

ERRATUM

Erratum to: Fitting net photosynthetic light-response curves with Microsoft Excel – a critical look at the models

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Erratum to: Photosynthetica

DOI: 10.1007/s11099-013-0045-y

A few errors in Table 3, equations 14, 16, 18, 25, 29, and 38, and two supplementary files (ESM4 and ESM9) were found in the above-mentioned paper. The corrected table and equations are published here. However, these errors do not compromise the discussion and analysis in the paper.

The publisher and authors apologize for these errors and for inconveniences they may have caused.

Table 3. The variables calculated from the models. I_{comp} – light compensation point [$\mu\text{mol}(\text{photon}) \text{ m}^{-2} \text{ s}^{-1}$]; I_{max} – light saturation point beyond which there is no significant change in P_N [$\mu\text{mol}(\text{photon}) \text{ m}^{-2} \text{ s}^{-1}$]; I_{sat} – light saturation point [$\mu\text{mol}(\text{photon}) \text{ m}^{-2} \text{ s}^{-1}$]; $I_{sat(50)}$ – light saturation point for $A + R_D$ equal to 50% of P_{Nmax} [$\mu\text{mol}(\text{photon}) \text{ m}^{-2} \text{ s}^{-1}$]; $I_{sat(85)}$ – light saturation point for $A + R_n$ equal to 85% of P_{Nmax} [$\mu\text{mol}(\text{photon}) \text{ m}^{-2} \text{ s}^{-1}$]; $I_{sat(90)}$ – light saturation point for $A + R_n$ equal to 90% of P_{Nmax} [$\mu\text{mol}(\text{photon}) \text{ m}^{-2} \text{ s}^{-1}$]; $I_{sat(95)}$ – light saturation point for $A + R_D$ equal to 95% of P_{Nmax} [$\mu\text{mol}(\text{photon}) \text{ m}^{-2} \text{ s}^{-1}$]; P_{gmax} – maximum gross photosynthetic rate [$\mu\text{mol}(\text{CO}_2) \text{ m}^{-2} \text{ s}^{-1}$]; $P_{N(I_{max})}$ – maximum net photosynthetic rate obtained at $I = I_{max}$ [$\mu\text{mol}(\text{CO}_2) \text{ m}^{-2} \text{ s}^{-1}$]; R_D – dark respiration [$\mu\text{mol}(\text{CO}_2) \text{ m}^{-2} \text{ s}^{-1}$]; $\phi_{(I_{comp})}$ – quantum yield at $I = I_{comp}$ [$\mu\text{mol}(\text{CO}_2) \mu\text{mol}(\text{photon})^{-1}$]; $\phi_{(I_{comp}-I_{200})}$ – quantum yield at the range between I_{comp} and $I = 200 \mu\text{mol}(\text{photon}) \text{ m}^{-2} \text{ s}^{-1}$ [$\mu\text{mol}(\text{CO}_2) \mu\text{mol}(\text{photon})^{-1}$]; $\phi_{(I_0)}$ – quantum yield at $I = 0 \mu\text{mol}(\text{photon}) \text{ m}^{-2} \text{ s}^{-1}$ [$\mu\text{mol}(\text{CO}_2) \mu\text{mol}(\text{photon})^{-1}$]; $\phi_{(I_0-I_{comp})}$ – quantum yield at the range between $I = 0 \mu\text{mol}(\text{photon}) \text{ m}^{-2} \text{ s}^{-1}$ and I_{comp} [$\mu\text{mol}(\text{CO}_2) \mu\text{mol}(\text{photon})^{-1}$]. *Photosynthetic active radiation values above the range employed to make the measurements. **Photosynthetic active radiation values above the maximum that reaches the Earth's surface.

	Calculated variables		Mathematical models						
	Eq. 1	Eq. 2	Eq. 3	Eq. 4	Eq. 5	Eq. 6	Eq. 8	Eq. 9	Eq. 11
I_{comp}	22.5	22.5	22.7	20.2	20.2	23.4	22.0		
$I_{sat(50)}$	261.4	261.4	209.4	211.0	211.0	235.6	210.1	210.1	211.1
$I_{sat(85)}$	1,376.3	1,376.3	559.2	462.4	462.4	1,022.7	537.0	537.0	678.0
$I_{sat(90)}$	2,172.6*	2,172.6*	713.1	539.8	539.8	1,564.3	647.0	647.0	854.6
$I_{sat(95)}$	4,561.7**	4,561.7**	1,047.6	668.7	668.7	3,179.1**	835.2	835.2	1,148.4
I_{sat}									2,289.9*
I_{max}	1537.0	1,949.0	1,030.0	847.0	847.0	1,348.0	1,008.0	1,008.0	1,297.0
P_{gmax}									17.1
$P_{N(I_{max})}$	15.2	15.7	14.5	14.4	14.4	14.9	14.5	14.5	14.9
R_D									1.7
$\phi_{(I_0)}$		0.0899			0.0433			0.0597	0.0824
$\phi_{(I_{comp})}$	0.0738	0.0738	0.0490	0.0431	0.0431	0.0638	0.0550	0.0574	0.0694
$\phi_{(I_0-I_{comp})}$	0.0816	0.0816	0.0492	0.0432	0.0432	0.0674	0.0573	0.0586	0.0757
$\phi_{(I_{comp}-I_{200})}$	0.0410	0.0410	0.0416	0.0391	0.0391	0.0421	0.0400	0.0410	0.0409

The online version of the original article can be found under doi: 10.1007/s11099-013-0045-y

The erratum includes two corrected supplementary files.

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$$I_{\text{sat}} = \frac{\sqrt{\frac{(\beta + \gamma) \times (1 + \gamma \times I_{\text{comp}})}{\beta} - 1}}{\gamma} \quad (14)$$

$$\phi_{(I)} = \frac{I_{(50)} \times P_{\text{gmax}}}{(I + I_{(50)})^2} \quad (16)$$

$$\phi_{(I)} = \phi_{(I_o)} \times \operatorname{sech}^2 \left(\frac{\phi_{(I_o)} \times I}{P_{\text{gmax}}} \right) = \phi_{(I_o)} \times \left[\frac{1}{\cosh^2 \left(\frac{\phi_{(I_o)} \times I}{P_{\text{gmax}}} \right)} \right] \quad (18)$$

$$I_{\text{comp}} = \frac{I_{(50)} \times R_D}{P_{\text{gmax}} - R_D} \quad (25)$$

$$I_{\text{comp}} = \frac{R_D \times (\theta \times R_D - P_{\text{gmax}})}{\phi_{(I_o)} \times (R_D - P_{\text{gmax}})} \quad (29)$$

$$I_{\text{sat}(n)} = I_{\text{comp}} - \frac{\ln \left\{ 1 - \left[\frac{\frac{n}{100} \times (P_{\text{gmax}} - R_D) + R_D}{P_{\text{gmax}}} \right] \right\}}{k} \quad (38)$$