

TABLE S1. List of functional traits measured in the 36 studies comparing co-occurring trees and lianas. The functional traits are organized by plant economics spectrum. Only traits measured at the individual level are considered.

Plant economics spectrum	Functional traits
LEAF TRAITS	<p>(SLA) Specific Leaf Area; (LMA) Leaf Mass per Area; (LA) Leaf Area; (LS) Leaf Size; (LW) Leaf weight; (Lth) Leaf Thickness; (LL) Leaf Life Span; (LTD) Leaf Tissue Density; (LWC) LEAF Water content; (LDMC) Leaf dry matter content; (CC_{mass}) Leaf construction cost per unit dry mass; (CC_{area}) Leaf construction cost per unit leaf area; (MC_{mass}) Leaf Maintenance cost per unit dry mass; (MC_{area}) Leaf Maintenance cost per unit Leaf area; (PI) Petiole length; (A₁:A_s) Leaf/sapwood area ratio; (DW/SW) Leaf dry weight to saturated fresh weight; (C_{leaf}) Pre turgor loss leaf hydraulic capacitance; (Fps) specific force to punch; (A_{max}) Maximum net leaf CO₂ assimilation rate; (A_{area}) maximum leaf CO₂ assimilation capacity per unit leaf area; (A_{mass}) maximum leaf CO₂ assimilation capacity per unit leaf mass; (A_{sat}) Light saturated leaf CO₂ assimilation capacity; (An) Photosynthetic nitrogen use efficiency; (gs) Stomatal conductance; (gw) Time integrated stomatal conductance to water vapour; (GC_L) Guard cell length; (Sd) Stomatal density; (c_v/c_a) intercellular to atmospheric carbon dioxide ratio; (K_i) Leaf specific hydraulic conductivity; (WUE) Water use efficiency; (PNUE) Photosynthetic Nitrogen-use efficiency; (PPUE) Photosynthetic Phosphorus-use efficiency; (N_{mass}) Mass based nitrogen content; (N_{area}) Area based nitrogen content; (K_{mass}) Mass based potassium content; (K_{area}) Area based potassium content; (Mg_{mass}) Mass based magnesium content; (Mg_{area}) Area based magnesium content; (Ca_{area}) Area based calcium content; (Ca_{mass}) Mass based calcium content; (N_{leaf}) total nitrogen content; (C_{leaf}) total carbon content; (P_{leaf}) total phosphorus content; (C/N) Carbon to Nitrogen Ratio; (C/P) Carbon to phosphorus ratio; (N/P) Nitrogen to phosphorus ratio; (V_{max}) Maximum carboxylation capacity; (J_{max}) Maximum rate of electron transport; (PPFD) Photosynthetically active photon flux density; (Rd_{area}) Area-based dark respiration; (Rd_{mass}) Mass-based dark respiration; (δ¹³C) Leaf Carbon 13 isotope; (δ¹⁵N) Leaf Nitrogen 15 isotope; (δ¹⁸O) Leaf Oxygen 18 isotope; (Chl) Chlorophyll content; (Car) Carotenoid content; (Ψ_{leaf pd}) Pre-down leaf water potential; (Ψ_{leaf md}) Mid-day leaf water potential; (LAR) Leaf area ratio; (LMF) Leaf mass fraction; (LAD) Leaf area density; (π_{tlp}) Leaf turgor loss point; (π_{tlp100}) Osmotic potential at full turgor; (R_{550nm}) Reflectance at 550nm; (R_{800nm}) Reflectance at 800nm; (mSR₇₀₅) Modified simple ratio at 705nm; (mND₇₀₅) Modified Normal Difference at 705nm; (WBI₉₇₀) Water Band Index; (R_m) Respiration at 25C per unit mass; (TNC) Non-structural carbohydrates; (Q₁₀) Proportional increase in respiration with 10C warming; (e_i) Vapor pressure in leaf intercellular air spaces; (ASM) Air space mesophyll; (E) Transpiration rate; (NAR) Net assimilation rate; (pex) Proportion of O atoms exchanging with medium water during cellulose synthesis; (px) Proportion of water in developing cells not subject to evaporative 18O enrich;</p>
STEM TRAITS	<p>(K_s) Theoretical specific xylem hydraulic conductivity; (K_p) Potential hydraulic conductivity; (ρ_{wood}) wood specific gravity*; (P50) Water potential at 50 percent loss of conductivity; (BT) Bark thickness; (SW) Stem weight; (IL) Internode length; (TwB) Twig biomass; (N_{stem}) Stem nitrogen content; (Hv) Huber Value; (V_n) Number of vessels per area; (VA) Vessel lumen area; (MVL) Maximum vessel length; (MLV) Mean longest vessel; (D_v) Vessel diameter; (MVD) Mean vessel lumen diameter; (BVD) Biggest vessel lumen diameter; (WLR) Wall-lumen ratio; (D_H) Hydraulically weighted vessel diameter; (Parenchyma) Parenchyma cross sectional area; (Pp) Percentage of xylem</p>

	represented by parenchyma; (Pf) Percentage of xylem represented by fibers; (D _F) Fiber diameter; (Pv) Percentage of xylem represented by vessels; (A _s) Sapwood cross-sectional area; (XA) Xylem cross sectional area; (Ψ _s) xylem water potential; (θ _{s,x}) sapwood saturated water content; (Aph) Phloem area; (Api) Pith area; (MOR) Modulus of Rupture; (E _x) sapwood bulk elastic modulus; (Pe) Air entry threshold; (SD) stem density; (SMF) Stem mass fraction; (π _{o,x}) sapwood osmotic potential at full turgor; (Ψ _{tlp,x}) sapwood water potential at turgor loss point; (RWC _{tlp,x}) relative water content at turgor loss point; (Cx) sapwood capacitance; (δ13C) Stem Carbon 13 isotope; (δ15N) Stem Nitrogen 15 isotope; (DMD) Dry mass density; (Gas content) Gas volumetric content;
ROOT TRAITS	(SRL) Specific Root Length; (RMF) Root mass fraction; (RMD) Root Mass Density; (RD) Root diameter; (RTD) Root tissue density; (RBI) Root branching intensity; (C _{root}) total root carbon; (N _{root}) total root nitrogen; (P _{root}) total root phosphorus; (C:N _{root}) root carbon to nitrogen ratio; (C:P _{root}) Root carbon to phosphorus ratio; (N:P _{root}) root nitrogen to phosphorus ratio; Mycorrhizal colonization; nodule biomass;
WHOLE PLANT TRAITS	(NUE) Whole-plant N use efficiency; (Rp) The 13C/12C ratio of plant C; (TEc) Whole-plant transpiration efficiency of C gain; (v) Whole-plant transpiration efficiency of C gain;

* Most accepted name for the functional trait referred as “wood density” (WD) in the studies selected for review.