

Table 3: Effect of cut off irrigation periods and fertilization treatments on yield per plant, marketable, unmarketable and total yields.

Treatments	Average yield (kg/plant)		Marketable		Unmarketable		Total	
	Yield (tons/fed.)							
	2014	2015	2014	2015	2014	2015	2014	2015
Cut off irrigation periods								
4 weeks before harvest	4.01	3.23	20.873	20.923	1.696	1.670	22.569	22.593
7 weeks before harvest	3.65	2.91	20.767	20.756	1.506	1.484	22.273	22.240
L.S.D. at 0.05 level	0.04	0.04	0.050	0.120	0.130	0.065	0.080	0.060
Fertilization								
Control	2.88	2.11	17.390	17.329	2.269	2.203	19.659	19.531
CN	3.26	2.35	19.638	19.350	1.919	1.923	21.558	21.273
MS	3.84	3.09	21.314	21.244	1.553	1.482	22.867	22.726
BA	3.59	2.80	20.597	20.536	1.766	1.793	22.363	22.329
CN + MS	4.39	3.67	22.265	22.498	1.202	1.179	23.467	23.678
CN + BA	4.00	3.29	21.739	21.896	1.344	1.325	23.083	23.221
CN + MS+ BA	4.83	4.20	22.796	23.027	1.155	1.133	23.951	24.159
L.S.D. at 0.05 level	0.14	0.14	0.140	0.360	0.080	0.100	0.150	0.320

CN: Calcium nitrate at 100 kg/fed., MS: Magnesium sulphate at 5 kg/fed., BA: Boric acid at 1 kg/fed.

Table 4: Effect of the interaction between cut off irrigation periods and fertilization treatments on yield per plant, marketable, unmarketable and total yields.

Treatments		Average yield (kg/plant)		Marketable		Unmarketable		Total	
Cut off irrigation periods	Fertilization	Yield (tons/fed.)							
		2014	2015	2014	2015	2014	2015	2014	2015
4 weeks before harvest	Control	3.02	2.22	17.400	17.464	2.424	2.282	19.824	19.746
	BA	3.76	2.96	20.682	20.589	1.873	1.935	22.555	22.524
	CN	3.52	2.52	19.696	19.340	2.052	2.070	21.747	21.411
	MS	3.99	3.27	21.346	21.262	1.647	1.615	22.993	22.878
	CN + MS	4.55	3.78	22.333	22.673	1.233	1.219	23.567	23.892
	CN + BA	4.21	3.49	21.764	21.984	1.435	1.388	23.199	23.372
	CN + MS+ BA	5.00	4.39	22.889	23.152	1.210	1.181	24.100	24.333
7 weeks before harvest	Control	2.73	1.99	17.379	17.194	2.115	2.123	19.494	19.317
	BA	3.41	2.64	20.512	20.484	1.659	1.651	22.172	22.134
	CN	3.00	2.17	19.581	19.359	1.788	1.776	21.368	21.135
	MS	3.69	2.91	21.282	21.225	1.459	1.349	22.741	22.574
	CN + MS	4.24	3.55	22.196	22.324	1.170	1.140	23.366	23.464
	CN + BA	3.79	3.09	21.714	21.808	1.253	1.262	22.967	23.070
	CN + MS+ BA	4.66	4.02	22.703	22.901	1.099	1.085	23.802	23.986
L.S.D. at 0.05 level		0.20	0.21	0.200	0.510	0.110	0.140	0.210	0.460

CN: Calcium nitrate at 100 kg/fed., MS: Magnesium sulphate at 5 kg/fed., BA: Boric acid at 1 kg/fed.

Table 5: Effect of cut off irrigation periods and fertilization treatments on weight loss and decay percentages of stored tubers.

Treatments	Days from storage						Decay (%)	
	30		60		90			
	Weight loss (%)						2014	2015
2014	2015	2014	2015	2014	2015			
Cutoff irrigation periods								
4 weeks before harvest	4.71	5.86	6.93	7.46	11.84	10.94	6.89	6.78
7 weeks before harvest	4.54	5.66	6.72	7.06	11.59	10.72	6.78	6.65
L.S.D. at 0.05 level	0.16	0.09	0.17	N.S.	0.09	0.08	0.05	0.10
Fertilization								
Control	5.46	6.62	7.92	8.10	12.51	11.52	7.95	7.82
CN	5.20	6.49	7.59	7.88	12.39	11.28	7.64	7.50
MS	4.65	5.88	7.06	7.27	11.78	10.78	6.95	6.94
BA	5.03	6.23	7.30	7.66	12.07	11.26	5.49	5.25
CN + MS	4.17	5.14	6.24	6.88	11.32	10.23	6.60	6.48
CN + BA	4.31	5.51	6.35	6.57	11.50	10.57	6.99	6.88
CN + MS+ BA	3.57	4.46	5.31	6.46	10.45	10.18	6.22	6.13
L.S.D. at 0.05 level	0.13	0.17	0.20	0.53	0.18	0.14	0.17	0.30

CN: Calcium nitrate at 100 kg/fed., MS: Magnesium sulphate at 5 kg/fed., BA: Boric acid at 1 kg/fed., N.S.: Not significant at 0.05 level probability.

Table 6: Effect of the interaction between cut off irrigation periods and fertilization treatments on weight loss and decay percentage of stored tubers.

Treatments		Days from storage							
		30		60		90		Decay (%)	
		Weight loss (%)							
		2014	2015	2014	2015	2014	2015	2014	2015
Cut off irrigation periods	Fertilization								
4 weeks before harvest	Control	5.48	6.65	7.90	8.14	12.63	11.57	8.02	7.91
	CN	5.19	6.55	7.60	7.98	12.38	11.43	7.69	7.55
	MS	4.74	5.98	7.23	7.42	12.03	10.96	7.02	7.01
	BA	5.07	6.33	7.43	7.80	12.19	11.26	5.55	5.31
	CN + MS	4.27	5.34	6.34	7.03	11.45	10.33	6.64	6.54
	CN + BA	4.50	5.63	6.54	7.23	11.67	10.69	7.05	6.93
	CN + MS+ BA	3.75	4.57	5.44	6.66	10.51	10.33	6.25	6.17
7 weeks before harvest	Control	5.45	6.61	7.94	8.08	12.39	11.46	7.87	7.73
	CN	5.22	6.44	7.58	7.77	12.39	11.12	7.59	7.45
	MS	4.56	5.78	6.89	7.13	11.52	10.61	6.88	6.87
	BA	4.98	6.14	7.17	7.52	11.95	11.26	5.43	5.20
	CN + MS	4.08	4.95	6.14	6.73	11.18	10.13	6.55	6.43
	CN + BA	4.12	5.39	6.17	5.90	11.33	10.46	6.94	6.82
	CN + MS+ BA	3.39	4.35	5.18	6.27	10.38	10.02	6.17	6.07
L.S.D. at 0.05 level		0.18	0.24	0.28	0.75	0.26	0.20	0.24	0.43

CN: Calcium nitrate at 100 kg/fed., MS: Magnesium sulphate at 5 kg/fed., BA: Boric acid at 1 kg/fed.

Table 7: Effect of cut off irrigation periods and fertilization treatments on chemical constituents of Jerusalem artichoke tubers.

Treatments	Inulin		Total carbohydrates		Ca		Mg		B	
	(%)				mg/kg D.W.					
Cut off irrigation periods	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015
4 weeks before harvest	9.45	9.50	22.63	22.75	1564	1547	1181	1197	6.68	6.74
7 weeks before harvest	9.65	9.71	23.03	23.05	1610	1583	1196	1209	6.78	6.82
L.S.D. at 0.05 level	0.13	0.04	N.S.	N.S.	30.93	32.5	12.17	N.S.	0.05	0.06
Fertilization										
Control	8.72	8.73	20.04	19.91	1106	1138	926	964	6.07	5.86
CN	8.98	9.01	21.25	21.23	1676	1763	1191	1203	5.58	5.82
MS	9.29	9.31	22.65	22.90	1195	1200	1259	1278	7.85	8.08
BA	9.10	9.08	22.25	22.39	1125	1106	1254	1289	9.42	9.05
CN + MS	10.36	10.46	24.80	24.91	1878	1785	1280	1282	6.32	6.55
CN + BA	9.58	9.66	23.50	23.46	1963	1918	1067	1079	5.04	5.12
CN + MS+ BA	10.83	10.96	25.30	25.53	2165	2046	1341	1327	6.85	6.95
L.S.D. at 0.05 level	0.09	0.11	0.22	0.28	128.2	168.8	23.32	33.81	0.32	0.47

CN: Calcium nitrate at 100 kg/fed., MS: Magnesium sulphate at 5 kg/fed., BA: Boric acid at 1 kg/fed., N.S.: Not significant at 0.05 level probability.

Table 8: Effect of the interaction between cut off irrigation periods and fertilization treatments on chemical constituents of Jerusalem artichoke tubers.

Treatments		Inulin (%)		Total carbohydrates (%)		Ca mg/kg D.W.		Mg mg/kg D.W.		B mg/kg D.W.	
Cut off irrigation periods	Fertilization	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015
4 weeks	Control	8.69	8.70	19.85	19.58	1056	1110	900	959	5.94	5.78
	CN	8.92	8.98	20.98	21.12	1666	1753	1186	1199	5.55	5.80
	MS	9.23	9.25	22.47	22.83	1180	1183	1255	1276	7.84	8.05
	BA	9.08	9.02	22.07	22.34	1106	1086	1248	1269	9.37	9.00
	CN + MS	10.22	10.35	24.63	24.80	1850	1773	1278	1279	6.27	6.52
	CN + BA	9.43	9.53	23.19	23.20	1943	1900	1063	1075	4.99	5.11
	CN + MS+ BA	10.59	10.66	25.19	25.40	2146	2026	1338	1324	6.82	6.93
7 weeks	Control	8.75	8.77	20.23	20.24	1156	1166	952	969	6.20	5.96
	CN	9.04	9.04	21.51	21.34	1686	1773	1196	1207	5.61	5.85
	MS	9.35	9.36	22.84	22.97	1210	1216	1263	1281	7.87	8.12
	BA	9.12	9.14	22.43	22.44	1143	1126	1260	1310	9.48	9.10
	CN + MS	10.50	10.58	24.97	25.01	1906	1796	1283	1284	6.36	6.58
	CN + BA	9.74	9.80	23.81	23.73	1983	1936	1072	1084	5.08	5.14
	CN + MS+ BA	11.09	11.25	25.41	25.65	2183	2066	1344	1330	6.88	6.97
L.S.D. at 0.05 level		0.13	0.16	0.31	0.40	181.3	238	32.98	47.81	0.45	0.66

CN: Calcium nitrate at 100 kg/fed., MS: Magnesium sulphate at 5 kg/fed., BA: Boric acid at 1 kg/fed.