

Table 36. Correlation matrix of various parameters of agricultural soil samples collected from selected sites during both summer and winter seasons

	<i>CAs</i>	<i>pH</i>	<i>Alk</i>	<i>NO₃</i>	<i>PO₄</i>	<i>Ca</i>	<i>Mg</i>	<i>Na</i>	<i>K</i>	<i>Fe</i>	<i>Zn</i>	<i>Mn</i>	<i>Cu</i>	<i>Cr</i>	<i>Co</i>	<i>Cd</i>	<i>C</i>	<i>H</i>	<i>N</i>	
<i>CAs</i>	1																			
<i>pH</i>	0.520	1.000																		
<i>Alk</i>	0.710	0.578	1.000																	
<i>NO₃</i>	0.129	0.516	-0.210	1.000																
<i>PO₄</i>	0.096	0.461	-0.294	0.956**	1.000															
<i>Ca</i>	-0.038	-0.409	-0.180	0.161	0.245	1.000														
<i>Mg</i>	0.074	0.125	-0.388	0.744*	0.880*	0.598	1.000													
<i>Na</i>	0.316	-0.439	0.211	-0.691	-0.528	0.283	-0.129	1.000												
<i>K</i>	0.224	0.395	0.604	-0.378	-0.545	-0.816*	-0.852*	-0.139	1.000											
<i>Fe</i>	0.061	0.228	-0.340	0.915**	0.933**	0.527	0.910**	-0.450	-0.700	1.000										
<i>Zn</i>	0.217	0.914**	0.372	0.498	0.524	-0.331	0.243	-0.457	0.212	0.260	1.000									
<i>Mn</i>	0.448	-0.073	0.691	-0.455	-0.447	0.469	-0.193	0.629	0.053	-0.271	-0.174	1.000								
<i>Cu</i>	0.643	0.955**	0.553	0.656	0.593	-0.188	0.312	-0.406	0.209	0.433	0.817*	0.004	1.000							
<i>Cr</i>	-0.575	-0.912**	-0.442	-0.501	-0.415	0.611	-0.035	0.439	-0.487	-0.161	-0.738*	0.290	-0.873*	1.000						
<i>Co</i>	-0.590	-0.179	-0.150	-0.528	-0.362	-0.212	-0.272	0.200	0.082	-0.508	0.156	-0.057	-0.419	0.334	1.000					
<i>Cd</i>	0.697	0.896**	0.510	0.687	0.655	-0.051	0.441	-0.306	0.060	0.523	0.760*	0.052	0.983**	-0.813*	-0.474	1.000				
<i>C</i>	0.122	0.543	-0.278	0.819*	0.921**	-0.026	0.780*	-0.417	-0.403	0.731*	0.644	-0.563	0.594	-0.546	-0.139	0.642	1.000			
<i>H</i>	0.108	0.435	-0.270	0.501	0.683	-0.176	0.622	-0.118	-0.318	0.426	0.587	-0.530	0.413	-0.469	0.151	0.463	0.906**	1.000		
<i>N</i>	0.195	0.472	-0.198	0.981**	0.978**	0.301	0.847*	-0.546	-0.506	0.960**	0.466	-0.347	0.641	-0.429	-0.528	0.704	0.837*	0.541	1	

* Significant at $p < 0.05$, **significant at $p < 0.01$.

CAs-Percentage aberrant cell; *Alk*- Alkalinity (meq/100 g); *NO₃*- Nitrates (mg/g); *PO₄*-Phosphates (mg/g); *Ca*-Calcium (mg/kg); *Mg* – Magnesium (mg/kg); *Na*-Sodium (mg/kg); *K*- Potassium (mg/kg); *Fe* – Iron (mg/kg); *Zn*- Zinc (mg/kg); *Mn*- Manganese (mg/kg); *Cu*- Copper (mg/kg); *Cr*- Chromium (mg/kg); *Co*-Cobalt (mg/kg); *Cd*- Cadmium (mg/kg); *C*- Carbon (%); *H*- Hydrogen (%); *N*- Nitrogen (%).

Table 37. Bioconcentration/Bioaccumulation factor[#] of different metals[@] in each vegetable sample collected from various sites.

Vegetables	Cadmium			Cobalt			Copper			Iron		
	Site 1	Site 2	Site 3	Site 1	Site 2	Site 3	Site 1	Site 2	Site 3	Site 1	Site 2	Site 3
Brinjal	0.333	0.437	0.222	0.986	1.397	4.857	0.323	0.136	0.065	0.058	0.057	0.073
Spinach	0.822	0.498	0.702	4.089	3.932	7.934	3.403	0.824	1.050	0.448	0.496	0.376
Raddish	0.731	1.791	1.053	3.081	2.225	2.752	2.399	0.366	0.701	0.164	0.287	0.104
Turnip	0.731	1.294	1.404	3.852	2.550	4.104	2.538	0.432	0.552	0.228	0.342	0.223
Onion	0.091	0.199	0.614	0.409	1.036	1.166	1.135	0.121	0.549	0.024	0.210	0.125
Garlic	0.183	0.199	1.140	0.634	1.859	2.267	1.152	0.070	0.476	0.021	0.020	0.013
Lady Finger	0.167	0.984	0.204	0.689	2.002	4.657	0.097	0.333	0.086	0.345	0.145	0.106
Green Chilli	0.167	0.984	0.056	1.649	1.716	7.000	0.086	0.075	0.029	0.031	0.164	0.098
Fenugreek	1.096	0.100	1.316	1.748	3.735	5.586	1.144	0.568	1.048	0.608	0.725	0.454
Coriander	0.731	0.199	0.877	2.631	4.096	6.517	0.586	0.331	0.590	0.184	0.437	0.425
Mint	0.833	0.874	0.241	4.405	1.868	8.024	0.507	0.516	0.088	0.189	0.555	0.491
Bottle gourd	0.083	1.858	0.074	2.347	1.348	5.476	0.141	0.102	0.022	0.556	0.162	0.126

#Using formula given by Yoon *et al.*, 2006 and Cui *et al.*, 2007.

@ Since concentration of Lead in soil samples was below detection limits, hence BCF/BAC couldn't be calculated.