

Table 2S. Definition of terms and formulae of JIP-test parameters and expressions

Parameter	Description
<i>Data extracted from the recorded fluorescence transient</i>	
F_0	Minimal Fluorescence Intensity (All PSII Reaction Centers (RCs) Are Open)
F_m	Maximal Fluorescence Intensity (All PSII RCs Are Closed)
F_{150}	Fluorescence Intensity At 150 μ s
F_{300}	Fluorescence Intensity At 300 μ s
F_I	Fluorescence Intensity At 2 ms (I Step)
F_J	Fluorescence Intensity At 30 ms (J Step)
F_V	Maximal Variable Fluorescence; $F_V = F_m - F_0$
t_{max}	Time Needed To Reach F_m
V_J	Relative Variable Fluorescence At J Step; $V_J = (F_J - F_0) / (F_m - F_0)$
V_I	Relative Variable Fluorescence At I Step; $V_I = (F_I - F_0) / (F_m - F_0)$
M_0	Initial Slope Of Relative Variable Fluorescence; $M_0 = 4(F_{300\mu s} - F_0) / (F_m - F_0)$
<i>Density Of Reaction Centres</i>	
RC/CS_0	Density Of Reaction Centres Per Excited Cross Section; $RC/CS_0 = F_V / F_m \cdot (V_J / M_0) \cdot F_0$
<i>Flux Ratio Or Yield</i>	
F_V / F_m	Maximum Quantum Yield Of PSII; $F_V / F_m = [1 - (F_0 / F_m)] = TR_0 / ABS$
<i>Specific Fluxes Per Active Reaction Center</i>	
ABS/RC	Absorption Per Active Reaction Centre; $ABS/RC = M_0 \cdot (1/V_J) \cdot [1/(F_V/F_m)]$
TR_0/RC	Trapping Per Active Reaction Centre; $TR_0/RC = M_0 \cdot (1/V_J)$
ET_0/RC	Electron Transport Per Active Reaction Centre; $ET_0/RC = M_0 \cdot (1/V_J) \cdot (1 - V_J)$
DI_0/RC	Dissipation Per Active Reaction Centre; $DI_0/RC = (ABS/RC) - (TR_0/RC)$
<i>Performance Index</i>	
PI_{ABS}	Performance Index On Absorption Basis; $PI = (RC/ABS) \cdot (TR_0/DI_0) \cdot [ET_0/(TR_0 - ET_0)]$
RC/ABS	Density Of Reaction Centres On Chlorophyll <i>a</i> Basis; $RC/ABS = (RC/TR_0) \cdot (TR_0/ABS) = [(F_J - F_0) / 4(F_{300\mu s} - F_0)] \cdot (F_V/F_m)$
TR_0/DI_0	Flux Ratio Trapping Per Dissipation; $TR_0/DI_0 = F_V/F_0$
$ET_0/(TR_0 - ET_0)$	Electron Transport Beyond QA^- ; $ET_0/(TR_0 - ET_0) = (F_m - F_J) / (F_J - F_0)$

Source: Strasser *et al.* 2004