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Appendices

APPENDIX A

Table A.1 Light intensity (lux.m^2) and temperature ($^\circ\text{C}$) during experimental

Date	Light intensity (lux.m^2)	Temperature ($^\circ\text{C}$)	Date	Light intensity (lux.m^2)	Temperature ($^\circ\text{C}$)
15/7/2006	10720	24	30/7/2006	11260	23.7
	57200	29.5		17500	30.0
	24800	28		11920	28.8
16/7/2006	12260	25	31/7/2006	2270	23.0
	9600	28.5		23000	27.3
	4080	27.5		1960	23.0
17/7/2006	6970	24.5	1/8/2006	4460	23.7
	7700	31.0		13700	27.0
	39800	32.0		16600	29.2
18/7/2006	5300	25.0	2/8/2006	8290	24.0
	24000	27.0		18790	26.5
	12500	27.8		34100	30.8
19/7/2006	9100	24.5	3/8/2006	9680	25.0
	25800	26.7		23600	29.5
	22800	26.5		21500	31.0
20/7/2006	2550	23.0	4/8/2006	3710	24.5
	29800	28.0		20200	29.0
	22600	30.0		20000	32.5
21/7/2006	8000	25.2	5/8/2006	9770	26.0
	59100	33.0		48500	33.0
	61700	33.2		14000	33.7
22/7/2006	9450	25.8	6/8/2006	7720	26.8
	42300	33.0		28200	33.0
	17900	32.0		18900	35.5
23/7/2006	10420	27.0	7/8/2006	12500	27.0
	54000	33.0		55100	36.5
	45300	35.7		17200	35.0
24/7/2006	6920	27.5	8/8/2006	9170	26.5
	64100	34.0		55800	34.5
	46000	35.0		9610	26.5
25/7/2006	10630	26.0	9/8/2006	13520	27.0
	59600	33.0		26200	33.0
	15150	33.8		22600	32.0
26/7/2006	9460	24.8	10/8/2006	7000	24.5
	31000	30.0		16100	27.1
	19100	27.0		12430	27.0
27/7/2006	5270	23.5	11/8/2006	9160	25.5
	11240	24.5		42500	31.0
	31800	28.8		12620	30.0
28/7/2006	14390	23.5	12/8/2006	13320	27.5
	13870	27.0		63500	31.5
	41200	31.5		23700	33.0
29/7/2006	8450	25.5	13/8/2006	5140	24.5
	27100	30.0		87400	32.0
	24200	31.0		1830	28.0

Table A.2 Light intensity (lux.m^2) and temperature ($^\circ\text{C}$) during experimental

Date	Light intensity (lux.m^2)	Temperature ($^\circ\text{C}$)	Date	Light intensity (lux.m^2)	Temperature ($^\circ\text{C}$)
14/8/2006	19300	26.5	29/8/2006	4160	25.0
	60200	32.5		86700	32.0
	23500	31.0		8750	29.0
15/8/2006	8280	25.8	30/8/2006	16320	29.0
	60400	32.0		87200	25.0
	11300	31.5		35100	27.0
16/8/2006	7250	25.5	31/8/2006	7440	23.5
	35200	30.0		19490	24.0
	895	26.3		32800	24.0
17/8/2006	6810	25.5	1/9/2006	3820	23.5
	29500	31.5		14200	26.5
	32700	32.8		22400	33.7
18/8/2006	18400	28.0	2/9/2006	39200	26.5
	35400	27.5		89700	33.5
	13390	29.0		33200	34.5
19/8/2006	5220	24.7	3/9/2006	8440	27.0
	16370	28.0		69600	32.5
	13930	29.8		59000	35.0
20/8/2006	11930	26.5	4/9/2006	26200	27.5
	14020	27.8		63200	33.7
	19100	28.8		45000	35.0
21/8/2006	9000	24.5	5/9/2006	19710	27.5
	34500	29.0		31900	32.5
	16700	30.0		30900	34.7
22/8/2006	7370	24.7	6/9/2006	7290	25.5
	22200	27.8		13690	29.0
	20500	30.0		39600	32.5
23/8/2006	5700	24.0	7/9/2006	20000	27.0
	34100	27.8		89200	32.0
	23100	31.5		42800	35.0
24/8/2006	11130	26.2	8/9/2006	9870	27.0
	71900	32.0		88300	34.5
	19760	34.0		21200	33.5
25/8/2006	1060	26.2	9/9/2006	12620	27.5
	22200	31.5		28300	32.7
	13350	33.5		6720	33.5
26/8/2006	6460	25.0	10/9/2006	6360	24.2
	43500	31.0		43200	31.0
	18150	31.2		41300	33.0
27/8/2006	5460	25.0	11/9/2006	11576	25.0
	29800	29.5		27500	29.5
	9520	29.5		28100	31.5
28/8/2006	3580	24.0	12/9/2006	57820	24.8
	38400	30.5		34000	30.0
	6000	24.0		13502	30.7

Table A.3 Dry weight (g) of *Canna* sp., *Colocasia esculenta* (L.), *Cyperus papyrus* (L.) and *Typha angustifolia* (L.)

plants	Treatments	Replication	Dry weight (g)			
			15 days	30 days	45 days	60 days
<i>Canna</i> sp.	Control	1	13.4	16.4	21.9	28.4
		2	12.6	17.5	19.9	25.6
		3	15.1	13.5	21.8	33.3
	As(III)	1	6.5	6.9	9.5	8.8
		2	7.1	8.0	12.5	10.1
		3	7.4	7.4	8.3	12.8
	As(V)	1	8.1	11.5	16.7	20.4
		2	7.5	9.3	13.3	18.8
		3	7.8	11.9	12.4	20.5
<i>C. esculenta</i>	Control	1	18.5	20.4	22.5	37.2
		2	17.6	19.8	22.4	25.2
		3	18.5	21.9	20.5	28.2
	As(III)	1	8.6	9.7	10.0	11.3
		2	12.1	13.6	13.1	15.5
		3	9.1	8.2	11.4	11.7
	As(V)	1	8.9	10.4	23.4	18.9
		2	11.0	11.5	14.0	24.0
		3	10.4	13.8	16.5	23.5
<i>C. papyrus</i>	Control	1	39.1	41.6	56.3	57.9
		2	45.1	53.8	62.0	78.3
		3	48.8	43.6	64.3	69.9
	As(III)	1	25.6	37.6	59.9	67.6
		2	32.3	39.8	49.8	53.4
		3	40.2	29.5	42.0	56.6
	As(V)	1	32.0	36.5	68.8	78.1
		2	40.1	46.6	55.5	62.8
		3	46.1	39.0	48.2	47.9
<i>T. angustifolia</i>	Control	1	18.6	23.7	25.0	29.4
		2	18.8	23.1	22.6	21.0
		3	24.5	17.7	22.6	24.8
	As(III)	1	16.2	15.7	23.7	25.1
		2	14.1	19.5	20.0	22.5
		3	21.9	17.0	20.8	23.6
	As(V)	1	17.7	23.6	24.8	28.9
		2	17.5	21.8	22.5	20.1
		3	22.3	17.0	21.4	23.6

Table A.4 Dry weight decreasing (%) of *Canna sp.*, *C. esculenta*, *C. papyrus*, and *T. angustifolia*

plants	Treatments	Replication	Dry weight decreasing (%)			
			15 days	30 days	45 days	60 days
<i>Canna sp.</i>	Control	1	0.0	0.0	0.0	0.0
		2	0.0	0.0	0.0	0.0
		3	0.0	0.0	0.0	0.0
	As(III)	1	51.3	57.9	56.4	69.2
		2	43.7	54.2	37.5	60.8
		3	51.1	45.7	62.2	61.6
	As(V)	1	39.5	30.1	23.8	28.2
		2	40.2	46.7	33.5	26.5
		3	48.6	12.5	43.1	38.5
<i>C. esculenta</i>	Control	1	0.0	0.0	0.0	0.0
		2	0.0	0.0	0.0	0.0
		3	0.0	0.0	0.0	0.0
	As(III)	1	53.8	52.5	55.4	40.9
		2	31.4	27.8	41.4	41.7
		3	51.0	58.7	44.7	44.5
	As(V)	1	51.8	48.9	46.4	16.0
		2	37.8	38.8	34.6	47.1
		3	43.6	30.9	35.6	21.7
<i>C. papyrus</i>	Control	1	0.0	0.0	0.0	0.0
		2	0.0	0.0	0.0	0.0
		3	0.0	0.0	0.0	0.0
	As(III)	1	34.4	26.3	35.0	33.1
		2	28.4	26.6	43.6	38.1
		3	17.6	32.3	5.4	15.2
	As(V)	1	18.0	12.1	23.5	19.4
		2	11.0	13.3	13.1	18.2
		3	5.5	10.6	6.2	8.9
<i>T. angustifolia</i>	Control	1	0.0	0.0	0.0	0.0
		2	0.0	0.0	0.0	0.0
		3	0.0	0.0	0.0	0.0
	As(III)	1	12.9	33.9	5.2	14.6
		2	25.2	15.6	11.5	2.4
		3	10.4	3.8	7.9	4.8
	As(V)	1	4.9	0.3	0.9	1.8
		2	7.0	5.7	0.5	4.6
		3	9.0	4.0	5.2	4.9

Table A.5 Dry weight (g) in different organs of *Canna* sp.

Organs	Treatments	Replication	Dry weight (g)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	3.0	3.7	5.0	6.5
		2	2.9	4.0	4.5	5.8
		3	3.4	3.1	5.0	7.6
	As(III)	1	1.5	1.6	2.2	2.0
		2	1.6	1.8	2.8	2.3
		3	1.7	1.7	1.9	2.9
	As(V)	1	1.8	2.6	3.8	4.6
		2	1.7	2.1	3.0	4.3
		3	1.8	2.7	2.8	4.7
Pseudostem	Control	1	2.5	3.0	4.0	5.2
		2	2.3	3.2	3.7	4.7
		3	2.8	2.5	4.0	6.1
	As(III)	1	1.2	1.3	1.8	1.6
		2	1.3	1.5	2.3	1.8
		3	1.4	1.4	1.5	2.3
	As(V)	1	1.5	2.1	3.1	3.7
		2	1.4	1.7	2.4	3.5
		3	1.4	2.2	2.3	3.8
Rhizome	Control	1	6.7	8.2	10.9	14.2
		2	6.3	8.8	10.0	12.8
		3	7.6	6.8	10.9	16.6
	As(III)	1	3.3	3.5	4.8	4.4
		2	3.5	4.0	6.2	5.0
		3	3.7	3.7	4.1	6.4
	As(V)	1	4.1	5.7	8.3	10.2
		2	3.8	4.7	6.6	9.4
		3	3.9	5.9	6.2	10.2
Root	Control	1	1.2	1.5	2.0	2.5
		2	1.1	1.6	1.8	2.3
		3	1.4	1.2	1.9	3.0
	As(III)	1	0.6	0.6	0.9	0.8
		2	0.6	0.7	1.1	0.9
		3	0.7	0.7	0.7	1.1
	As(V)	1	0.7	1.0	1.5	1.8
		2	0.7	0.8	1.2	1.7
		3	0.7	1.1	1.1	1.8

Table A.6 Dry weight (g) in different organs of *C. esculenta*

Organs	Treatments	Replication	Dry weight (g)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	4.2	4.6	5.1	8.4
		2	4.0	4.5	5.1	5.7
		3	4.2	4.9	4.6	6.4
	As(III)	1	1.9	2.2	2.3	2.5
		2	2.7	3.1	3.0	3.5
		3	2.0	1.9	2.6	2.6
	As(V)	1	2.0	2.3	5.3	4.3
		2	2.5	2.6	3.2	5.4
		3	2.4	3.1	3.7	5.3
Petiole	Control	1	3.4	3.8	4.2	6.9
		2	3.3	3.7	4.2	4.7
		3	3.4	4.1	3.8	5.2
	As(III)	1	1.6	1.8	1.9	2.1
		2	2.3	2.5	2.4	2.9
		3	1.7	1.5	2.1	2.2
	As(V)	1	1.7	1.9	4.4	3.5
		2	2.0	2.1	2.6	4.5
		3	1.9	2.6	3.1	4.4
Corm	Control	1	8.7	9.5	10.5	17.4
		2	8.3	9.3	10.5	11.8
		3	8.7	10.3	9.6	13.2
	As(III)	1	4.0	4.5	4.7	5.3
		2	5.7	6.4	6.1	7.3
		3	4.2	3.9	5.3	5.5
	As(V)	1	4.2	4.9	11.0	8.8
		2	5.1	5.4	6.6	11.3
		3	4.9	6.4	7.7	11.0
Root	Control	1	2.2	2.4	2.7	4.4
		2	2.1	2.4	2.7	3.0
		3	2.2	2.6	2.5	3.4
	As(III)	1	1.0	1.2	1.2	1.3
		2	1.4	1.6	1.6	1.9
		3	1.1	1.0	1.4	1.4
	As(V)	1	1.1	1.2	2.8	2.3
		2	1.3	1.4	1.7	2.9
		3	1.2	1.6	2.0	2.8

Table A.7 Dry weight (g) in different organs of *C. papyrus*

Organs	Treatments	Replication	Dry weight (g)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	12.1	12.8	17.4	17.9
		2	13.9	16.6	19.2	24.2
		3	15.1	13.5	19.9	21.6
	As(III)	1	7.9	11.6	18.5	20.9
		2	10.0	12.3	15.4	16.5
		3	12.4	9.1	13.0	17.5
	As(V)	1	9.9	11.3	21.3	24.1
		2	12.4	14.4	17.1	19.4
		3	14.2	12.1	14.9	14.8
Culm	Control	1	13.9	14.7	20.0	20.6
		2	16.0	19.1	22.0	27.8
		3	17.3	15.5	22.8	24.8
	As(III)	1	9.1	13.4	21.3	24.0
		2	11.5	14.1	17.7	19.0
		3	14.3	10.5	14.9	20.1
	As(V)	1	11.4	13.0	24.4	27.7
		2	14.2	16.5	19.7	22.3
		3	16.3	13.8	17.1	17.0
Rhizome	Control	1	7.7	8.2	11.0	11.4
		2	8.9	10.6	12.2	15.4
		3	9.6	8.6	12.6	13.7
	As(III)	1	5.0	7.4	11.8	13.3
		2	6.3	7.8	9.8	10.5
		3	7.9	5.8	8.2	11.1
	As(V)	1	6.3	7.2	13.5	15.3
		2	7.9	9.1	10.9	12.3
		3	9.0	7.7	9.5	9.4
Root	Control	1	5.5	5.8	7.9	8.1
		2	6.3	7.5	8.7	10.9
		3	6.8	6.1	9.0	9.8
	As(III)	1	3.6	5.3	8.4	9.4
		2	4.5	5.6	7.0	7.5
		3	5.6	4.1	5.9	7.9
	As(V)	1	4.5	5.1	9.6	10.9
		2	5.6	6.5	7.8	8.8
		3	6.4	5.4	6.7	6.7

Table A.8 Dry weight (g) in different organs of *T. angustifolia*

Organs	Treatments	Replication	Dry weight (g)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	6.4	8.1	8.5	10.1
		2	6.4	7.9	7.7	7.2
		3	8.4	6.0	7.7	8.5
	As(III)	1	5.5	5.3	8.1	8.6
		2	4.8	6.7	6.8	7.7
		3	7.5	5.8	7.1	8.1
	As(V)	1	6.1	8.1	8.5	9.9
		2	6.0	7.5	7.7	6.9
		3	7.6	5.8	7.3	8.1
Rhizome	Control	1	9.7	12.3	13.0	15.3
		2	9.8	12.0	11.7	10.9
		3	12.7	9.2	11.7	12.9
	As(III)	1	8.4	8.1	12.3	13.0
		2	7.3	10.1	10.4	11.7
		3	11.4	8.8	10.8	12.3
	As(V)	1	9.2	12.2	12.9	15.0
		2	9.1	11.3	11.7	10.4
		3	11.5	8.8	11.1	12.3
Root	Control	1	2.6	3.3	3.5	4.1
		2	2.6	3.2	3.2	2.9
		3	3.4	2.5	3.2	3.5
	As(III)	1	2.3	2.2	3.3	3.5
		2	2.0	2.7	2.8	3.1
		3	3.1	2.4	2.9	3.3
	As(V)	1	2.5	3.3	3.5	4.0
		2	2.4	3.1	3.1	2.8
		3	3.1	2.4	3.0	3.3

Table A.9 Total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) of *Canna* sp., *C. esculenta*, *C. papyrus*, and *T. angustifolia*

Plants	Treatments	Replication	Total arsenic ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
<i>Canna</i> sp.	Control	1	2	1	1	1
		2	2	1	1	1
		3	2	1	1	1
	As(III)	1	78	135	129	147
		2	73	143	131	144
		3	72	138	125	151
	As(V)	1	123	154	168	186
		2	118	153	179	195
		3	111	153	183	186
<i>C. esculenta</i>	Control	1	1	2	1	1
		2	1	2	1	1
		3	1	1	1	1
	As(III)	1	120	162	93	80
		2	125	155	84	85
		3	124	145	87	85
	As(V)	1	149	180	119	109
		2	143	172	123	103
		3	146	182	130	101
<i>C. papyrus</i>	Control	1	1	2	1	1
		2	1	2	1	1
		3	1	2	1	1
	As(III)	1	93	134	117	101
		2	99	137	118	114
		3	97	142	106	105
	As(V)	1	155	174	134	128
		2	150	165	134	131
		3	146	178	128	130
<i>T. angustifolia</i>	Control	1	2	1	3	1
		2	2	1	3	1
		3	2	1	2	1
	As(III)	1	162	180	205	187
		2	159	180	192	181
		3	168	172	206	186
	As(V)	1	103	122	139	154
		2	98	120	139	146
		3	99	121	142	146

Table A.10 Total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in different organs of *Canna* sp.

Organs	Treatments	Replication	Total arsenic ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	1	1	1	0
		2	1	1	1	0
		3	2	1	1	0
	As(III)	1	12	20	30	83
		2	18	21	31	93
		3	15	27	31	95
	As(V)	1	31	100	111	109
		2	39	108	104	100
		3	34	103	113	104
Pseudostem	Control	1	5	1	1	0
		2	3	1	2	0
		3	4	2	1	0
	As(III)	1	40	94	80	97
		2	43	102	89	96
		3	41	90	104	87
	As(V)	1	47	88	85	97
		2	51	91	107	102
		3	61	98	99	110
Rhizome	Control	1	1	1	1	1
		2	2	1	2	1
		3	1	1	2	1
	As(III)	1	100	192	189	194
		2	90	204	190	181
		3	93	194	174	195
	As(V)	1	200	203	223	257
		2	185	195	241	279
		3	169	197	247	258
Root	Control	1	1	2	2	1
		2	1	2	2	1
		3	2	2	2	1
	As(III)	1	201	192	146	154
		2	184	193	141	164
		3	165	203	129	184
	As(V)	1	86	160	179	164
		2	88	155	179	159
		3	87	144	172	148

Table A.11 Total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in different organs of *C. esculenta*

Organs	Treatments	Replication	Total arsenic ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	1	1	1	0
		2	1	1	1	1
		3	1	1	1	1
	As(III)	1	96	127	85	58
		2	104	123	81	52
		3	101	109	72	51
	As(V)	1	99	115	54	84
		2	82	125	63	92
		3	93	145	64	89
Petiole	Control	1	1	2	2	3
		2	1	1	1	2
		3	1	2	1	2
	As(III)	1	110	137	80	69
		2	124	140	67	80
		3	122	129	79	86
	As(V)	1	155	192	170	145
		2	148	181	176	132
		3	153	188	194	138
Corm	Control	1	1	2	1	1
		2	1	2	1	1
		3	1	1	1	2
	As(III)	1	130	181	130	113
		2	123	161	123	127
		3	134	156	124	115
	As(V)	1	67	91	60	47
		2	71	76	64	35
		3	72	94	52	38
Root	Control	1	1	1	1	2
		2	1	1	1	1
		3	1	1	1	1
	As(III)	1	184	294	97	112
		2	175	260	97	105
		3	162	262	86	100
	As(V)	1	347	396	136	110
		2	352	379	123	116
		3	333	366	122	81

Table A.12 Total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in different organs of *C. papyrus*

Organs	Treatments	Replication	Total arsenic ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	1	2	1	1
		2	1	2	1	1
		3	1	2	1	1
	As(III)	1	69	136	172	167
		2	74	121	163	186
		3	74	128	143	177
	As(V)	1	208	180	155	152
		2	200	175	143	128
		3	200	200	143	137
Culm	Control	1	1	2	1	0
		2	1	3	0	1
		3	1	2	0	1
	As(III)	1	51	70	66	58
		2	62	70	74	69
		3	54	85	61	60
	As(V)	1	134	143	105	110
		2	120	132	124	133
		3	129	131	109	117
Rhizome	Control	1	3	1	1	1
		2	2	1	1	2
		3	2	1	1	1
	As(III)	1	100	130	81	61
		2	108	153	71	72
		3	119	141	72	70
	As(V)	1	141	110	106	86
		2	132	101	89	94
		3	115	115	105	94
Root	Control	1	1	1	1	2
		2	1	1	1	2
		3	1	1	1	2
	As(III)	1	241	300	177	125
		2	231	321	192	131
		3	228	322	183	105
	As(V)	1	114	330	204	176
		2	137	321	202	188
		3	118	333	180	198

Table A.13 Total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in different organs of *T. angustifolia*

Organs	Treatments	Replication	Total arsenic ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	1	2	2	1
		2	1	2	2	1
		3	1	2	2	1
	As(III)	1	79	84	130	72
		2	70	88	120	68
		3	85	72	135	65
	As(V)	1	89	133	124	141
		2	88	117	126	135
		3	87	126	130	140
Rhizome	Control	1	3	1	5	0
		2	2	1	4	0
		3	2	1	3	0
	As(III)	1	233	249	270	291
		2	231	248	255	280
		3	247	242	271	293
	As(V)	1	112	105	132	145
		2	104	111	125	133
		3	109	111	128	132
Root	Control	1	2	2	0	1
		2	2	1	1	1
		3	1	1	1	1
	As(III)	1	100	158	146	80
		2	107	155	131	90
		3	83	156	138	84
	As(V)	1	104	156	200	221
		2	97	161	226	223
		3	88	148	226	212

Table A.14 Bioconcentration factor of *Canna* sp., *C. esculenta*, *C. papyrus*, and *T. angustifolia*

Plants	Treatment	Replication	Bioconcentration factor			
			15 days	30 days	45 days	60 days
<i>Canna</i> sp.	Control	1	0.0103	0.0067	0.0069	0.0035
		2	0.0111	0.0066	0.0085	0.0041
		3	0.0101	0.0073	0.0082	0.0033
	As(III)	1	0.4457	0.7700	0.7367	0.8413
		2	0.4197	0.8151	0.7476	0.8220
		3	0.4142	0.7866	0.7123	0.8640
	As(V)	1	0.7044	0.8823	0.9617	1.0626
		2	0.6769	0.8727	1.0255	1.1154
		3	0.6339	0.8720	1.0447	1.0641
<i>C. esculenta</i>	Control	1	0.0048	0.0092	0.0068	0.0071
		2	0.0057	0.0088	0.0060	0.0061
		3	0.0060	0.0080	0.0061	0.0075
	As(III)	1	0.6838	0.9245	0.5294	0.4568
		2	0.7159	0.8833	0.4804	0.4865
		3	0.7105	0.8298	0.4955	0.4866
	As(V)	1	0.8522	1.0304	0.6812	0.6210
		2	0.8176	0.9851	0.7036	0.5889
		3	0.8344	1.0402	0.7420	0.5784
<i>C. papyrus</i>	Control	1	0.0068	0.0095	0.0047	0.0050
		2	0.0066	0.0106	0.0043	0.0062
		3	0.0061	0.0096	0.0041	0.0051
	As(III)	1	0.5299	0.7679	0.6700	0.5798
		2	0.5633	0.7845	0.6714	0.6536
		3	0.5551	0.8132	0.6036	0.5977
	As(V)	1	0.8872	0.9951	0.7673	0.7300
		2	0.8545	0.9457	0.7648	0.7509
		3	0.8359	1.0146	0.7335	0.7420
<i>T. angustifolia</i>	Control	1	0.0108	0.0077	0.0196	0.0033
		2	0.0103	0.0083	0.0158	0.0030
		3	0.0090	0.0070	0.0116	0.0041
	As(III)	1	0.9257	1.0268	1.1701	1.0674
		2	0.9066	1.0305	1.0970	1.0351
		3	0.9625	0.9820	1.1753	1.0602
	As(V)	1	0.5881	0.6950	0.7940	0.8815
		2	0.5582	0.6857	0.7957	0.8345
		3	0.5641	0.6910	0.8124	0.8333

Table A.15 Arsenic removal efficiency (%) *Canna sp.*, *C. esculenta*, *C. papyrus*, and *T. angustifolia*

Plants	Treatments	Replication	Arsenic removal efficiency (%)			
			15 days	30 days	45 days	60 days
<i>Canna sp.</i>	Control	1	0.00275	0.00221	0.00302	0.00198
		2	0.00278	0.00233	0.00339	0.00208
		3	0.00305	0.00197	0.00359	0.00222
	As(III)	1	0.05821	0.10657	0.14041	0.14739
		2	0.05935	0.13073	0.18629	0.16522
		3	0.06131	0.11562	0.11754	0.22084
	As(V)	1	0.11439	0.20276	0.32062	0.43352
		2	0.10166	0.16284	0.27177	0.42007
		3	0.09851	0.20666	0.25928	0.43565
<i>C. esculenta</i>	Control	1	0.00178	0.00376	0.00304	0.00527
		2	0.00201	0.00348	0.00270	0.00309
		3	0.00223	0.00350	0.00252	0.00420
	As(III)	1	0.10619	0.10276	0.11692	0.17879
		2	0.12594	0.15062	0.17308	0.24041
		3	0.11256	0.11357	0.12872	0.13641
	As(V)	1	0.15185	0.21430	0.31902	0.23459
		2	0.17937	0.22733	0.19754	0.28310
		3	0.17387	0.28624	0.24424	0.27135
<i>C. papyrus</i>	Control	1	0.00530	0.00787	0.00533	0.00585
		2	0.00594	0.01139	0.00534	0.00968
		3	0.00592	0.00839	0.00521	0.00720
	As(III)	1	0.27162	0.57778	0.80234	0.78441
		2	0.36389	0.62384	0.66914	0.69845
		3	0.44599	0.48013	0.50644	0.67629
	As(V)	1	0.56815	0.72684	1.05570	1.13947
		2	0.68565	0.88099	0.84877	0.94314
		3	0.77001	0.79137	0.70742	0.71010
<i>T. angustifolia</i>	Control	1	0.00401	0.00367	0.00983	0.00197
		2	0.00389	0.00386	0.00714	0.00128
		3	0.00439	0.00249	0.00524	0.00205
	As(III)	1	0.30029	0.32160	0.55510	0.53671
		2	0.25529	0.40252	0.43922	0.46621
		3	0.42158	0.33408	0.48797	0.50125
	As(V)	1	0.20844	0.32802	0.39400	0.50949
		2	0.19559	0.29938	0.35824	0.33482
		3	0.25101	0.23453	0.34740	0.39364

Table A.16 Total arsenic concentration ($\text{mg} \cdot \text{kg}^{-1}$) in tested soil

plants	Treatments	Replication	Total arsenic in soil ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
No plant	Control	1	1	0	0	0
		2	1	0	0	0
		3	1	1	0	0
	As(III)	1	177	176	178	172
		2	175	173	172	175
		3	173	173	172	175
	As(V)	1	175	170	170	169
		2	171	175	174	175
		3	174	172	174	174
<i>Canna</i> sp.	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	165	150	140	126
		2	172	158	144	123
		3	175	156	137	126
	As(V)	1	158	147	137	120
		2	165	146	135	117
		3	156	148	136	128
<i>C. esculenta</i>	Control	1	0	0	0	0
		2	1	0	0	0
		3	1	0	0	0
	As(III)	1	176	155	135	118
		2	175	163	123	125
		3	167	149	142	121
	As(V)	1	164	138	122	117
		2	157	150	138	123
		3	158	147	131	108
<i>C. papyrus</i>	Control	1	0	0	0	0
		2	1	0	0	0
		3	1	0	0	0
	As(III)	1	179	168	147	147
		2	169	150	157	131
		3	174	161	155	139
	As(V)	1	150	137	128	119
		2	159	149	134	129
		3	169	155	141	130
<i>T. angustifolia</i>	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	173	156	159	155
		2	167	164	149	137
		3	171	158	156	147
	As(V)	1	164	145	138	122
		2	159	158	132	127
		3	156	143	141	129

Table A.17 As(III) concentration ($\text{mg} \cdot \text{kg}^{-1}$) in tested soil

plants	Treatments	Replication	As(III) in soil ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
No plant	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	159	105	91	9
		2	158	105	94	9
		3	159	106	96	8
	As(V)	1	0	1	1	0
		2	0	1	1	0
		3	0	1	1	0
<i>Canna</i> sp.	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	81	75	13	8
		2	82	73	13	8
		3	85	73	13	8
	As(V)	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
<i>C. esculenta</i>	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	86	59	9	9
		2	87	58	9	10
		3	89	60	9	9
	As(V)	1	1	0	0	0
		2	1	0	0	0
		3	1	0	0	0
<i>C. papyrus</i>	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	94	81	13	11
		2	96	79	13	11
		3	93	81	13	12
	As(V)	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
<i>T. angustifolia</i>	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	120	48	25	18
		2	126	47	25	18
		3	128	48	25	20
	As(V)	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0

Table A.18 As(V) content ($\text{mg} \cdot \text{kg}^{-1}$) in As(III) and arsenate tested soil

plants	Treatments	Replication	Arsenate in soil ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
No plant	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	13	66	78	164
		2	14	62	76	162
		3	15	71	82	166
	As(V)	1	161	162	167	165
		2	164	169	166	166
		3	162	163	170	168
<i>Canna</i> sp.	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	75	70	114	105
		2	74	70	117	104
		3	77	71	114	107
	As(V)	1	150	133	131	109
		2	153	136	129	111
		3	148	133	117	111
<i>C. esculenta</i>	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	70	86	115	101
		2	70	88	114	103
		3	76	87	111	102
	As(V)	1	145	135	118	110
		2	158	136	116	109
		3	145	138	136	100
<i>C. papyrus</i>	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	62	65	130	118
		2	67	67	129	117
		3	65	71	122	112
	As(V)	1	150	144	124	113
		2	155	141	123	115
		3	151	136	127	119
<i>T. angustifolia</i>	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	35	71	118	117
		2	37	69	115	115
		3	35	75	119	119
	As(V)	1	150	147	127	122
		2	154	146	123	116
		3	151	149	133	105

Table A.19 Arsenic transformation efficiency of tested soil (%)

plants	Replication	Arsenic transformation efficiency in soil (%)			
		15 days	30 days	45 days	60 days
No plant	1	7.3	38.7	46.1	95.0
	2	7.9	37.1	44.8	94.5
	3	8.8	40.0	46.1	95.3
<i>Canna</i> sp.	1	47.9	48.2	90.0	92.7
	2	47.6	48.9	89.9	93.1
	3	47.4	49.4	89.7	92.9
<i>C. esculenta</i>	1	44.8	59.2	92.7	92.1
	2	44.6	60.1	92.5	91.4
	3	46.0	59.2	92.3	92.3
<i>C. papyrus</i>	1	39.8	44.6	91.0	91.3
	2	40.9	45.8	90.7	91.4
	3	41.2	46.7	90.5	90.2
<i>T. angustifolia</i>	1	22.6	59.8	82.6	86.5
	2	22.8	59.5	81.9	86.7
	3	21.8	60.9	82.5	85.8

Table A.20 Total arsenate content ($\text{mg} \cdot \text{kg}^{-1}$) of *Canna sp.*, *C. esculenta*, *C. papyrus*, and *T. angustifolia* in As(III) and As(V) treatments

Plants	Treatments	Replication	Total arsenate ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
<i>Canna sp.</i>	Control	1	0	0	0	1
		2	1	0	0	0
		3	0	0	0	0
	As(III)	1	53	89	85	129
		2	62	78	83	142
		3	70	71	77	118
	As(V)	1	104	110	176	199
		2	95	113	181	188
		3	97	125	183	179
<i>C. esculenta</i>	Control	1	1	1	1	1
		2	1	1	1	1
		3	1	1	1	1
	As(III)	1	147	133	90	67
		2	145	135	91	69
		3	153	119	101	76
	As(V)	1	180	158	136	124
		2	171	144	136	117
		3	182	163	123	125
<i>C. papyrus</i>	Control	1	2	1	1	1
		2	1	1	1	1
		3	1	2	1	1
	As(III)	1	101	134	117	90
		2	104	129	112	89
		3	100	140	114	94
	As(V)	1	123	172	122	141
		2	120	159	126	124
		3	130	171	129	129
<i>T. angustifolia</i>	Control	1	1	1	1	1
		2	1	1	1	1
		3	0	1	1	1
	As(III)	1	108	140	163	138
		2	100	138	170	138
		3	96	154	173	158
	As(V)	1	103	145	161	186
		2	106	141	152	183
		3	108	133	143	181

Table A.21 Total As(V) concentration ($\text{mg} \cdot \text{kg}^{-1}$) of *Canna* sp. in As(III) and As(V) treatments

<i>Canna</i> sp.	Treatments	Replication	Arsenate content ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	0	1	0	1
		2	1	0	1	1
		3	0	0	1	0
	As(III)	1	68	86	103	143
		2	79	75	99	136
		3	76	60	85	101
	As(V)	1	81	95	100	121
		2	79	98	86	115
		3	64	133	94	103
Pseudostem	Control	1	0	0	0	1
		2	1	0	0	0
		3	0	1	0	0
	As(III)	1	54	122	139	199
		2	71	113	142	184
		3	57	118	129	188
	As(V)	1	85	134	167	203
		2	95	128	192	175
		3	130	113	197	167
Rhizome	Control	1	0	0	0	1
		2	1	0	0	0
		3	0	0	0	0
	As(III)	1	33	72	60	104
		2	41	58	59	137
		3	53	53	54	102
	As(V)	1	130	112	220	251
		2	112	118	228	241
		3	107	126	227	229
Root	Control	1	2	0	0	0
		2	1	2	0	1
		3	1	0	0	0
	As(III)	1	120	129	67	91
		2	117	125	59	95
		3	182	104	82	107
	As(V)	1	48	92	148	96
		2	44	93	129	105
		3	57	128	135	117

Table A.22 Total As(V) concentration ($\text{mg} \cdot \text{kg}^{-1}$) of *C. esculenta* in As(III) and As(V) treatments

<i>C. esculenta</i>	Treatments	Replication	Arsenate content ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	1	1	2	2
		2	1	2	1	1
		3	2	1	0	1
	As(III)	1	124	112	92	63
		2	111	108	79	67
		3	110	97	84	84
	As(V)	1	106	91	45	90
		2	96	103	33	83
		3	96	88	39	77
Petiole	Control	1	1	1	1	1
		2	1	1	1	1
		3	2	1	1	1
	As(III)	1	106	79	67	54
		2	98	93	65	56
		3	104	77	81	62
	As(V)	1	171	155	91	77
		2	160	143	99	74
		3	170	142	85	61
Corm	Control	1	1	1	2	1
		2	1	1	1	1
		3	1	1	2	2
	As(III)	1	197	167	115	82
		2	195	169	120	88
		3	214	147	138	103
	As(V)	1	199	168	210	181
		2	192	142	203	162
		3	211	170	180	187
Root	Control	1	1	1	1	2
		2	1	1	1	1
		3	0	1	1	1
	As(III)	1	107	96	32	42
		2	102	88	37	45
		3	86	93	41	41
	As(V)	1	278	205	76	49
		2	271	187	73	58
		3	255	205	69	49

Table A.23 Total As(V) concentration ($\text{mg} \cdot \text{kg}^{-1}$) of *C. papyrus* in As(III) and As(V) treatments

<i>C. papyrus</i>	Treatments	Replication	Arsenate ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	2	1	2	2
		2	1	1	1	1
		3	0	1	1	1
	As(III)	1	104	132	157	165
		2	121	123	174	181
		3	113	138	156	174
	As(V)	1	157	222	126	137
		2	172	203	141	120
		3	173	223	142	141
Culm	Control	1	2	1	1	1
		2	1	2	2	1
		3	2	2	1	1
	As(III)	1	87	115	83	39
		2	80	120	76	39
		3	69	134	87	36
	As(V)	1	78	133	117	156
		2	67	113	100	124
		3	83	128	101	133
Rhizome	Control	1	1	1	0	1
		2	1	1	0	1
		3	0	1	1	1
	As(III)	1	112	184	112	90
		2	123	171	89	65
		3	134	176	107	102
	As(V)	1	199	142	160	171
		2	177	158	187	168
		3	186	157	203	150
Root	Control	1	1	1	1	0
		2	1	1	0	0
		3	0	0	1	1
	As(III)	1	115	113	118	56
		2	101	104	94	46
		3	103	108	97	55
	As(V)	1	51	203	73	71
		2	59	176	72	67
		3	72	188	67	63

Table A.24 Total As(V) concentration ($\text{mg} \cdot \text{kg}^{-1}$) of *T. angustifolia* in As(III) and As(V) treatments

<i>T. angustifolia</i>	Treatments	Replication	Arsenate content ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	0	0	1	0
		2	1	0	1	1
		3	0	0	0	1
	As(III)	1	152	143	185	145
		2	139	124	189	151
		3	133	142	201	161
	As(V)	1	109	101	136	148
		2	113	94	131	144
		3	97	89	107	138
Rhizome	Control	1	1	1	1	1
		2	1	1	1	1
		3	1	1	1	1
	As(III)	1	96	133	160	154
		2	91	143	167	151
		3	83	164	165	175
	As(V)	1	98	184	186	230
		2	104	177	170	225
		3	121	168	170	226
Root	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	44	156	119	63
		2	40	155	135	61
		3	50	151	132	88
	As(V)	1	106	111	130	112
		2	101	122	139	120
		3	92	107	131	120

Table A.25 Total As(III) content ($\text{mg} \cdot \text{kg}^{-1}$) of *Canna sp.*, *C. esculenta*, *C. papyrus*, and *T. angustifolia* in As(III) and As(V) treatments

Plants	Treatments	Replication	Total As(III) (mg/kg)			
			15 days	30 days	45 days	60 days
<i>Canna sp.</i>	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	3	26	3	2
		2	4	32	3	2
		3	6	28	5	3
	As(V)	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
<i>C. esculenta</i>	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	36	68	40	49
		2	36	70	41	46
		3	36	70	32	48
	As(V)	1	23	52	14	23
		2	19	56	16	27
		3	23	56	16	26
<i>C. papyrus</i>	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	21	17	13	0
		2	18	17	14	0
		3	17	19	15	0
	As(V)	1	34	36	12	13
		2	30	34	13	15
		3	33	27	12	17
<i>T. angustifolia</i>	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	22	22	22	15
		2	24	24	25	19
		3	29	29	34	14
	As(V)	1	18	18	30	9
		2	21	16	27	10
		3	19	18	27	9

Table A.26 Total As(III) content ($\text{mg} \cdot \text{kg}^{-1}$) of *Canna* sp. in As(III) and As(V) treatments

<i>Canna</i> sp.	Treatments	Replication	As(III) content ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	1	17	0	0
		2	3	24	0	0
		3	3	24	0	0
	As(V)	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
Pseudostem	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	16	38	17	0
		2	16	47	14	0
		3	29	26	26	0
	As(V)	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
Rhizome	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	0	31	0	0
		2	0	36	1	0
		3	0	35	1	0
	As(V)	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
Root	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	0	0	0	18
		2	0	0	0	25
		3	0	0	0	33
	As(V)	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0

Table A.27 Total As(III) content ($\text{mg} \cdot \text{kg}^{-1}$) of *C. esculenta* in As(III) and As(V) treatments

<i>C. esculenta</i>	Treatments	Replication	As(III) ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	0	22	14	0
		2	0	20	11	0
		3	0	26	14	0
	As(V)	1	0	44	11	0
		2	0	46	10	0
		3	0	40	15	0
Petiole	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	74	117	112	82
		2	67	138	123	94
		3	72	144	84	81
	As(V)	1	0	89	1	12
		2	0	89	2	15
		3	0	78	3	14
Corm	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	0	29	0	44
		2	0	27	0	35
		3	0	28	0	45
	As(V)	1	2	15	3	4
		2	2	17	4	6
		3	3	15	3	6
Root	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	0	30	0	2
		2	0	34	0	2
		3	0	44	0	3
	As(V)	1	0	22	0	3
		2	0	23	0	2
		3	0	16	0	5

Table A.28 Total As(III) content ($\text{mg} \cdot \text{kg}^{-1}$) of *C. papyrus* in As(III) and As(V) treatments

<i>C. papyrus</i>	Treatments	Replication	As(III) ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	0	8	9	0
		2	0	7	8	0
		3	0	12	12	0
	As(V)	1	44	12	0	0
		2	37	15	0	0
		3	46	13	0	0
Culm	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	14	9	3	0
		2	9	8	4	0
		3	9	5	5	0
	As(V)	1	58	69	0	0
		2	52	65	1	0
		3	53	48	1	0
Rhizome	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	56	23	31	0
		2	46	30	36	0
		3	49	28	33	0
	As(V)	1	0	16	26	24
		2	0	13	22	25
		3	0	11	24	40
Root	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	35	50	19	0
		2	44	43	19	0
		3	27	54	26	0
	As(V)	1	0	34	45	59
		2	0	29	58	69
		3	0	24	54	67

Table A.29 Total As(III) content ($\text{mg} \cdot \text{kg}^{-1}$) of *T. angustifolia* in As(III) and As(V) treatments

<i>T. angustifolia</i>	Treatments	Replication	As(III) in plants ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
Leaf	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	34	44	55	0
		2	36	56	60	0
		3	46	58	75	0
	As(V)	1	0	19	41	9
		2	0	24	28	13
		3	0	18	29	10
Rhizome	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	10	13	7	30
		2	11	10	8	36
		3	14	18	15	28
	As(V)	1	35	21	26	0
		2	41	16	31	0
		3	36	23	30	0
Root	Control	1	0	0	0	0
		2	0	0	0	0
		3	0	0	0	0
	As(III)	1	37	0	0	0
		2	46	0	0	0
		3	45	0	0	0
	As(V)	1	0	0	19	47
		2	0	0	14	43
		3	0	0	12	40

Table A.30 As(III) transformation efficiency of plant species in As(III) and As(V) treatments

plants	Replication	As(III) transformation efficiency in plants (%)			
		15 days	30 days	45 days	60 days
<i>Canna</i> sp.	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
<i>C. esculenta</i>	1	0	22	3	5
	2	0	23	4	6
	3	0	20	6	6
<i>C. papyrus</i>	1	17	16	13	13
	2	16	16	14	16
	3	16	12	13	18
<i>T. angustifolia</i>	1	10	9	16	10
	2	11	9	14	10
	3	11	10	15	9

Table A.31 As(III) transformation efficiency in different organs of *Canna* sp.

organs	Replication	As(III) transformation efficiency in Canna sp. (%)			
		15 days	30 days	45 days	60 days
Leaf	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
Pseudostem	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
Rhizome	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
Root	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0

Table A.32 As(III) transformation efficiency in different organs of *C. papyrus*

organs	Replication	As(III) transformation efficiency in <i>C. papyrus</i> (%)			
		15 days	30 days	45 days	60 days
Leaf	1	22	5	0	0
	2	18	7	0	0
	3	21	6	0	0
Culm	1	42	34	0	0
	2	43	36	1	0
	3	39	27	1	0
Rhizome	1	0	10	14	12
	2	0	7	11	13
	3	0	7	11	21
Root	1	0	14	38	45
	2	0	14	45	50
	3	0	11	44	52

Table A.33 As(III) transformation efficiency in different organs of *C. esculenta*

organs	Replication	As(III) transformation efficiency in <i>C. esculenta</i> (%)			
		15 days	30 days	45 days	60 days
Leaf	1	0	33	20	0
	2	0	31	24	0
	3	0	31	28	0
Petiole	1	0	37	1	13
	2	0	38	2	17
	3	0	35	4	18
Corm	1	1	8	1	2
	2	1	11	2	3
	3	1	8	2	3
Root	1	0	10	0	5
	2	0	11	0	3
	3	0	7	0	10

Table A.34 As(III) transformation efficiency in different organs of *T. angustifolia*

organs	Replication	As(III) transformation efficiency in <i>T. angustifolia</i> (%)			
		15 days	30 days	45 days	60 days
Leaf	1	0	16	23	5
	2	0	20	18	8
	3	0	17	22	7
Rhizome	1	27	10	12	0
	2	28	8	15	0
	3	23	12	15	0
Root	1	0	0	13	29
	2	0	0	9	26
	3	0	0	8	25

Table A.35 As(V) transformation efficiency of plant species

plants	Replication	Arsenate transformation efficiency in plants (%)			
		15 days	30 days	45 days	60 days
<i>Canna</i> sp.	1	46	34	6	4
	2	47	29	6	3
	3	45	30	3	1
<i>C. esculenta</i>	1	43	10	0	0
	2	44	8	0	0
	3	42	4	0	0
<i>C. papyrus</i>	1	40	41	0	9
	2	40	40	0	9
	3	42	38	0	10
<i>T. angustifolia</i>	1	56	29	6	6
	2	52	27	6	4
	3	50	25	2	8

Table A.36 As(V) transformation efficiency in different organs of *Canna* sp.

organs	Replication	Arsenate transformation efficiency in Canna sp. (%)			
		15 days	30 days	45 days	60 days
Leaf	1	51	36	10	7
	2	48	27	10	7
	3	48	22	10	7
Pseudostem	1	29	28	0	7
	2	34	22	1	7
	3	19	32	0	7
Rhizome	1	52	21	10	7
	2	52	13	9	7
	3	53	11	9	7
Root	1	52	52	10	0
	2	52	51	10	0
	3	53	51	10	0

Table A.37 As(V) transformation efficiency in different organs of *C. papyrus*

organs	Replication	Arsenate transformation efficiency in <i>C. papyrus</i> (%)			
		15 days	30 days	45 days	60 days
Leaf	1	60	50	4	9
	2	59	49	5	9
	3	59	45	2	10
Culm	1	46	49	5	9
	2	49	48	4	9
	3	47	49	4	10
Rhizome	1	27	44	0	9
	2	32	39	0	9
	3	32	40	0	10
Root	1	37	25	0	9
	2	29	25	0	9
	3	38	20	0	10

Table A.38 Arsenate transformation efficiency in different organs of *C. esculenta*

organs	Replication	Arsenate transformation efficiency in <i>C. esculenta</i> (%)			
		15 days	30 days	45 days	60 days
Leaf	1	55	24	0	8
	2	55	25	0	9
	3	54	20	0	8
Petiole	1	14	0	0	0
	2	15	0	0	0
	3	13	0	0	0
Corm	1	60	41	9	0
	2	59	41	9	0
	3	59	37	10	0
Root	1	55	17	7	3
	2	55	12	8	4
	3	54	9	8	1

Table A.39 Arsenate transformation efficiency in different organs of *T. angustifolia*

organs	Replication	Arsenate transformation efficiency in <i>T. angustifolia</i> (%)			
		15 days	30 days	45 days	60 days
Leaf	1	59	17	0	14
	2	57	10	0	13
	3	52	10	0	14
Rhizome	1	68	31	13	0
	2	67	34	13	0
	3	64	29	9	1
Root	1	31	40	17	14
	2	24	40	18	13
	3	31	39	18	14

Table A.40 Extractable Fe ($\text{mg} \cdot \text{kg}^{-1}$) in tested soils

plants	Treatments	Replication	Extractable Fe ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
No plant	Control	1	638	452	462	502
		2	642	465	481	496
		3	639	472	488	498
	As(III)	1	681	476	407	412
		2	674	472	412	420
		3	678	483	419	416
	As(V)	1	676	485	431	426
		2	671	486	433	425
		3	673	480	432	432
<i>Canna</i> sp.	Control	1	553	558	462	339
		2	556	555	469	332
		3	562	554	468	330
	As(III)	1	593	528	541	445
		2	595	532	536	447
		3	602	543	538	446
	As(V)	1	583	570	458	420
		2	581	578	451	428
		3	586	570	456	423
<i>C. esculenta</i>	Control	1	431	423	302	315
		2	434	425	307	322
		3	430	428	307	322
	As(III)	1	423	388	350	349
		2	430	389	344	362
		3	428	386	351	361
	As(V)	1	365	355	336	340
		2	366	352	341	338
		3	363	351	346	337
<i>C. papyrus</i>	Control	1	558	510	496	300
		2	555	512	510	307
		3	560	516	511	319
	As(III)	1	538	515	367	342
		2	530	513	362	340
		3	528	516	380	343
	As(V)	1	643	642	497	479
		2	636	624	492	488
		3	637	646	496	475
<i>T. angustifolia</i>	Control	1	548	488	400	300
		2	554	502	425	309
		3	581	495	402	298
	As(III)	1	677	630	528	433
		2	673	632	530	448
		3	676	636	531	433
	As(V)	1	593	530	478	441
		2	610	528	477	418
		3	608	531	478	415

Table A.41 Exchangeable Ca (mg.kg⁻¹) in tested soils

plants	Treatments	Replication	Exchangeable Ca (mg.kg ⁻¹)			
			15 days	30 days	45 days	60 days
No plant	Control	1	914	1000	1000	938
		2	935	990	1014	938
		3	922	962	1032	936
	As(III)	1	1342	1399	1242	612
		2	1304	1373	1104	696
		3	1328	1386	1173	687
	As(V)	1	873	874	1170	672
		2	869	901	1097	676
		3	872	832	1187	677
<i>Canna</i> sp.	Control	1	1201	1339	845	951
		2	1174	1267	867	958
		3	1236	1186	824	945
	As(III)	1	710	710	755	775
		2	679	661	758	758
		3	742	767	752	757
	As(V)	1	901	803	808	820
		2	860	815	948	784
		3	892	815	884	856
<i>C. esculenta</i>	Control	1	1202	1040	817	839
		2	1342	1077	922	812
		3	1135	970	914	833
	As(III)	1	872	920	957	717
		2	950	918	969	1054
		3	886	919	850	869
	As(V)	1	726	915	833	740
		2	704	788	815	740
		3	682	755	721	734
<i>C. papyrus</i>	Control	1	960	974	1065	935
		2	1022	972	934	860
		3	886	973	1178	786
	As(III)	1	679	1049	878	1033
		2	710	893	904	932
		3	742	812	894	805
	As(V)	1	1240	875	933	824
		2	991	860	842	821
		3	1139	890	864	828
<i>T. angustifolia</i>	Control	1	820	989	1191	875
		2	818	1018	1195	874
		3	818	1000	1094	879
	As(III)	1	949	1001	831	820
		2	829	839	785	880
		3	708	880	808	830
	As(V)	1	1004	1029	971	1114
		2	1046	1088	995	978
		3	919	1004	948	1080

Table A.42 Exchangeable Mg ($\text{mg} \cdot \text{kg}^{-1}$) in tested soils

plants	Treatments	Replication	Exchangeable Mg ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
No plant	Control	1	18	38	40	12
		2	22	31	35	34
		3	22	31	44	16
	As(III)	1	47	35	57	15
		2	55	42	35	18
		3	55	38	46	16
	As(V)	1	22	29	30	10
		2	16	24	41	15
		3	20	26	42	16
<i>Canna</i> sp.	Control	1	32	25	17	39
		2	28	28	16	46
		3	30	11	16	39
	As(III)	1	15	20	16	38
		2	33	13	33	34
		3	28	23	24	36
	As(V)	1	36	39	34	23
		2	22	17	11	21
		3	20	27	26	22
<i>C. esculenta</i>	Control	1	41	35	19	26
		2	31	36	39	24
		3	39	28	20	14
	As(III)	1	23	28	39	20
		2	33	12	41	18
		3	20	17	25	28
	As(V)	1	35	35	26	39
		2	29	29	18	38
		3	23	25	14	37
<i>C. papyrus</i>	Control	1	23	28	40	39
		2	18	24	22	19
		3	27	16	23	29
	As(III)	1	16	37	30	40
		2	15	29	41	42
		3	16	24	26	19
	As(V)	1	23	21	30	38
		2	33	27	24	28
		3	24	33	23	33
<i>T. angustifolia</i>	Control	1	15	39	46	13
		2	15	43	62	35
		3	9	22	14	28
	As(III)	1	23	38	18	33
		2	13	20	37	21
		3	18	27	27	21
	As(V)	1	20	43	40	41
		2	27	37	42	35
		3	32	27	19	25

Table A.43 Available P ($\text{mg} \cdot \text{kg}^{-1}$) in tested soils

plants	Treatments	Replication	Available P ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
No plant	Control	1	13	12	11	15
		2	11	12	11	12
		3	12	13	12	12
	As(III)	1	18	16	16	17
		2	13	16	16	16
		3	16	16	16	17
	As(V)	1	15	16	14	16
		2	14	16	15	14
		3	14	16	15	15
<i>Canna</i> sp.	Control	1	17	15	13	12
		2	15	15	13	12
		3	16	15	13	11
	As(III)	1	13	13	12	17
		2	13	13	13	13
		3	13	13	13	15
	As(V)	1	15	13	13	12
		2	16	13	12	12
		3	15	13	13	12
<i>C. esculenta</i>	Control	1	13	12	11	12
		2	14	13	15	10
		3	15	13	11	10
	As(III)	1	11	15	16	17
		2	12	15	14	15
		3	10	14	15	16
	As(V)	1	14	15	14	14
		2	14	16	17	15
		3	15	16	17	15
<i>C. papyrus</i>	Control	1	14	10	12	13
		2	14	10	11	9
		3	15	11	12	9
	As(III)	1	9	15	13	13
		2	11	11	12	12
		3	9	15	13	12
	As(V)	1	11	11	13	13
		2	11	10	13	12
		3	11	11	13	13
<i>T. angustifolia</i>	Control	1	12	10	10	11
		2	12	9	9	11
		3	13	10	10	8
	As(III)	1	10	7	9	13
		2	9	7	10	11
		3	10	7	10	15
	As(V)	1	13	10	9	11
		2	12	10	10	10
		3	12	11	10	13

Table A.44 Exchangeable Al ($\text{mg} \cdot \text{kg}^{-1}$) in tested soils

plants	Treatments	Replication	Exchangeable Al ($\text{mg} \cdot \text{kg}^{-1}$)			
			15 days	30 days	45 days	60 days
No plant	Control	1	0.034	0.033	0.031	0.003
		2	0.017	0.027	0.018	0.005
		3	0.027	0.042	0.020	0.022
	As(III)	1	0.021	0.044	0.022	0.007
		2	0.019	0.037	0.021	0.005
		3	0.020	0.040	0.016	0.008
	As(V)	1	0.050	0.053	0.004	0.006
		2	0.065	0.026	0.005	0.009
		3	0.040	0.033	0.003	0.009
<i>Canna</i> sp.	Control	1	0.041	0.036	0.000	0.019
		2	0.035	0.038	0.025	0.005
		3	0.033	0.045	0.036	0.003
	As(III)	1	0.035	0.043	0.004	0.007
		2	0.037	0.054	0.007	0.010
		3	0.036	0.034	0.003	0.013
	As(V)	1	0.027	0.028	0.007	0.011
		2	0.018	0.026	0.003	0.006
		3	0.017	0.034	0.010	0.010
<i>C. esculenta</i>	Control	1	0.025	0.037	0.048	0.014
		2	0.017	0.042	0.028	0.012
		3	0.037	0.038	0.015	0.019
	As(III)	1	0.030	0.042	0.008	0.014
		2	0.012	0.046	0.002	0.015
		3	0.033	0.044	0.006	0.006
	As(V)	1	0.019	0.044	0.007	0.005
		2	0.023	0.037	0.007	0.004
		3	0.018	0.033	0.007	0.007
<i>C. papyrus</i>	Control	1	0.025	0.020	0.011	0.007
		2	0.024	0.019	0.007	0.005
		3	0.032	0.046	0.027	0.005
	As(III)	1	0.034	0.043	0.003	0.021
		2	0.029	0.054	0.005	0.019
		3	0.034	0.042	0.006	0.011
	As(V)	1	0.022	0.035	0.005	0.003
		2	0.026	0.037	0.002	0.003
		3	0.021	0.042	0.004	0.004
<i>T. angustifolia</i>	Control	1	0.033	0.021	0.024	0.008
		2	0.038	0.026	0.010	0.019
		3	0.035	0.045	0.040	0.007
	As(III)	1	0.030	0.052	0.005	0.016
		2	0.033	0.048	0.006	0.014
		3	0.020	0.040	0.007	0.010
	As(V)	1	0.018	0.042	0.005	0.007
		2	0.018	0.026	0.003	0.005
		3	0.017	0.025	0.007	0.005

APPENDIX B**Table B.1** Analysis of variance table for plants dry weight (g) at 15 days

Source	DF	SS	MS	F	P
rep	2	145.37	72.68		
plt	3	4656.27	1552.09	179.02	0.0000
tr	2	348.71	174.36	20.11	0.0000
plt*tr	6	85.38	14.23	1.64	0.1831
Error	22	190.74	8.67		
Total	35	5426.47			

Grand Mean 20.025 CV 14.70

Table B.2 Analysis of variance table for plants dry weight (g) at 30 days

Source	DF	SS	MS	F	P
rep	2	84.81	42.41		
plt	3	4780.98	1593.66	172.17	0.0000
tr	2	423.13	211.57	22.86	0.0000
plt*tr	6	66.91	11.15	1.20	0.3408
Error	22	203.64	9.26		
Total	35	5559.48			

Grand Mean 21.632 CV 14.06

Table B.3 Analysis of variance table for plants dry weight (g) at 45 days

Source	DF	SS	MS	F	P
rep	2	119.4	59.70		
plt	3	10028.2	3342.73	189.52	0.0000
tr	2	425.5	212.73	12.06	0.0003
plt*tr	6	98.2	16.37	0.93	0.4944
Error	22	388.0	17.64		
Total	35	11059.3			

Grand Mean 27.779 CV 15.12

Table B.4 Analysis of variance table for plants dry weight (g) at 60 days

Source	DF	SS	MS	F	P
rep	2	68.8	34.40		
plt	3	11796.6	3932.21	92.89	0.0000
tr	2	821.4	410.70	9.70	0.0010
plt*tr	6	290.9	48.48	1.15	0.3700
Error	22	931.3	42.33		
Total	35	13909.0			

Grand Mean 32.378 CV 20.09

Table B.5 Analysis of variance table for plants dry weight (g) decrease at 15 days

Source	DF	SS	MS	F	P
rep	2	77.7	38.83		
plt	3	3704.7	1234.90	35.59	0.0000
tr	2	7733.8	3866.92	111.46	0.0000
plt*tr	6	2014.0	335.66	9.67	0.0000
Error	22	763.3	34.69		
Total	35	14293.4			

Grand Mean 20.226 CV 29.12

Table B.6 Analysis of variance table for plants dry weight (g) decrease at 30 days

Source	DF	SS	MS	F	P
rep	2	59.4	29.72		
plt	3	3620.1	1206.71	13.73	0.0000
tr	2	7676.6	3838.31	43.66	0.0000
plt*tr	6	2035.9	339.32	3.86	0.0088
Error	22	1934.2	87.92		
Total	35	17726.4			

Grand Mean 19.124 CV 49.03

Table B.7 Analysis of variance table for plants dry weight (g) decrease at 45 days

Source	DF	SS	MS	F	P
rep	2	148.6	74.28		
plt	3	3773.4	1257.79	24.40	0.0000
tr	2	5831.8	2915.90	56.56	0.0000
plt*tr	6	2289.7	381.61	7.40	0.0002
Error	22	1134.1	51.55		
Total	35	13177.5			

Grand Mean 15.416 CV 46.57

Table B.8 Analysis of variance table for plants dry weight (g) decrease at 60 days

Source	DF	SS	MS	F	P
rep	2	220.8	110.38		
plt	3	5344.0	1781.32	22.47	0.0000
tr	2	7110.1	3555.04	44.84	0.0000
plt*tr	6	3999.6	666.61	8.41	0.0001
Error	22	1744.1	79.28		
Total	35	18418.5			

Grand Mean 17.075 CV 52.15

Table B.9 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) of plants at 15 days

Source	DF	SS	MS	F	P
rep	2	19	9.5		
plt	3	3615	1205.0	111.99	0.0000
tr	2	116244	58121.8	5401.51	0.0000
plt*tr	6	14644	2440.6	226.81	0.0000
Error	22	237	10.8		
Total	35	134758			

Grand Mean 81.363 CV 4.03

Table B.10 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) of plants at 30 days

Source	DF	SS	MS	F	P
rep	2	11	5.3		
plt	3	969	322.8	19.19	0.0000
tr	2	186351	93175.3	5538.62	0.0000
plt*tr	6	8130	1355.0	80.55	0.0000
Error	22	370	16.8		
Total	35	195830			

Grand Mean 103.17 CV 3.98

Table B.11 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) of plants at 45 days

Source	DF	SS	MS	F	P
rep	2	1	0.7		
plt	3	10346	3448.5	161.65	0.0000
tr	2	149591	74795.7	3505.96	0.0000
plt*tr	6	15686	2614.4	122.55	0.0000
Error	22	469	21.3		
Total	35	176094			

Grand Mean 92.450 CV 5.00

Table B.12 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) of plants at 60 days

Source	DF	SS	MS	F	P
rep	2	5	2.5		
plt	3	16142	5380.7	412.19	0.0000
tr	2	148659	74329.6	5694.07	0.0000
plt*tr	6	13300	2216.7	169.81	0.0000
Error	22	287	13.1		
Total	35	178394			

Grand Mean 91.447 CV 3.95

Table B.13 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *Canna sp.* at 15 days

Source	DF	SS	MS	F	P
rep	2	109	54.4		
tr	2	57580	28789.8	511.51	0.0000
part	3	41766	13921.9	247.35	0.0000
tr*part	6	47810	7968.3	141.57	0.0000
Error	22	1238	56.3		
Total	35	148502			

Grand Mean 58.403 CV 12.85

Table B.14 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *Canna sp.* at 30 days

Source	DF	SS	MS	F	P
rep	2	19	9.4		
tr	2	137772	68885.9	3013.49	0.0000
part	3	49427	16475.7	720.75	0.0000
tr*part	6	36451	6075.2	265.77	0.0000
Error	22	503	22.9		
Total	35	224172			

Grand Mean 88.609 CV 5.40

Table B.15 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *Canna sp.* at 45 days

Source	DF	SS	MS	F	P
rep	2	64	31.8		
tr	2	150291	75145.4	1397.84	0.0000
part	3	48822	16274.0	302.73	0.0000
tr*part	6	28133	4688.9	87.22	0.0000
Error	22	1183	53.8		
Total	35	228492			

Grand Mean 89.164 CV 8.22

Table B.16 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *Canna sp.* at 60 days

Source	DF	SS	MS	F	P
rep	2	31	15.5		
tr	2	172653	86326.3	1504.50	0.0000
part	3	46404	15468.1	269.58	0.0000
tr*part	6	29063	4843.8	84.42	0.0000
Error	22	1262	57.4		
Total	35	249413			

Grand Mean 97.707 CV 7.75

Table B.17 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *C. esculenta* at 15 days

Source	DF	SS	MS	F	P
rep	2	14	7.2		
tr	2	178587	89293.7	2401.94	0.0000
part	3	70304	23434.5	630.37	0.0000
tr*part	6	78498	13083.1	351.93	0.0000
Error	22	818	37.2		
Total	35	328222			

Grand Mean 98.643 CV 6.18

Table B.18 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *C. esculenta* at 30 days

Source	DF	SS	MS	F	P
rep	2	413	206		
tr	2	271694	135847	1418.77	0.0000
part	3	110442	36814	384.48	0.0000
tr*part	6	83421	13904	145.21	0.0000
Error	22	2107	96		
Total	35	468078			

Grand Mean 123.38 CV 7.93

Table B.19 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *C. esculenta* at 45 days

Source	DF	SS	MS	F	P
rep	2	21	10.7		
tr	2	79306	39653.1	1010.79	0.0000
part	3	7350	2450.0	62.45	0.0000
tr*part	6	27887	4647.8	118.47	0.0000
Error	22	863	39.2		
Total	35	115427			

Grand Mean 67.005 CV 9.35

Table B.20 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *C. esculenta* at 60 days

Source	DF	SS	MS	F	P
rep	2	92.6	46.3		
tr	2	63753.8	31876.9	609.12	0.0000
part	3	4026.7	1342.2	25.65	0.0000
tr*part	6	18258.8	3043.1	58.15	0.0000
Error	22	1151.3	52.3		
Total	35	87283.1			

Grand Mean 60.764 CV 11.91

Table B.21 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *C. papyrus* at 15 days

Source	DF	SS	MS	F	P
rep	2	43	21.4		
tr	2	140784	70392.0	1383.87	0.0000
part	3	15718	5239.3	103.00	0.0000
tr*part	6	55501	9250.1	181.85	0.0000
Error	22	1119	50.9		
Total	35	213164			

Grand Mean 88.110 CV 8.09

Table B.22 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *C. papyrus* at 30 days

Source	DF	SS	MS	F	P
rep	2	189	95		
tr	2	250082	125041	2188.32	0.0000
part	3	115591	38530	674.31	0.0000
tr*part	6	67266	11211	196.20	0.0000
Error	22	1257	57		
Total	35	434385			

Grand Mean 118.55 CV 6.38

Table B.23 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *C. papyrus* at 45 days

Source	DF	SS	MS	F	P
rep	2	247	123.4		
tr	2	135193	67596.6	1159.41	0.0000
part	3	30207	10068.9	172.70	0.0000
tr*part	6	17636	2939.4	50.42	0.0000
Error	22	1283	58.3		
Total	35	184566			

Grand Mean 86.913 CV 8.79

Table B.24 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *C. papyrus* at 60 days

Source	DF	SS	MS	F	P
rep	2	185	92.7		
tr	2	118735	59367.5	976.94	0.0000
part	3	20138	6712.7	110.46	0.0000
tr*part	6	20015	3335.9	54.89	0.0000
Error	22	1337	60.8		
Total	35	160411			

Grand Mean 80.778 CV 9.65

Table B.25 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *T. angustifolia* at 15 days

Source	DF	SS	MS	F	P
rep	2	29	14.6		
tr	2	87518	43759.1	993.21	0.0000
part	2	18896	9448.0	214.44	0.0000
tr*part	4	27014	6753.6	177.29	0.0000
Error	16	705	44.1		
Total	26	134163			

Grand Mean 78.828 CV 8.42

Table B.26 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *T. angustifolia* at 30 days

Source	DF	SS	MS	F	P
rep	2	63	31.3		
tr	2	129001	64500.7	3039.18	0.0000
part	2	11404	5702.0	268.67	0.0000
tr*part	4	32448	8111.9	382.22	0.0000
Error	16	340	21.2		
Total	26	173255			

Grand Mean 97.438 CV 4.73

Table B.27 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *T. angustifolia* at 45 days

Source	DF	SS	MS	F	P
rep	2	98	49.0		
tr	2	165549	82774.3	1760.24	0.0000
part	2	10566	5283.2	112.35	0.0000
tr*part	4	40652	10163.1	216.12	0.0000
Error	16	752	47.0		
Total	26	217617			

Grand Mean 112.24 CV 6.11

Table B.28 Analysis of variance table for total arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in organs of *T. angustifolia* at 60 days

Source	DF	SS	MS	F	P
rep	2	41	20.6		
tr	2	145609	72804.7	3737.85	0.0000
part	2	23605	11802.5	605.95	0.0000
tr*part	4	79340	19835.0	1018.34	0.0000
Error	16	312	19.5		
Total	26	248907			

Grand Mean 104.06 CV 4.24

Table B.29 Analysis of variance table for bioconcentration factor at 15 days

Source	DF	SS	MS	F	P
rep	2	0.00062	0.00031		
plt	3	0.11806	0.03935	111.93	0.0000
tr	2	3.79570	1.89785	5397.91	0.0000
plt*tr	6	0.47816	0.07969	226.67	0.0000
Error	22	0.00773	0.00035		
Total	35	4.40028			

Grand Mean 0.4649 CV 4.03

Table B.30 Analysis of variance table for bioconcentration factor at 30 days

Source	DF	SS	MS	F	P
rep	2	0.00035	0.00017		
plt	3	0.03162	0.01054	19.20	0.0000
tr	2	6.08520	3.04260	5543.31	0.0000
plt*tr	6	0.26547	0.04424	80.61	0.0000
Error	22	0.01208	0.00055		
Total	35	6.39471			

Grand Mean 0.5895 CV 3.97

Table B.31 Analysis of variance table for bioconcentration factor at 45 days

Source	DF	SS	MS	F	P
rep	2	0.00004	0.00002		
plt	3	0.33776	0.11259	161.65	0.0000
tr	2	4.88490	2.44245	3506.93	0.0000
plt*tr	6	0.51228	0.08538	122.59	0.0000
Error	22	0.01772	0.00070		
Total	35	5.75031			

Grand Mean 0.5283 CV 5.00

Table B.32 Analysis of variance table for bioconcentration factor at 60 days

Source	DF	SS	MS	F	P
rep	2	0.00017	0.00008		
plt	3	0.52707	0.17569	412.36	0.0000
tr	2	4.85435	2.42718	5696.74	0.0000
plt*tr	6	0.43430	0.07238	169.89	0.0000
Error	22	0.00937	0.00043		
Total	35	5.82527			

Grand Mean 0.5226 CV 3.95

Table B.33 Analysis of variance table for Arsenic removal efficiency (%) of plants at 15 days

Source	DF	SS	MS	F	P
rep	2	0.01340	0.00670		
plt	3	0.45115	0.15038	83.49	0.0000
tr	2	0.53375	0.26688	148.16	0.0000
plt*tr	6	0.35800	0.05967	33.12	0.0000
Error	22	0.03963	0.00180		
Total	35	1.39594			

Grand Mean 0.1701 CV 24.95

Table B.34 Analysis of variance table for Arsenic removal efficiency (%) of plants at 30 days

Source	DF	SS	MS	F	P
rep	2	0.00539	0.00269		
plt	3	0.71010	0.23670	165.66	0.0000
tr	2	0.91982	0.45991	321.89	0.0000
plt*tr	6	0.41324	0.06887	48.20	0.0000
Error	22	0.03143	0.00143		
Total	35	2.07999			

Grand Mean 0.2243 CV 16.85

Table B.35 Analysis of variance table for Arsenic removal efficiency (%) of plants at 45 days

Source	DF	SS	MS	F	P
rep	2	0.03513	0.01757		
plt	3	0.84117	0.28039	67.09	0.0000
tr	2	1.30432	0.65216	156.04	0.0000
plt*tr	6	0.51175	0.08529	20.41	0.0000
Error	22	0.09195	0.00418		
Total	35	2.78433			

Grand Mean 0.2695 CV 23.98

Table B.36 Analysis of variance table for arsenic removal efficiency (%) of plants at 60 days

Source	DF	SS	MS	F	P
rep	2	0.01651	0.00826		
plt	3	0.85943	0.28648	57.02	0.0000
tr	2	1.68697	0.84348	167.88	0.0000
plt*tr	6	0.52668	0.08778	17.47	0.0000
Error	22	0.11054	0.00502		
Total	35	3.20012			

Grand Mean 0.3030 CV 23.39

Table B.37 Analysis of variance table for total arsenic concentration ($\text{mg} \cdot \text{kg}^{-1}$) in submerged soil at 15 days

Source	DF	SS	MS	F	P
rep	2	4	2		
plt	4	230	58	3.43	0.0211
tr	2	279861	139930	8329.03	0.0000
plt*tr	8	252	32	1.88	0.1043
Error	28	470	17		
Total	44	280818			

Grand Mean 111.85 CV 3.66

Table B.38 Analysis of variance table for total arsenic concentration ($\text{mg} \cdot \text{kg}^{-1}$) in submerged soil at 30 days

Source	DF	SS	MS	F	P
rep	2	66	33		
plt	4	1440	360	15.08	0.0000
tr	2	243992	121996	5112.49	0.0000
plt*tr	8	810	101	4.24	0.0020
Error	28	668	24		
Total	44	246976			

Grand Mean 104.30 CV 4.68

Table B.39 Analysis of variance table for total arsenic concentration ($\text{mg} \cdot \text{kg}^{-1}$) in submerged soil at 30 days

Source	DF	SS	MS	F	P
rep	2	41	20		
plt	4	4032	1008	48.63	0.0000
tr	2	214560	107280	5175.53	0.0000
plt*tr	8	2413	302	14.55	0.0000
Error	28	580	21		
Total	44	221626			

Grand Mean 97.802 CV 4.66

Table B.40 Analysis of variance table for total arsenic concentration ($\text{mg} \cdot \text{kg}^{-1}$) in submerged soil at 60 days

Source	DF	SS	MS	F	P
rep	2	9	4.3		
plt	4	7564	1890.9	88.19	0.0000
tr	2	187077	93538.6	4362.53	0.0000
plt*tr	8	4132	516.5	24.09	0.0000
Error	28	600	21.4		
Total	44	199382			

Grand Mean 91.308 CV 5.07

Table B.41 Analysis of variance table for As(III)concentration ($\text{mg} \cdot \text{kg}^{-1}$) in submerged soil at 15 days

Source	DF	SS	MS	F	P
rep	2	6	3.0		
plant	4	4026	1006.5	577.01	0.0000
Tr	2	119698	59849.2	34312.3	0.0000
plant*Tr	8	8173	1021.6	585.71	0.0000
Error	28	49	1.7		
Total	44	131952			

Grand Mean 36.560 CV 3.61

Table B.42 Analysis of variance table for As(III)concentration ($\text{mg} \cdot \text{kg}^{-1}$) in submerged soil at 30 days

Source	DF	SS	MS	F	P
rep	2	1.5	0.7		
plant	4	1960.9	490.2	2189.27	0.0000
Tr	2	53459.6	26729.8	119372	0.0000
plant*Tr	8	3808.9	476.1	2126.28	0.0000
Error	28	6.3	0.2		
Total	44	59237.2			

Grand Mean 24.431 CV 1.94

Table B.43 Analysis of variance table for As(III)concentration ($\text{mg} \cdot \text{kg}^{-1}$) in submerged soil at 45 days

Source	DF	SS	MS	F	P
rep	2	1.3	0.63		
plant	4	5194.7	1298.67	3162.87	0.0000
Tr	2	9430.0	4715.02	11483.3	0.0000
plant*Tr	8	10062.5	1257.81	3063.36	0.0000
Error	28	11.5	0.41		
Total	44	24700.0			

Grand Mean 10.323 CV 6.21

Table B.44 Analysis of variance table for As(III)concentration ($\text{mg} \cdot \text{kg}^{-1}$) in submerged soil at 60 days

Source	DF	SS	MS	F	P
rep	2	0.09	0.044		
plant	4	74.37	18.592	114.70	0.0000
Tr	2	1245.31	622.654	3841.27	0.0000
plant*Tr	8	148.74	18.592	114.70	0.0000
Error	28	4.54	0.162		
Total	44	1473.04			

Grand Mean 3.7198 CV 10.82

Table B.45 Analysis of variance table for As(V) concentration (mg.kg⁻¹) in submerged soil at 15 days**Analysis of Variance Table for day15**

Source	DF	SS	MS	F	P
rep	2	39	19.3		
plant	4	1957	489.1	91.18	0.0000
Tr	2	181518	90759.1	16919.2	0.0000
plant*Tr	8	6819	852.4	158.90	0.0000
Error	28	150	5.4		
Total	44	190482			

Grand Mean 68.445 CV 3.38

Table B.46 Analysis of variance table for As(V) concentration in (mg.kg⁻¹) submerged soil at 30 days

Source	DF	SS	MS	F	P
rep	2	7	3.6		
plant	4	491	122.8	23.42	0.0000
Tr	2	156350	78175.2	14908.7	0.0000
plant*Tr	8	2178	272.2	51.92	0.0000
Error	28	147	5.2		
Total	44	159174			

Grand Mean 72.315 CV 3.17

Table B.47 Analysis of variance table for As(V) concentration (mg.kg⁻¹) in submerged soil at 45 days

Source	DF	SS	MS	F	P
rep	2	16	8.1		
plant	4	131	32.8	1.89	0.1392
Tr	2	153024	76511.9	4419.93	0.0000
plant*Tr	8	8307	1038.4	59.99	0.0000
Error	28	485	17.3		
Total	44	161963			

Grand Mean 81.342 CV 5.11

Table B.48 Analysis of variance table for As(V) concentration (mg.kg⁻¹) in submerged soil at 60 days

Source	DF	SS	MS	F	P
rep	2	11	5.4		
plant	4	9867	2466.7	256.08	0.0000
Tr	2	148134	74067.2	7689.38	0.0000
plant*Tr	8	4986	623.3	64.71	0.0000
Error	28	270	9.6		
Total	44	163268			

Grand Mean 81.134 CV 3.83

Table B.49 Analysis of variance table for transformation efficiency (%) of soil at 15, 30, 45 and 60 days

Source	DF	SS	MS	F	P
rep	2	1.4	0.7		
plants	4	4891.9	1223.0	3055.20	0.0000
day	3	32560.3	10853.4	27113.5	0.0000
plants*day	12	4371.3	364.3	910.02	0.0000
Error	38	15.2	0.4		
Total	59	41840.2			

Grand Mean 63.733 CV 0.99

Table B.50 Analysis of variance table for total As(III)concentration ($\text{mg} \cdot \text{kg}^{-1}$) of plants at 15 days

Source	DF	SS	MS	F	P
rep	2	4.10	2.05		
plant	3	1726.61	575.54	205.14	0.0000
Tr	2	3125.48	1562.74	557.01	0.0000
plant*Tr	6	1464.04	244.01	86.97	0.0000
Error	22	61.72	2.81		
Total	35	6381.96			

Grand Mean 13.138 CV 12.75

Table B.51 Analysis of variance table for total As(III)concentration ($\text{mg} \cdot \text{kg}^{-1}$) of plants at 30 days

Source	DF	SS	MS	F	P
rep	2	4.6	2.30		
plant	3	5527.5	1842.51	385.45	0.0000
Tr	2	7934.7	3967.35	829.96	0.0000
plant*Tr	6	4185.7	697.61	145.94	0.0000
Error	22	105.2	4.78		
Total	35	17757.7			

Grand Mean 20.441 CV 10.70

Table B.52 Analysis of variance table for total As(III)concentration ($\text{mg} \cdot \text{kg}^{-1}$) of plants at 45 days

Source	DF	SS	MS	F	P
rep	2	3.15	1.57		
plant	3	1803.18	601.06	99.80	0.0000
Tr	2	2639.23	1319.62	219.10	0.0000
plant*Tr	6	1394.22	232.37	38.58	0.0000
Error	22	132.50	6.02		
Total	35	5972.29			

Grand Mean 11.544 CV 21.26

Table B.53 Analysis of variance table for total As(III)concentration ($\text{mg} \cdot \text{kg}^{-1}$) of plants at 60 days

Source	DF	SS	MS	F	P
rep	2	1.99	0.995		
plant	3	2884.69	961.564	694.39	0.0000
Tr	2	1777.84	888.922	641.93	0.0000
plant*Tr	6	2481.76	413.626	298.70	0.0000
Error	22	30.46	1.385		
Total	35	7176.75			

Grand Mean 9.6897 CV 12.14

Table B.54 Analysis of variance table for total As(V)concentration ($\text{mg} \cdot \text{kg}^{-1}$) of plants at 15 days As(V)and As(III)treatments

Source	DF	SS	MS	F	P
rep	2	41	20.4		
plant	3	14707	4902.5	259.84	0.0000
Tr	2	107275	53637.3	2842.88	0.0000
plant*Tr	6	8108	1351.3	71.62	0.0000
Error	22	415	18.9		
Total	35	130546			

Grand Mean 76.840 CV 5.65

Table B.55 Analysis of variance table for total As(V)concentration ($\text{mg} \cdot \text{kg}^{-1}$) of plants at 30 days grown in As(V)and As(III)treatments

Source	DF	SS	MS	F	P
rep	2	103	51.5		
plant	3	6980	2326.7	51.75	0.0000
Tr	2	142985	71492.3	1590.18	0.0000
plant*Tr	6	4888	814.6	18.12	0.0000
Error	22	989	45.0		
Total	35	155944			

Grand Mean 89.038 CV 7.53

Table B.56 Analysis of variance table for total As(V)concentration ($\text{mg} \cdot \text{kg}^{-1}$) of plants at 45 days grown in As(V)and As(III)treatments

Source	DF	SS	MS	F	P
rep	2	4	1.8		
plant	3	5182	1727.4	74.65	0.0000
Tr	2	142034	71017.2	3068.92	0.0000
plant*Tr	6	13439	2239.8	96.79	0.0000
Error	22	509	23.1		
Total	35	161168			

Grand Mean 87.565 CV 5.49

Table B.57 Analysis of variance table for total As(V) concentration ($\text{mg} \cdot \text{kg}^{-1}$) of plants at 60 days grown in As(V) and As(III) treatments

Source	DF	SS	MS	F	P
rep	2	24	11.9		
plant	3	13746	4581.9	102.19	0.0000
Tr	2	152400	76200.1	1699.49	0.0000
plant*Tr	6	7460	1243.3	27.73	0.0000
Error	22	986	44.8		
Total	35	174616			

Grand Mean 88.713 CV 7.55

Table B.58 Analysis of variance table for As(III) transformation efficiency (%) of 4 plants at 15, 30, 45 and 60 days

Source	DF	SS	MS	F	P
rep	2	0.77	0.383		
plt	3	1480.09	493.363	434.81	0.0000
day	3	142.20	47.400	41.77	0.0000
plt*day	9	720.90	80.100	70.59	0.0000
Error	30	34.04	1.135		
Total	47	2377.99			

Grand Mean 8.5610 CV 12.44

Table B.59 Analysis of variance table for As(III) transformation efficiency (%) of *C. papyrus* at 15, 30, 45 and 60 days

Source	DF	SS	MS	F	P
rep	2	1.9	0.94		
day	3	38.4	12.79	2.14	0.1164
organs	3	2991.3	997.09	166.58	0.0000
day*organs	9	10262.6	1140.29	190.50	0.0000
Error	30	179.6	5.99		
Total	47	13473.7			

Grand Mean 15.045 CV 16.26

Table B.60 Analysis of variance table for As(III) transformation efficiency (%) of *T. angustifolia* at 15, 30, 45 and 60 days

Source	DF	SS	MS	F	P
rep	2	1.91	0.954		
day	3	218.11	72.704	21.54	0.0000
organs	2	69.52	34.759	10.30	0.0007
day*organs	6	3102.83	517.139	153.19	0.0000
Error	22	74.27	3.376		
Total	35	3466.64			

Grand Mean 11.044 CV 16.64

Table B.61 Analysis of variance table for As(III) transformation efficiency (%) of *C. esculenta* at 15, 30, 45 and 60 days

Source	DF	SS	MS	F	P
rep	2	9.62	4.808		
day	3	2977.32	992.441	355.42	0.0000
part	3	1214.64	404.879	145.00	0.0000
day*part	9	2306.23	256.248	91.77	0.0000
Error	30	83.77	2.792		
Total	47	6591.57			

Grand Mean 8.8146 CV 18.96

Table B.62 Analysis of variance table for As(V) transformation efficiency (%) of 4 plants at 15, 30, 45 and 60 days

Source	DF	SS	MS	F	P
rep	2	28.3	14.17		
plt	3	816.6	272.19	112.10	0.0000
day	3	14850.8	4950.26	2038.71	0.0000
plt*day	9	1323.4	147.04	60.56	0.0000
Error	30	72.8	2.43		
Total	47	17091.9			

Grand Mean 19.608 CV 7.95

Table B.63 Analysis of variance table for As(V) transformation efficiency (%) of *Canna sp.* at 15, 30, 45 and 60 days

Source	DF	SS	MS	F	P
rep	2	35.8	17.90		
day	3	13195.4	4398.47	421.39	0.0000
organs	3	1037.7	345.90	33.14	0.0000
day*organs	9	2649.4	294.38	28.20	0.0000
Error	30	313.1	10.44		
Total	47	17231.4			

Grand Mean 22.136 CV 14.60

Table B.64 Analysis of variance table for As(V) transformation efficiency (%) of *T. angustifolia* at 15, 30, 45 and 60 days

Source	DF	SS	MS	F	P
rep	2	23.5	11.75		
day	3	10107.2	3369.07	728.71	0.0000
organs	2	306.3	153.13	33.12	0.0000
day*organs	6	4045.6	674.26	145.84	0.0000
Error	22	101.7	4.62		
Total	35	14584.3			

Grand Mean 24.291 CV 8.85

Table B.65 Analysis of variance table for As(V) transformation efficiency (%) of *C. papyrus* at 15, 30, 45 and 60 days

Source	DF	SS	MS	F	P
rep	2	1.7	0.83		
day	3	15932.9	5310.96	1304.47	0.0000
organs	3	1392.9	464.32	114.04	0.0000
day*organs	9	1489.5	165.50	40.65	0.0000
Error	30	122.1	4.07		
Total	47	18939.2			

Grand Mean 23.572 CV 8.56

Table B.66 Analysis of variance table for As(V) transformation efficiency (%) of *C. esculenta* at 15, 30, 45 and 60 days

Source	DF	SS	MS	F	P
rep	2	19.0	9.49		
day	3	14385.4	4795.14	2995.40	0.0000
organs	3	3659.8	1219.93	762.06	0.0000
day*organs	9	3258.2	362.02	226.15	0.0000
Error	30	48.0	1.60		
Total	47	21370.4			

Grand Mean 17.841 CV 7.09

Table B.67 Unweighted Least Squares Linear Regression of Total arsenic ($\text{mg} \cdot \text{kg}^{-1}$) in soil of *Canna sp.*

Predictor						VIF
Variables	Coefficient	Std Error	T	P		
Constant	61.3162	46.1621	1.33	0.1961		
As3S	0.49338	0.04851	10.17	0.0000	3.3	
As5S	1.05075	0.06132	17.13	0.0000	6.0	
day	-0.56855	0.22435	-2.53	0.0179	7.1	
Eh	0.14385	0.06541	2.20	0.0373	3.5	
pH	8.87938	5.03186	1.76	0.0898	3.0	
Al	392.159	198.205	1.98	0.0590	4.8	
Ca	-0.04766	0.01961	-2.43	0.0226	5.9	
Fe	-0.11806	0.06543	-1.80	0.0832	12.6	
Mg	-0.29559	0.19236	-1.54	0.1369	1.5	
P	1.22517	1.44751	0.85	0.4054	2.3	
R-Squared	0.9896	Resid. Mean Square (MSE)	71.5614			
Adjusted R-Squared	0.9855	Standard Deviation	8.45940			
Source	DF	SS	MS	F	P	
Regression	10	170850	17085.0	238.75	0.0000	
Residual	25	1789	71.6			
Total	35	172639				
Cases Included	36	Missing Cases	0			

Table B.68 Unweighted Least Squares Linear Regression of arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in *Canna sp.*

Predictor						VIF
Variables	Coefficient	Std Error	T	P		
Constant	109.728	199.204	0.55	0.5861		
TAsP	16.4941	6.15967	2.68	0.0123	68.4	
As3P	-24.9302	16.6306	-1.50	0.1451	6.1	
As5P	9.85424	4.87627	2.02	0.0530	36.6	
TAsS	-9.41842	6.49362	-1.45	0.1581	71.9	
As3S	4.13614	3.18830	1.30	0.2051	10.2	
As5S	-4.66352	7.34345	-0.64	0.5305	60.6	
day	-3.10438	4.69477	-0.66	0.5139	2.2	
R-Squared	0.9362	Resid. Mean Square (MSE)	101309			
Adjusted R-Squared	0.9202	Standard Deviation	318.291			
Source	DF	SS	MS	F	P	
Regression	7	4.160E+07	5942415	58.66	0.0000	
Residual	28	2836658	101309			
Total	35	4.443E+07				
Cases Included	36	Missing Cases	0			

Table B.69 Unweighted Least Squares Linear Regression of Total arsenic ($\text{mg} \cdot \text{kg}^{-1}$) in soil in *C. esculenta*

Predictor	Variables	Coefficient	Std Error	T	P	VIF
Constant		-23.1534	33.1303	-0.70	0.4911	
As3S		1.12196	0.06313	17.77	0.0000	2.2
As5S		1.00599	0.05766	17.45	0.0000	7.5
day		-0.01829	0.19415	-0.09	0.9257	7.6
Eh		-0.03144	0.06072	-0.52	0.6091	3.8
pH		2.22784	4.77475	0.47	0.6448	4.0
Al		-14.6689	152.996	-0.10	0.9244	3.3
Ca		-0.00815	0.01562	-0.52	0.6066	3.7
Fe		0.00389	0.06568	0.06	0.9532	5.1
Mg		0.03731	0.17583	0.21	0.8337	1.6
P		1.02270	0.97038	1.05	0.3020	2.7
R-Squared		0.9926		Resid. Mean Square (MSE)		50.1092
Adjusted R-Squared		0.9896		Standard Deviation		7.07879
Source	DF	SS	MS	F	P	
Regression	10	167953	16795.3	335.17	0.0000	
Residual	25	1253	50.1			
Total	35	169206				
Cases Included	36	Missing Cases 0				

Table B.70 Unweighted Least Squares Linear Regression of arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in *C. esculenta*

Predictor	Variables	Coefficient	Std Error	T	P	VIF
Constant		-519.627	206.073	-2.52	0.0177	
TAsP		9.13722	3.71627	2.46	0.0204	15.7
As3P		-17.0844	9.04002	-1.89	0.0692	22.3
As5P		21.8432	16.8109	1.30	0.2044	40.9
TAsS		-8.26400	10.2841	-0.80	0.4284	138.9
As3S		4.57608	11.3133	0.40	0.6889	26.9
As5S		11.5306	11.0147	1.05	0.3041	106.1
day		15.1009	4.53502	3.33	0.0024	1.6
R-Squared		0.8708		Resid. Mean Square (MSE)		128861
Adjusted R-Squared		0.8385		Standard Deviation		358.972
Source	DF	SS	MS	F	P	
Regression	7	2.432E+07	3474703	26.96	0.0000	
Residual	28	3608109	128861			
Total	35	2.793E+07				
Cases Included	36	Missing Cases 0				

Table B.71 Unweighted Least Squares Linear Regression of Total arsenic ($\text{mg} \cdot \text{kg}^{-1}$) in soil of *C. papyrus*

Predictor						VIF
Variables	Coefficient	Std Error	T	P		
Constant	-14.3543	45.0739	-0.32	0.7528		
As3S	1.14993	0.07750	14.84	0.0000	4.0	
As5S	1.00205	0.05430	18.45	0.0000	6.5	
day	0.11457	0.18927	0.61	0.5504	6.5	
Eh	0.02926	0.08107	0.36	0.7212	6.0	
pH	-0.26884	6.33274	-0.04	0.9665	5.5	
Al	-155.060	151.950	-1.02	0.3173	3.2	
Ca	0.00801	0.01445	0.55	0.5843	1.9	
Fe	0.05187	0.02404	2.16	0.0408	3.8	
Mg	-0.17900	0.21825	-0.82	0.4199	1.8	
P	-0.83488	0.89333	-0.93	0.3590	1.4	
R-Squared	0.9917		Resid. Mean Square (MSE)		55.9582	
Adjusted R-Squared	0.9884		Standard Deviation		7.48052	
Source	DF	SS	MS	F	P	
Regression	10	167807	16780.7	299.88	0.0000	
Residual	25	1399	56.0			
Total	35	169206				
Cases Included	36	Missing Cases	0			

Table B.72 Unweighted Least Squares Linear Regression of arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in *C. papyrus*

Predictor						VIF
Variables	Coefficient	Std Error	T	P		
Constant	-143.626	590.624	-0.24	0.8096		
TAsP	7.93794	21.7198	0.37	0.7175	84.5	
As3P	-115.641	32.8378	-3.52	0.0015	6.6	
As5P	43.9012	19.5361	2.25	0.0327	61.8	
TAsS	20.9110	22.4021	0.93	0.3586	104.4	
As3S	-36.5942	24.1328	-1.52	0.1406	26.6	
As5S	-3.49715	22.1103	-0.16	0.8755	74.6	
day	4.27326	14.1176	0.30	0.7644	2.5	
R-Squared	0.9375		Resid. Mean Square (MSE)		813453	
Adjusted R-Squared	0.9219		Standard Deviation		901.916	
Source	DF	SS	MS	F	P	
Regression	7	3.417E+08	4.882E+07	60.02	0.0000	
Residual	28	2.278E+07	813453			
Total	35	3.645E+08				
Cases Included	36	Missing Cases	0			

Table B.73 Unweighted Least Squares Linear Regression of Total arsenic ($\text{mg} \cdot \text{kg}^{-1}$) in soil of *T. angustifolia*

Predictor						VIF
Variables	Coefficient	Std Error	T	P		
Constant	-129.144	56.3366	-2.29	0.0306		
As3S	0.93204	0.09894	9.42	0.0000	5.9	
As5S	0.96078	0.05524	17.39	0.0000	5.3	
day	0.83903	0.34550	2.43	0.0227	16.3	
Eh	-0.03138	0.07102	-0.44	0.6625	3.7	
pH	4.71706	5.71644	0.83	0.4171	3.6	
Al	120.180	234.556	0.51	0.6129	5.0	
Ca	0.00488	0.01742	0.28	0.7815	2.0	
Fe	0.16953	0.08137	2.08	0.0476	32.7	
Mg	-0.12265	0.19245	-0.64	0.5297	2.5	
P	-1.59641	1.13157	-1.41	0.1706	1.9	
R-Squared	0.9900		Resid. Mean Square (MSE)		74.2470	
Adjusted R-Squared	0.9859		Standard Deviation		8.61667	
Source	DF	SS	MS	F	P	
Regression	10	182897	18289.7	246.34	0.0000	
Residual	25	1856	74.2			
Total	35	184753				
Cases Included	36	Missing Cases	0			

Table B.74 Unweighted Least Squares Linear Regression of arsenic accumulation ($\text{mg} \cdot \text{kg}^{-1}$) in *T. angustifolia*

Predictor						VIF
Variables	Coefficient	Std Error	T	P		
Constant	-178.137	237.363	-0.75	0.4592		
TAsP	26.9129	4.34411	6.20	0.0000	30.1	
As3P	-13.8160	13.4780	-1.03	0.3141	6.2	
As5P	-0.49292	4.09768	-0.12	0.9051	22.6	
TAsS	-14.1777	7.73252	-1.83	0.0774	83.6	
As3S	6.88007	7.28724	0.94	0.3532	17.9	
As5S	12.6025	6.62513	1.90	0.0675	42.9	
day	4.68225	5.72088	0.82	0.4200	2.5	
R-Squared	0.9634		Resid. Mean Square (MSE)		132198	
Adjusted R-Squared	0.9542		Standard Deviation		363.590	
Source	DF	SS	MS	F	P	
Regression	7	9.742E+07	1.391E+07	105.28	0.0000	
Residual	28	3701534	132198			
Total	35	1.011E+08				
Cases Included	36	Missing Cases	0			

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