

Table 3. Effect of organic manure, nitrogen fertilization and its interaction on vegetative growth of barley plants during 2006/2007 and 2007/2008 seasons.

Treatments	Plant height (cm)		No. of tillers/m ²		No. of Spikes/ m ²		Spike length (cm)		Flag leaf Blade area (cm ²)	
	06/07	07/08	06/07	07/08	06/07	07/08	06/07	07/08	06/07	07/08
Organic manure: (m³/hectare)										
0	71.34d	64.60b	371.99d	372.01b	327.04d	327.26d	6.10d	6.11d	12.58d	12.60d
50	73.86c	73.97ab	378.07c	378.10ab	347.96c	347.99c	6.22c	6.23c	14.79c	14.80c
75	80.23a	80.44a	393.84a	393.94a	383.43a	382.60a	6.42a	6.42a	21.55a	21.56a
100	76.19b	76.27a	383.78b	372.80b	358.57b	358.64b	6.34b	6.34b	17.32b	17.33b
N-fertilization: (kg/hectare)										
100	74.49c	69.63a	379.89c	380.00a	349.21c	349.39c	6.22c	6.23c	15.93c	15.94c
150	75.42b	75.44a	382.19b	382.24a	354.40b	354.40b	6.27b	6.26b	16.75b	16.75b
200	76.31a	76.49a	383.68a	375.44a	356.58a	358.58a	6.31a	6.31a	17.01a	17.02a
Interaction: OM X N										
F-test	**	NS	*	*	NS	**	**	**	**	**

Means with the same letter are not significantly different at level of (0.05).

Table 4 . Effect of organic manure, nitrogen fertilization and its interaction on total chlorophyll, yield and its components of barley during 2006/2007 and 2007/2008 seasons.

Treatments	Total chlorophyll of leaves (mg/g.)		1000 grain weight(g.)		Grain yield Ardab/hectare		Straw yield Ton/hectare	
	06/07	07/08	06/07	07/08	06/07	07/08	06/07	07/08
Organic manure: (m³/hectare)								
0	20.65d	20.65d	35.13d	36.24d	24.69d	24.71d	5.42d	5.44d
50	21.32c	21.32c	38.92c	39.08c	28.76c	28.76c	5.57c	5.60c
75	22.87a	22.88a	44.88a	44.83a	40.02a	40.03a	5.89a	5.89a
100	22.34b	22.35b	41.87b	41.53b	33.19b	33.21b	5.76b	5.77b
N-fertilization: (kg/hectare)								
100	21.68c	21.69c	39.43c	39.44c	30.13c	30.14c	5.59c	5.61c
150	21.81b	21.81b	40.27b	40.40b	32.05b	32.07b	5.66b	5.67b
200	21.89a	21.90a	40.99a	41.43a	32.82a	32.83a	5.73a	5.64a
Interaction: OM X N								
F-test	**	**	**	*	**	**	NS	**

Means with the same letter are not significantly different at level of (0.05) .

Table 5. Effect of interaction between the organic manure and nitrogen fertilization on vegetative growth of barley plants during 2006/2007 and 2007/2008 seasons.

organic manure: (m ³ /hectare)	N- fertilization: (Kg/hectare)	Plant height (cm)		No. of tillers/m ²		No. of Spikes/ m ²		Spike length (cm)		Flag leaf Blade area (cm ²)	
		06/07	07/08	06/07	07/08	06/07	07/08	06/07	07/08	06/07	07/08
0	100	70.26	69.96	370.10	370.20	325.20	325.56	6.04	6.05	12.50	12.51
	150	71.30	71.36	372.26	372.16	327.66	327.66	6.12	6.13	12.61	12.61
	200	72.46	72.46	373.60	373.66	328.26	328.53	6.14	6.15	12.63	12.65
50	100	73.16	73.36	376.73	376.86	344.73	344.70	6.15	6.16	14.75	14.76
	150	73.93	73.86	377.66	377.70	347.76	347.66	6.22	6.24	14.79	14.80
	2000	74.46	74.66	379.80	379.90	351.36	351.60	6.28	6.28	14.81	14.82
75	100	79.33	79.59	391.60	391.66	375.36	375.60	6.37	6.38	19.25	19.25
	150	80.06	80.23	394.40	394.50	382.33	382.60	6.42	6.43	22.24	22.25
	200	81.30	81.56	395.53	395.66	392.60	389.60	6.45	6.46	23.16	23.16
100	100	75.20	75.63	381.13	381.26	351.53	351.70	6.31	6.33	17.21	17.22
	150	76.36	76.30	384.43	384.60	359.80	359.66	6.32	6.32	17.32	17.33
	200	77.00	76.86	385.76	382.53	364.36	364.56	6.35	6.36	17.41	17.44
LSD (0.05)		0.84	NS	14.49	16.33	NS	0.15	0.01	0.01	0.02	0.01

Table 6. Effect of interaction between the organic manure and nitrogen fertilization on total chlorophyll, yield and its components of barley during 2006/2007 and 2007/2008 seasons.

Organic manure: (m ³ /hectare)	N-fertilization: (Kg/hectare)	Total chlorophyll of leaves (mg/g.)		1000 grain weight (g.)		Grain yield Ardab/hectare		Straw yield Ton/hectare	
		06/07	07/08	06/07	07/08	06/07	07/08	06/07	07/08
0	100	20.58	20.58	34.33	35.26	23.23	23.24	5.34	5.34
	150	20.64	20.64	35.26	36.33	25.18	25.20	5.42	5.46
	200	20.71	20.71	35.80	37.13	25.66	25.67	5.50	5.52
50	100	21.16	21.16	37.50	38.46	27.27	27.27	5.47	5.55
	150	21.34	21.33	39.43	39.03	29.15	29.17	5.58	5.58
	200	21.47	21.46	40.03	39.73	29.86	29.88	5.65	5.65
75	100	22.80	22.81	44.33	43.46	39.54	39.56	5.81	5.82
	150	22.85	22.86	44.83	44.76	40.19	40.20	5.89	5.89
	200	22.94	22.95	45.46	46.26	40.31	40.33	5.95	5.95
100	100	22.18	22.19	41.20	40.56	30.48	30.48	5.71	5.72
	150	22.38	22.39	41.73	41.46	33.67	33.70	5.74	5.75
	200	22.44	22.45	42.66	42.56	35.42	35.34	5.80	5.81
LSD (0.05)		0.02	0.01	0.31	0.29	0.46	0.39	NS	0.02