter Steege et al 2016) in lowland Amazonian forest area (see Fig. S1)
nr. ind. in ATDN plots	Nr of tree individuals in ATDN plots in 2018 (courtesy ATDN 2018) ^{8,9}
est. population in Amazon	Population size in Amazon (¹⁰ log classes: 4 = 10,000-99,000 9 = 1 ⁹ - 9.9 ⁹) (courtesy ATDN 2018) ⁹

Sheet 2 and 3 list the synonyms changes that were applied to the ter Steege et al 2016 list (with sources for the synonymy change), and the species that were deleted from that list, respectively.

4. References

- 1 Environmental Systems Research Institute. ESRI Data & Maps 1999. An ESRI White Paper. (Environmental Systems Research Institute, Redlands, US, 1999).
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- 4 Soares-Filho, B. S. *et al.* (ed Oak Ridge Oak Ridge National Laboratory Distributed Active Archive Center, Tennessee, U.S.A.) (http://daac.ornl.gov/LBA/guides/LC14_Amazon_Scenarios.html, 2013).
- 5 ter Steege, H. *et al.* The discovery of the Amazonian tree flora with an updated checklist of all known tree taxa. *Scientific Reports* **6**, 29549, doi:10.1038/srep29549 (2016).
- 6 R: A language and environment for statistical computing (R Foundation for Statistical Computing, Vienna, Austria, 2017).
- 7 Cardoso, D. *et al.* Amazon plant diversity revealed by a taxonomically verified species list. *Proceedings of the National Academy of Sciences* **114**, 10695-10700, doi:10.1073/pnas.1706756114 (2017).
- 8 ter Steege, H. *et al.* Hyperdominance in the Amazonian Tree Flora. *Science* **342**, 1243092, doi:10.1126/science.1243092 (2013).
- 9 Amazon Tree Diversity Network. <<http://web.science.uu.nl/Amazon/ATDN/>> (2018).