**The list of leaf traits, units and abbreviations**

Leaf mass per area, g m-2, LMA

Area-based max. net photosynthetic rate (*A*max), μmol m-2 s-1, *A*a

Mass-based max. net photosynthetic rate (*A*max), nmol g-1 s-1, *A*m

Area-based max. water vapour stomatal conductance (*G*max), mol m-2 s-1, *G*a

Minimum leaf internal CO2 concentration, μmol mol -1, *C*i

Intrinsic water-use efficiency (*A*max/*G*max), μmol mol -1, iWUE (A/G)

Leaf area-based nitrogen (N) content, mmol m-2, Na

Leaf area-based phosphate (N) content, mmol m-2, Pa

Leaf area-based magnesium (Mg) content, mmol m-2, Mga

Leaf area-based calcium (Ca) content, mmol m-2, Caa

Leaf area-based potassium (K) content, mmol m-2, Ka

Leaf mass-based nitrogen (N) concentration, μmol g-1, Nm

Leaf mass-based phosphate (N) concentration, μmol g-1, Pm

Leaf mass-based magnesium (Mg) concentration, μmol g-1, Mgm

Leaf mass-based calcium (Ca) concentration, μmol g-1, Cam

Leaf mass-based potassium (K) concentration, μmol g-1, Km

Nitrogen-based max. net photosynthetic rate, μmol molN-1 s-1, PNUE

Phosphate-based max. net photosynthetic rate, mmol molP-1 s-1, PPUE

Magnesium-based max. net photosynthetic rate, mmol molMg-1 s-1, PMgUE

Leaf carbon/nitrogen ratio, (non-dimension), C/N

Leaf stable carbon isotope ratio, ‰, Delta13C

**Table data list**

MDF\_Data.csv : Ecophysiological data list of the top canopy tree species in the mixed deciduous forest (MDF) at the Mae-Klong Watershed Research Station in Thailand

DEF\_Data.csv : Ecophysiological data list of the top canopy tree species in the dry evergreen forest (DEF) at the Sakaerat Environmental Research Station in Thailand

DDF\_Data.csv : Ecophysiological data list of the top canopy tree species in the dry dipterocarp forest (dry deciduous forest) (DDF) at the Sakaerat Environmental Research Station in Thailand

**n/a**

**“n/a” means data that we could not obtain in this study.**