

Values are an average of five observations values in parenthesis are percentage activity with respective control Mean \pm S ϵ . ** Significance at P<0.05 level

Table 5: Effect of Lead acetate (15 mM) and Sugar cane bagasse on the growth parameter of *Vigna radiata* (L.) Wilczek

Dry Weight (mg)	0.146 \pm 0.026** (100)	0.046 \pm 0.0003** (31)	0.056 \pm 0.002* (38)	0.064 \pm 0.001* (43)	0.074 \pm 0.001** (50)
Leaf Area (cm²)	3.33 \pm 0.166** (100)	2.23 \pm 0.016** s(67)	2.41 \pm 0.083* (72)	2.59 \pm 0.041* (77)	2.75 \pm 0.040** (82)

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Parameter	Control	15m M	2g/L(w/v)	4g/L(w/v)	6g/L(w/v)
Chlorophyll a (mg/g/LFW)	0.123 \pm 0.0005** (100)	0.095 \pm 0.0006** (77)	0.099 \pm 0.002* (80)	0.105 \pm 0.003* (85)	0.111 \pm 0.010** (90)
Chlorophyll b (mg/g/LFW)	0.056 \pm 0.0011** (100)	0.026 \pm 0.0005** (46)	0.028 \pm 0.001* (50)	0.035 \pm 0.002* (62)	0.044 \pm 0.001** (78)
Total chlorophyll (mg/g/LFW)	0.179 \pm 0.0006**	0.116 \pm 0.001** (65)	0.127 \pm 0.002* (71)	0.140 \pm 0.005* (78)	0.155 \pm 0.011** (86)

	(100)				
Carotenoids (mg/g/LFW)	1.12 4 ± 0.00 1** (100)	0.615 ± 0.001 ** (54)	0.665 ± 0.008* * (59)	0.735 ± 0.055* * (65)	0.870 ± 0.012 ** (77)

Mean ± S.E.** Significance at P<0.05 level

Table 6: Effect of Lead acetate (15 mM) and Sugar cane bagasse on the pigment content of *Vigna radiata* (L.) Wilczek

Anthocyanin (mg/g/LFW)	4.23 ± 0.01 1** (100)	6.67 ± 0.012 ** (157)	6.28 ± 0.170* * (148)	5.43 ± 0.256* * (128)	4.76 ± 0.088 ** (112)
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Mean ± S.E.** Significance at P<0.05 level

Table 7: Effect of Lead acetate (15 mM) and Sugar cane bagasse on the Biochemical parameter of *Vigna radiata* (L.) Wilczek

Parameter	Control	15m M	2g/L(w/v)	4g/L(w/v)	6g/L(w/v)
Glucose (mg/gLFW)	64.2 3 ± 0.14 5** (100)	22.70 ± 0.115 ** (35)	25.70 ± 0.208 ** (40)	29.66 ± 0.120* * (46)	38.43 ± 0.120 ** (59)
Protein (mg/gLFW)	4.63 ± 0.08 8** (100)	2.50 ± 0.023 ** (53)	2.80 ± 0.080* * (60)	2.98 ± 0.064* * (64)	3.42± 0.157 ** (73)
Starch (mg/gLFW)	2.05 ± 0.00 6** (100)	0.54 ± 0.014 ** (26)	0.73 ± 0.029* * (35)	0.92 ± 0.023* * (44)	1.08 ± 0.082 ** (52)
Amino Acid (µmole/gL FW)	26.6 6 ± 0.08 8** (100)	53.24 ± 0.023 ** (199)	45.56 ± 0.145* * (170)	42.80± 0.200* * (160)	41.13 ± 0.735 ** (154)
Proline (mg/gLFW)	1.24 ± 0.00 8** (100)	1.95 ± 0.020 ** (156)	1.65 ± 0.061* * (132)	1.53± 0.058* * (122)	1.30 ± 0.029 ** (104)

Leaf Nitrate (mg/g/LFW)	15.1	28.45	26.66	24.90	22.10
	6 ±	±	±	±	±
	0.08	0.017	0.317*	0.305*	0.866
	8**	**	*	*	**
	(100)	(187)	(175)	(164)	(145)

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Table 8: Effect of Lead acetate (15 mM) and Sugar cane bagasse on the enzyme content of *Vigna radiata* (L.) Wilczek

Parameter	Control	15m M	2g/L (w/v)	4g/L (w/v)	6g/L (w/v)
NRA (µmole/gL FW)	7.65	2.14	2.79±	3.30 ±	3.84
	±	±	0.112*	0.121*	±
	0.00	0.008	*	*	0.058
	5**	**			**
	(100)	(28)	(36)	(43)	(50)
Catalase (µmole/gL FW)	2.10	4.65	4.48 ±	4.24 ±	3.74
	±	±	0.061*	0.012*	±
	0.05	0.018	*	*	0.130
	7**	**			**
	(100)	(221)	(213)	(202)	(178)
Peroxidase (µmole/gL FW)	0.00	0.018	0.017	0.014	0.012
	7 ±	±	±	±	±
	0.00	0.000	0.0005	0.0006	0.001
	03*	3**	**	**	5**
	(100)	(242)	(220)	(181)	(155)

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Table 9: AAS study on the concentration of lead in heavy metal treated *Vigna radiata* (L.) Wilczek

S.NO	Treatment	Lead in ppm
1	Control	0.0782
2	5mM	0.4313
3	10mM	0.8136
4	15mM	1.3273
5	20mM	1.9042
6	25mM	2.7410

Table 10: AAS study on the concentration of lead in Sugar cane bagasse treated *Vigna radiata* (L.) Wilczek

S.NO	Treatment	Lead in ppm
1	Control	0.0782
2	15mM	1.3273
3	2g/L	0.6412
4	4g/L	0.4315
5	6g/L	0.1135

