



Supplementary

Application of elicitors (jasmonic acid, salicylic acid and nanosheet) for *in vitro* growth and biochemical properties of Siam Tulip (*Curcuma alismatifolia* cv. Maejo Impress)

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Supplementary Figure

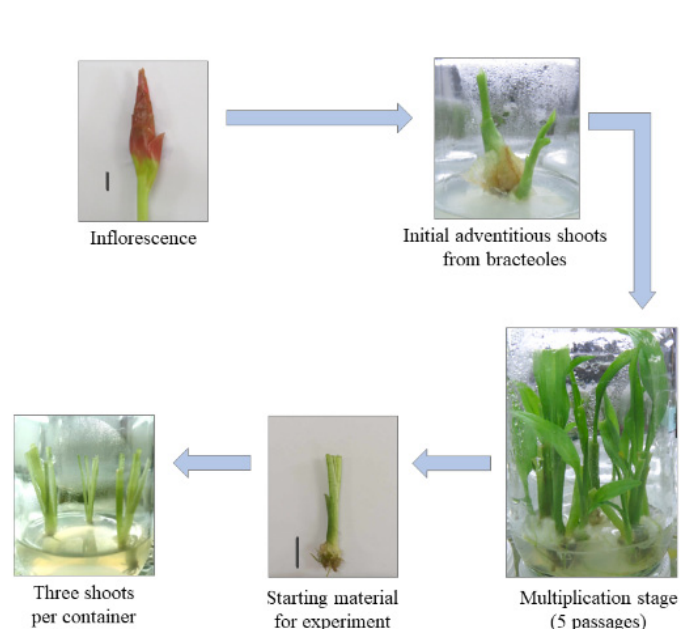


Fig. S1 Flow chart of plant materials prepared for the experiment (scale bar = 1.0 cm)

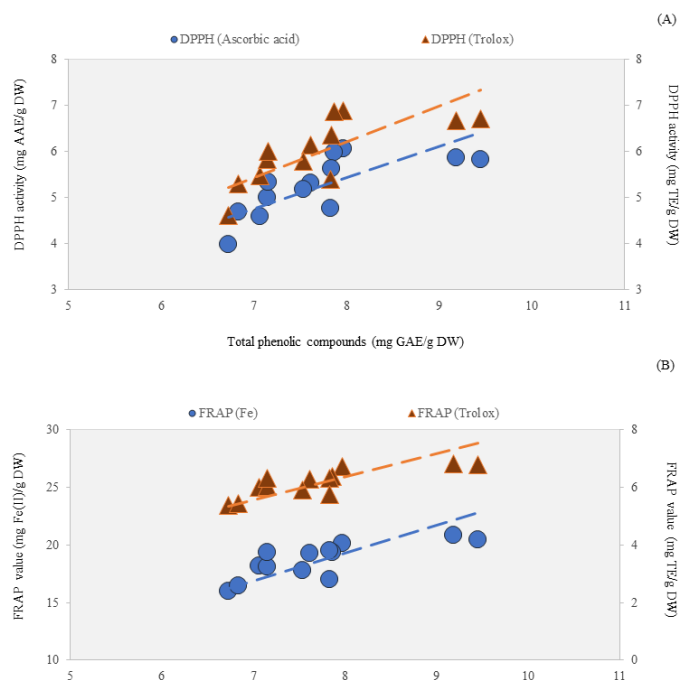


Fig. S2 Regression analysis between antioxidant activity and total phenolic content based on Pearson's correlation coefficient for: (A) 1,1-diphenyl-2-picrylhydrazyl (DPPH); (B) ferric reduction antioxidant power (FRAP), where AAE = ascorbic acid equivalent and DW = dry weight

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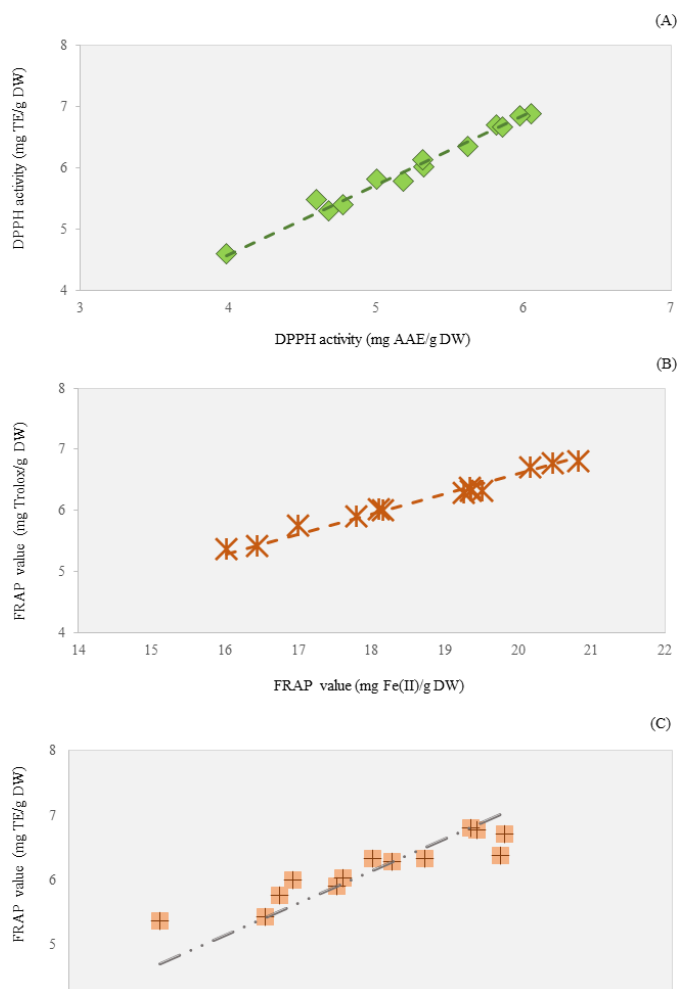


Fig. S3 Regression analysis based on Pearson's correlation coefficient between antioxidant activity and 1,1-diphenyl-2-picrylhydrazyl (DPPH) using: (A) ascorbic acid equivalent (AAE) versus DPPH using Trolox; (A); ferric reduction antioxidant power (FRAP) using Fe(II) versus FRAP using; (C) DPPH versus FRAP, where TE = Trolox equivalent

Total phenolic content and antioxidant activities of *in vitro* and field-grown leaves

This study evaluated the total phenolic content and antioxidant activities derived from *in vitro*, and field-grown plants. The total phenolic content and antioxidant activity of field-grown plants were significantly different from those of the *in vitro* plants (Fig. S4). Furthermore, using 50% or 70% EtOH was suitable for extraction compared to using either water or 95% EtOH (Fig. S4).

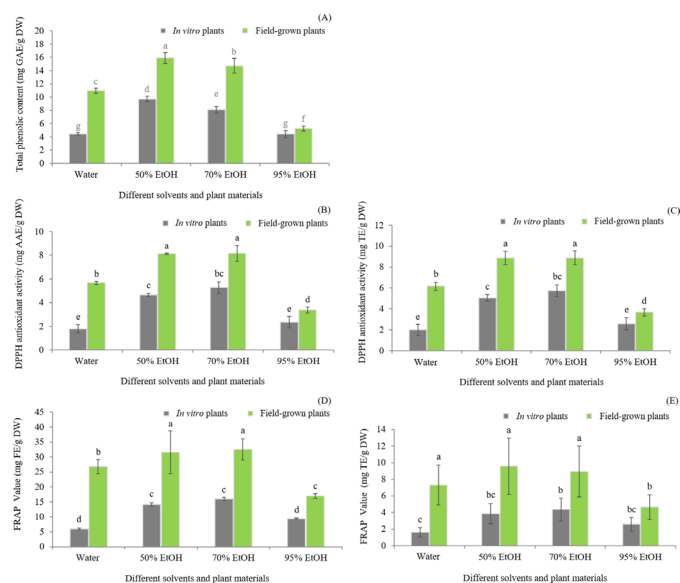


Fig. S4 (A) Average total phenolic content; (B–C) 1,1-diphenyl-2-picrylhydrazyl (DPPH); (D–E) ferric reduction antioxidant power (FRAP) versus different solvent and plant materials from *in vitro* plant or field-grown plants, where each graph value represents the mean ($n = 6$) and error bar indicates \pm SD, same lowercase letters for each treatment indicate not significantly ($p > 0.05$) different, AAE = ascorbic acid equivalent and TE = Trolox equivalent