The GLM Procedure

Class Level Information				
Class	Levels	Values		
Р	5	15 20 25 30 35		

Number of Observations Read	25
Number of Observations Used	25

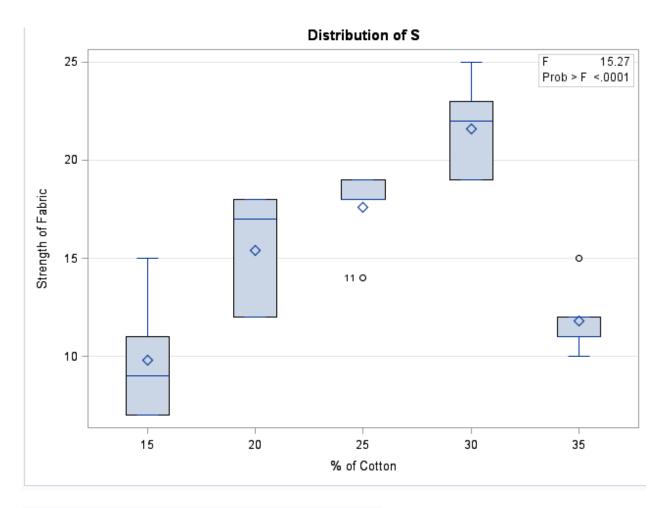
The GLM Procedure

Dependent Variable: S Strength of Fabric

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	437.3600000	109.3400000	15.27	<.0001
Error	20	143.2000000	7.1600000		
Corrected Total	24	580.5600000			

R-Square	Coeff Var	Root MSE	S Mean
0.753342	17.55786	2.675818	15.24000

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Р	4	437.3600000	109.3400000	15.27	<.0001



The GLM Procedure

Tukey's Studentized Range (HSD) Test for S

Note: This test controls the Type I experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	20
Error Mean Square	7.16
Critical Value of Studentized Range	4.23186
Minimum Significant Difference	5.0641

Comparisons significant at the 0.05 level are
indicated by ***.

indicated by ***.				
p Comparison	Difference Between Means	Simultaneous 9		
30 - 25	4.000	-1.064	9.064	
30 - 20	6.200	1.136	11.264	***
30 - 35	9.800	4.736	14.864	***
30 - 15	11.800	6.736	16.864	***
25 - 30	-4.000	-9.064	1.064	
25 - 20	2.200	-2.864	7.264	
25 - 35	5.800	0.736	10.864	***
25 - 15	7.800	2.736	12.864	***
20 - 30	-6.200	-11.264	-1.136	***
20 - 25	-2.200	-7.264	2.864	
20 - 35	3.600	-1.464	8.664	
20 - 15	5.600	0.536	10.664	***
35 - 30	-9.800	-14.864	-4.736	***
35 - 25	-5.800	-10.864	-0.736	***
35 - 20	-3.600	-8.664	1.464	
35 - 15	2.000	-3.064	7.064	
15 - 30	-11.800	-16.864	-6.736	***
15 - 25	-7.800	-12.864	-2.736	***
15 - 20	-5.600	-10.664	-0.536	***
15 - 35	-2.000	-7.064	3.064	

The GLM Procedure

Dunnett's t Tests for S

Note: This test controls the Type I experimentwise error for comparisons of all treatments against a control.

Alpha	0.05
Error Degrees of Freedom	20
Error Mean Square	7.16
Critical Value of Dunnett's t	2.65103
Minimum Significant Difference	4.4864

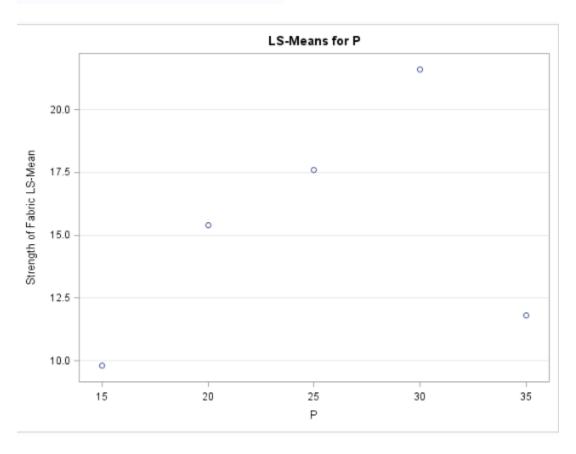
Comparisons significant at the 0.05 level are indicated by ***.				
p Comparison	Difference Between Means		95% Confidence mits	
30 - 15	11.800	7.314	16.286	***
25 - 15	7.800	3.314	12.286	***
20 - 15	5.600	1.114	10.086	***
35 - 15	2.000	-2.486	6.486	

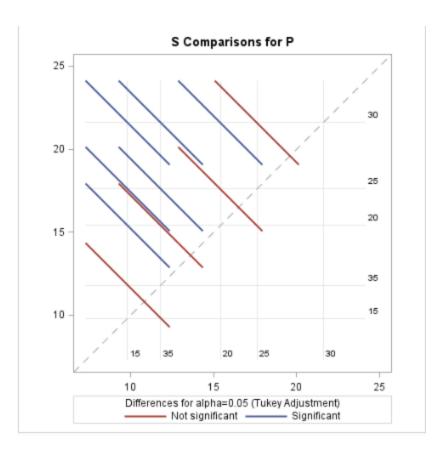
The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey

P	S LSMEAN	LSMEAN Number
15	9.8000000	1
20	15.4000000	2
25	17.6000000	3
30	21.6000000	4
35	11.8000000	5

Least Squares Means for effect P
Pr > t for H0: LSMean(i)=LSMean(j)
Dependent Variable: S

•									
i/j	1	2	3	4	5				
1		0.0258	0.0014	<.0001	0.7614				
2	0.0258		0.6942	0.0119	0.2476				
3	0.0014	0.6942		0.1665	0.0200				
4	<.0001	0.0119	0.1665		0.0001				
5	0.7614	0.2476	0.0200	0.0001					





The GLM Procedure

Dependent Variable: S Strength of Fabric

Contrast	DF	Contrast SS	Mean Square	F Value	Pr>F
LINEAR	1	52.0200000	52.0200000	7.27	0.0139
QUADRATIC	1	300.3571429	300.3571429	41.95	<.0001
CUBIC	1	54.0800000	54.0800000	7.55	0.0124
QUARTIC	1	30.9028571	30.9028571	4.32	0.0508

Parameter	Estimate	Standard Error	t Value	Pr > t
LINEAR	10.2000000	3.7841776	2.70	0.0139
QUADRATIC	-29.0000000	4.4774993	-6.48	<.0001
CUBIC	-10.4000000	3.7841776	-2.75	0.0124
QUARTIC	-20.8000000	10.0119928	-2.08	0.0508

