LIST OF ABBREVIATIONS

The metric system is adopted as standard. You should use the international system of units. If non-standard abbreviations must be used they should be defined in the text.

Use the fundamental quantity with appropriate prefix:

kilo	k
mega	M
giga	G
tera	T
milli	m
micro	μ
nano	n
pico	p

Units of length:

<u>meter</u>	m
kilometer	km
centimeter	cm
millimeter	mm
micrometer	μm
nanometer	nm

Units of area:

<u>square meter</u>	m^2
kilometer	km^2
hectare (10 000 m^2)	ha
square centimeter	cm^2
square millimeter	mm^2

Units of volume:

<u>cubic meter</u>	m^3
cubic centimeter	cm^3
<u>liter</u>	L
milliliter	mL
microliter	μL

Units of mass:

gram	g
kilogram	kg
tonne	t
milligram	mg
microgram	μg

Units of density :

g/cm^3, kg/m^3, t/m^3, g/L, kg/L

Units of pressure:

pascal	Pa
megapascal	MPa

Units of time:

second	s
minute	min
hour	h
day, week, month, year	day, week, month, year

Units of temperature:

Celsius	°C
Kelvin	K

Additional physical units:

dalton	Da
hertz	Hz
joule	J
volt	V
watt	W

Relative units:

parts/million parts	ppm
parts/billion parts	ppb
parts/trillion parts	ppt
percentage	%
weight	w
volume	V

Units of electrical conductivity :

siemens per meter	S/m
millisiemens per meter	mS/m
(mS/cm; μS/cm)	
ohm	Ω

Units of concentration:

<u>mole per kilogram (liter)</u>	mol/kg(mol/L)
millimole (micromole)	mmol/kg
per kilogram	(μmol/kg)
gram per kilogram	g/kg
milligram per kilogram	mg/kg
microgram per kilogram	μg/kg

Similar units for volume:

g/L, mg/L, mg/mL, μg/L, μg/mL

Units of irradiation:

watt per square meter	W/m^2

Units of photon flux density :

mol per square meter per second	$mol/m^2/s$

Units of yield, sampling and rate:

kilogram per hectare	kg/ha
tonnes per hectare	t/ha
liter per hectare	L/ha
gram per hectare	g/ha
gram per square meter	g/m^2
gram per kilogram	g/kg
milligram per kilogram	mg/kg

Unis of cation exhance capacity (CEC):

mmol of chemical equivalent per kilogram of soil or another materials $mmol_+/kg$

Similar units for volume of cation exchange.

Content of nutrients in plants, soils and another materials is necessar y to state always as pure element (C, N, P, K , Ca, S, Fe, etc.), so dose of nutrients or compounds, for example 1 g S applied in the form of calcium sulphate ($CaSO_4$). You should use the dose of nutrients as pure element per specified area, or weight soil, container, etc. and you should use the slash, for example 110 kg N/ha, or write 110 kg N per ha. You should **not** use the indexes as 110 kg N/ha, (1 g N/container, 10 mg Cu/kg soil).

Forms of nutrients:

Nitrite nitrogen	$NO_2^- \text{-N}$
Nitrate nitrogen	$NO_3^- \text{-N}$
Ammonia	$NH_4^+ \text{-N}$
Total nitrogen	N_{tot}
Sulfur in sulfate	$SO_4^{2-} \text{-S}$

You should use the content of organic matter in soils (topsoil, soil organic matter, etc.) entirely as C.

You should specif y the form of determined element, possibly the method of determination, by using subscripts. For example, content of carbon determined by oxidometric methods as C_{ox}, futhermore C_{org}, C_{tot}, C_{ox} humic acids and its solubility C_{hwe}, etc.

You should use the FAO guidelines (Food and Agriculture Organization) for characterization of habitat conditions (soil type description according WRB – World References Base for Soil Resources 2006 version, soil textural class), as well as altitude, average rainfall and temperature, and if possible coordinates as well.

You should assess the weather v different years and months according to recommendatons of the World Meteorological Organization (WMO) – according to deviations from long-term average or normal.

You should use the method of nutrients determination in soil, for example content of P (Olsen, Egner, Mehlich III, etc.), as P_{Olsen}, P_{Egner} etc.

You should not use the symbol of magnesium (Mg) for 1000 kg (megagram), but use as the unit tonne (t). Don´t use the symbol M for the expression of amount of substance, but use the mol (mmol, μmol).

To simplify the expression of contents, use relative units, especially % (10^{-2}) and ppm (10^{-6}). If it is possible you should keep the same unit in tables and graphs (in any case you should not use absolute and relative units, such as g/kg and %).

Statistical symbols and abbreviations

analysis of variance	ANOVA	variance (sample)	s^2
coefficient of variation	CV	standard deviation (sample)	SD
degree of freedom	df	standard error	SE
F-distribution	F	standard error of the differences of means	SED
least significant difference	LSD	standard error of mean	SEM
sample size	n	t-(or Student) test	t
probability	P	mean	x
simple correlation coefficient	r		
simple correlation of determination	r^2	**Additional use symbols**	
multiple correlation coefficient	R	dry weight (matter)	DW (DM)
multiple correlation of determination	R^2	fresh weight	F W (FM)
		water use efficiency	WUE