Table 1 Suppl. Fluorescence indices recorded by fluorescence-based portable sensors and conventional dark-adapted-sample technique used for non-destructive assessment of plant physiological status of apple seedlings cultivated in a climate chamber under different radiation sources [light emitting diodes (LED) and compact fluorescence lamps (CFL)] and watering regimes (fully watered and water deficit). FRT = far-red transmission (~800 nm), RT = red transmission (~710 nm), FRF_R = far-red fluorescence (FRF, 720 - 755 nm) with red excitation light (R* 630 nm), RF_R = red fluorescence (680 - 690 nm) with red excitation light (R* 630 nm), FRF_UV = far-red fluorescence with UV excitation (UV-A* 375 nm), FER_UV = fluorescence excitation ratio with red and UV excitation, F_v = variable fluorescence yield, F_m = maximal fluorescence yield, F_o= dark fluorescence yield.

Index	Sensor	Description	Formula
Chl Index	Dualex®	chlorophyll content estimation	FRT - RT/RT
SFR_R	Multiplex®	simple fluorescence ratio (red radiation excitation)	FRF_R/RF_R
NBI	Dualex®	nitrogen balanceiIndex	Chl Index/Flav_Dx
NBI_R	Multiplex®	nitrogen balance index (red light excitation)	FRF_UV/RF_R
Flav_Dx	Dualex®	epidermal flavonol content	Log FRF_R/FRF_UV
Flav_Mx	Multiplex®	epidermal flavonol content	Log (FER_UV^f)
F_v/F_m	Imaging-PAM®	maximum quantum yield of PS II	$(F_m - F_o)/F_m$