Table 1. Plant height, number of spikes / m^2 and spike length of four wheat cultivars as influenced by seeding rate and nitrogen sources in the two seasons and their combined.

Treatments and interactions	Plant height (cm)			Number of spikes / m^2			Spike length (cm)		
	1st	2nd	Comb.	1st	2nd	Comb.	1st	2nd	Comb.
Cultivars (C):									
Giza 168	85.67 d	83.27 d	84.47 d	337.0 c	324.9 c	331.0 c	8.43	7.79	8.113
Gemmiza 7	95.39 b	93.05 b	94.22 b	346.8 b	355.0 b	341.0 b	9.81	9.16	9.489
Gemmiza 9	97.57 a	95.24 a	96.40 a	358.2 a	346.2 a	352.2 a	9.74	9.01	9.375
Sakha 93	90.78 c	88.45 c	89.62 c	336.8 c	324.0 c	330.4 c	8.48	7.82	8.150
F. test	*	*	*	*	*	**	N.S	N.S	N.S
Seeding rate (S):									
300 grain / m^2	88.88 c	86.51 c	87.70 c	316.6 c	304.4 c	310.5 c	10.29 a	9.61 a	9.954 a
400 grain / m^2	92.19 b	89.82 b	91.01 b	340.8 b	328.7 b	334.7 b	8.98 b	8.27 b	8.627 b
500 grain / m^2	95.98 a	93.67 a	94.82 a	376.8 a	364.4 a	370.6 a	8.08 c	7.45 c	7.765 c
F. test	**	**	**	**	**	**	**	**	**
Nitrogen sources (N):									
Ammonium sulphate (AS)	94.64 a	92.30 a	93.47 a	349.9 a	337.6 a	343.8 a	10.15 a	9.43 a	9.788 a
Ammonium nitrate (AN)	92.33 b	89.98 b	91.16 b	344.7 b	332.7 b	338.7 b	9.01 b	8.39 b	8.701 b
Urea (U)	90.08 c	87.72 c	88.90 c	339.6 c	327.2 c	333.4 c	8.19 c	7.53 c	7.857 c
F. test	**	**	**	**	**	**	*	*	*
Interaction:									
C x S	*	*	** (1-a)	*	*	** (1-a)	*	**	** (1-a)
C x N	N.S	*	N.S	N.S	N.S	N.S	N.S	*	N.S
S x N	*	N.S	N.S	*	N.S	N.S	N.S	N.S	N.S
C x S x N	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S

***, ** and N.S denote the significant and highly significant and the insignificant differences in respective order.**

Table 2. Number of spikelets/spike, number of grains/spike, thousand grain weight and grain weight/spike of four wheat cultivars as influenced by seeding rate and nitrogen sources in the two seasons and their combined.

Treatments and interactions	Number of spikelets/spike			Number of grains/spike			Thousand grain weight (gm)			Grain weight/spike (gm)		
	1st	2nd	Comb.	1st	2nd	Comb.	1st	2nd	Comb.	1st	2nd	Comb.
Cultivars (C):												
Giza 168	16.02 b	14.57 b	15.29 b	42.67 b	40.65 c	41.66 c	42.49 c	40.80 c	41.64 c	1.807 b	1.675 b	1.741 b
Gemmiza 7	19.20 a	17.82 a	18.51 a	47.67 a	45.27 b	46.47 b	48.58 a	47.59 a	48.08 a	2.308 a	2.158 a	2.233 a
Gemmiza 9	19.24 a	17.84 a	18.54 a	50.77 a	48.82 a	49.80 a	46.14 b	45.09 b	45.62 b	2.330 a	2.186 a	2.258 a
Sakha 93	16.05 b	14.67 b	15.36 b	42.40 b	40.43 c	41.41 c	43.10 c	41.59 c	42.35 c	1.799 b	1.676 b	1.737 b
F. test	*	*	**	**	**	**	*	*	*	*	*	*
Seeding rate (S):												
300 grain / m^2	19.67 a	18.26 a	18.97 a	48.17 a	46.29 a	47.23 a	47.42 a	45.54 a	46.48 a	2.265 a	2.128 a	2.197 a
400 grain / m^2	17.36 b	15.96 b	16.66 b	46.04 b	43.93 b	44.99 b	44.73 b	43.69 b	44.21 b	2.055 b	1.910 b	1.983 b
500 grain / m^2	15.84 c	14.45 c	15.15 c	43.41 c	41.16 c	42.29 c	43.08 c	42.06 c	42.57 c	1.863 c	1.732 c	1.797 c
F. test	**	**	**	**	**	**	**	*	*	**	**	**
Nitrogen sources (N):												
Ammonium sulphate (AS)	19.34 a	17.92 a	18.63 a	47.68 a	45.72 a	46.70 a	44.99	43.95	44.47	2.143 a	2.008 a	2.076 a
Ammonium nitrate (AN)	17.58 b	16.18 b	16.88 b	45.72 b	43.79 b	44.75 b	45.26	43.68	44.47	2.059 b	1.918 b	1.988 b
Urea (U)	15.97 c	14.56 c	15.27 c	44.23 c	41.87 c	43.05 c	44.98	43.66	44.32	1.981 c	1.845 c	1.913 c
F. test	**	**	**	**	**	**	N.S	N.S	N.S	**	**	**
Interaction:												
C x S	*	*	** (2-a)	N.S	*	** (2-a)	N.S	N.S	N.S	*	*	** (2-a)
C x N	N.S	*	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	*	N.S
S x N	*	N.S	N.S	*	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S
C x S x N	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S

***, ** and N.S denote the significant and highly significant and the insignificant differences in respective order.**

Table 3. Grain yield, straw yield and total yields per fad and harvest index of four wheat cultivars as influenced by seeding rate and nitrogen sources in the two seasons and their combined.

Treatments	Grain yield (ton / fad)			Straw yield (ton / fad)			Total yield (ton / fad)			Harvest index		
	1st	2nd	Comb.	1st	2nd	Comb.	1st	2nd	Comb.	1st	2nd	Comb.
Cultivars (C):												
Giza 168	2.277 b	1.924 c	2.100 c	4.377 b	3.440 b	3.909 c	6.654 b	5.364 c	6.009 c	0.342	0.360	0.351
Gemmiza 7	2.898 a	2.536 b	2.717 b	5.043 a	4.720 a	4.882 b	7.941 a	7.256 b	7.599 b	0.365	0.349	0.357
Gemmiza 9	2.964 a	2.714 a	2.839 a	5.185 a	5.079 a	5.132 a	8.149 a	7.794 a	7.971 a	0.363	0.349	0.356
Sakha 93	2.110 c	1.870 c	1.990 c	4.047 c	3.506 b	3.776 c	6.156 c	5.375 c	5.766 c	0.344	0.351	0.347
F. test	**	**	**	**	**	**	*	*	**	N.S	N.S	N.S
Seeding rate (S):												
300 grain / m^2	2.452 b	2.123 c	2.288 c	4.450 c	3.817 c	4.133 c	6.902 c	5.940 c	6.421 c	0.354	0.360	0.357
400 grain / m^2	2.572 a	2.256 b	2.414 b	4.673 b	4.104 b	4.388 b	7.245 b	6.360 b	6.802 b	0.354	0.357	0.355
500 grain / m^2	2.662 a	2.404 a	2.533 a	4.867 a	4.638 a	4.752 a	7.529 a	7.042 a	7.285 a	0.352	0.340	0.346
F. test	**	**	**	*	**	**	*	**	**	N.S	N.S	N.S
Nitrogen sources (N):												
Ammonium sulphate (AS)	2.679 a	2.370 a	2.524 a	4.864 a	4.336 a	4.600 a	7.542 a	6.706 a	7.124 a	0.354	0.355	0.354
Ammonium nitrate (AN)	2.546 b	2.255 b	2.401 b	4.642 b	4.185 b	4.414 b	7.189 b	6.440 b	6.814 b	0.353	0.352	0.352
Urea (U)	2.461 c	2.158 c	2.310 c	4.483 c	4.038 c	4.260 c	6.944 c	6.196 c	6.570 c	0.353	0.350	0.351
F. test	**	**	**	*	**	**	**	*	**	N.S	N.S	N.S
Interaction:												
C x S	**N.S**	**N.S**	**N.S**	**N.S**	*	* (3-a)	**N.S**	*	* (3-a)	**N.S**	**N.S**	**N.S**
C x N	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**
S x N	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**
C x S x N	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**	**N.S**

*, ** and N.S denote the significant and highly significant and the insignificant differences in respective order.

Table 4. Simple correlation coefficients between grain yield (ton / fad) and its attributes of wheat.

Characters	1	2	3	4	5	6	7	8	9	10
Y- Grain yield (ton / fad)	0.744**	0.526*	0.492	0.589*	0.720**	0.518*	0.700**	0.914**	0.971**	0.696**
1- Plant height		0.746**	0.247	0.342	0.487	0.236	0.408	0.716**	0.744**	0.455
2- No. of spikes / m^2			-0.191	-0.150	0.004	-0.272	-0.106	0.567*	0.561*	0.207
3- Spike length				0.970**	0.863**	0.692**	0.861**	0.351	0.420	0.507*
4- No. of spikelets / spike					0.923**	0.766**	0.925**	0.466	0.530*	0.533*
5- No. of grains / spike						0.741**	0.960**	0.589**	0.659**	0.617**
6- 1000- grain weight							0.878**	0.353	0.433	0.569*
7- Weight of grain / spike								0.550*	0.627**	0.640**
8- Straw yield (ton / fad)									0.984**	0.354
9- Total yield (ton / fad)										0.510*
10- Harvest index										----