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Correction to: Ectopic overexpression of a type-II DGAT (CeDGAT2-2) derived from oil-rich tuber of *Cyperus esculentus* enhances accumulation of oil and oleic acid in tobacco leaves

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Following publication of the original article [1], it was brought to our attention that we missed and failed to cite a related paper [2] (Liu et al. *Plant Cell Physiol*, 2020; 61:118–129) that was published a short while before. Liu et al. [2] described the identification and molecular characterization of *CeDGAT1* and *CeDGAT2a/b* (*CeDGAT2-1* and *CeDGAT2-2* in [1]) from *Cyperus esculentus*. Our study [1] obtained the same results in gene expression patterns and confirmed that *CeDGAT2b* exhibited DGAT activity and is therefore likely the major contributor to tuber oil biosynthesis. Extending these results, our experiments demonstrated that *CeDGAT2-2* had a very strong substrate specificity for oleic acid in transgenic yeast cells and tobacco leaves. More significantly, overexpression of *CeDGAT2-2* in tobacco resulted in a high level of oleic acid and total oil accumulation, and the transgenic plants exhibited no negative impact on other agronomic traits. Therefore, our finding demonstrates

that *CeDGAT2-2* is the desirable target gene in metabolic engineering to enrich oil and value-added lipids in high-biomass plants. We sincerely apologize for our missing of the related work of Liu et al. [2].

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References

1. Gao Y, Sun Y, Gao H, Chen Y, Wang X, Xue J, Jia X, Li R. Ectopic overexpression of a type-II DGAT (CeDGAT2-2) derived from oil-rich tuber of *Cyperus esculentus* enhances accumulation of oil and oleic acid in tobacco leaves. *Biotechnol Biofuels*. 2021;14:76. <https://doi.org/10.1186/s13068-021-01928-8>.
2. Liu D, Ji H, Yang Z. Functional characterization of three novel genes encoding diacylglycerol acyltransferase (DGAT) from oil-rich tubers of *Cyperus esculentus*. *Plant Cell Physiol*. 2020;61(1):118–29. <https://doi.org/10.1093/pcp/pcz184>.

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