

Supplementary Files

Table S1 Analysis of variance for different biochemical traits of two plant parts in different genotypes of *Dorema*.

S.O.V	D.F	Studied traits						
		TPC [‡]	TFD	TFL	TChl	Car	Ant	DPPH
Plant organs	1	87.98 **	38.75 **	9.85 **	33873.03 **	380.27 **	79050.81 **	1102.40 **
Genotype	13	308.54 **	4.83**	0.88 **	4426.33 **	63.49 **	6224.69 **	350.72 **
Plant organ× genotype	13	97.49 **	0.97 **	0.10**	2420.28 **	44.94 **	6112.33 **	161.74 **
Residual	56	9.13	0.29	0.21	135.92	8.73	590.71	92.43
Coefficient of variation (%)		15.60	19.57	30.38	19.05	39.39	34.39	8.59

[‡]TPC: total phenolics content; TFD: total flavonoids, TFL: total flavonols; TChl: Total chlorophyll; Car; carotenoids; Ant: Anthocyanin; DPPH: 2, 2-diphenyl-1-picrylhydrazyl. *, **: significantly different at the 5% and 1% probability levels, respectively.

Table S2 Eigen-values, estimated variance and cumulative variance for four factors obtained from principal components in stem samples of *Dorema*.

Trait	Prin1	Prin2	Prin3	Prin4
TPC [‡]	0.43	-0.16	0.25	0.50
TFD	0.44	-0.16	0.31	0.17
TFL	0.41	0.23	-0.16	-0.64
Anthocyanins	0.43	0.006	-0.05	-0.24
TChl	0.23	0.49	-0.67	0.47
Carotenoids	0.09	0.73	0.57	0.012
DPPH	0.43	-0.32	-0.12	-0.075

[‡]TPC: total phenolics content; TFD: total flavonoids, TFL: total flavonols; TChl: Total chlorophyll; DPPH: 2, 2-diphenyl-1-picrylhydrazyl.

Table S3 Eigen-values, estimated variance and cumulative variance for four factors obtained from principal components in leaves samples of *Dorema*.

Trait	Prin1	Prin2	Prin3	Prin4
TPC [‡]	0.45	0.08	0.46	0.15
TFD	0.52	0.20	0.17	0.07
TFL	-0.14	0.57	0.55	-0.17
Anthocyanins	-.46	0.07	0.34	-0.13
TChl	-0.17	0.42	-0.19	0.86
Carotenoids	-0.08	0.62	-0.45	-0.38
DPPH	0.48	0.20	-0.28	-0.17

[‡]TPC: total phenolics content; TFD: total flavonoids, TFL: total flavonols; TChl: Total chlorophyll; DPPH: 2, 2-diphenyl-1-picrylhydrazyl.

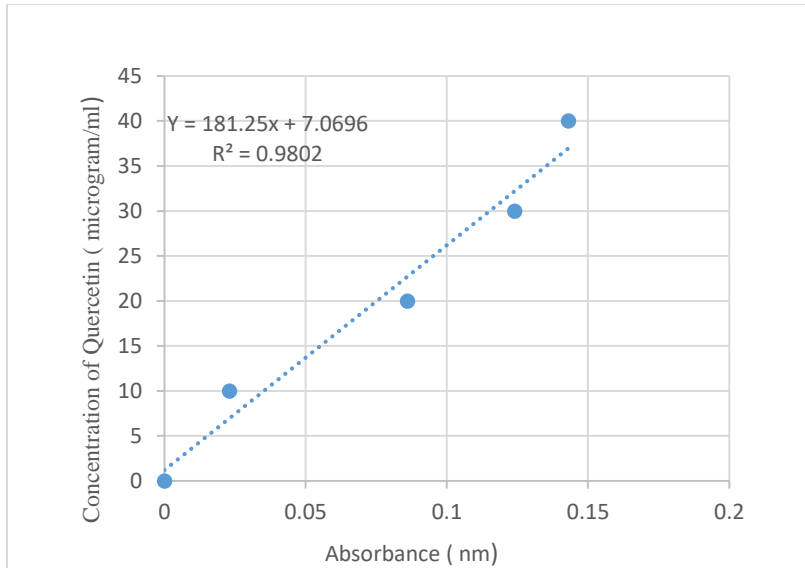


Fig. S1 The calibration curve for quercetin. Concentrations used are: 0, 20, 40, 60, 80 and 100 and 120 $\mu\text{g/mL}$.