Table S1. Analysis of variance (ANOVA) of data showing the change in malondialdehyde contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	Df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	178.465	178.465	235.14	0.0000***
FA spray (B)	2	79.997	39.999	52.70	0.0000***
A x B	2	0.252	0.126	0.17	0.8486ns
Error	18	13.662	0.759		
Total	23	272.375			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

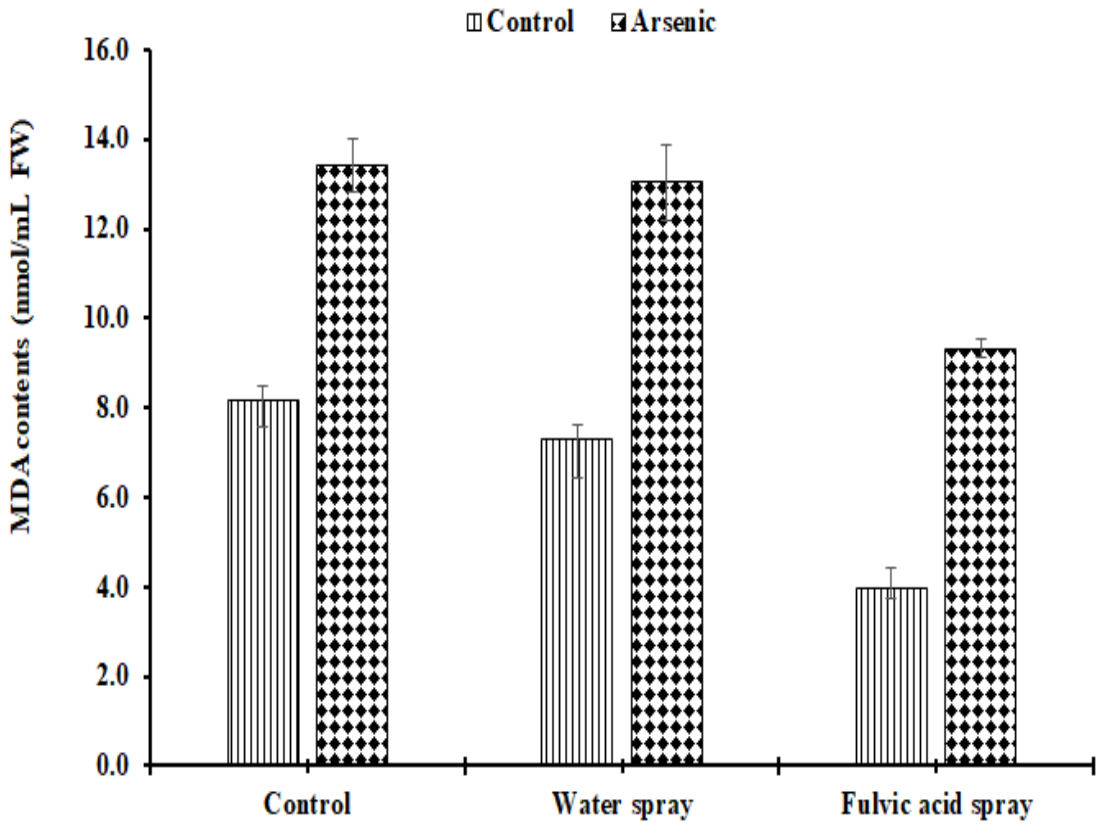

Fig. S1. The change in malondialdehyde contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S2. Analysis of variance (ANOVA) of data showing the change in hydrogen peroxide contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	56.479	56.4790	58.94	0.0000***
FA spray (B)	2	31.892	15.9462	16.64	0.0001***
A x B	2	3.324	1.6620	1.73	0.2047ns
Error	18	17.249	0.9583		
Total	23	108.945			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

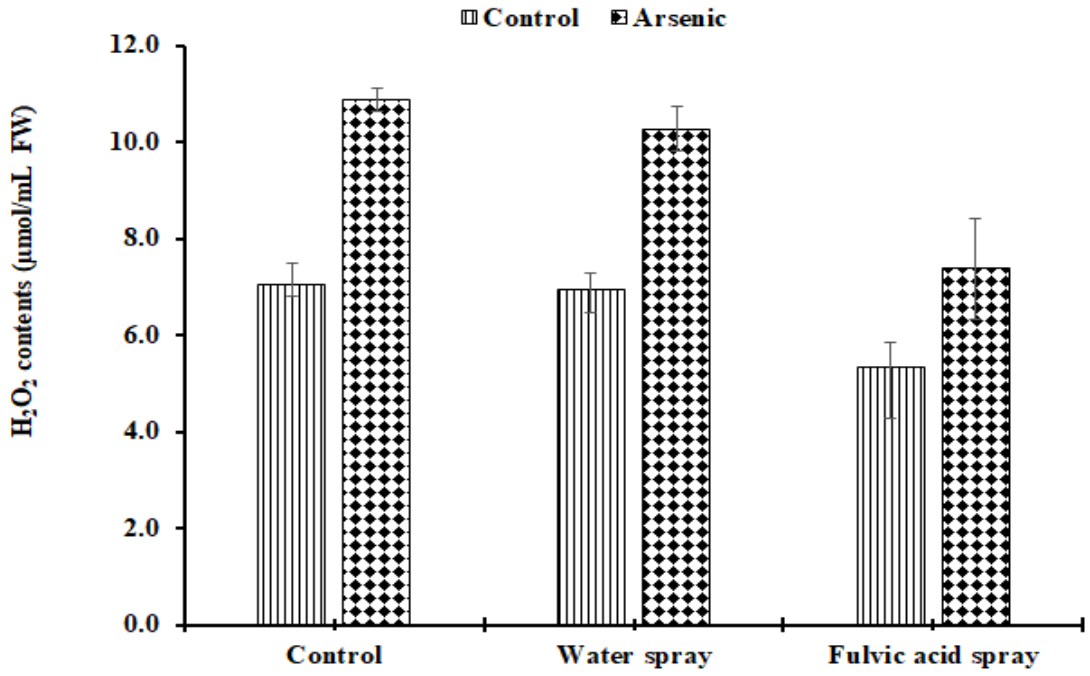

Fig. S2. The change in hydrogen peroxide contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S3. Analysis of variance (ANOVA) of data showing the change in ascorbic acid contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	5.4381	5.43808	56.54	0.0000***
FA spray (B)	2	6.8804	3.44022	35.77	0.0000***
A x B	2	0.1174	0.05868	0.61	0.5542ns
Error	18	1.7314	0.09619		
Total	23	14.1672			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

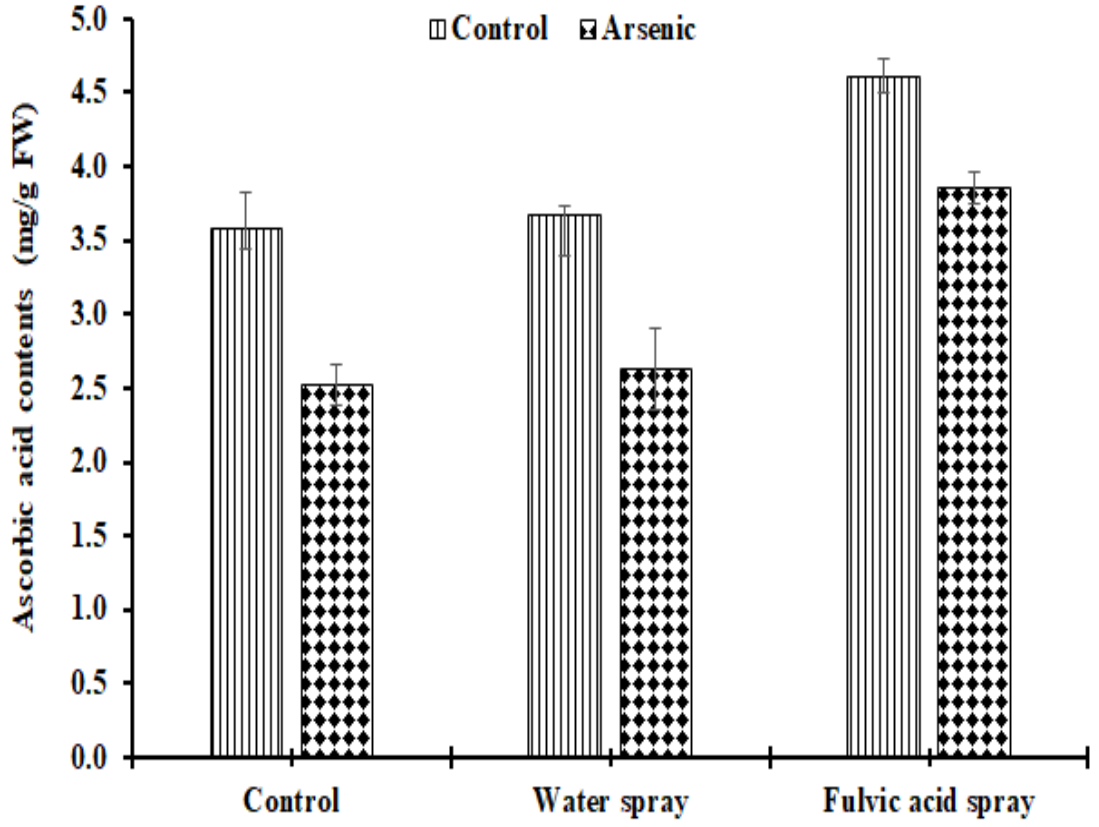

Fig. S3. The change in ascorbic acid contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S4. Analysis of variance (ANOVA) of data showing the change in total soluble protein contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	0.05555	0.05555	0.53	0.4763ns
FA spray (B)	2	0.13557	0.06779	0.65	0.5360ns
A x B	2	1.45154	0.72577	0.91	0.0059**
Error	18	1.88941	0.104497		
Total	23	3.53208			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

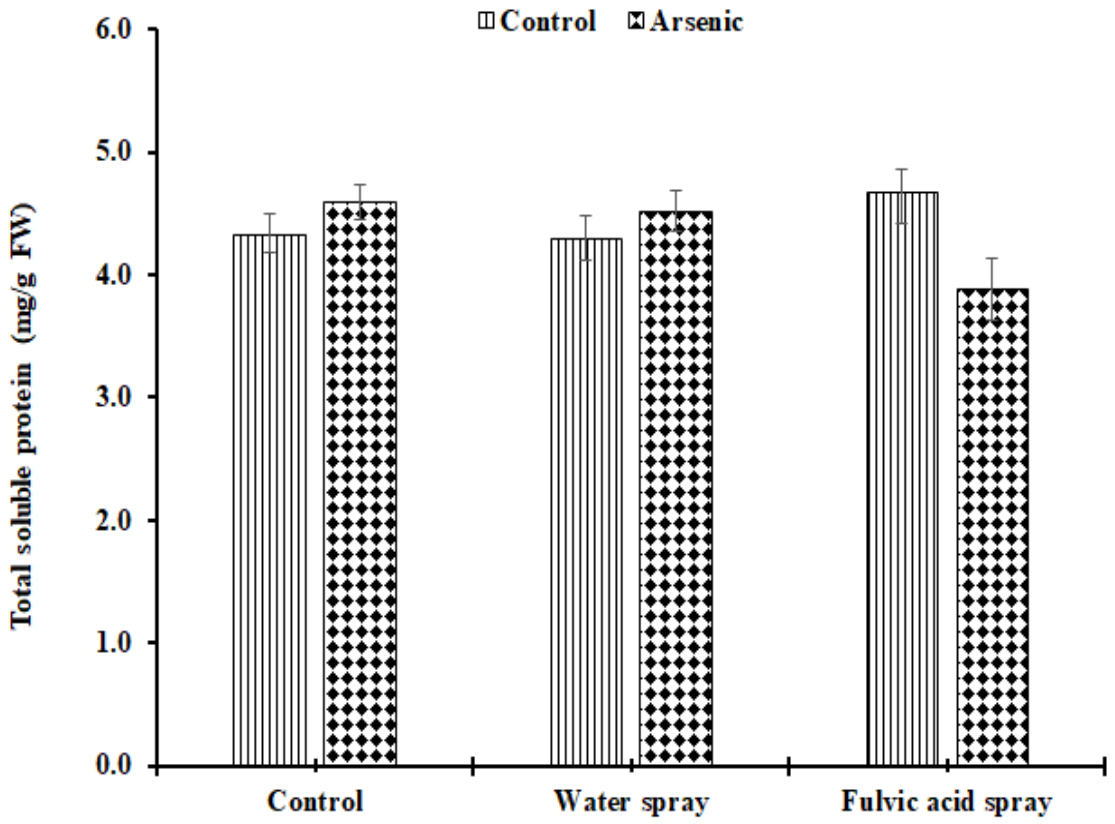

Fig. S4. The change in total soluble protein contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S5. Analysis of variance (ANOVA) of data showing the change in total soluble sugar contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	344.368	344.368	79.08	0.0000***
FA spray (B)	2	20.307	10.153	2.33	0.1258ns
A x B	2	2.979	1.490	0.34	0.7148ns
Error	18	78.388	4.355		
Total	23	446.042			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

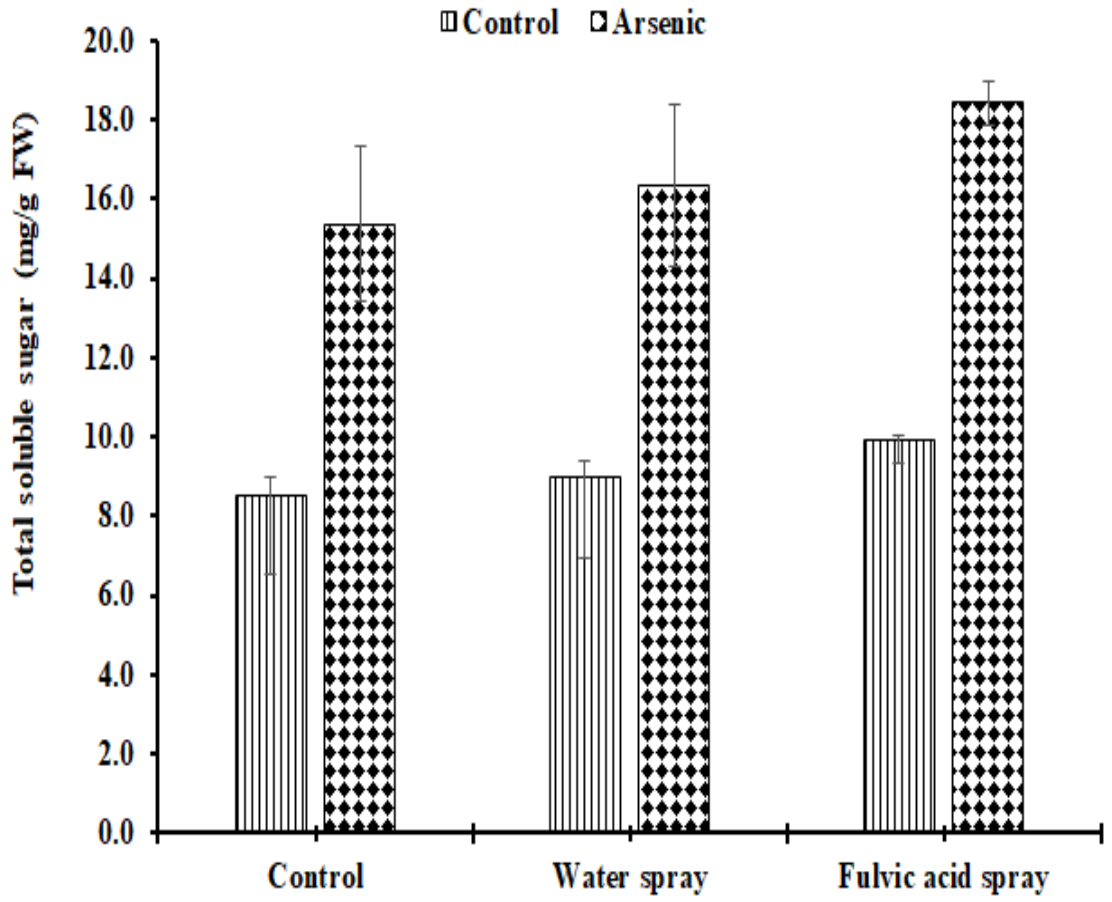

Fig. S5. The change in total soluble sugar contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S6. Analysis of variance (ANOVA) of data showing the change in reducing sugar contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	82.377	82.3773	330.35	0.0000***
FA spray (B)	2	13.545	6.7727	27.16	0.0000***
A x B	2	3.043	1.5215	6.10	0.0095***
Error	18	4.488	0.2494		
Total	23	103.454			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

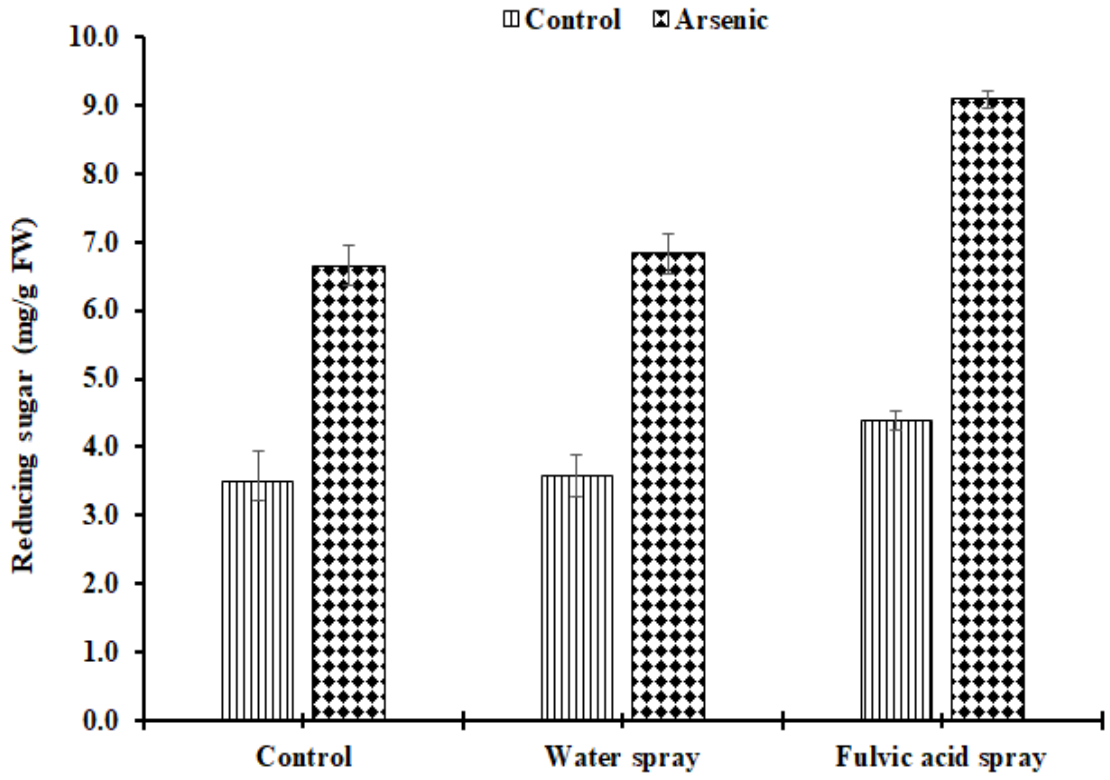

Fig. S6. The change in reducing sugar contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S7. Analysis of variance (ANOVA) of data showing the change in total free amino acids contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	8.8518	8.85179	71.25	0.0000***
FA spray (B)	2	2.2462	1.12308	9.04	0.0019***
A x B	2	0.0406	0.02032	0.16	0.8504ns
Error	18	2.2363	0.12424		
Total	23	13.3749			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

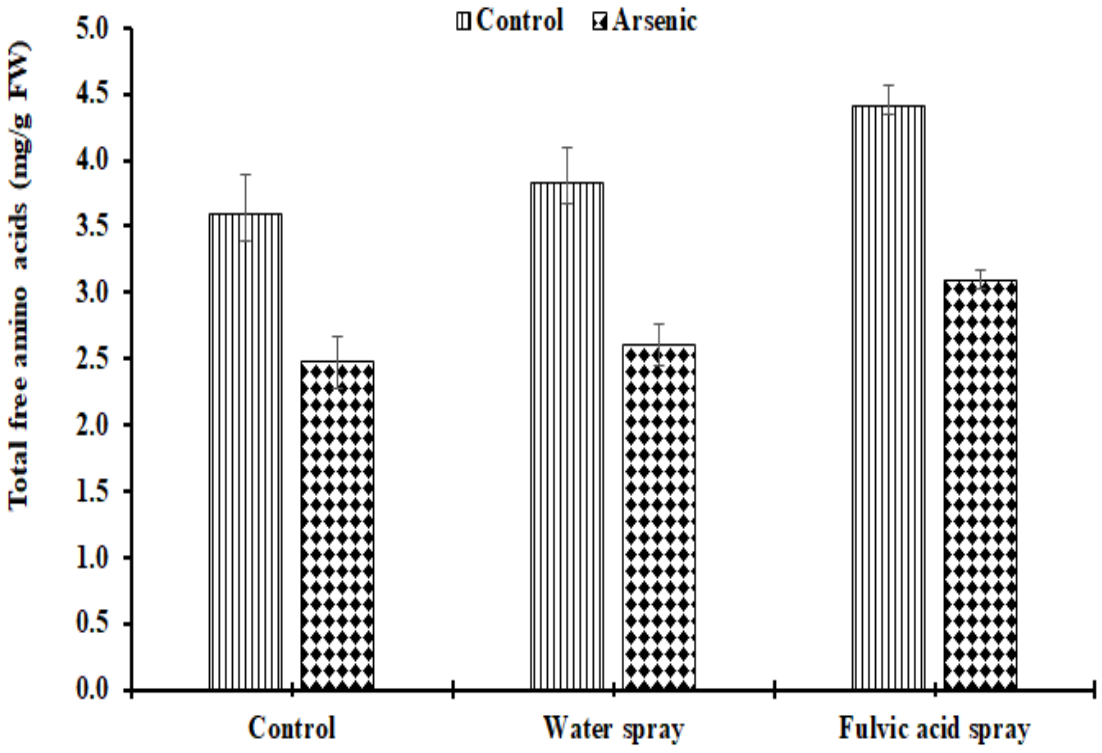

Fig. S7. The change in total free amino acids contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S8. Analysis of variance (ANOVA) of data showing the change in total phenolic contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	5.1240	5.12399	11.93	0.0028***
FA spray (B)	2	8.1385	4.06926	9.48	0.0015***
A x B	2	1.3221	0.66106	1.54	0.2414ns
Error	18	7.7280	0.42933		
Total	23	22.3126			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05

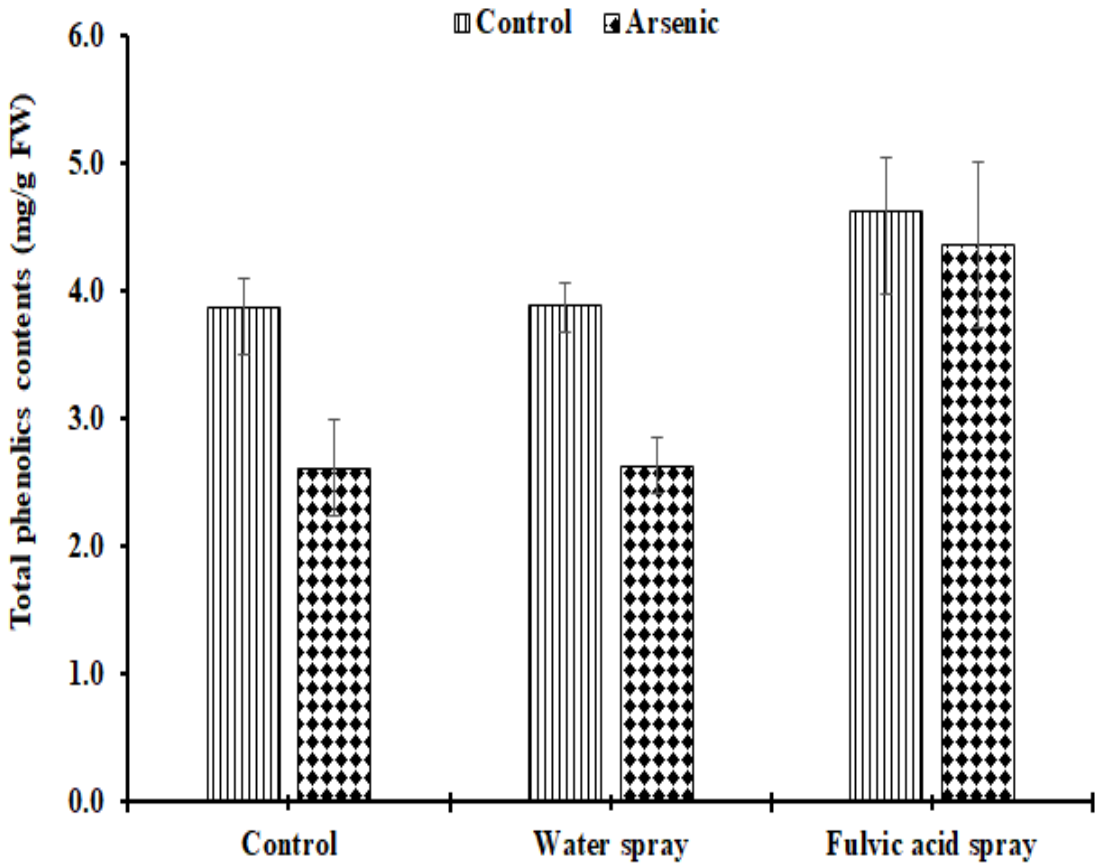

Fig. S8. The change in total phenolic contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S9. Analysis of variance (ANOVA) of data showing the change in flavonoids contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	1.91564	1.91564	38.82	0.0000***
FA spray (B)	2	0.79235	0.39618	8.03	0.0032***
A x B	2	0.01424	0.00712	0.14	0.8666ns
Error	18	0.88829	0.04935		
Total	23	3.61053			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

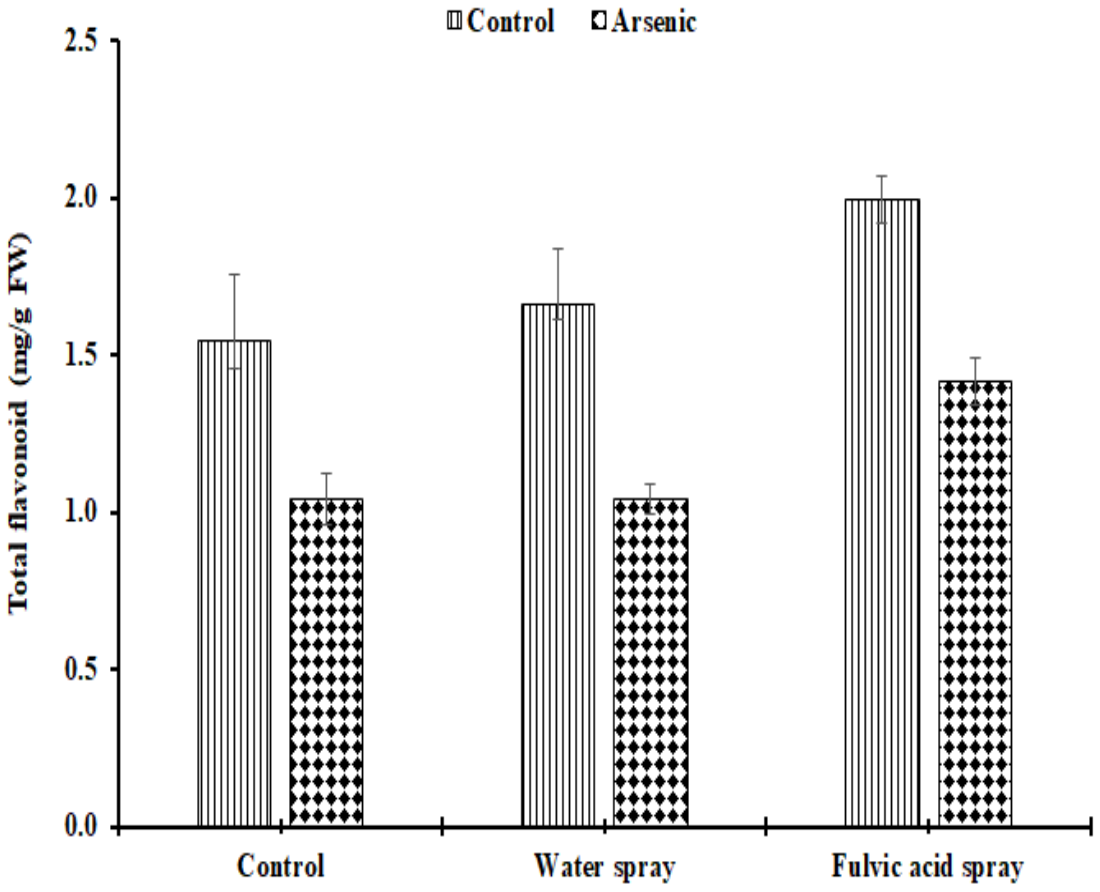

Fig. S9. The change in flavonoids contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S10. Analysis of variance (ANOVA) of data showing the change in anthocyanin contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	0.03589	0.03589	20.05	0.0003***
FA spray (B)	2	0.08928	0.04464	24.94	0.0000***
A x B	2	0.00046	0.00023	0.13	0.8801ns
Error	18	0.03222	0.00179		
Total	23	0.15786			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

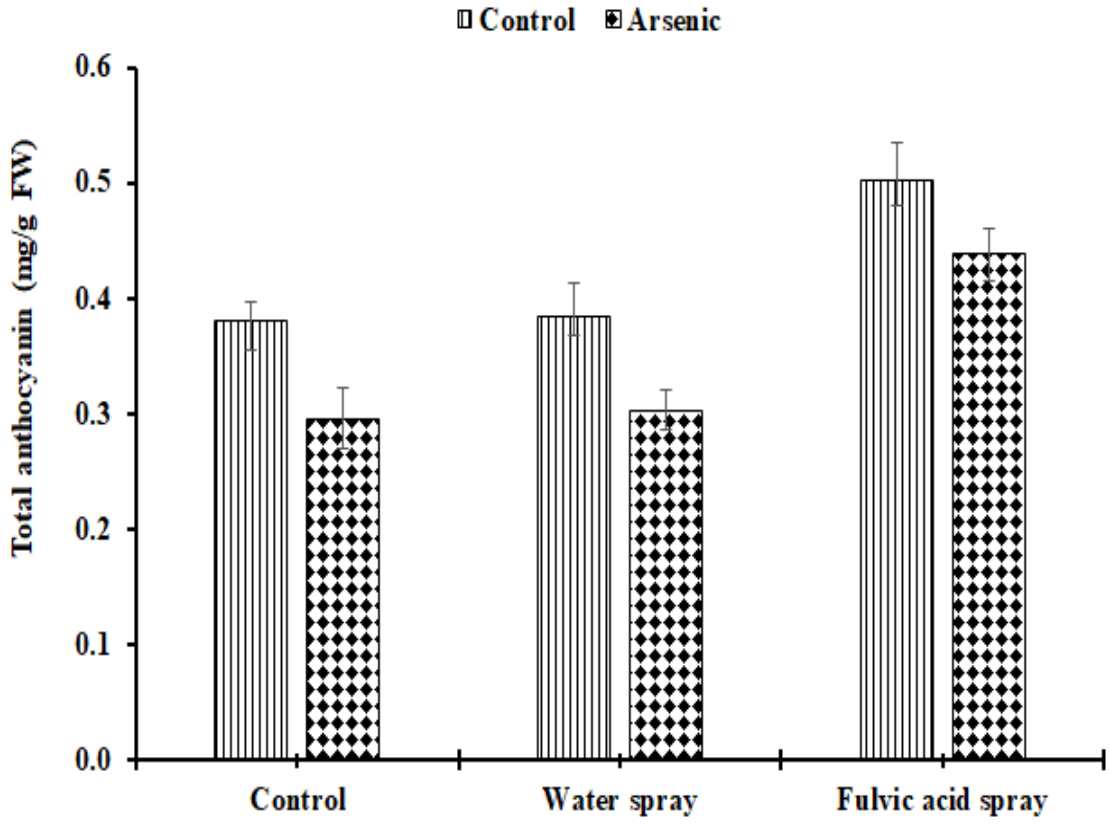

Fig. S10. The change in anthocyanin contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S11. Analysis of variance (ANOVA) of data showing the change in proline contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	27.5136	27.5136	71.89	0.0000***
FA spray (B)	2	6.0998	3.0499	7.97	0.0033***
A x B	2	0.1876	0.0938	0.25	0.7852ns
Error	18	6.8885	0.3827		
Total	23	40.6895			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

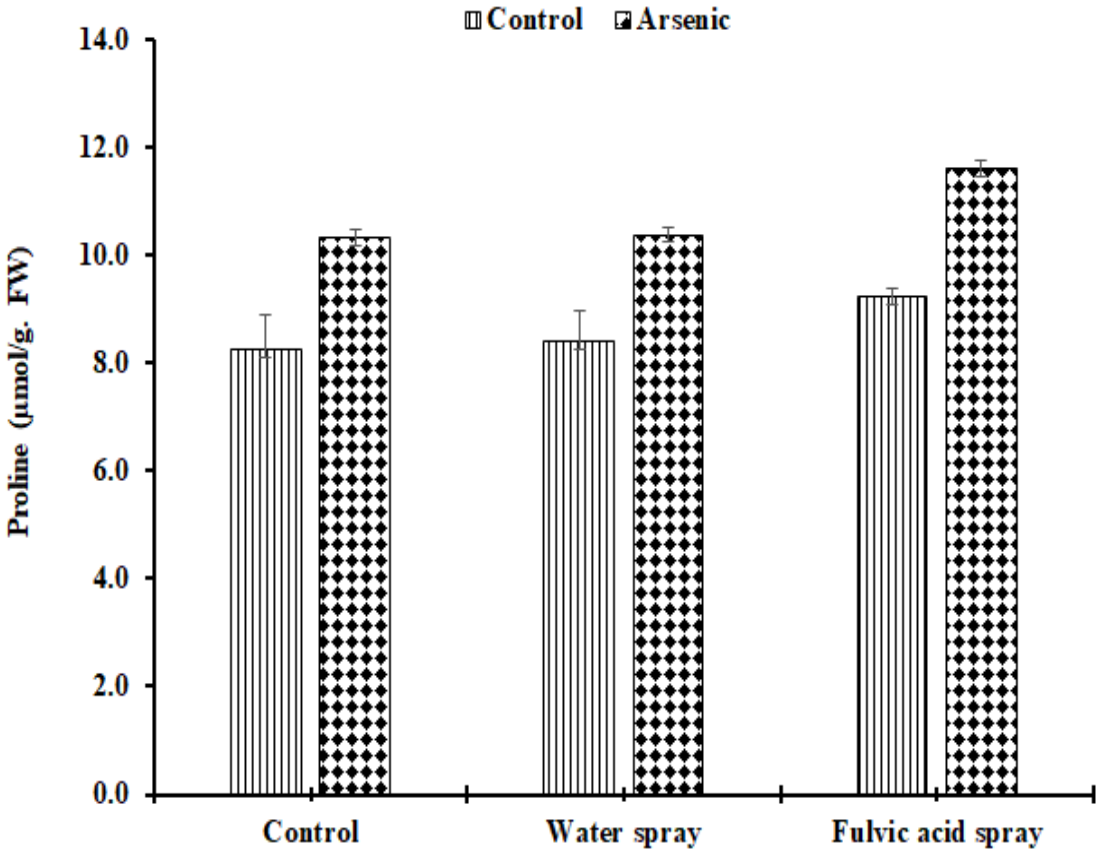

Fig. S11. The change in proline contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S12. Analysis of variance (ANOVA) of data showing the change in glycine betaine contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	546.642	546.642	109.49	0.0000***
FA spray (B)	2	1714.44	857.222	171.69	0.0000***
A x B	2	0.55	0.277	0.06	0.9462ns
Error	18	89.87	4.993		
Total	23	2351.5102			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

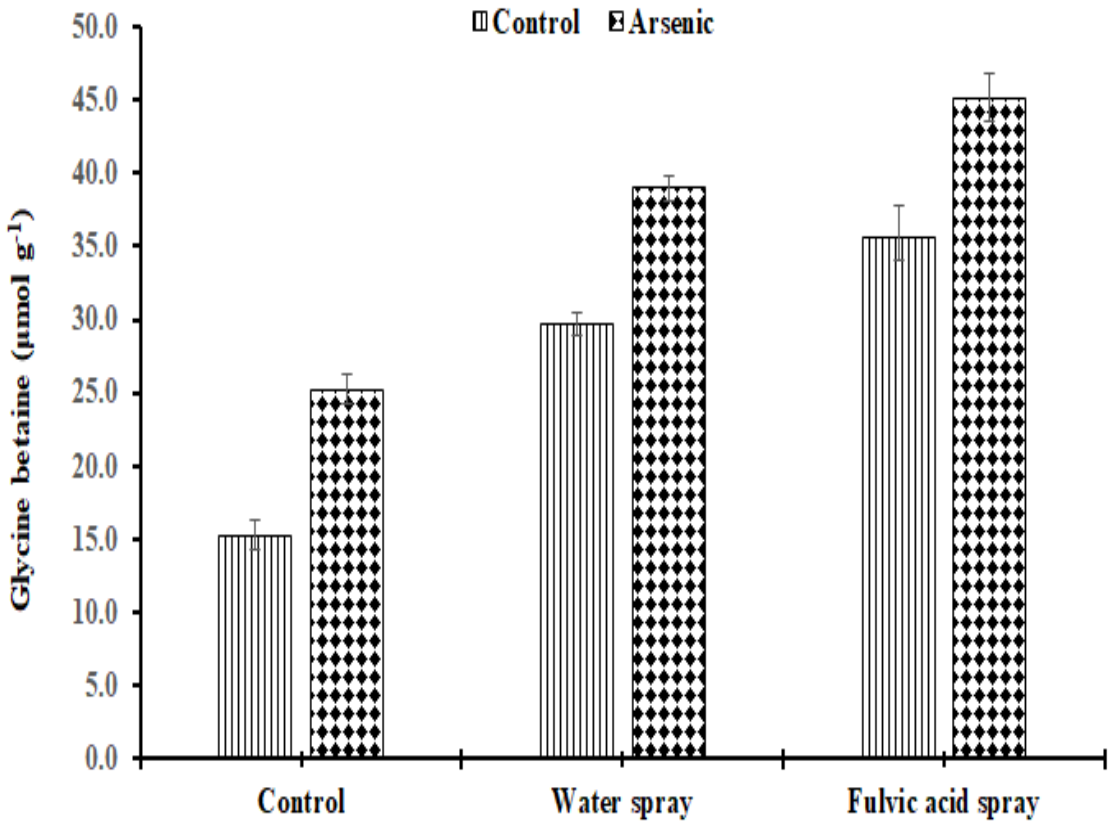

Fig. S12. The change in glycine betaine contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S13. Analysis of variance (ANOVA) of data showing the change in superoxide dismutase contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	5680.14	5680.14	874.54	0.0000***
FA spray (B)	2	135.66	67.83	10.44	0.0010***
A x B	2	16.87	8.44	1.30	0.2972ns
Error	18	116.91	6.50		
Total	23	5949.58			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

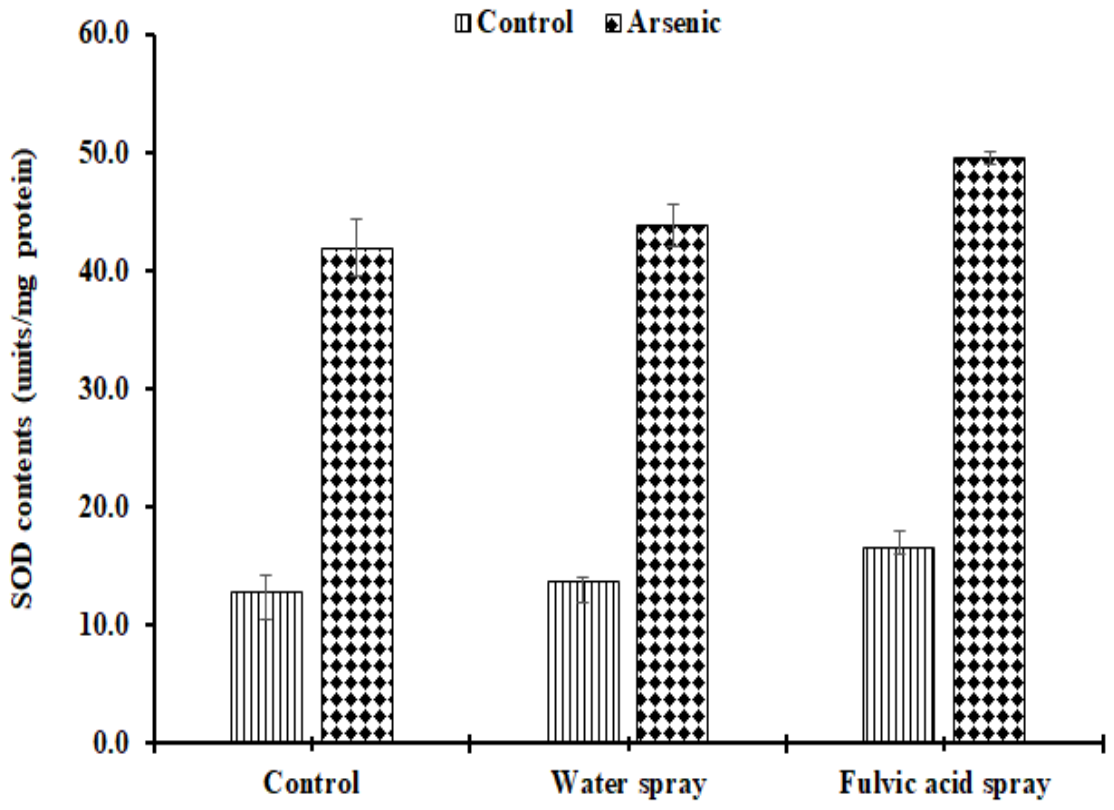

Fig. S13. The change in superoxide dismutase contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S14. Analysis of variance (ANOVA) of data showing the change in peroxidase contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	12282.4	12282.4	38.99	0.0000***
FA spray (B)	2	11290.3	5645.2	17.92	0.0001***
A x B	2	45.9	23.0	0.07	0.9300ns
Error	18	5670.9	315.1		
Total	23	29289.6			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

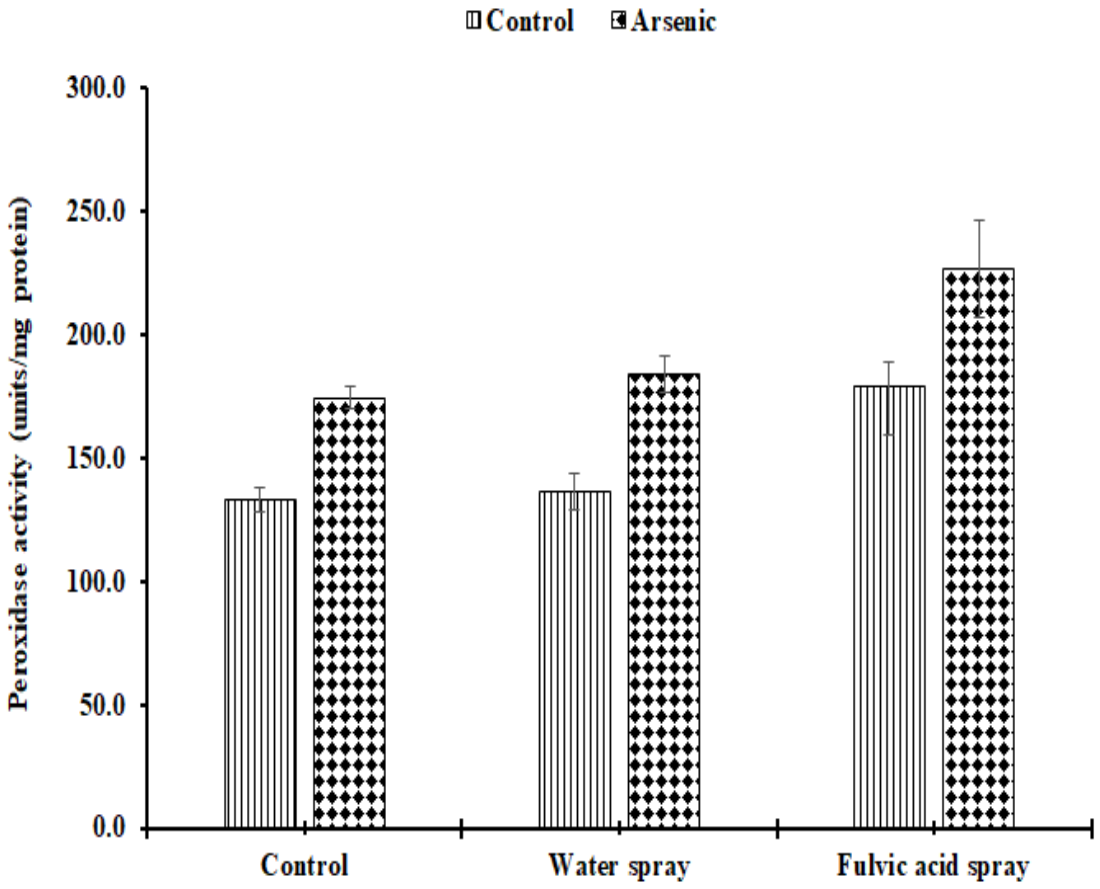

Fig. S14. The change in peroxidase contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S15. Analysis of variance (ANOVA) of data showing the change in catalase contents of wheat by by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	4648.32	4648.82	31.09	0.0000***
FA spray (B)	2	1878.36	989.18	6.62	0.0070**
A x B	2	141.89	70.94	0.47	0.6298ns
Error	18	2691.13	149.51		
Total	23	9460.20			

*, **, *** = significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05.

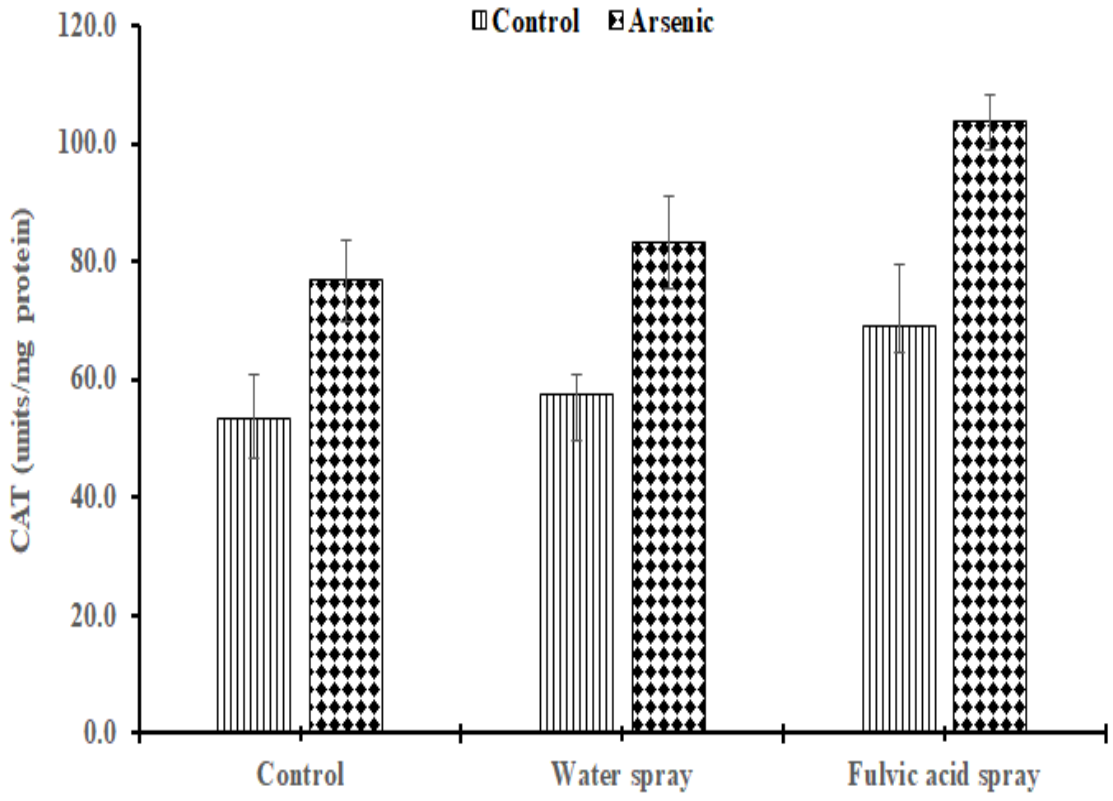

Fig. S15. The change in catalase contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).

Table S16. Analysis of variance (ANOVA) of data showing the change in ascorbate peroxidase contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress.

SOV	df	SS	MS	F	P
Main Effects					
Arsenic stress (A)	1	39.9	39.92	0.29	0.5998ns
FA spray (B)	2	7123.7	3561.85	25.45	0.0000***
A x B	2	721.7	360.86	2.58	0.1036ns
Error	18	2518.9	139.94		
Total	23	10404.2			

*, **, *** =significant at P<0.05, P<0.01and P<0.001, respectively. ns = no significant at P>0.05

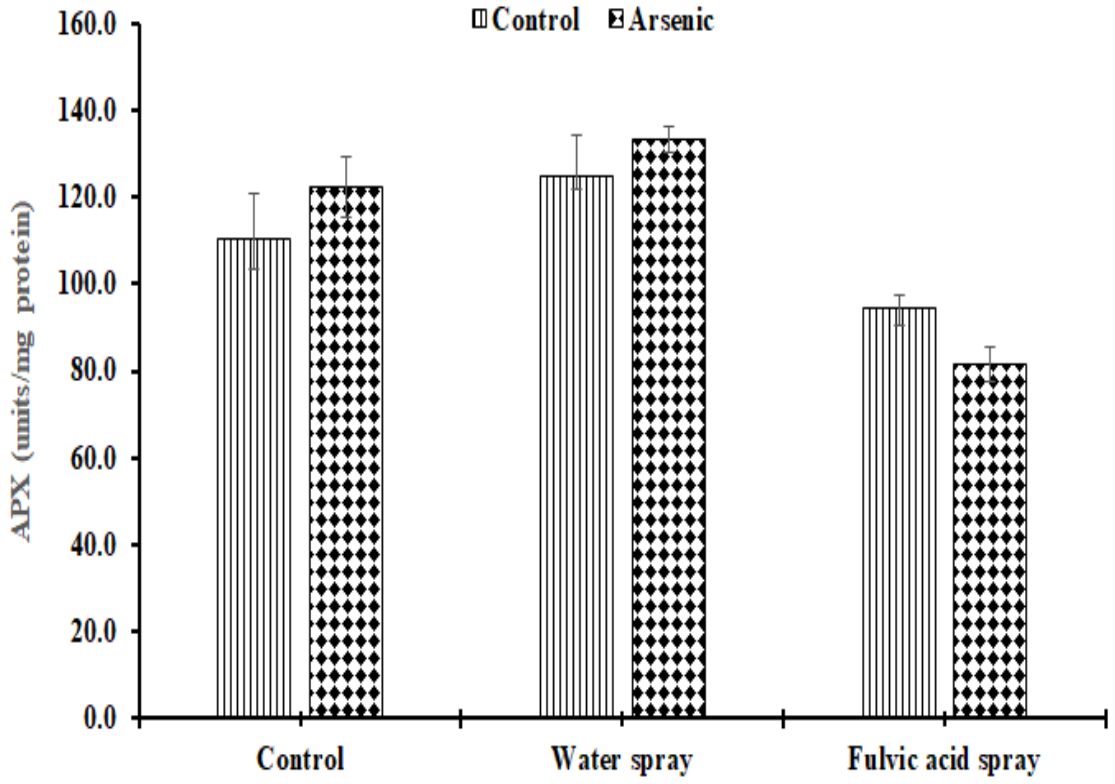

Fig. S16. The change in ascorbate peroxidase contents of wheat by exogenous application of fulvic acid at vegetative stage under arsenic stress (n = 3; Mean±S.E).