

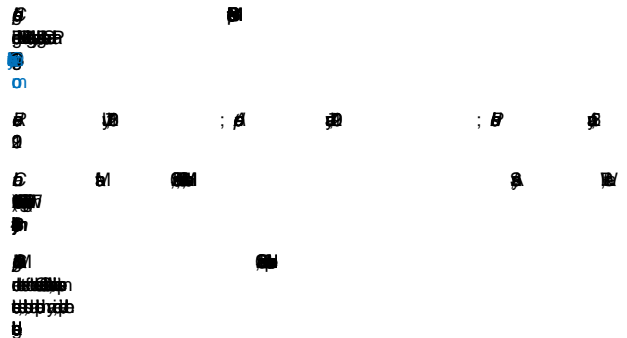
A

length, grains/spike, 1000 grain weight, harvest index, vegetative period, grain filling period, days to maturity, and grain yield/ plant were investigated and significant variations were observed among the genotypes. Divergence

program in spring wheat. Study of correlations showed that grain yield/plant was significantly and positively correlated

studied characters, spikes/plant showed the highest phenotypic coefficient of variation followed by grain yield per

weight, harvest index and grain yield/plant were highly heritable. Path coefficient analysis also confirmed that spikes/plant, grains/spike, spike length, 1000-grain weight, and harvest index influenced grain yield directly in positive



Materials and Methods

Experimental site

Location

Soil and climate:

Experimental details

Plant materials:

Design and layout

Methods

Land preparation and fertilization:

Sowing of seeds and intercultural operations:

Data collection

Plant height (cm):

Spikes/plant:

Spikes length (cm):

1000-grain weight (g):

Grains/spike:
Harvest index:

Vegetative period:
Grain filling period:

Days to maturity:

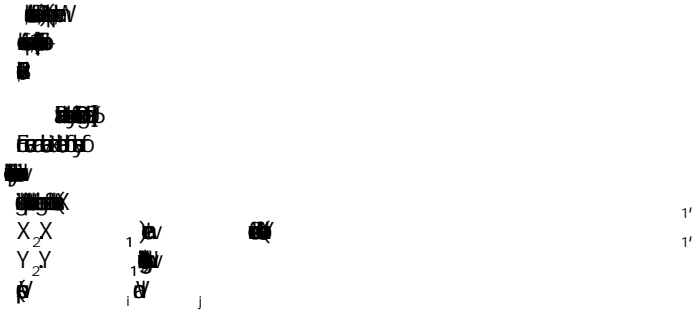
Grain yield/plant (g)

Data analysis

Estimation of genotypic and phenotypic coefficients of variation:

$$\frac{\sigma_g^2}{\sigma_p^2} = \frac{\sigma_g^2}{\sigma_g^2 + \sigma_e^2}$$

$$\frac{\sigma_g^2}{\sigma_p^2} = \frac{\sigma_g^2}{\sigma_g^2 + \sigma_e^2}$$



1000000
1000000
1000000
1000000
1000000
1000000
1000000
1000000

Harvest index: 0.3200

Spike length: 4.150

1000000
1000000
1000000
1000000
1000000
1000000
1000000
1000000

Grains/spike: 2.530

1000000
1000000
1000000
1000000
1000000
1000000
1000000
1000000

1000-grain weight: 4.000

1000000
1000000
1000000
1000000
1000000
1000000
1000000
1000000

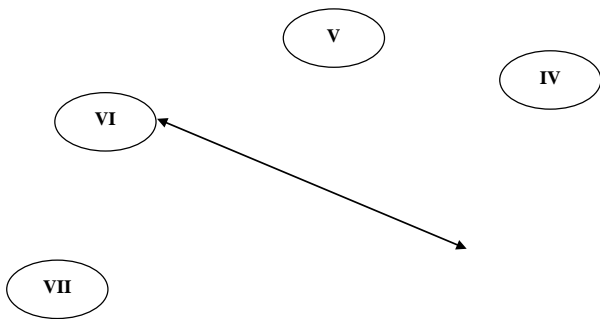
30
31
32
33
34
35
36
37
38
39
40

Genetic divergence

41
42

6	I	I	I	M	V	M	M
I	0 P	0 P	0 P	0 P	0 P	0 P	0 P
I		0 P	0 P	0 P	0 P	0 P	0 P
I			0 P	0 P	0 P	0 P	0 P
V				0 P	0 P	0 P	0 P
V					0 P	0 P	0 P
V						0 P	0 P
V							0 P

5



999

	$\beta_{G \rightarrow H}$	$\beta_{G \rightarrow P}$	$\beta_{G \rightarrow S}$	$\beta_{G \rightarrow N}$	$\beta_{G \rightarrow Y}$	$\beta_{G \rightarrow H}$	$\beta_{G \rightarrow P}$	$\beta_{G \rightarrow S}$	$\beta_{G \rightarrow N}$	$\beta_{G \rightarrow Y}$
$\beta_{G \rightarrow H}$	0	0	0	0	0	0	0	0	0	0
$\beta_{G \rightarrow P}$	0	0	0	0	0	0	0	0	0	0
$\beta_{G \rightarrow S}$	0	0	0	0	0	0	0	0	0	0
$\beta_{G \rightarrow N}$	0	0	0	0	0	0	0	0	0	0
$\beta_{G \rightarrow Y}$	0	0	0	0	0	0	0	0	0	0
$\beta_{H \rightarrow P}$	0	0	0	0	0	0	0	0	0	0
$\beta_{H \rightarrow S}$	0	0	0	0	0	0	0	0	0	0
Grain filling period	0	0	0	0	0	0	0	0	0	0
$\beta_{S \rightarrow Y}$	0	0	0	0	0	0	0	0	0	0

Diagonally bold figures indicate the direct effect

Partitioning of genotypic variance into direct and indirect effects of morphological characters of 40 wheat genotypes by path coefficient analysis.

0
0
0
0
0

Plant height: 0

0
0
0
0

5 [unclear]
6 [unclear]
7 [unclear]
8 [unclear]
9 [unclear] ² [unclear]
0 [unclear]
1 [unclear]
2 [unclear]
3 Bhatt GM (1973) Significance at path coefficients analysis in determining the
4 [unclear]
5 [unclear] significance Proc sixth Int Grasslands Congr 1: 284-291.
6 Singh RK, Chaudhary BD (1985) Biometrical Methods in quantitative genetic
analysis. Biometrical methods in quantitative genetic analysis. Kalyani
7 [unclear]
8 Sharma RC, Ortiz FG, Crossa J, Bhatta MR Sufan MA (2007) Wheat grain
9 [unclear]
0 [unclear]
2 [unclear]
2 [unclear]
2 [unclear]
2 [unclear]