

NUMERICAL DATA

Effect of various Cr concentrations on different chlorophyll (Chl) a transients in wheat plants.

Cr treatment [μM]	Fv/FM	Area	RC/ABS	FV/F0	PI _(ABS)
Control	0.823 ± 0.03	29620 ± 74	0.939 ± 0.01	4.655 ± 1	26 ± 1
100	0.788 ± 0.02**	24778 ± 87***	0.764 ± 0.02***	3.707 ± 1**	17 ± 1***
200	0.773 ± 0.01**	17626 ± 75***	0.686 ± 0.04***	3.398 ± 1**	13 ± 2***
300	0.768 ± 0.02**	11548 ± 58***	0.678 ± 0.05***	3.31 ± 1**	12 ± 1***

Each experiment is a repetition of six replicates with five plants each. Values are given as mean ± SD. Significant differences were calculated according to Newman-Keuls' multiple comparison test at p<0.001. Fv/FM – quantum yield of primary photochemistry of PSII; FV/F0 – conformation term for primary photochemistry; PI(ABS) – performance index on the basis of absorbance; RC/ABS – density of active PSII reaction centers per Chl and the antenna size of Chl molecules.

Source: <https://link.springer.com/content/pdf/10.1007%2Fs11099-016-0198-6.pdf>

The effect of different concentrations of ethylene diamine tetra-acetic acid, EDTA (0, 1, and 3 mg /L) and Cr (2 and 6 ppm) on Cr content in shoot and root of sunflower

Treatment	Control	EDTA 0 Cr2	EDTA 0 Cr6	EDTA 1 Cr2	EDTA 1 Cr6	EDTA3 Cr2	EDTA3 Cr6
shoot Cr (ppm)	0 g	17.3 f	54.7 c	43.6 e	69.5 b	50.3 d	93.6 a
Root Cr (ppm)	0 g	574.5 f	1567.6 b	738.6 d	1127.5 c	580.4 e	1600.4 a

Source: <http://www.sid.ir/FileServer/JE/1036720160205>

Effect of different levels of Cr on some physiological parameters in *Agave americana*

Treatment (mg Cr kg ⁻¹ soil)	Dry weight (g plant ⁻¹)		Number of leaves plant ⁻¹
	Root	Leaves	
0	3.75	16.88	18.30
25	3.43	14.65	17.00
50	1.87	10.12	11.30
100	1.63	7.02	8.00
200	1.59	7.21	8.00
CD(0.05)	0.89	2.27	0.70

CD critical difference

Source: <https://link.springer.com/article/10.1007/s40011-015-0685-8>

Partitioning, uptake, translocation factor and translocation of Cr in *Agave americana*

Treatment (mg Cr kg ⁻¹ soil)	Concentration of Cr in the tissue (µg g ⁻¹ DW)		Uptake of Cr (µg g ⁻¹ plant)			% Cr removal	TF	TE (%)	BCF
	Root	Leaves	Root	Leaves	Total				
0	<dl	<dl	<dl	<dl	<dl	<dl	<dl	<dl	–
25	122	22	417	327	745	0.47	0.18	44	4.88
50	253	40	473	364	890	0.24	0.16	41	5.06
100	567	87	924	417	1535	0.21	0.15	27	5.67
200	1318	179	1568	718	2286	0.16	0.13	31	6.59
CD(0.05)	128	19	253	144	259	0.12	0.02	–	–

TF translocation factor, TE translocation efficiency (%), BCF bio concentration factor, CDcritical difference, <dl = below the detection limit (detection limit 3 µg L⁻¹)

Source: <https://link.springer.com/article/10.1007/s40011-015-0685-8>

Morpho-physiological features of Pokkali and BRRI 51 grown in the absence or presence of Cr under hydroponic conditions.

Features	Pokkali		BRRI 51	
	Cr-	Cr+	Cr-	Cr+
Shoot height (cm)	13.6 ± 2.46 ^a	13.5 ± 1.84 ^a	13.9 ± 1.42 ^a	9.8 ± 1.45 ^b
Shoot dry weight (mg)	22.1 ± 2.96 ^a	19.1 ± 3.02 ^a	13.10 ± 2.45 ^a	8.83 ± 0.76 ^b
Root length (cm)	14.2 ± 1.30 ^a	13.7 ± 3.60 ^a	13.1 ± 0.11 ^a	8.13 ± 0.90 ^b
Root dry weight (mg)	3.83 ± 0.83 ^a	3.73 ± 0.57 ^a	2.26 ± 0.58 ^a	1.80 ± 0.40 ^b
Total chlorophyll <i>a</i> and <i>b</i> (mg·g ⁻¹ FW)	83.0 ± 6.02 ^a	70.4 ± 9.79 ^b	78.3 ± 1.68 ^a	63.0 ± 2.71 ^b

Different letters indicate significant differences between means (± SD) of treatments (n = 3). Data were from 1-week-old plants

Source: <http://onlinelibrary.wiley.com/doi/10.1111/plb.12436/full>

Statistical significance of the growth performance of giant reed under various Cr treatments

	Treatment	Leaves	Tillers	Nodes	Plant height	Fresh weight	Dry weight	Root length
Without Antibiotic	1	3.33a	8cd	32e	14.33bc	244.5b	62.6j	9.83c
	2	7b	4a	19.67bc	16d	242.17a	57.87h	11.95d
	3	2.66a	6b	16a	12.92ab	249.42e	56.4g	19.33h
	4	6.66b	4a	21c	15.1cd	246.58cd	52.7f	7.08b
	5	13c	10ef	15a	13.88bc	245.75bc	50.80e	8.91c
With Antibiotic	6	2.66a	7bc	33.66e	14bc	247.42d	60.38i	14.33f
	7	19.66d	10ef	19bc	15.17cd	252.25f	43.36d	13e
	8	3.66a	11.33f	24.33d	12.17ab	244.92b	37.28c	34.95i
	9	6b	9.33de	21.33c	13.17ab	252.17f	34.37b	16.91g
	10	20.33d	3.33a	18.33b	15.17cd	251.92f	27.90a	2.25a

Different letters indicate significant differences between treatments (p < 0.05)

Source: <https://link.springer.com/article/10.1007/s13762-016-0996-1>

Growth and related attributes of two maize hybrids as affected by different levels of chromium stress

Maize hybrids	Cr level (μM)	Plant height (cm)	Number of leaves/plant	Leaf area (cm ²)	Stem diameter (mm)	Ear length (cm)	Shoot fresh weight/plant (g)	Shoot dry weight/plant (g)
Wan Dan 13	0	201.38±1.87 ^a	14.33±0.44 ^{ns}	254.65±1.97 ^a	25.55±0.76 ^a	17.98±0.29 ^{ns}	241.00±1.33 ^a	66.36±0.29 ^a
	30	199.76±1.44 ^a	14.21±0.34 ^{ns}	256.87±1.33 ^a	24.84±0.34 ^{ab}	17.92±0.34 ^{ns}	237.55±1.33 ^a	65.32±0.34 ^a
	60	196.00±3.22 ^b	14.12±0.44 ^{ns}	258.76±2.09 ^{ab}	24.71±0.44 ^{ab}	17.83±0.18 ^{ns}	230.21±2.09 ^{ab}	62.54±0.18 ^{ab}
	90	193.65±2.44 ^{bc}	13.99±0.59 ^{ns}	253.33±1.28 ^{ab}	24.60±0.59 ^{ab}	17.77±0.59 ^{ns}	227.87±1.28 ^{ab}	60.34±0.59 ^b
	120	191.88±2.21 ^c	13.93±0.78 ^{ns}	251.54±2.66 ^{ab}	24.69±0.78 ^{ab}	17.73±0.78 ^{ns}	219.54±2.66 ^b	55.54±0.78 ^c
	150	190.87±0.98 ^c	13.78±0.43 ^{ns}	247.02±0.99 ^b	24.42±0.49 ^b	17.62±0.65 ^{ns}	209.65±0.22 ^c	53.76±0.65 ^c
Run Nong 35	0	200.95±2.76 ^a	14.32±0.66 ^{ns}	253.74±2.33 ^a	24.88±0.44 ^a	17.97±0.64 ^{ns}	238.87±1.46 ^a	64.99±0.64 ^a
	30	198.76±3.11 ^b	14.19±0.78 ^{ns}	250.55±3.11 ^{ab}	23.39±0.78 ^{ab}	17.88±0.95 ^{ns}	231.76±3.11 ^b	62.56±0.95 ^{ab}
	60	194.33±2.55 ^c	14.08±0.70 ^{ns}	247.56±2.57 ^{ab}	22.87±0.70 ^b	17.75±0.70 ^{ns}	225.23±2.57 ^b	59.76±0.70 ^b
	90	191.04±2.01 ^d	13.92±0.54 ^{ns}	244.99±2.08 ^b	22.64±0.33 ^b	17.69±0.34 ^{ns}	214.87±2.08 ^c	55.23±0.34 ^c
	120	189.65±0.88 ^e	13.78±0.38 ^{ns}	237.87±1.86 ^c	22.52±0.38 ^b	17.61±0.38 ^{ns}	201.65±4.00 ^d	51.76±0.38 ^d
	150	188.11±1.65 ^f	13.61±0.32 ^{ns}	228.76±2.11 ^d	22.21±0.65 ^b	17.55±0.20 ^{ns}	189.43±2.77 ^e	47.32±0.20 ^e

Values in the table are the means of three replicates ± SE. Values share a letter in common within columns do not differ significantly according to Newman–Keuls test (p< 0.05)

Source: <https://pakjas.com.pk/papers/2635.pdf>