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CORRECTION
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Corrigendum: Purification and Characterisation of Malate Dehydrogenase From *Synechocystis* sp. PCC 6803: Biochemical Barrier of the Oxidative Tricarboxylic Acid Cycle

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A Corrigendum on

Purification and Characterisation of Malate Dehydrogenase From *Synechocystis* sp. PCC 6803: Biochemical Barrier of the Oxidative Tricarboxylic Acid Cycle

by Takeya, M., Ito, S., Sukigara, H., and Osanai, T. (2018). Front. Plant Sci. 9:947. doi: 10.3389/fpls.2018.00947

In the original article, there were errors in **Table 1** and **Table S1** as published as a result of the incorrect calculation of k_{cat}. We performed a re-calculation of and k_{cat} values and corrected the k_{cat} and k_{cat}/K_m values in **Table 1** and **Table S1**; the corrected versions these tables and updated **Table 1** footnote appear below.

The following sentence in the *Results* sub-section the *Measurement of Kinetic Parameters* contained an associated error: "*Sy*MDH displayed approximately 1.7-fold (k_{cat}) and 350-fold (k_{cat}/K_m) preferences for oxaloacetate reduction over malate oxidation and approximately 4.7-fold (k_{cat}) and 89.5-fold (k_{cat}/K_m) preferences for NADH oxidation over NAD^+ reduction (**Table 1**)." This sentence should have read: "*Sy*MDH displayed approximately 1.7-fold (k_{cat}) and 361-fold (k_{cat}/K_m) preferences for oxaloacetate reduction over malate oxidation and approximately 4.7-fold (k_{cat}) and 90.5-fold (k_{cat}/K_m) preferences for NADH oxidation over NAD^+ reduction (**Table 1**)."

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

TABLE 1 | Kinetic parameters of *Sy*MDH.

	V_{max} (units·mg^{-1})	k_{cat} (s^{-1})	k_{cat}/K_m (s^{-1}·mM^{-1})
Malate	0.412	0.43	0.165
OAA	0.685	0.71	59.5
NAD^+	0.199	0.21	0.357
NADH	0.931	0.97	32.3

The oxidative reaction (malate to oxaloacetate) was assayed in 100 mM potassium phosphate buffer (pH 8.0) by varying the malate concentration at a fixed NAD^+ concentration (8.0 mM) or by varying the NAD^+ concentration at a fixed malate concentration (4.0 mM). The reductive reaction (oxaloacetate to malate) was assayed in 100 mM potassium phosphate buffer (pH 6.5) by varying the oxaloacetate concentration at a fixed NADH concentration (0.1 mM) or by varying the NADH concentration at a fixed oxaloacetate concentration (0.1 mM). The kinetic parameters were calculated by the Lineweaver–Burk plot. The values of k_{cat} were calculated by dividing V_{max} by the molar amounts of SyMDH proteins.

TABLE S1 | Kinetic parameters of *Sy*MDH calculated by Michaelis-Menten equation.

	V_{max} (units·mg^{-1})	k_{cat} (s^{-1})	k_{cat}/K_m (s^{-1}·mM^{-1})	K_i (mM)
Malate	0.373	0.39	0.144	–
OAA	0.422	0.44	13.7	–
NAD^+	0.647	0.67	0.674	14.5
NADH	1.795	1.87	134	–

The oxidative reaction (malate to oxaloacetate) was assayed in 100 mM potassium phosphate buffer (pH 8.0) by varying the malate concentration at a fixed NAD^+ concentration (8.0 mM) or by varying the NAD^+ concentration at a fixed malate concentration (4.0 mM). The reductive reaction (oxaloacetate to malate) was assayed in 100 mM potassium phosphate buffer (pH 6.5) by varying the oxaloacetate concentration at a fixed NADH concentration (0.1 mM) or by varying the NADH concentration at a fixed oxaloacetate concentration (0.1 mM). The kinetics parameters were calculated by the Michaelis-Menten equation.