

# The SAS System

## The ANOVA Procedure

Class Level Information		
Class	Levels	Values
cv	3	BD JB WG
treat	2	dH2O SSG
exp	3	I II III

Number of Observations Read	54
Number of Observations Used	54

### Dependent Variables: w (g/mon)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	13	344.1074282	26.4698022	4.49	0.0001
Error	40	235.5597737	5.8889943		
Corrected Total	53	579.6672019			

R-Square	Coeff Var	Root MSE	w Mean
0.593629	62.52775	2.426725	3.881037

Source	DF	Anova SS	Mean Square	F Value	Pr > F
cv	2	149.3295676	74.6647838	12.68	<.0001
treat	1	110.3445345	110.3445345	18.74	<.0001
exp	2	4.4026089	2.2013045	0.37	0.6905
cv*treat	2	18.9892196	9.4946098	1.61	0.2121
cv*exp	4	43.7954224	10.9488556	1.86	0.1366
treat*exp	2	17.2460751	8.6230376	1.46	0.2434

# The SAS System

## The ANOVA Procedure

cv=BD

Class Level Information		
Class	Levels	Values
treat	2	dH2O SSG

Number of Observations Read	18
Number of Observations Used	18

Dependent Variables: w (g/mon)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	92.5389427	92.5389427	6.26	0.0236
Error	16	236.6016442	14.7876028		
Corrected Total	17	329.1405869			

R-Square	Coeff Var	Root MSE	w Mean
0.281153	69.77870	3.845465	5.510944

Source	DF	Anova SS	Mean Square	F Value	Pr > F
treat	1	92.53894272	92.53894272	6.26	0.0236

t Tests (LSD) for w

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	16
Error Mean Square	14.7876
Critical Value of t	2.11991
Least Significant Difference	3.8429

Means with the same letter  
are not significantly different.

t Grouping    Mean N treat

A              7.778    9    SSG

B              3.244    9    dH2O

# The SAS System

## The ANOVA Procedure

cv=JB

Class Level Information		
Class	Levels	Values
treat	2	dH2O SSG

Number of Observations Read	18
Number of Observations Used	18

Dependent Variable: w(g/mon)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
--------	----	----------------	-------------	---------	--------

Model	1	17.29896200	17.29896200	14.920.0014
-------	---	-------------	-------------	-------------

Error	16	18.54956778	1.15934799
-------	----	-------------	------------

Corrected Total	17	35.84852978
-----------------	----	-------------

R-Square	Coeff Var	Root MSE	w Mean
----------	-----------	----------	--------

0.482557	67.38455	1.076730	1.597889
----------	----------	----------	----------

Source	DF	Anova SS	Mean Square	F Value	Pr > F
--------	----	----------	-------------	---------	--------

treat	1	17.29896200	17.29896200	14.920.0014
-------	---	-------------	-------------	-------------

t Tests (LSD) for w

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
-------	------

Error Degrees of Freedom	16
--------------------------	----

Error Mean Square	1.159348
-------------------	----------

Critical Value of t	2.11991
---------------------	---------

Least Significant Difference	1.076
------------------------------	-------

Means with the same letter  
are not significantly different.

t Grouping	Mean	N	treat
------------	------	---	-------

A	2.5782	9	SSG
---	--------	---	-----

B	0.6176	9	dH2O
---	--------	---	------

# The SAS System

## The ANOVA Procedure

cv=WG		
Class Level Information		
Class	Levels	Values
treat	2	dH2O SSG

Number of Observations Read	18
Number of Observations Used	18

Dependent Variable: w(g/mon)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	19.49584939	19.49584939	6.80	0.0190
Error	16	45.85266822	2.86579176		
Corrected Total	17	65.34851761			

R-Square	Coeff Var	Root MSE	w Mean
0.298337	37.33483	1.692865	4.534278

Source	DF	Anova SS	Mean Square	F Value	Pr > F
treat	1	19.49584939	19.49584939	6.80	0.0190

### t Tests (LSD) for w

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	16
Error Mean Square	2.865792
Critical Value of t	2.11991
Least Significant Difference	1.6917

Means with the same letter  
are not significantly different.

tGrouping	Mean	N	treat
A	5.5750	9	SSG
B	3.4936	9	dH2O

The SAS System  
w(g/mon)

O b s	cv	treat	mW	seW
1	BD	dH2O	3.24356	0.51128
2	BD	SSG	7.77833	1.73918
3	JB	dH2O	0.61756	0.25449
4	JB	SSG	2.57822	0.43917
5	WG	dH2O	3.49356	0.46230
6	WG	SSG	5.57500	0.65048