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OPEN Author Correction: Metal nanoparticles as effective promotors for Maize production

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Correction to: Scientific Reports https://doi.org/10.1038/s41598-019-50265-2, published online 26 September 2019

In the original version of this Article, Chien Ha and Nga Thanh Le were omitted from the author list. The complete author list, and affiliations, is listed below,

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As a result, the Author Contributions statement now reads:

"D.N., Q.V., N.L., C.H. reagents and analytic tools, performed research."

In addition, the legend of Figure 5 contained an error:

"Enzyme analysis after 14 days drought (a) APX content, (b) SOD content"

and now reads:

"(a) APX and (b) SOD enzyme activity of maize leaf at 7 days under drought stress"

Finally, some methodological details were not provided in the original Article, and the following text has been added to the Supplementary Information file, under the subheading '3. Chlorophyll, Protein and Anthocyanin analysis':

"The fresh plant mass was measured after washing the plants and gently placed on the filter paper. Subsequently, the dry weight was obtained after 48 h of drying in an oven at 65°C. To determine the leaf relative water content, detached leaves were individually weighed to determine sample weight (W). Subsequently, the samples were fully dipped in deionized water overnight under normal room light and temperature for rehydration to full turgidity. The samples were then gently removed with filter paper and were immediately weighed to obtain a fully turgid weight (TW). Afterwards, the samples were dried in an oven at 65° C for 48 h, and dry weight was measured (DW). The relative water content (RWC) was calculated as RWC (%) = $[(W - DW)/(TW - DW)]^{1}$.

For chlorophyll measurement, an amount of 0.5 g leaf sample was extracted in 20 mL of extraction solution (acetone 80%) by overnight shaking (200 rpm) in the dark condition at room temperature. After the extraction, 1 mL of extraction solution was used for measuring the absorbance of chlorophyll at 645 nm and 663 nm via the spectrophotometry (Thermo Scientific Gensys 20, USA). The total chlorophyll content was calculated based on the formula in the literature².

For anthocyanin measurement, 0.02 g leaf was ground in liquid nitrogen and extracted by 300 μ L of extraction solution (methanol plus 1% HCl) at 4 °C overnight. The solution was then mixed with 200 μ L of water and 200 μ L of chloroform. Consequently, the solution sample was centrifuged at 4 °C for 15 min (3000 rpm). The anthocyanin content was determined from the absorbance at 530 nm³."

These errors have now been corrected in the PDF and HTML versions of the Article, and in the accompanying Supplementary information file.

References

- 1. Ha, C. V., Le, D. T., Nishiyama, R., Watanabe, Y., Tran, U. T., Dong, N. V., Tran, L. S. Characterization of the newly developed soybean cultivar DT2008 in relation to the model variety W82 reveals a new genetic resource for comparative and functional genomics for improved drought tolerance. *Biomed. Res. Int.* 759657 (2013).
- Mostofa, M. G., Hossain, M. A., Fujita, M. & Tran, L. S. Physiological and biochemical mechanisms associated with trehaloseinduced copper-stress tolerance in rice. Sci. Rep. 5, 11433. https://doi.org/10.1038/srep11433.PMID:26073760 (2015).
- 3. Nguyen, K. H. *et al.* Arabidopsis type B cytokinin response regulators ARR1, ARR10, and ARR12 negatively regulate plant responses to drought. *Proc. Natl. Acad. Sci. U. S. A.* **113**, 3090–3095 (2016).

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