

ERRATUM

Erratum to: Morpho-Physiological Parameters Associated with Iron Deficiency Chlorosis Resistance and Their Effect on Yield and Its Related Traits in Groundnut

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Erratum to: J. Crop Sci. Biotech. 2016 (JUNE) 19 (2) : 177~187
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On page 178, in the 1st line of the third paragraph, the following sentence should be replaced. 'wwIron deficiency in groundnut initially appears as chlorosis on young rapidly expanding leaves which is characterized by interveinal chlorosis.' should now read as: 'Iron deficiency in groundnut initially appears as chlorosis on young rapidly expanding leaves which is characterized by interveinal chlorosis.'

On page 180, in the 7th line of the last paragraph, the following sentence should be replaced. 'Interaction (A~B) mean squares showed significant differences for VCR at all five stages, while at specific stages for SPAD (60, 80, and 100 d), chlorophyll content ['a' (60 d), 'b' (100 d), and total (100 d)], and peroxidase activity (40 and 100 d). should now read as: 'Interaction (A x B) mean squares showed significant differences for VCR at all five stages, while at specific stages for SPAD (60, 80, and 100 d), chlorophyll content ['a' (60 d), 'b' (100 d), and total (100 d)], and peroxidase activity (40 and 100 d)'. And, in the 14th line, the following sentence should be replaced. 'The interaction (A x B) mean squares showed significant difference only for 100-seed weight.' should now read as: 'The interaction (A~B) mean squares showed significant difference only for 100-seed weight.'

On page 186, in the 10th reference, should be replaced.

Irmak S, C1 I AN, Yücel H, Kaya Z. 2012. The effects of iron application to soil and foliarly on agronomic properties and yield of peanut (*Arachis hypogaea*). J. Food Agric. Env. 10(3/4): 417-42

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Irmak S, Çıl AN, Yücel H, Kaya Z. 2012. The effects of iron application to soil and foliarly on agronomic properties and yield of peanut (*Arachis hypogaea*). J. Food Agric. Env. 10(3/4): 417-442

On page 187, in the last reference, should be replaced.

Zuo Y, Ren L, Zhang F, Jiang RF. 2007. Bicarbonate concentration as affected by soil water content controls iron nutrition of peanut plants in a calcareous soil.

In JF Briat , JB Gaymard, Eds, XIII Int. Symp. Iron Nutrition & Interactions in Plants, Montpellier, France, 3-7 July 2006. Plant Physiol. Bioch. 45(5): 357-364

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Zuo Y, Ren L, Zhang F, Jiang RF. 2007. Bicarbonate concentration as affected by soil water content controls iron nutrition of peanut plants in a calcareous soil. In JF Briat , JB Gaymard, Eds, XIII Int. Symp. Iron Nutrition & Interactions in Plants, Montpellier, France, 3-7 July 2006. Plant Physiol. Bioch. 45(5): 357-364

Also, figure Table 2 and Table 5 should be changed. The updated tables are shown in this erratum.

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Table 2. Mean performance of genotypes for morpho-physiological parameters in normal- and deficit- Fe soils across growth stages.

Trait*	Genotype	20 d		40 d		60 d		80 d		100 d		Mean		change(%) [†]
		N [‡]	D	N	D	N	D	N	D	N	D	N	D	
VCR	ICGV 86031	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00	1.00	0.0
	A30b	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00 ^a	1.00	1.00	0.0
	TG 26	1.25 ^a	2.75 ^b	1.00 ^a	2.50 ^b	1.00 ^a	2.00 ^b	1.75 ^b	2.25 ^b	2.00 ^b	2.50 ^b	1.40	2.40	71.4
	TAG 24	2.00 ^b	3.25 ^b	1.50 ^a	3.00 ^b	1.25 ^a	3.00 ^c	2.25 ^{bc}	3.50 ^c	2.75 ^c	3.50 ^c	1.95	3.25	66.7
	TMV 2	2.25 ^b	3.50 ^b	2.50 ^b	3.00 ^b	2.25 ^b	3.00 ^c	2.75 ^c	3.75 ^c	3.00 ^c	4.00 ^c	2.55	3.45	35.3
	LSD #	0.51	0.67	0.56	0.40	0.42	0.34	0.51	0.67	0.34	0.56	-	-	-
	LSD(N&D) \$	0.54		0.44		0.35		0.59		0.46		-	-	-
SPAD	ICGV 86031	38.2 ^a	34.0 ^a	39.4 ^a	35.3 ^a	40.0 ^a	37.8 ^a	38.7 ^a	36.4 ^a	31.5 ^a	28.7 ^a	37.6	34.4	8.5
	A30b	37.9 ^a	33.6 ^a	39.3 ^a	34.1 ^a	39.8 ^{ab}	37.4 ^a	38.4 ^a	35.9 ^a	30.8 ^a	27.4 ^a	37.2	33.7	9.4
	TG 26	31.1 ^b	25.6 ^b	34.4 ^b	26.9 ^b	37.5 ^{bc}	27.1 ^b	35.0 ^b	24.5 ^b	28.6 ^{ab}	22.6 ^b	33.3	25.3	24.0
	TAG 24	28.5 ^b	21.8 ^b	31.4 ^b	23.3 ^c	35.4 ^{cd}	25.1 ^b	32.0 ^c	19.8 ^c	26.5 ^b	18.8 ^{bc}	30.8	21.8	29.2
	TMV 2	27.3 ^b	21.4 ^b	30.9 ^b	23.2 ^c	35.2 ^d	25.1 ^b	31.7 ^c	19.7 ^c	26.4 ^b	18.1 ^c	30.3	21.5	29.0
	LSD	3.33	2.98	3.05	1.79	1.57	2.40	1.91	2.88	2.57	3.04	-	-	-
	LSD(N&D)	3.40		2.40		1.83		2.25		2.75		-	-	-
Active Fe	ICGV 86031	10.22 ^a	8.38 ^a	11.94 ^a	10.61 ^a	13.84 ^a	12.77 ^a	9.79 ^a	8.43 ^a	8.81 ^a	6.23 ^a	10.92	9.28	15.0
	A30b	10.10 ^a	8.22 ^a	11.65 ^a	10.39 ^a	13.42 ^{ab}	12.47 ^a	9.56 ^a	8.24 ^a	8.25 ^a	6.01 ^a	10.60	9.07	14.4
	TG 26	8.35 ^{ab}	6.78 ^b	9.60 ^{ab}	8.15 ^b	10.51 ^{bc}	10.86 ^b	8.27 ^{ab}	7.38 ^a	7.18 ^{ab}	5.96 ^{ab}	8.78	7.83	10.8
	TAG 24	6.74 ^b	5.63 ^b	7.92 ^b	6.64 ^b	9.33 ^c	8.98 ^c	7.43 ^b	5.22 ^b	6.10 ^b	4.46 ^{bc}	7.50	6.19	17.5
	TMV 2	6.46 ^b	5.59 ^b	7.47 ^b	6.47 ^b	9.04 ^c	8.95 ^c	7.41 ^b	5.62 ^b	6.09 ^b	4.22 ^c	7.29	6.17	15.4
	LSD	1.58	0.82	2.08	1.41	2.05	1.05	1.36	0.92	1.26	1.03	-	-	-
	LSD(N&D)	1.20		1.66		1.46		1.24		1.03		-	-	-
Chl. a	ICGV 86031	1.26 ^a	1.00 ^a	1.66 ^a	1.48 ^a	1.83 ^a	1.58 ^a	1.57 ^a	1.35 ^a	1.13 ^a	0.87 ^a	1.49	1.26	15.4
	A30b	1.24 ^a	0.93 ^{ab}	1.64 ^a	1.47 ^a	1.82 ^a	1.47 ^a	1.54 ^a	1.34 ^a	1.12 ^a	0.84 ^a	1.47	1.21	17.7
	TG 26	0.94 ^b	0.74 ^{bc}	1.22 ^b	0.91 ^b	1.40 ^b	1.32 ^b	1.16 ^b	1.10 ^b	0.76 ^b	0.61 ^b	1.10	0.94	14.5
	TAG 24	0.83 ^b	0.55 ^{cd}	0.96 ^c	0.84 ^b	0.99 ^c	0.92 ^c	0.83 ^c	0.78 ^c	0.65 ^b	0.48 ^b	0.85	0.72	15.3
	TMV 2	0.84 ^b	0.52 ^d	0.94 ^c	0.86 ^b	0.98 ^c	0.91 ^c	0.82 ^c	0.75 ^c	0.63 ^b	0.46 ^b	0.84	0.70	16.7
	LSD	0.14	0.14	0.12	0.11	0.16	0.10	0.10	0.14	0.13	0.12	-	-	-
	LSD(N&D)	0.14		0.11		0.12		0.12		0.12		-	-	-
Chl. b	ICGV 86031	0.63 ^a	0.48 ^a	1.04 ^a	0.80 ^a	1.14 ^a	0.85 ^a	0.91 ^a	0.65 ^a	1.13 ^a	0.45 ^a	0.97	0.64	34.0
	A30b	0.60 ^a	0.45 ^a	0.99 ^{ab}	0.77 ^a	1.13 ^a	0.83 ^a	0.87 ^a	0.62 ^a	1.12 ^a	0.44 ^a	0.94	0.62	34.0
	TG 26	0.44 ^b	0.38 ^b	0.80 ^b	0.57 ^b	1.00 ^a	0.74 ^a	0.69 ^b	0.42 ^b	0.76 ^b	0.27 ^b	0.74	0.47	36.5
	TAG 24	0.34 ^c	0.18 ^c	0.59 ^c	0.41 ^c	0.77 ^b	0.39 ^b	0.59 ^c	0.36 ^b	0.65 ^b	0.16 ^b	0.59	0.30	49.2
	TMV 2	0.33 ^c	0.16 ^c	0.55 ^c	0.35 ^c	0.76 ^b	0.41 ^b	0.57 ^c	0.34 ^b	0.63 ^b	0.15 ^b	0.57	0.28	50.9
	LSD	0.05	0.04	0.14	0.08	0.11	0.10	0.07	0.08	0.11	0.08	-	-	-
	LSD(N&D)	0.06		0.10		0.10		0.09		0.09		-	-	-
Total Chl.	ICGV 86031	1.89 ^a	1.47 ^a	2.70 ^a	2.28 ^a	2.97 ^a	2.43 ^a	2.48 ^a	2.00 ^a	2.26 ^a	1.32 ^a	2.46	1.90	22.8
	A30b	1.84 ^a	1.39 ^a	2.63 ^a	2.24 ^a	2.95 ^a	2.30 ^a	2.41 ^a	1.96 ^a	2.24 ^a	1.28 ^a	2.41	1.83	24.1
	TG 26	1.38 ^b	1.11 ^b	2.03 ^b	1.48 ^b	2.39 ^b	2.06 ^b	1.85 ^b	1.52 ^b	1.52 ^b	0.87 ^b	1.83	1.41	23.0
	TAG 24	1.18 ^c	0.74 ^c	1.55 ^c	1.25 ^c	1.76 ^c	1.32 ^c	1.42 ^c	1.14 ^c	1.30 ^b	0.64 ^c	1.44	1.02	29.2
	TMV 2	1.17 ^c	0.69 ^c	1.49 ^c	1.20 ^c	1.74 ^c	1.32 ^c	1.40 ^c	1.09 ^c	1.27 ^b	0.61 ^c	1.41	0.98	30.5
	LSD	0.14	0.13	0.17	0.15	0.22	0.12	0.13	0.14	0.24	0.15	-	-	-
	LSD(N&D)	0.14		0.16		0.16		0.14		0.19		-	-	-
Peroxidase	ICGV 86031	0.100 ^{ab}	0.081 ^a	0.151 ^b	0.122 ^b	0.141 ^b	0.110 ^b	0.112 ^a	0.106 ^a	0.091 ^a	0.076 ^a	0.119	0.099	16.8
	A30b	0.121 ^a	0.093 ^a	0.221 ^a	0.200 ^a	0.181 ^a	0.178 ^a	0.121 ^a	0.101 ^{ab}	0.091 ^a	0.075 ^a	0.147	0.129	12.2
	TG 26	0.071 ^c	0.055 ^b	0.099 ^c	0.074 ^c	0.128 ^{bc}	0.108 ^{bc}	0.111 ^a	0.088 ^{bc}	0.074 ^a	0.058 ^b	0.097	0.076	21.6
	TAG 24	0.077 ^{bc}	0.037 ^b	0.092 ^{cd}	0.067 ^{cd}	0.127 ^{bc}	0.078 ^c	0.108 ^a	0.080 ^{bc}	0.071 ^a	0.060 ^{ab}	0.095	0.064	32.6
	TMV 2	0.078 ^{bc}	0.046 ^b	0.057 ^d	0.039 ^d	0.101 ^c	0.079 ^{bc}	0.127 ^a	0.071 ^c	0.070 ^a	0.050 ^b	0.087	0.057	34.5
	LSD	0.019	0.014	0.027	0.023	0.019	0.021	0.029	0.014	0.017	0.011	-	-	-
	LSD(N&D)	0.011		0.016		0.014		0.015		0.010		-	-	-

* VCR- Visual chlorosis rating, SPAD- SPAD values, Chl. a- Chlorophyll a, Chl. b- Chlorophyll b, Total Chl.- Total Chlorophyll; d - days after sowing

LSD- Least significant difference ($P=0.05$) for normal- and deficit-Fe soils individually; \$LSD(N&D)- Common LSD ($P=0.05$) for both normal- and deficit-Fe soils for treatment comparisons; †N- Normal-Fe soil, D- Deficit-Fe soil; Initials (a, b, c, etc.) given for mean values indicate grouping of genotypes based on Tukey's HSD test within normal-Fe (N) and deficit-Fe (D) conditions; ‡Change (%) - % Change for mean across five stages between normal- and deficit-Fe i.e. % increase in VCR, while % decrease for rest other traits

Table 5. Associations between mean of morpho-physiological parameters across five stages and yield-related traits

Trait ^a	Pod yield	Shelling percentage	100-seed weight	Main stem height	No. of primary branches	No. of pods	Dry haulm yield
VCR	-0.978**	0.130	-0.988**	-0.815	-0.976**	-0.988**	-0.787
SPAD	0.987**	-0.105	0.982**	0.864	0.985**	0.985**	0.846
Active Fe	0.972**	-0.035	0.995**	0.795	0.971**	0.993**	0.767
Chl. a	0.987**	-0.075	0.997**	0.828	0.986**	0.997**	0.807
Chl. b	0.974**	-0.070	0.996**	0.784	0.972**	0.994**	0.757
Tot. chl.	0.983**	-0.078	0.997**	0.812	0.981**	0.996**	0.788
Peroxidase	0.836	-0.222	0.861	0.738	0.831	0.859	0.664