

n=1 observation per cell

(ch8-3-wheat_H0.out)

Class	Levels	Values
sand	4	0 25 50 75
fert	4	0 25 50 75

Dependent Variable: height

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	125.9965278	20.9994213	5.01	0.0160
Error	9	37.7378472	4.1930941		
Corrected Total	15	163.7343750			

Source	DF	Type III SS	Mean Square	F Value	Pr > F
sand	3	81.04687500	27.01562500	6.44	0.0128
fert	3	44.94965278	14.98321759	3.57	0.0599

Adjustment for Multiple Comparisons: Tukey

fert	height LSMEAN	Standard Error	Pr > t	LSMEAN Number
0	20.5000000	1.0238523	<.0001	1
25	23.6250000	1.0238523	<.0001	2
50	25.0416667	1.0238523	<.0001	3
75	22.2916667	1.0238523	<.0001	4

Least Squares Means for effect fert
Pr > |t| for H0: LSMean(i)=LSMean(j)

i/j	1	2	3	4
1		0.2066	0.0489	0.6207
2	0.2066		0.7649	0.7948
3	0.0489	0.7649		0.2934
4	0.6207	0.7948	0.2934	

SS(Non-Additivity) for Tukey 1 d.f. test for Transformable Non-Additivity

dfnonadd	ssnonadd
1	6.68687

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	15	491.2031250	32.7468750	3.93	0.0006
Error	32	266.6666667	8.3333333		
Corrected Total	47	757.8697917			

Source	DF	Type III SS	Mean Square	F Value	Pr > F
sand	3	243.1406250	81.0468750	9.73	0.0001
fert	3	134.8489583	44.9496528	5.39	0.0040
sand*fert	9	113.2135417	12.5792824	1.51	0.1869

Adjustment for Multiple Comparisons: Tukey

fert	height LSMEAN	Standard Error	Pr > t	LSMEAN Number
0	20.5000000	0.8333333	<.0001	1
25	23.6250000	0.8333333	<.0001	2
50	25.0416667	0.8333333	<.0001	3
75	22.2916667	0.8333333	<.0001	4

Least Squares Means for effect fert
Pr > |t| for H0: LSMean(i)=LSMean(j)

i/j	1	2	3	4
1		0.0569	0.0028	0.4376
2	0.0569		0.6300	0.6732
3	0.0028	0.6300		0.1116
4	0.4376	0.6732	0.1116	