

File
10-25-95

**DATA EVALUATION RECORD
AVIAN REPRODUCTION TEST
GUIDELINE 71-4b**

1. **CHEMICAL:** Sulfentrazone (129081)

2. **TEST MATERIAL:** Sulfentrazone technical; 94.2%

3. **CITATION:**

Authors: Pedersen, C.A. and D.R. DuCharme
Date: 1994
Title: Toxicity and reproduction study with
F6285 technical in mallard ducks
Laboratory: Bio-Life Associates, Ltd., Neillsville,
WI
Lab. Report No: BLAL No. 112-006-08
Sponsor: FMC Corporation, Princeton, NJ
MRID No.: 433559-02

4. **STUDY PARAMETERS/RESULTS SYNOPSIS:**

Test Organisms Age: 18 weeks
Definitive Study Duration: 21 weeks
Endpoints affected: none
NOEC: 100 ppm
LOEC: >100 ppm

5. **REVIEWED BY:**

William Erickson
Biologist
EEB/EFED/EPA

Signature: *W. Erickson*

Date: *10/23/95*

6. **APPROVED BY:**

Harry Craven
Section Head 4
EEB/EFED/EPA

Signature: *Harry Craven*

Date: *10/25/95*

7. **CONCLUSIONS:** This study is scientifically sound but does not fulfill the guideline requirement for an avian reproduction study with the mallard.

6. **ADEQUACY OF THE STUDY:** Supplemental.

7. **GUIDELINE DEVIATIONS:** Test concentrations were too low to support the proposed use on turf and lawn. The study supports the proposed use on soybeans. The study must be repeated at higher test concentrations unless the proposed use on turf and lawn is limited to no more than two annual applications.

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8. **BACKGROUND:** New chemical. Proposed uses are on soybeans and turf and lawn.

9. **MATERIALS AND METHODS:**

Test Organism:

Guideline Criteria	Reported Information
Species:	<i>Anas platyrhynchos</i>
Supplier:	Whistling Wings, Inc., Hanover, IL
Same source and hatch?	yes
Pen-reared?	yes
Age:	18 weeks
Indistinguishable from wild birds?	yes
Health:	based on general physical condition, all birds used for testing were healthy
Acclimation:	37 days

Test System:

Guideline Criteria	Reported Information
Adult housing and environmental conditions:	
Pens:	indoor, steel-wire pens (61 x 61 x 48.3 cm) maintained over galvanized dropping pans
Temperature: (21°C recommended)	18°C avg.
Relative humidity: (55% recommended)	58% avg.
Photoperiod: (7 h for first 8 wks, 16-17 h thereafter)	7-h light/day for first 8 weeks; 17-h thereafter
Chicks:	

Brooding pens:	battery brooders (36 x 28 x 11 in.) with up to 20 ducklings per brooder
Temperature:	18-24°C room temp. for most hatches, but as low as 14°C for hatch F
Photoperiod:	24 h

Test Design:

Guideline Criteria	Reported Information
Dose levels:	0, 1, 10, 100 ppm ai
No. pens per level:	16
Male:Female ratio per pen:	1:1
Solvent:	none
Vehicle:	none reported
Diet:	Purina Custom Game Bird Layena 28%
Diet preparation:	prepared fresh weekly, 24 h prior to administration
Verification of test substance concentrations:	200-g samples collected from control and each test level during weeks 1, 2, 3, 4, 8, 12, 16, and 20
Food and water provided ad lib.?	yes
Food consumption/pen recorded weekly?	measured weekly but calculated on a biweekly basis
Adults weighed on weeks 0, 2, 4, 6, 8, and at termination?	yes
Hatchlings and 14-day old chicks weighed?	yes
Egg-laying phase:	10+ weeks
Eggs collected daily?	yes
Eggs stored at 16°C and 65% relative humidity?	15-18°C 58% rh

Hatchability recorded? (bobwhite, day 24; mallard, day 27)	day 27
Adults observed daily for abnormal behavior and signs of toxicity?	yes

10. **QUALITY ASSURANCE MEASURES:** Yes.

11. **AUTHORS' STATISTICAL METHODS:** Dunnett's test (one-tailed) was used to detect statistically significant differences between the control group and each of the treatment groups. Percentage data were arcsine transformed.

12. **REPORTED RESULTS:**

Dietary Analysis: The percents of nominal recovered from the dose verification samples collected during test weeks 1, 2, 3, 4, 8, 12, 16, and 20 averaged 93.2%, 98.3%, and 103% for the 1, 10, and 100 ppm test diets, respectively. The percents of nominal recovered from stability samples held for 7 days in environmental conditions simulating those of the study were 102%, 90.5%, and 95.3% for the 1, 10, and 100 ppm test diets, respectively.

Mortality: In test week 6, one bird dosed at 100 ppm died, and in test week 14 one bird dosed at 1 ppm died; their pen mates were sacrificed per protocol requirement. No mortality occurred in control birds or those dosed at 10 ppm.

Clinical Observations: No overt signs of toxicity were observed.

Gross Necropsy: Examinations were made on the two birds that died during the test, their pen mates, and 64 birds sacrificed at the end of the test period. The 1 ppm bird found dead during test week 14 had an odiferous, green, slimy, fluid-filled body cavity; a hollow, red-colored mass (1.5 x 3 cm) on the ovary; and a gizzard which was void of feed. The 100 ppm bird found dead during test week 6 had outstretched legs and enlarged veins in its upper intestines.

Nine of 64 birds sacrificed at the end of the study revealed gross abnormalities. These included a pale liver, 2 small livers, scabs, missing tracts of feathers, and a cloaca filled with a thick, yellow-colored substance. Because these abnormalities were not dose related, they ". . . were attributed to factors other than the test material."

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Adult Body Weights: No statistical differences were noted between the control group and any of the test groups.

Adult Feed Consumption: No statistical differences were noted between the control group and any of the test groups.

Reproduction Results: The authors report that the test material did not adversely affect any parameters of reproduction: "Egg fertility (% viable embryos of eggs set) ranged from 86% to 93% in the test groups, compared to 91% in the control group. Live 21-day embryos (%) of viable embryos ranged from 97% to 98% in the test groups, compared to 95% in the control group. Overall hatchability (%) based on live 21-day embryos ranged from 75% to 86% in the test groups, compared to 84% in the control group."

Egg Shell Thickness: No statistically significant differences in average eggshell thickness values per pen were reported. Mean thickness values were 0.393, 0.407, 0.405, and 0.399 mm for the control, 1, 10, and 100 ppm test groups, respectively.

Offspring: Overall survivability was 93% for the control group and 99-100% in the treatment groups. No significant differences in offspring body weights occurred at day 1 or day 14.

13. REVIEWER'S ANALYSIS:

EFFECTS OF SULFENTRAZONE ON REPRODUCTION OF THE MALLARD:

	LEVEL			
	CONTROL	1 ppm	10 ppm	100 ppm
	MEAN	MEAN	MEAN	MEAN
EL	51.06	58.73	53.94	50.53
EC	0.75	0.73	0.25	0.87
ES	46.44	52.53	50.25	44.40
VE	41.31	48.73	44.19	41.20
LE	40.31	47.60	43.31	40.13
NH	35.75	40.93	36.88	32.53
HS	35.50	40.67	36.63	32.20

ES/EL (%)	87.22	90.00	93.15	86.77
(EL-EC)/ EL (%)	97.68	98.81	99.59	98.19
VE/ES (%)	91.13	92.71	86.44	89.91
LE/VE (%)	94.96	97.66	97.94	97.08
NH/EL (%)	63.34	70.72	65.22	62.31
NH/ES (%)	71.36	77.85	70.11	67.43
NH/LE (%)	84.06	85.97	83.35	74.55
HS/ES (%)	67.90	77.39	69.67	66.82
HS/NH (%)	92.74	99.43	99.42	99.19
THICK	0.39	0.41	0.40	0.40
HATWT	38.57	38.13	37.99	37.07
SURVWT	336.14	328.49	327.41	328.40
FOOD	37902.50	37251.07	36125.56	36657.57
POSTM	1256.13	1288.73	1259.75	1222.20
POSTF	1257.19	1259.73	1316.69	1218.20

Statistical Method: ANOVA (SAS) - results attached

Endpoints affected: none

14. **REVIEWER'S CONCLUSIONS:** Sulfentrazone technical had no significant adverse effects on reproduction of the mallard at test concentrations of 1, 10, and 100 ppm. The study is scientifically sound but does not fulfill the guideline requirement. The study supports the proposed use on soybean (1 application at 0.375 lb ai/acre) but not on turf/lawn, where an unlimited number of applications can be made at up to 0.25 lb ai/acre per application. The study should be repeated at higher test concentrations, or the number of annual applications on turf/lawn should be limited to two.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
09:30 Wednesday, August 16, 1995

OBS	LEVEL	EL	EC	ES	VE	LE	NH	HS	THICK	HATWT
1	CONTROL	69	0	64	63	60	54	54	0.404	44.0
2	CONTROL	58	3	51	50	49	42	42	0.365	36.9
3	CONTROL	52	1	47	32	32	30	29	0.407	43.3
4	CONTROL	68	0	62	44	43	32	31	0.391	39.6
5	CONTROL	58	0	53	50	50	48	48	0.398	38.8
6	CONTROL	28	0	26	26	25	19	19	0.425	34.3
7	CONTROL	48	1	44	43	43	41	41	0.358	36.1
8	CONTROL	48	3	41	41	39	32	32	0.391	36.5
9	CONTROL	6	1	2	2	1	1	0	0.359	31.8
10	CONTROL	73	1	67	64	64	63	63	0.380	40.1
11	CONTROL	6	0	5	5	5	0	0	0.416	41.7
12	CONTROL	54	1	50	47	46	43	43	0.405	40.1
13	CONTROL	67	0	63	60	50	50	50	0.402	36.9
14	CONTROL	57	1	52	50	36	36	36	0.391	39.3
15	CONTROL	70	0	65	36	46	39	39	0.399	40.7
16	CONTROL	55	0	51	48	46	40	39	0.397	36.8
17	TRT1	57	0	54	49	45	40	40	0.422	43.6
18	TRT1	56	1	49	48	48	40	40	0.419	41.6
19	TRT1	69	0	65	63	62	60	59	0.428	43.6
20	TRT1	51	0	48	47	47	33	33	0.419	41.6
21	TRT1	63	3	55	48	48	48	48	0.401	40.4
22	TRT1	53	0	50	47	47	43	43	0.401	35.7
23	TRT1	60	3	53	53	52	40	39	0.391	40.0
24	TRT1	15	0	14	14	14	13	13	0.398	32.3
25	TRT1	66	1	61	57	54	49	49	0.426	31.2
26	TRT1	63	0	60	57	57	51	51	0.393	39.6
27	TRT1	61	1	56	54	50	35	35	0.393	39.6
28	TRT1	57	1	54	48	48	45	45	0.388	34.3
29	TRT1	71	1	39	27	25	22	22	0.390	40.5
30	TRT1									

OBS	SURVMT	FOOD	PREM	POSTM	PREF	POSTF
1	325.7	39294	1220	1344	1077	1440
2	283.9	41989	1174	1097	869	926
3	353.8	41859	1257	1292	1060	1456
4	413.13	1379	1339	1333	1147	1291
5	349.6	40560	1287	1206	1024	1108
6	331.1	41158	1258	1226	1146	1337
7	336.7	34014	1181	1156	1111	1467
8	355.2	35484	1217	1156	1111	1293
9	330.4	34808	1351	1325	901	1010
10	344.8	41404	1364	1386	862	1094
11	309.1	33514	1261	1345	1079	1348
12	348.8	32458	1273	1289	1101	1348
13	331.6	41236	1230	1216	1107	1325
14	367.2	32346	1212	1168	1075	1227
15	338.1	36222	1087	1072	1089	1370
16	341.5	40817	1296	1304	1087	1176
17	334.3	31221	1153	1228	1145	1279
18	377.1	36750	1243	1194	1059	985
19	350.9	36466	1226	1358	1127	1398
20	313.2	33547	1050	1129	1078	1297
21	323.6	36608	1062	1108	1117	1297
22			1473	1601	1100	1437
23			1174	1381	1111	1367
24	322.0	34740	1330	1222	1025	938
25	309.5	42000	1301	1294	997	1270
26	334.6	41188	1300	1294	1048	1174
27	330.3	36263	1246	1270	1071	1145
28	304.5	37540	1164	1366	1161	1145
29	307.7	39314	1322	1303	1052	1145
30	299.7	38481	1233	1324	919	1527

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

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OBS	LEVEL	EL	EC	ES	VE	LE	NH	HS	THICK	HATWT
31	TRT1	68	0	63	55	54	52	51	0.403	41.7
32	TRT1	71	0	67	64	63	58	58	0.400	41.3
33	TRT2	51	0	48	47	45	39	39	0.402	36.7
34	TRT2	12	0	11	10	10	5	5	0.397	37.2
35	TRT2	61	0	56	56	54	51	51	0.392	38.3
36	TRT2	59	1	54	51	50	38	38	0.413	40.5
37	TRT2	55	0	51	51	51	48	48	0.397	36.1
38	TRT2	41	0	38	1	1	1	1	0.428	41.1
39	TRT2	61	1	56	39	38	29	29	0.414	39.7
40	TRT2	37	0	36	29	26	16	16	0.383	34.4
41	TRT2	56	0	45	48	47	39	39	0.391	40.3
42	TRT2	48	0	42	43	42	32	32	0.407	38.9
43	TRT2	64	1	58	56	56	56	56	0.424	39.7
44	TRT2	50	0	46	46	46	41	41	0.417	36.4
45	TRT2	58	1	54	48	46	43	43	0.402	39.7
46	TRT2	71	0	68	62	61	42	42	0.400	36.6
47	TRT2	65	0	62	52	52	49	46	0.405	37.7
48	TRT2	74	0	69	68	68	61	61	0.388	38.9
49	TRT3	42	1	39	36	36	28	27	0.427	40.0
50	TRT3	28	0	26	21	21	19	19	0.400	36.6
51	TRT3	63	0	58	58	57	49	49	0.405	37.7
52	TRT3	60	2	54	51	51	48	47	0.388	38.9
53	TRT3	54	1	49	49	48	43	43	0.391	39.0
54	TRT3	38	1	2	1	1	0	0	0.411	36.6
55	TRT3	69	0	64	62	59	57	56	0.392	40.2
56	TRT3	40	0	37	37	33	33	33	0.427	36.3
57	TRT3	29	2	27	25	25	22	22	0.414	37.8
58	TRT3	55	2	49	48	47	29	29		
59	TRT3	57	2	51	30	26	19	19		
60	TRT3									

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

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OBS	LEVEL	EL	EC	ES	VE	LE	NH	PREF	HS	THICK	HATWT
61	TRT3	62	1	58	57	57	43	42	0.401	37.6	
62	TRT3	68	0	64	62	59	30	30	0.394	37.1	
63	TRT3	73	1	68	61	60	59	59	0.396	36.6	
64	TRT3	20	0	20	20	17	8	8		33.6	

OBS	SURVMT	FOOD	PREM	POSTM	PREF	HS	THICK	HATWT
61	332.2	39443	1543	1603	959	1138		
62	301.8	35158	1072	1067	1014	1339		
63	357.8	40116	1355	1281	955	1251		
64	354.4	39455	1208	964	1080	982		

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

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LEVEL											
CONTROL			TRT1			TRT2			TRT3		
MEAN			MEAN			MEAN			MEAN		
EL	51.06	58.73	53.94	50.53							
EC	0.75	0.73	0.25	0.87							
ES	46.44	52.53	50.25	44.40							
VE	41.31	48.73	44.19	41.20							
LE	40.31	47.60	43.31	40.13							
NH	35.75	40.93	36.88	32.53							
HS	35.50	40.67	36.63	32.20							
ES/EL (%)	87.22	90.00	93.15	86.77							
(EL-EC)/EL (%)	97.68	98.81	99.59	98.19							
VE/ES (%)	91.13	92.71	86.44	89.91							
LE/VE (%)	94.96	97.66	97.94	97.08							
NH/EL (%)	63.34	70.72	65.22	62.31							
NH/ES (%)	71.36	77.85	70.11	67.43							
NH/LE (%)	84.06	85.97	83.35	74.55							
HS/ES (%)	67.90	77.39	69.67	66.82							
HS/NH (%)	92.74	99.43	99.42	99.19							
THICK	0.39	0.41	0.40	0.40							
HATWT	38.57	38.13	37.99	37.07							
SURVMT	336.14	328.49	327.41	328.40							
FOOD	37902.50	37251.07	36125.56	3657.57							
POSTM	1256.13	1288.73	1259.75	1222.20							
POSTF	1257.19	1259.73	1316.69	1218.20							

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

LEVEL=CONTROL

Variable Label	N	Mean	Std Dev	CV
EL	16	51.063	20.770	40.676
EC	16	0.750	1.000	133.333
ES	16	46.438	19.775	42.585
VE	16	41.313	18.003	43.577
LE	16	40.313	17.613	43.692
NH	16	35.750	17.176	48.044
HS	16	35.500	17.328	48.812
THICK	15	0.393	0.020	5.047
HATWT	14	38.571	3.399	8.813
SURVMT	14	336.143	20.955	6.234
FOOD	16	37902.500	3659.435	9.655
PREM	16	1252.938	75.227	6.004
POSTM	16	1256.125	95.469	7.600
PREF	16	1049.688	91.090	8.678
POSTF	16	1257.188	158.874	12.637
ES/EL (%)	16	87.215	14.656	16.804
(EL-EC)/EL (%)	16	63.342	24.866	39.257
VE/ES (%)	16	97.683	4.275	4.376
NH/ES (%)	16	91.126	13.573	14.895
HS/ES (%)	16	71.359	24.255	33.990
LE/VE (%)	16	67.901	29.877	44.000
NH/LE (%)	16	94.955	12.192	12.839
HS/NH (%)	16	84.061	24.180	28.765
HS/NH (%)	15	92.744	25.686	27.696

LEVEL=TRT1

Variable Label	N	Mean	Std Dev	CV
EL	15	58.733	13.646	23.234
EC	15	0.733	1.033	140.836
ES	15	52.533	12.906	24.566
VE	15	48.733	12.942	26.557
LE	15	47.600	12.783	26.855
NH	15	40.933	12.725	31.087
HS	15	40.667	12.574	30.919
THICK	14	0.406	0.015	3.815
HATWT	15	38.133	3.693	9.684
SURVMT	15	328.487	20.417	6.216
FOOD	15	37251.067	2872.191	7.710
PREM	15	1247.250	110.939	8.895
POSTM	15	1288.733	119.085	9.240
PREF	15	1057.875	72.115	6.817
POSTF	15	1259.733	165.762	13.158
ES/EL (%)	15	90.001	10.065	11.183
(EL-EC)/EL (%)	15	70.719	14.907	21.079
VE/ES (%)	15	98.809	1.683	1.703
NH/ES (%)	15	92.708	7.730	8.338
HS/ES (%)	15	77.851	11.392	14.633
LE/VE (%)	15	77.394	11.305	14.607
NH/LE (%)	15	97.660	3.091	3.165
HS/NH (%)	15	85.970	9.766	11.360
HS/NH (%)	15	99.427	1.002	1.008

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

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LEVEL=TRT2

Variable Label	N	Mean	Std Dev	CV
EL	16	53.938	14.915	27.653
EC	16	0.250	0.447	178.885
ES	16	50.250	13.921	27.704
VE	16	44.188	17.608	39.848
LE	16	43.313	17.583	40.596
NH	16	36.875	16.998	46.095
HS	16	36.625	16.891	46.120
THICK	16	0.404	0.015	3.828
HATWT	14	37.994	2.721	7.161
SURVWT	16	327.413	25.469	7.779
FOOD	16	3171.302	3171.302	8.779
PREM	16	1264.188	97.230	7.691
POSTM	16	1259.750	125.305	9.947
PREF	16	1080.313	60.360	5.587
POSTF	16	1316.688	142.698	10.838
ES/EL (%)	16	93.148	1.771	1.901
NH/EL (%)	16	65.223	22.448	34.418
(EL-EC)/EL (%)	16	99.586	0.741	0.744
VE/ES (%)	16	86.438	23.818	27.555
NH/ES (%)	16	70.109	24.435	34.853
HS/ES (%)	16	69.668	24.345	34.945
LE/VE (%)	16	97.945	2.713	2.770
NH/LE (%)	16	83.353	14.265	17.114
HS/NH (%)	16	99.422	1.671	1.681

LEVEL=TRT3

Variable Label	N	Mean	Std Dev	CV
EL	15	50.533	16.574	32.798
EC	15	0.867	0.834	96.209
ES	15	44.400	18.882	42.528
VE	15	41.200	18.705	45.401
LE	15	40.133	18.578	46.289
NH	15	32.533	17.443	53.617
HS	15	32.200	17.147	53.252
THICK	12	0.402	0.016	4.083
HATWT	14	37.071	2.431	6.557
SURVWT	14	328.400	21.911	6.672
FOOD	14	3657.571	2073.833	5.657
PREM	16	1244.625	132.642	10.657
POSTM	15	1222.200	159.797	13.075
PREF	16	1064.625	88.331	8.297
POSTF	15	1218.200	142.379	11.688
ES/EL (%)	15	86.768	22.692	26.152
NH/EL (%)	15	62.308	23.894	38.348
(EL-EC)/EL (%)	15	98.185	1.988	2.024
VE/ES (%)	15	89.909	15.389	17.116
NH/ES (%)	15	67.428	26.094	38.699
HS/ES (%)	15	66.816	25.761	38.554
LE/VE (%)	15	97.076	4.876	5.023
NH/LE (%)	15	74.547	26.043	34.935
HS/NH (%)	14	99.186	1.211	1.221

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
1. ANALYSIS OF EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

1. ANALYSIS OF EGGS LAID

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General Linear Models Procedure
Type I Estimable Functions for: LEVEL

Coefficients

Effect	
INTERCEPT	0
LEVEL	
CONTROL	L2
TRT1	L3
TRT2	L4
TRT3	-L2-L3-L4

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

1. ANALYSIS OF EGGS LAID

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General Linear Models Procedure

Dependent Variable: EL

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	640.89382	213.63127	0.76	0.5200
Error	58	16260.54167	280.35417		
Corrected Total	61	16901.43548			

R-Square	C.V.	Root MSE	EL Mean
0.037919	31.27793	16.744	53.532

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	640.89382	213.63127	0.76	0.5200

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

1. ANALYSIS OF EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Least Squares Means

LEVEL	EL	Pr > T	H0: LSMEAN(i)=LSMEAN(j)
	LSMEAN	i/j	
CONTROL	51.0625000	1	0.2075
TRT1	58.7333333	2	0.2075
TRT2	53.9375000	3	0.6290
TRT3	50.5333333	4	0.9302

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

1. ANALYSIS OF EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: EL

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 280.3542
Critical Value of Studentized Range= 3.741

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

LEVEL Comparison	Simultaneous Lower Confidence Limit		Difference Between Means		Simultaneous Upper Confidence Limit	
	Lower Limit	Upper Limit	Mean	Mean	Lower Limit	Upper Limit
TRT1 - TRT2	-11.122	20.713	4.796	4.796	20.713	20.713
TRT1 - CONTROL	-8.247	23.588	7.671	7.671	23.588	23.588
TRT1 - TRT3	-7.972	24.372	8.200	8.200	24.372	24.372
TRT2 - TRT1	-20.713	11.122	-4.796	-4.796	11.122	11.122
TRT2 - CONTROL	-12.784	18.534	2.875	2.875	18.534	18.534
TRT2 - TRT3	-12.513	19.322	3.404	3.404	19.322	19.322
CONTROL - TRT1	-23.588	8.247	-7.671	-7.671	8.247	8.247
CONTROL - TRT2	-18.534	12.784	-2.875	-2.875	12.784	12.784
CONTROL - TRT3	-15.388	16.447	0.529	0.529	16.447	16.447
TRT3 - TRT1	-24.372	7.972	-8.200	-8.200	7.972	7.972
TRT3 - TRT2	-19.322	12.513	-3.404	-3.404	12.513	12.513
TRT3 - CONTROL	-16.447	15.388	-0.529	-0.529	15.388	15.388

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

1. ANALYSIS OF EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for variable: EL

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 280.3542
Critical Value of Dunnett's T= 2.108

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

LEVEL Comparison	Simultaneous Lower Confidence Limit		Difference Between Means		Simultaneous Upper Confidence Limit	
	Lower Limit	Upper Limit	Mean	Mean	Lower Limit	Upper Limit
TRT1 - CONTROL	-5.014	20.356	7.671	7.671	20.356	20.356
TRT2 - CONTROL	-9.604	15.354	2.875	2.875	15.354	15.354
TRT3 - CONTROL	-13.214	12.156	-0.529	-0.529	12.156	12.156

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

2. ANALYSIS OF EGGS CRACKED

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

2. ANALYSIS OF EGGS CRACKED

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Type I Estimable Functions for: LEVEL

Coefficients

INTERCEPT	0
LEVEL	
CONTROL	L2
TRT1	L3
TRT2	L4
TRT3	-L2-L3-L4

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

2. ANALYSIS OF EGGS CRACKED

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: EC

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	3.5268817	1.1756272	1.60	0.1997
Error	58	42.6666667	0.7356322		
Corrected Total	61	46.1935484			

R-Square	C.V.	Root MSE	EC Mean
0.076350	132.9420	0.8577	0.6452

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	3.5268817	1.1756272	1.60	0.1997

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

2. ANALYSIS OF EGGS CRACKED

09:30 Wednesday, August 16, 1995

LEVEL	LSMEAN	EC	Pr > T	H0: LSMEAN(i)=LSMEAN(j)	1	2	3	4
CONTROL	0.75000000	1	0.9571	0.1046	0.7065			
TRT1	0.73333333	2	0.9571	0.1223	0.6719			
TRT2	0.25000000	3	0.1046	0.1223	0.0501			
TRT3	0.86666667	4	0.7065	0.6719	0.0501			

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

2. ANALYSIS OF EGGS CRACKED

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: EC

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 0.735632
Critical Value of Studentized Range= 3.741

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

LEVEL	Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
TRT3	- CONTROL	-0.6987	0.1167	0.9320
TRT3	- TRT1	-0.6951	0.1333	0.9617
TRT3	- TRT2	-0.1987	0.6167	1.4320
CONTROL	- TRT3	-0.9320	-0.1167	0.6987
CONTROL	- TRT1	-0.7987	0.0167	0.8320
CONTROL	- TRT2	-0.3021	0.5000	1.3021
TRT1	- TRT3	-0.9617	-0.1333	0.6951
TRT1	- CONTROL	-0.8320	-0.0167	0.7987
TRT1	- TRT2	-0.3320	0.4833	1.2987
TRT2	- TRT3	-1.4320	-0.6167	0.1987
TRT2	- CONTROL	-1.3021	-0.5000	0.3021
TRT2	- TRT1	-1.2987	-0.4833	0.3320

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

2. ANALYSIS OF EGGS CRACKED

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for variable: EC

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 0.735632
Critical Value of Dunnett's T= 2.108

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

LEVEL	Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
TRT3	- CONTROL	-0.5331	0.1167	0.7665
TRT1	- CONTROL	-0.6665	-0.0167	0.6331
TRT2	- CONTROL	-1.1392	-0.5000	0.1392

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

3. ANALYSIS OF EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

3. ANALYSIS OF EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Type I Estimable Functions for: LEVEL

Effect	Coefficients
INTERCEPT	0
LEVEL	CONTROL L2 L3 L4
TRT1	-L2-L3-L4
TRT2	
TRT3	

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

3. ANALYSIS OF EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: ES	Sum of Squares	Mean Square	F Value	Pr > F
Source	DF			
Model	3	612.64852	204.21617	0.74
Error	58	16096.27083	277.52191	0.5349
Corrected Total	61	16708.91935		
R-Square		C.V.	Root MSE	ES Mean
0.036666		34.41710	16.659	48.403

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Source DF Type I SS Mean Square F Value Pr > F
LEVEL 3 612.64852 204.21617 0.74 0.5349

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

3. ANALYSIS OF EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure Least Squares Means

LEVEL	ES	Pr > T	HO: LSMEAN(I)=LSMEAN(J)	1	2	3	4
CONTROL	46.4375000	1	0.3128	0.5200	0.7349		
TRT1	52.5333333	2	0.3128	0.7043	0.1864		
TRT2	50.2500000	3	0.5200	0.7043	0.3326		
TRT3	44.4000000	4	0.7349	0.1864	0.3326		

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

3. ANALYSIS OF EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: ES

NOTE: This test controls the type I experimentwise error rate.

Alpha=0.05 Confidence=0.95 df= 58 MSE= 277.5219
Critical Value of Studentized Range= 3.741

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

LEVEL Comparison	Simultaneous			
	Lower Limit	Difference Between Means	Upper Confidence Limit	
TRT1 - TRT2	-13.553	2.283	18.120	
TRT1 - CONTROL	-9.741	6.096	21.933	
TRT1 - TRT3	-7.957	8.133	24.224	
TRT2 - TRT1	-18.120	-2.283	13.553	
TRT2 - CONTROL	-11.767	3.813	19.392	
TRT2 - TRT3	-9.987	5.850	21.687	
CONTROL - TRT1	-21.933	-6.096	9.741	
CONTROL - TRT2	-19.392	-3.813	11.767	
CONTROL - TRT3	-13.799	2.038	17.874	
TRT3 - TRT1	-24.224	-8.133	7.957	
TRT3 - TRT2	-21.687	-5.850	9.987	
TRT3 - CONTROL	-17.874	-2.038	13.799	

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

3. ANALYSIS OF EGGS SET

09:30 Wednesday, August 16, 1995

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General Linear Models Procedure

Dunnett's One-tailed T tests for variable: ES

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence=0.95 df= 58 MSE= 277.5219
Critical Value of Dunnett's T= 2.108

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

LEVEL Comparison	Simultaneous		
	Lower Limit	Difference Between Means	Upper Confidence Limit
TRT1 - CONTROL	-6.525	6.096	18.717
TRT2 - CONTROL	-8.603	3.813	16.228
TRT3 - CONTROL	-14.658	-2.038	10.583

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

4. ANALYSIS OF VIABLE EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

4. ANALYSIS OF VIABLE EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure Type I Estimable Functions for: LEVEL

Effect	Coefficients
INTERCEPT	0
LEVEL	
CONTROL	L2
TRT1	L3
TRT2	L4
TRT3	-L2-L3-L4

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

4. ANALYSIS OF VIABLE EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: VE	Sum of	Mean	F Value	Pr > F
Source	Squares	Square		
DF				

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Model	3	567.84005	189.28002	0.66	0.5829
Error	58	16755.20833	288.88290		
Corrected Total	61	17323.04839			
R-Square		C.V.	Root MSE	VE Mean	
0.032779		38.78493	16.997	43.823	
Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	567.84005	189.28002	0.66	0.5829

EFFECTS OF TSULENTAZONE ON REPRODUCTION OF THE MALLARD
4. ANALYSIS OF VIABLE EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Least Squares Means

LEVEL	VE LSMEAN	Pr > T i/j	H0: LSMEAN(i)=LSMEAN(j) 2 3 4
CONTROL	41.3125000	1	0.2294 0.6341 0.9854
TRT1	48.7333333	2	0.2294 0.4598 0.2297
TRT2	44.1875000	3	0.6341 0.4598 0.6266
TRT3	41.2000000	4	0.9854 0.2297 0.6266

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULENTAZONE ON REPRODUCTION OF THE MALLARD
4. ANALYSIS OF VIABLE EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: VE

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 288.8829
Critical Value of Studentized Range= 3.741

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

LEVEL Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
TRT1 - TRT2	-11.612	4.546	20.704
TRT1 - CONTROL	-8.737	7.421	23.579
TRT1 - TRT3	-8.883	7.533	23.950
TRT2 - TRT1	-20.704	-4.546	11.612
TRT2 - CONTROL	-13.020	2.875	18.770
TRT2 - TRT3	-13.170	2.987	19.145
CONTROL - TRT1	-23.579	-7.421	8.737
CONTROL - TRT2	-18.770	-2.875	13.020
CONTROL - TRT3	-16.045	0.112	16.270

TRT3 - TRT1	-7.533	8.883
TRT3 - TRT2	-2.987	13.170
TRT3 - CONTROL	-0.112	16.045

EFFECTS OF TSULENTAZONE ON REPRODUCTION OF THE MALLARD
4. ANALYSIS OF VIABLE EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for variable: VE

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 288.8829
Critical Value of Dunnett's T= 2.108

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

LEVEL Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
TRT1 - CONTROL	-5.456	7.421	20.298
TRT2 - CONTROL	-9.792	2.875	15.542
TRT3 - CONTROL	-12.989	-0.112	12.764

EFFECTS OF TSULENTAZONE ON REPRODUCTION OF THE MALLARD
5. ANALYSIS OF LIVE 3-WEEK EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULENTAZONE ON REPRODUCTION OF THE MALLARD
5. ANALYSIS OF LIVE 3-WEEK EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Type I Estimable Functions for: LEVEL

Effect	Coefficients
INTERCEPT	0
LEVEL	
CONTROL	L2
TRT1	L3
TRT2	L4
TRT3	-L2-L3-L4

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EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
5. ANALYSIS OF LIVE 3-WEEK EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Dependent Variable: LE
Source DF Sum of Squares Mean Square F Value Pr > F
Model 3 555.46909 185.15636 0.65 0.5834
Error 58 16410.20833 282.93463
Corrected Total 61 16965.67742
R-Square C.V. Root MSE LE Mean
0.032741 39.29469 16.821 42.806

Source DF Type I SS Mean Square F Value Pr > F
LEVEL 3 555.46909 185.15636 0.65 0.5834

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
5. ANALYSIS OF LIVE 3-WEEK EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Least Squares Means
LEVEL LSMEAN LE Pr > |T| H0: LSMEAN(1)=LSMEAN(J) 4
CONTROL 40.3125000 1 0.2329 0.6159 0.9765
TRT1 47.6000000 2 0.2329 0.4810 0.2290
TRT2 43.3125000 3 0.6159 0.4810 0.6010
TRT3 40.1333333 4 0.9765 0.2290 0.6010

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
5. ANALYSIS OF LIVE 3-WEEK EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Tukey's Studentized Range (HSD) Test for variable: LE
NOTE: This test controls the type I experimentwise error rate.
Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 282.9346
Critical Value of Studentized Range= 3.741

Comparisons significant at the 0.05 level are indicated by '****'.
LEVEL Comparison Simultaneous Lower Confidence Limit Difference Between Means Simultaneous Upper Confidence Limit

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TRT1 - TRT2 -11.703 4.288 20.278
TRT1 - CONTROL -8.703 7.288 23.278
TRT1 - TRT3 -8.780 7.467 23.713
TRT2 - TRT1 -20.278 4.288 11.703
TRT2 - CONTROL -12.730 3.000 18.730
TRT2 - TRT3 -12.811 3.179 19.170
CONTROL - TRT1 -23.278 -7.288 8.703
CONTROL - TRT2 -18.730 -3.000 12.730
CONTROL - TRT3 -15.811 -0.179 16.170
TRT3 - TRT1 -23.713 -7.467 8.780
TRT3 - TRT2 -19.170 -3.179 12.811
TRT3 - CONTROL -16.170 -0.179 15.811
EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
5. ANALYSIS OF LIVE 3-WEEK EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Dunnett's One-tailed T tests for variable: LE
NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.
Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 282.9346
Critical Value of Dunnett's T= 2.108

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

LEVEL Comparison Simultaneous Lower Confidence Limit Difference Between Means Simultaneous Upper Confidence Limit
TRT1 - CONTROL -5.456 7.288 20.031
TRT2 - CONTROL -9.536 3.000 15.536
TRT3 - CONTROL -12.923 -0.179 12.564

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
6. ANALYSIS OF NORMAL HATCHLINGS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Class Level Information
Class Levels Values
LEVEL 4 CONTROL TRT1 TRT2 TRT3
Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
6. ANALYSIS OF NORMAL HATCHLINGS

09:30 Wednesday, August 16, 1995
General Linear Models Procedure

Effect Coefficients

INTERCEPT 0
LEVEL CONTROL L2
TRT1 L3
TRT2 L4
TRT3 -L2-L3-L4

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
6. ANALYSIS OF NORMAL HATCHLINGS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: NH
Source DF Sum of Squares Mean Square F Value Pr > F
Model 3 542.06720 180.68907 0.69 0.5645
Error 58 15285.41667 263.54167
Corrected Total 61 15827.48387

R-Square C.V. Root MSE NH Mean
0.034248 44.45698 16.234 36.516

Source DF Type I SS Mean Square F Value Pr > F
LEVEL 3 542.06720 180.68907 0.69 0.5645

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
6. ANALYSIS OF NORMAL HATCHLINGS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Least Squares Means

LEVEL	NH LSMEAN	Pr > T i/j	H0: LSMEAN(i)=LSMEAN(j) 2 3 4
CONTROL	35.7500000	1	0.3780 0.8453 0.5835
TRT1	40.9333333	2	0.3780 0.4895 0.1618
TRT2	36.8750000	3	0.8453 0.4895 0.4598
TRT3	32.5333333	4	0.5835 0.1618 0.4598

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
6. ANALYSIS OF NORMAL HATCHLINGS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: NH

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 263.5417
Critical Value of Studentized Range= 3.741

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

LEVEL Comparison	Simultaneous Lower Confidence Limit		Difference Between Means	Simultaneous Upper Confidence Limit	
	Lower Limit	Upper Limit		Lower Limit	Upper Limit
TRT1 - TRT2	-11.374	4.058	4.058	19.491	19.491
TRT1 - CONTROL	-10.249	5.183	5.183	20.616	20.616
TRT1 - TRT3	-7.280	8.400	8.400	24.080	24.080
TRT2 - TRT1	-19.491	-4.058	-4.058	11.374	11.374
TRT2 - CONTROL	-14.057	1.125	1.125	16.307	16.307
TRT2 - TRT3	-11.091	4.342	4.342	19.774	19.774
CONTROL - TRT1	-20.616	-5.183	-5.183	10.249	10.249
CONTROL - TRT2	-16.307	-1.125	-1.125	14.057	14.057
CONTROL - TRT3	-12.216	3.217	3.217	18.649	18.649
TRT3 - TRT1	-24.080	-8.400	-8.400	7.280	7.280
TRT3 - TRT2	-19.774	-4.342	-4.342	11.091	11.091
TRT3 - CONTROL	-18.649	-3.217	-3.217	12.216	12.216

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
6. ANALYSIS OF NORMAL HATCHLINGS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnnett's One-tailed T tests for variable: NH

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 263.5417
Critical Value of Dunnnett's T= 2.108

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

LEVEL Comparison	Simultaneous Lower Confidence Limit		Difference Between Means	Simultaneous Upper Confidence Limit	
	Lower Limit	Upper Limit		Lower Limit	Upper Limit
TRT1 - CONTROL	-7.116	5.183	5.183	17.482	17.482
TRT2 - CONTROL	-10.974	1.125	1.125	13.224	13.224
TRT3 - CONTROL	-15.516	-3.217	-3.217	9.082	9.082

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
7. ANALYSIS OF 14-DAY-OLD SURVIVORS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

7. ANALYSIS OF 14-DAY-OLD SURVIVORS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Type I Estimable Functions for: LEVEL

Effect Coefficients

INTERCEPT

LEVEL

CONTROL

TRT1

TRT2

TRT3

L2

L3

L4

-L2-L3-L4

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

7. ANALYSIS OF 14-DAY-OLD SURVIVORS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: HS

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	549.88763	183.29588	0.70	0.5538
Error	58	15113.48333	260.57730		
Corrected Total	61	15663.37097			

R-Square	C.V.	Root MSE	HS Mean
0.035107	44.54069	16.142	36.242

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	549.88763	183.29588	0.70	0.5538

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

7. ANALYSIS OF 14-DAY-OLD SURVIVORS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Least Squares Means

LEVEL	HS LSMEAN	Pr > T 1/j	T 1	H0: LSMEAN(i)=LSMEAN(j) 2 3 4
CONTROL	35.500000	1	0.3768	0.8444 0.5717
TRT1	40.666667	2	0.3768	0.4888 0.1563
TRT2	36.625000	3	0.8444	0.4888 0.4487
TRT3	32.200000	4	0.5717	0.1563 0.4487

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

7. ANALYSIS OF 14-DAY-OLD SURVIVORS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for Variable: HS

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 260.5773

Critical Value of Studentized Range= 3.741

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

LEVEL Comparison	Simultaneous		Difference Between Means	Simultaneous	
	Lower Confidence Limit	Upper Confidence Limit		Lower Confidence Limit	Upper Confidence Limit
TRT1 - TRT2	-11.304	19.387	4.042	19.387	
TRT1 - CONTROL	-10.179	20.512	5.167	20.512	
TRT1 - TRT3	-7.125	24.058	8.467	24.058	
TRT2 - TRT1	-19.387	11.304	-4.042	11.304	
TRT2 - CONTROL	-13.971	16.221	1.125	16.221	
TRT2 - TRT3	-10.921	19.771	4.425	19.771	
CONTROL - TRT1	-20.512	10.179	-5.167	10.179	
CONTROL - TRT2	-16.221	13.971	-1.125	13.971	
CONTROL - TRT3	-12.046	18.646	3.300	18.646	
TRT3 - TRT1	-24.058	7.125	-8.467	7.125	
TRT3 - TRT2	-19.771	10.921	-4.425	10.921	
TRT3 - CONTROL	-18.646	12.046	-3.300	12.046	

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

7. ANALYSIS OF 14-DAY-OLD SURVIVORS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for Variable: HS

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 260.5773

Critical Value of Dunnett's T= 2.108

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

LEVEL Comparison	Simultaneous		Difference Between Means	Simultaneous	
	Lower Confidence Limit	Upper Confidence Limit		Lower Confidence Limit	Upper Confidence Limit
TRT1 - CONTROL	-7.063	17.396	5.167	17.396	
TRT2 - CONTROL	-10.906	13.156	1.125	13.156	
TRT3 - CONTROL	-15.530	8.930	-3.300	8.930	

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

8. ANALYSIS OF EGGS SET/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

8. ANALYSIS OF EGGS SET/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Type I Estimable Functions for: LEVEL

Effect Coefficients

INTERCEPT	0
LEVEL	
CONTROL	L2
TRT1	L3
TRT2	L4
TRT3	-L2-L3-L4

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

8. ANALYSIS OF EGGS SET/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: RESPONSE

Weight:

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	6738.6875	2246.2292	0.63	0.6014
Error	58	208291.5214	3591.2331		
Corrected Total	61	215030.2089			

R-Square	C.V.	Root MSE	RESPONSE Mean
0.031338	82.37148	59.927	72.752

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	6738.6875	2246.2292	0.63	0.6014

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

8. ANALYSIS OF EGGS SET/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Least Squares Means

RESPONSE Pr > |T| H0: LSMEAN(I)=LSMEAN(J)
LSMEAN i/j 1 2 3 4

CONTROL	72.7180505	1	0.8405	0.4508	0.5768
TRT1	72.1295911	2	0.8405	0.3317	0.7105
TRT2	74.9390331	3	0.4508	0.3317	0.1943
TRT3	71.0219972	4	0.5768	0.7105	0.1943

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

8. ANALYSIS OF EGGS SET/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: RESPONSE

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 3591.233

Critical Value of Studentized Range= 3.741

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

LEVEL Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
TRT2 - CONTROL	-53.822	2.221	58.264
TRT2 - TRT1	-54.160	2.809	59.779
TRT2 - TRT3	-53.052	3.917	60.886
CONTROL - TRT2	-58.264	-2.221	53.822
CONTROL - TRT1	-56.381	0.588	57.558
CONTROL - TRT3	-55.273	1.696	58.665
TRT1 - TRT2	-59.779	-2.809	54.160
TRT1 - CONTROL	-57.558	-0.588	56.381
TRT1 - TRT3	-56.773	-1.108	58.988
TRT3 - TRT2	-60.886	-3.917	53.052
TRT3 - CONTROL	-58.665	-1.696	55.273
TRT3 - TRT1	-58.988	-1.108	56.773

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

8. ANALYSIS OF EGGS SET/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for variable: RESPONSE

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 3591.233

Critical Value of Dunnett's T= 2.108

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

Simultaneous Simultaneous

LEVEL Comparison	Lower Confidence Limit	Difference Between Means	Upper Confidence Limit
TRT2 - CONTROL	-42.442	2.221	46.884
TRT1 - CONTROL	-45.989	-0.588	44.812
TRT3 - CONTROL	-47.097	-1.696	43.705

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

9. ANALYSIS OF VIABLE EMBRYOS/EGGS SETS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

9. ANALYSIS OF VIABLE EMBRYOS/EGGS SETS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Type I Estimable Functions for: LEVEL

Effect Coefficients

INTERCEPT	0
LEVEL	L2
	L3
	L4
	-L2-L3-L4

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

9. ANALYSIS OF VIABLE EMBRYOS/EGGS SETS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: RESPONSE

Weight:

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	9594.6176	3198.2059	0.40	0.7523
Error	58	461706.7554	7960.4613		
Corrected Total	61	471301.3730			

R-Square	C.V.	Root MSE	RESPONSE Mean
0.020358	118.6979	89.221	75.167

Source	DF	Type I SS	Mean Square	F Value	Pr > F
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LEVEL	3	9594.6176	3198.2059	0.40	0.7523
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EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

9. ANALYSIS OF VIABLE EMBRYOS/EGGS SETS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Least Squares Means

LEVEL	RESPONSE LSMEAN	Pr > T i/j	H0: LSMEAN(i)=LSMEAN(j)
CONTROL	73.8616552	1	0.6518 0.9060 0.3947
TRT1	75.9313675	2	0.6518 0.5621 0.6699
TRT2	73.3232429	3	0.9060 0.5621 0.3271
TRT3	77.9437418	4	0.3947 0.6699 0.3271

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

9. ANALYSIS OF VIABLE EMBRYOS/EGGS SETS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: RESPONSE

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 7960.461

Critical Value of Studentized Range= 3.741

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

LEVEL Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
TRT3 - TRT1	-84.163	2.012	88.188
TRT3 - CONTROL	-80.736	4.082	88.900
TRT3 - TRT2	-80.198	4.620	89.439
TRT1 - TRT3	-88.188	-2.012	84.163
TRT1 - CONTROL	-82.748	2.070	86.888
TRT1 - TRT2	-82.210	2.608	87.426
CONTROL - TRT3	-88.900	-4.082	80.736
CONTROL - TRT1	-86.888	-2.070	82.748
CONTROL - TRT2	-82.900	0.538	83.977
TRT2 - TRT3	-89.439	-4.620	80.198
TRT2 - TRT1	-87.426	-2.608	82.210
TRT2 - CONTROL	-83.977	-0.538	82.900

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

9. ANALYSIS OF VIABLE EMBRYOS/EGGS SETS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for variable: RESPONSE

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 7960.461
Critical Value of Dunnett's T= 2.108

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

LEVEL Comparison	Simultaneous		
	Lower Confidence Limit	Difference Between Means	Upper Confidence Limit
TRT3 - CONTROL	-63.512	4.082	71.677
TRT1 - CONTROL	-65.525	2.070	69.664
TRT2 - CONTROL	-67.034	-0.538	65.957

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
10. ANALYSIS OF LIVE 3-WEEK EMBRYOS/VIALE EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
10. ANALYSIS OF LIVE 3-WEEK EMBRYOS/VIALE EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Type I Estimable Functions for: LEVEL

Effect Coefficients

INTERCEPT	0
LEVEL	
CONTROL	L2
TRT1	L3
TRT2	L4
TRT3	-L2-L3-L4

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
10. ANALYSIS OF LIVE 3-WEEK EMBRYOS/VIALE EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: RESPONSE
Weight:

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
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Model	3	95.022128	31.674043	0.02	0.9967
Error	58	103434.1780	1783.347896		
Corrected Total	61	103529.2001			

R-Square C.V. Root MSE RESPONSE Mean
0.000918 50.48008 42.230 83.656

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	95.022128	31.674043	0.02	0.9967

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
10. ANALYSIS OF LIVE 3-WEEK EMBRYOS/VIALE EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Least Squares Means

LEVEL	RESPONSE LSMEAN	Pr > T H0: LSMEAN(i)=LSMEAN(j)
CONTROL	83.390582	1
TRT1	83.6613959	2 0.9053 0.8186 0.9177
TRT2	83.9170283	3 0.8186 0.9090 0.9911
TRT3	83.6356752	4 0.9177 0.9911 0.9041

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
10. ANALYSIS OF LIVE 3-WEEK EMBRYOS/VIALE EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: RESPONSE

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 1783.348
Critical Value of Studentized Range= 3.741

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

LEVEL Comparison	Simultaneous		
	Lower Confidence Limit	Difference Between Means	Upper Confidence Limit
TRT2 - TRT1	-39.8899	0.2556	40.4011
TRT2 - TRT3	-39.8642	0.2814	40.4269
TRT2 - CONTROL	-38.9662	0.5265	40.0192
TRT1 - TRT2	-40.4011	-0.2556	39.8899
TRT1 - TRT3	-40.7622	0.0257	40.8136
TRT1 - CONTROL	-39.8747	0.2708	40.4163
TRT3 - TRT2	-40.4269	-0.2814	39.8642
TRT3 - TRT1	-40.8136	-0.0257	40.7622
TRT3 - CONTROL	-39.9004	0.2451	40.5906

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CONTROL - TRT2 -0.5265 38.9662
 CONTROL - TRT1 -0.4163 39.8747
 CONTROL - TRT3 -0.3906 39.9004

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

10. ANALYSIS OF LIVE 3-WEEK EMBRYOS/VIALE EMBRYOS

 09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnnett's One-tailed T tests for variable: RESPONSE

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 1783.348
 Critical Value of Dunnnett's T= 2.108

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

LEVEL Comparison	Simultaneous			Simultaneous		
	Lower Confidence Limit	Difference Between Means	Upper Confidence Limit	Lower Confidence Limit	Difference Between Means	Upper Confidence Limit
TRT2 - CONTROL	-30.9467	0.5265	31.9996			
TRT1 - CONTROL	-31.7226	0.2708	32.2643			
TRT3 - CONTROL	-31.7483	0.2451	32.2385			

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

11. ANALYSIS OF NORMAL HATCHLINGS/3-WEEK LIVE EMBRYOS

 09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

11. ANALYSIS OF NORMAL HATCHLINGS/3-WEEK LIVE EMBRYOS

 09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Type I Estimable Functions for: LEVEL

Effect	Coefficients
INTERCEPT	0
LEVEL	L2 L3 L4 -L2-L3-L4

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

11. ANALYSIS OF NORMAL HATCHLINGS/3-WEEK LIVE EMBRYOS

 09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: RESPONSE

Weight:

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	13819.469	4606.490	0.93	0.4312
Error	58	286721.148	4943.468		
Corrected Total	61	300540.617			

R-Square C.V. Root MSE RESPONSE Mean
 0.045982 101.4307 70.310 69.318

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	13819.469	4606.490	0.93	0.4312

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

11. ANALYSIS OF NORMAL HATCHLINGS/3-WEEK LIVE EMBRYOS

 09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Least Squares Means

LEVEL	RESPONSE LSMEAN	Pr > T H0: LSMEAN(i)=LSMEAN(j)
CONTROL	72.7401841	1 0.3459 0.3529 0.1013
TRT1	69.1102383	2 0.3459 0.9942 0.4431
TRT2	69.1377444	3 0.3529 0.9942 0.4421
TRT3	66.1056081	4 0.1013 0.4431 0.4421

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

11. ANALYSIS OF NORMAL HATCHLINGS/3-WEEK LIVE EMBRYOS

 09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: RESPONSE

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 4943.468
 Critical Value of Studentized Range= 3.741

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

LEVEL Comparison	Simultaneous			Simultaneous		
	Lower Confidence Limit	Difference Between Means	Upper Confidence Limit	Lower Confidence Limit	Difference Between Means	Upper Confidence Limit

CONTROL - TRT2	-62.150	3.602	69.355
CONTROL - TRT1	-63.210	3.630	70.470
CONTROL - TRT3	-60.205	6.635	73.474
TRT2 - CONTROL	-69.355	-3.602	62.150
TRT2 - TRT1	-66.812	0.028	66.867
TRT2 - TRT3	-63.808	3.032	69.872
TRT1 - CONTROL	-70.470	-3.630	63.210
TRT1 - TRT2	-66.867	-0.028	66.812
TRT1 - TRT3	-64.905	3.005	70.914
TRT3 - CONTROL	-73.474	-6.635	60.205
TRT3 - TRT2	-69.872	-3.032	63.808
TRT3 - TRT1	-70.914	-3.005	64.905

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

11. ANALYSIS OF NORMAL HATCHLINGS/3-WEEK LIVE EMBRYOS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnnett's One-tailed T tests for variable: RESPONSE

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 4943.468

Critical Value of Dunnnett's T= 2.108

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

LEVEL	Comparison	Simultaneous		
		Lower Limit	Difference Between Means	Upper Confidence Limit

TRT2 - CONTROL	-56.003	-3.602	48.798
TRT1 - CONTROL	-56.897	-3.630	49.637
TRT3 - CONTROL	-59.902	-6.635	46.632

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

12. ANALYSIS OF NORMAL HATCHLINGS/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

12. ANALYSIS OF NORMAL HATCHLINGS/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Type I Estimable Functions for: LEVEL

Coefficients

INTERCEPT	0
LEVEL	
CONTROL	L2
TRT1	L3
TRT2	L4
TRT3	-L2-L3-L4

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

12. ANALYSIS OF NORMAL HATCHLINGS/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: RESPONSE

Weight:

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	8519.5813	2839.8604	0.33	0.8038
Error	58	499324.5365	8609.0437		
Corrected Total	61	507844.1177			

R-Square	C.V.	Root MSE	RESPONSE Mean
0.016776	165.9103	92.785	55.925

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	8519.5813	2839.8604	0.33	0.8038

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

12. ANALYSIS OF NORMAL HATCHLINGS/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Least Squares Means

LEVEL	RESPONSE	Pr > T HO: LSMEAN(1)=LSMEAN(J)					
		LSMEAN	i/j	1	2	3	4
CONTROL	57.2353481	1	0.9665	0.7881	0.3817		
TRT1	57.0451253	2	0.9665	0.8170	0.3955		
TRT2	56.0122414	3	0.7881	0.8170	0.5323		
TRT3	53.1104036	4	0.3817	0.3955	0.5323		

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

12. ANALYSIS OF NORMAL HATCHLINGS/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: RESPONSE

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 8609.044
Critical Value of Studentized Range= 3.741

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

LEVEL Comparison	Simultaneous Lower Confidence Limit		Difference Between Means		Simultaneous Upper Confidence Limit	
	Lower Limit	Upper Limit			Lower Limit	Upper Limit
CONTROL - TRT1	-88.015	88.396	0.190		88.396	
CONTROL - TRT2	-85.548	87.994	1.223		87.994	
CONTROL - TRT3	-84.081	92.331	4.125		92.331	
TRT1 - CONTROL	-88.396	88.015	-0.190		88.015	
TRT1 - TRT2	-87.173	89.239	1.033		89.239	
TRT1 - TRT3	-85.682	93.552	3.935		93.552	
TRT2 - CONTROL	-87.994	85.548	-1.223		85.548	
TRT2 - TRT1	-89.239	87.173	-1.033		87.173	
TRT2 - TRT3	-85.304	91.107	2.902		91.107	
TRT3 - CONTROL	-92.331	84.081	-4.125		84.081	
TRT3 - TRT1	-93.552	85.682	-3.935		85.682	
TRT3 - TRT2	-91.107	85.304	-2.902		85.304	

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

12. ANALYSIS OF NORMAL HATCHINGS/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for variable: RESPONSE

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

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 8609.044
Critical Value of Dunnett's T= 2.108

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

LEVEL Comparison	Simultaneous Lower Confidence Limit		Difference Between Means		Simultaneous Upper Confidence Limit	
	Lower Limit	Upper Limit			Lower Limit	Upper Limit
TRT1 - CONTROL	-70.485	70.104	-0.190		70.104	
TRT2 - CONTROL	-70.374	67.928	-1.223		67.928	
TRT3 - CONTROL	-74.419	66.169	-4.125		66.169	

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

13. ANALYSIS OF 14-DAY HATCHLING SURVIVORS/NORMAL HATCHLINGS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 60 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
13. ANALYSIS OF 14-DAY HATCHLING SURVIVORS/NORMAL HATCHLINGS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Type I Estimable Functions for: LEVEL

Coefficients

INTERCEPT	0
LEVEL	
CONTROL	L2
TRT1	L3
TRT2	L4
TRT3	-L2-L3-L4

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
13. ANALYSIS OF 14-DAY HATCHLING SURVIVORS/NORMAL HATCHLINGS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: RESPONSE

Weight: NH

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	1647.9588	549.3196	0.68	0.5681
Error	56	45257.3955	808.1678		
Corrected Total	59	46905.3543			

R-Square	C.V.	Root MSE	RESPONSE Mean
0.035134	32.50564	28.428	87.456

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	1647.9588	549.3196	0.68	0.5681

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
13. ANALYSIS OF 14-DAY HATCHLING SURVIVORS/NORMAL HATCHLINGS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Least Squares Means

LEVEL	RESPONSE LSMEAN	Pr > T i/j	H0: LSMEAN(i)=LSMEAN(j)
CONTROL	88.0340999	1	0.6935 0.9105 0.2392
TRT1	87.3795695	2	0.6935 0.6091 0.4106
TRT2	88.2224705	3	0.9105 0.6091 0.1968
TRT3	85.9501378	4	0.2392 0.4106 0.1968

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULEFENTRAZONE ON REPRODUCTION OF THE MALLARD 13. ANALYSIS OF 14-DAY HATCHLING SURVIVORS/NORMAL HATCHLINGS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: RESPONSE

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 56 MSE= 808.1678

Critical Value of Studentized Range= 3.745

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

LEVEL Comparison	Simultaneous		Difference Between Means	Simultaneous	
	Lower Confidence Limit	Upper Confidence Limit		Lower Confidence Limit	Upper Confidence Limit
TRT2 - CONTROL	-26.866	0.188		27.243	
TRT2 - TRT1	-26.211	0.843		27.897	
TRT2 - TRT3	-25.276	2.272		29.821	
CONTROL - TRT2	-27.243	-0.188		26.866	
CONTROL - TRT1	-26.833	0.655		28.142	
CONTROL - TRT3	-25.890	2.084		30.058	
TRT1 - TRT2	-27.897	-0.843		26.211	
TRT1 - CONTROL	-28.142	-0.655		26.833	
TRT1 - TRT3	-26.544	1.429		29.403	
TRT3 - TRT2	-29.821	-2.272		25.276	
TRT3 - CONTROL	-30.058	-2.084		25.890	
TRT3 - TRT1	-29.403	-1.429		26.544	

EFFECTS OF TSULEFENTRAZONE ON REPRODUCTION OF THE MALLARD

13. ANALYSIS OF 14-DAY HATCHLING SURVIVORS/NORMAL HATCHLINGS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for variable: RESPONSE

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 56 MSE= 808.1678

Critical Value of Dunnett's T= 2.107

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

LEVEL Comparison	Simultaneous		Difference Between Means	Simultaneous Upper Confidence Limit
	Lower Confidence Limit			
TRT2 - CONTROL	-21.340		0.188	21.716
TRT1 - CONTROL	-22.527		-0.655	21.218
TRT3 - CONTROL	-24.344		-2.084	20.176

EFFECTS OF TSULEFENTRAZONE ON REPRODUCTION OF THE MALLARD

14. ANALYSIS OF EGGS NOT CRACKED/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULEFENTRAZONE ON REPRODUCTION OF THE MALLARD

14. ANALYSIS OF EGGS NOT CRACKED/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure Type I Estimable Functions for: LEVEL

Effect Coefficients

INTERCEPT	0
LEVEL	
CONTROL	L2
TRT1	L3
TRT2	L4
TRT3	-L2-L3-L4

EFFECTS OF TSULEFENTRAZONE ON REPRODUCTION OF THE MALLARD

14. ANALYSIS OF EGGS NOT CRACKED/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: RESPONSE

Weight: EL

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	5957.6241	1985.8747	1.65	0.1881
Error	58	69865.7598	1204.5821		
Corrected Total	61	75823.3839			

R-Square		C.V.	Root MSE	RESPONSE Mean	
0.078572	40.44291	34.707			85.817

Source	-DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	5957.6241	1985.8747	1.65	0.1881

EFFECTS OF TSULEFENTRAZONE ON REPRODUCTION OF THE MALLARD

14. ANALYSIS OF EGGS NOT CRACKED/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Least Squares Means

LEVEL	RESPONSE	Pr > T	H0: LSMEAN(i)=LSMEAN(j)			
	LSMEAN	i/j	1	2	3	4
CONTROL	85.3614196	1		0.8808	0.1404	0.5025
TRT1	85.6153270	2	0.8808		0.1758	0.4074
TRT2	87.8936381	3	0.1404	0.1758		0.0358
TRT3	84.1802686	4	0.5025	0.4074	0.0358	

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

14. ANALYSIS OF EGGS NOT CRACKED/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: RESPONSE

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 1204.582
Critical Value of Studentized Range= 3.741

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

LEVEL	Comparison	Simultaneous Lower Limit	Simultaneous Upper Limit	Difference Between Means	Confidence Limit
TRT2	- TRT1	-30.716	35.272	2.278	35.272
TRT2	- CONTROL	-29.925	34.990	2.532	34.990
TRT2	- TRT3	-29.281	36.708	3.713	36.708
TRT1	- TRT2	-35.272	30.716	-2.278	30.716
TRT1	- CONTROL	-32.740	33.248	-0.254	33.248
TRT1	- TRT3	-32.087	34.957	1.435	34.957
CONTROL	- TRT2	-34.990	29.925	-2.532	29.925
CONTROL	- TRT1	-33.248	32.740	-0.254	32.740
CONTROL	- TRT3	-31.813	34.175	1.181	34.175
TRT3	- TRT2	-36.708	29.281	-3.713	29.281
TRT3	- TRT1	-34.957	32.087	-1.435	32.087
TRT3	- CONTROL	-34.175	31.813	-1.181	31.813

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

14. ANALYSIS OF EGGS NOT CRACKED/EGGS LAID

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for variable: RESPONSE

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 1204.582
Critical Value of Dunnett's T= 2.108

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

LEVEL	Comparison	Simultaneous Lower Limit	Simultaneous Upper Limit	Difference Between Means	Confidence Limit
TRT2	- CONTROL	-23.334	2.532	2.532	28.399
TRT1	- CONTROL	-26.040	0.254	0.254	26.548
TRT3	- CONTROL	-27.475	-1.181	-1.181	25.113

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

15. ANALYSIS OF NORMAL HATCHLINGS/EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

15. ANALYSIS OF NORMAL HATCHLINGS/EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Type I Estimable Functions for: LEVEL

Coefficients

Effect	Coefficients
INTERCEPT	0
LEVEL	CONTROL L2
	TRT1 L3
	TRT2 L4
	TRT3 -L2-L3-L4

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

15. ANALYSIS OF NORMAL HATCHLINGS/EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: RESPONSE

Weight: ES

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	5080.3831	1693.4610	0.23	0.8736
Error	58	423102.4636	7294.8701		
Corrected Total	61	428182.8467			

R-Square	C.V.	Root MSE	RESPONSE Mean
0.011865	139.4320	85.410	61.256

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	5080.3831	1693.4610	0.23	0.8736

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

15. ANALYSIS OF NORMAL HATCHLINGS/EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Least Squares Means

LEVEL	RESPONSE	Pr > T _{i/j} H0: LSMEAN(i)=LSMEAN(j)			
		1	2	3	4
CONTROL	62.5193170	1	0.9961	0.5594	0.5649
TRT1	62.5405745	2	0.9961	0.5501	0.5565
TRT2	59.9671748	3	0.5594	0.5501	0.9847
TRT3	59.8812090	4	0.5649	0.5565	0.9847

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

15. ANALYSIS OF NORMAL HATCHLINGS/EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: RESPONSE

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 7294.87
Critical Value of Studentized Range= 3.741

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

LEVEL	Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
TRT1	- CONTROL	-81.173	0.021	81.216
TRT1	- TRT2	-78.621	2.573	83.768
TRT1	- TRT3	-79.835	2.659	85.153
CONTROL	- TRT1	-81.216	-0.021	81.173
CONTROL	- TRT2	-77.322	2.552	82.427
CONTROL	- TRT3	-78.557	2.638	83.833
TRT2	- TRT1	-83.768	-2.573	78.621
TRT2	- CONTROL	-82.427	-2.552	77.322
TRT2	- TRT3	-81.109	0.086	81.281
TRT3	- TRT1	-85.153	-2.659	79.835
TRT3	- CONTROL	-83.833	-2.638	78.557
TRT3	- TRT2	-81.281	-0.086	81.109

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

15. ANALYSIS OF NORMAL HATCHLINGS/EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed t tests for variable: RESPONSE

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 7294.87
Critical Value of Dunnett's T= 2.108

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

LEVEL	Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
TRT1	- CONTROL	-64.686	0.021	64.728
TRT2	- CONTROL	-66.207	-2.552	61.103
TRT3	- CONTROL	-67.345	-2.638	62.069

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

16. ANALYSIS OF 14-DAY HATCHLING SURVIVORS/EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

16. ANALYSIS OF 14-DAY HATCHLING SURVIVORS/EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Type I Estimable Functions for: LEVEL

Effect	Coefficients
INTERCEPT	0
LEVEL	L2
	L3
	L4
	-L2-L3-L4

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

16. ANALYSIS OF 14-DAY HATCHLING SURVIVORS/EGGS SET

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: RESPONSE
Weight: ES

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	5404.3561	1801.4520	0.24	0.8650
Error	58	427585.6633	7372.1666		
Corrected Total	61	432990.0194			

R-Square	C.V.	Root MSE	RESPONSE Mean
0.012481	141.1140	85.861	60.845

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	5404.3561	1801.4520	0.24	0.8650

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD 16. ANALYSIS OF 14-DAY HATCHLING SURVIVORS/EGGS SET *****

09:30 Wednesday, August 16, 1995

General Linear Models Procedure Least Squares Means

LEVEL	RESPONSE	LSMEAN	Pr > T	H0: LSMEAN(i)=LSMEAN(j)
CONTROL	62.1601124	1	0.9982	0.5658 0.5340
TRT1	62.1503451	2	0.9982	0.5615 0.5298
TRT2	59.6367058	3	0.5658	0.5615 0.9395
TRT3	59.2936714	4	0.5340	0.5298 0.9395

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD 16. ANALYSIS OF 14-DAY HATCHLING SURVIVORS/EGGS SET *****

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: RESPONSE

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 7372.167
Critical Value of Studentized Range= 3.741

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

LEVEL	Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
CONTROL - TRT1		-81.614	0.010	81.634
CONTROL - TRT2		-77.773	2.523	82.820
CONTROL - TRT3		-78.757	2.866	84.490
TRT1 - CONTROL		-81.634	-0.010	81.614
TRT1 - TRT2		-79.110	2.514	84.137
TRT1 - TRT3		-80.073	2.857	85.786

TRT2 - CONTROL	-82.820	-2.523	77.773
TRT2 - TRT1	-84.137	-2.514	79.110
TRT2 - TRT3	-81.281	0.343	81.967
TRT3 - CONTROL	-84.490	-2.866	78.757
TRT3 - TRT1	-85.786	-2.857	80.073
TRT3 - TRT2	-81.967	-0.343	81.281

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD 16. ANALYSIS OF 14-DAY HATCHLING SURVIVORS/EGGS SET *****

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for variable: RESPONSE

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 58 MSE= 7372.167
Critical Value of Dunnett's T= 2.108

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

LEVEL	Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
TRT1 - CONTROL		-65.059	-0.010	65.039
TRT2 - CONTROL		-66.515	-2.523	61.468
TRT3 - CONTROL		-67.915	-2.866	62.183

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD 17. ANALYSIS OF EGGSHELL THICKNESS *****

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 55 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD 17. ANALYSIS OF EGGSHELL THICKNESS *****

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Type I Estimable Functions for: LEVEL

Coefficients

0

INTERCEPT

L2

CONTROL

L3

TRT1

EFFECTS OF TSULENTAZONE ON REPRODUCTION OF THE MALLARD
17. ANALYSIS OF EGGSHELL THICKNESS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: THICK

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	0.0015535	0.0005178	1.80	0.1596
Error	51	0.0146999	0.0002882		
Corrected Total	54	0.0162533			

R-Square	C.V.	Root MSE	THICK Mean
0.095578	4.232621	0.0170	0.4011

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	0.0015535	0.0005178	1.80	0.1596

EFFECTS OF TSULENTAZONE ON REPRODUCTION OF THE MALLARD
17. ANALYSIS OF EGGSHELL THICKNESS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Least Squares Means

LEVEL	THICK LSMEAN	Pr > T H0: LSMEAN(i)=LSMEAN(j)	1	2	3	4
CONTROL	0.39273333	1	0.0374	0.0782	0.1575	
TRT1	0.40621429	2	0.0374	0.7398	0.5472	
TRT2	0.40407143	3	0.0782	0.7398	0.7767	
TRT3	0.40216667	4	0.1575	0.5472	0.7767	

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULENTAZONE ON REPRODUCTION OF THE MALLARD
17. ANALYSIS OF EGGSHELL THICKNESS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: THICK

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 51 MSE= 0.000288
Critical Value of Studentized Range= 3.756

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

	Simultaneous Lower	Difference	Simultaneous Upper
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LEVEL	Comparison	Confidence Limit	Between Means	Confidence Limit
TRT1	- TRT2	-0.014899	0.002143	0.019185
TRT1	- TRT3	-0.013690	0.004048	0.021785
TRT1	- CONTROL	-0.003275	0.013481	0.030236
TRT2	- TRT1	-0.019185	-0.002143	0.014899
TRT2	- TRT3	-0.015833	0.001905	0.019643
TRT2	- CONTROL	-0.005417	0.011338	0.028094
TRT3	- TRT1	-0.021785	-0.004048	0.013690
TRT3	- TRT2	-0.019643	-0.001905	0.015833
TRT3	- CONTROL	-0.008029	0.009433	0.026896
CONTROL	- TRT1	-0.030236	-0.013481	0.003275
CONTROL	- TRT2	-0.028094	-0.011338	0.005417
CONTROL	- TRT3	-0.026896	-0.009433	0.008029

EFFECTS OF TSULENTAZONE ON REPRODUCTION OF THE MALLARD
17. ANALYSIS OF EGGSHELL THICKNESS

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for variable: THICK

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 51 MSE= 0.000288
Critical Value of Dunnett's T= 2.119

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

LEVEL	Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
TRT1	- CONTROL	0.000115	0.013481	0.026847
TRT2	- CONTROL	-0.002028	0.011338	0.024704
TRT3	- CONTROL	-0.004497	0.009433	0.023364

EFFECTS OF TSULENTAZONE ON REPRODUCTION OF THE MALLARD
18. ANALYSIS OF HATCHLING WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 59 observations can be used in this analysis.

EFFECTS OF TSULENTAZONE ON REPRODUCTION OF THE MALLARD
18. ANALYSIS OF HATCHLING WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Type I Estimable Functions for: LEVEL

Effect Coefficients

INTERCEPT 0

LEVEL CONTROL L2
TRT1 L3
TRT2 L4
TRT3 -L2-L3-L4EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
18. ANALYSIS OF HATCHLING WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: HATWT

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	16.747267	5.582422	0.58	0.6303
Error	55	528.979851	9.617815		
Corrected Total	58	545.727119			

R-Square	C.V.	Root MSE	HATWT Mean
0.030688	8.172511	3.1013	37.947

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	16.747267	5.582422	0.58	0.6303

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
18. ANALYSIS OF HATCHLING WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Least Squares Means

LEVEL	HATWT LSMEAN	Pr > t i/j	H0: LSMEAN(i)=LSMEAN(j)
CONTROL	38.5714286	1	0.7053 0.6128 0.2060
TRT1	38.1333333	2	0.7053 0.9008 0.3609
TRT2	37.9937500	3	0.6128 0.9008 0.4199
TRT3	37.0714286	4	0.2060 0.3609 0.4199

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
18. ANALYSIS OF HATCHLING WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: HATWT

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 55 MSE= 9.617815
Critical Value of Studentized Range= 3.747

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

LEVEL Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
CONTROL - TRT1	-2.615	0.438	3.491
CONTROL - TRT2	-2.429	0.578	3.585
CONTROL - TRT3	-1.605	1.500	4.605
TRT1 - CONTROL	-3.491	-0.438	2.615
TRT1 - TRT2	-2.813	0.140	3.093
TRT1 - TRT3	-1.991	1.062	4.115
TRT2 - CONTROL	-3.585	-0.578	2.429
TRT2 - TRT1	-3.093	-0.140	2.813
TRT2 - TRT3	-2.085	0.922	3.929
TRT3 - CONTROL	-4.605	-1.500	1.605
TRT3 - TRT1	-4.115	-1.062	1.991
TRT3 - TRT2	-3.929	-0.922	2.085

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
18. ANALYSIS OF HATCHLING WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for variable: HATWT

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

Alpha= 0.05 Confidence= 0.95 df= 55 MSE= 9.617815
Critical Value of Dunnett's T= 2.104

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

LEVEL Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
TRT1 - CONTROL	-2.862	-0.438	1.986
TRT2 - CONTROL	-2.965	-0.578	1.810
TRT3 - CONTROL	-3.966	-1.500	0.966

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
19. ANALYSIS OF 14-DAY SURVIVOR WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure
Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 59 observations can be used in this analysis.

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

19. ANALYSIS OF 14-DAY SURVIVOR WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure Type I Estimable Functions for: LEVEL

Effect Coefficients

INTERCEPT	0
LEVEL	
CONTROL	L2
TRT1	L3
TRT2	L4
TRT3	-L2-L3-L4

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

19. ANALYSIS OF 14-DAY SURVIVOR WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: SURVWT

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	705.59664	235.19888	0.47	0.7043
Error	55	27516.10912	500.29289		
Corrected Total	58	28221.70576			

R-Square	0.025002
C.V.	6.778122
Root MSE	22.367
SURVWT Mean	329.99

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	705.59664	235.19888	0.47	0.7043

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

19. ANALYSIS OF 14-DAY SURVIVOR WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure Least Squares Means

LEVEL	SURVWT LSMEAN	Pr > t i/j	H0: LSMEAN(i)=LSMEAN(j) 1 2 3 4
CONTROL	336.142857	1	0.3610 0.2908 0.3637
TRT1	328.486667	2	0.3610 0.8942 0.9917
TRT2	327.412500	3	0.2908 0.8942 0.9044
TRT3	328.400000	4	0.3637 0.9917 0.9044

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

19. ANALYSIS OF 14-DAY SURVIVOR WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: SURVWT

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 55 MSE= 500.2929
Critical Value of Studentized Range= 3.747

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

LEVEL Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
CONTROL - TRT1	-14.365	7.656	29.678
CONTROL - TRT3	-14.655	7.743	30.141
CONTROL - TRT2	-12.956	8.730	30.417
TRT1 - CONTROL	-29.678	-7.656	14.365
TRT1 - TRT3	-21.935	0.087	22.108
TRT1 - TRT2	-20.223	1.074	22.372
TRT3 - CONTROL	-30.141	-7.743	14.655
TRT3 - TRT1	-22.108	-0.087	21.935
TRT3 - TRT2	-20.699	0.987	22.674
TRT2 - CONTROL	-30.417	-8.730	12.956
TRT2 - TRT1	-22.372	-1.074	20.223
TRT2 - TRT3	-22.674	-0.987	20.699

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD

19. ANALYSIS OF 14-DAY SURVIVOR WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for variable: SURVWT

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 55 MSE= 500.2929
Critical Value of Dunnett's T= 2.104

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

LEVEL Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
TRT1 - CONTROL	-25.141	-7.656	9.829
TRT3 - CONTROL	-25.527	-7.743	10.041
TRT2 - CONTROL	-25.949	-8.730	8.489

File:A:\SULF-MAL.OUT Page 47
 EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
 20. ANALYSIS OF FOOD CONSUMPTION

 09:30 Wednesday, August 16, 1995

General Linear Models Procedure
 Class Level Information
 Class Levels Values
 LEVEL 4 CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 61 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
 20. ANALYSIS OF FOOD CONSUMPTION

 09:30 Wednesday, August 16, 1995

General Linear Models Procedure
 Type I Estimable Functions for: LEVEL

Effect Coefficients

INTERCEPT 0
 LEVEL CONTROL L2
 TRT1 L3
 TRT2 L4
 TRT3 -L2-L3-L4

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
 20. ANALYSIS OF FOOD CONSUMPTION

 09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: FOOD
 Source DF Sum of Squares Mean Square F Value Pr > F
 Model 3 27847979 9282660 1.01 0.3944
 Error 57 523132284 9177759
 Corrected Total 60 550980263

R-Square C.V. Root MSE FOOD Mean
 0.050543 8.189889 3029.5 36991
 Source DF Type I SS Mean Square F Value Pr > F
 LEVEL 3 27847979 9282660 1.01 0.3944

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
 20. ANALYSIS OF FOOD CONSUMPTION

 09:30 Wednesday, August 16, 1995

File:A:\SULF-MAL.OUT Page 48
 General Linear Models Procedure
 Least Squares Means
 LEVEL FOOD PR > |T| H0: LSMEAN(i)=LSMEAN(j)
 LSMEAN i/j 1 2 3 4

CONTROL 37902.5000 1 0.5520 0.1026 0.2662
 TRT1 37251.0667 2 0.5520 0.3056 0.6001
 TRT2 36125.5625 3 0.1026 0.3056 0.6332
 TRT3 36657.5714 4 0.2662 0.6001 0.6332

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
 20. ANALYSIS OF FOOD CONSUMPTION

 09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: FOOD

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 57 MSE= 9177759
 Critical Value of Studentized Range= 3.743

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

LEVEL Comparison	Simultaneous Lower Confidence Limit		Difference Between Means	Simultaneous Upper Confidence Limit	
	Lower Limit	Upper Limit		Lower Limit	Upper Limit
CONTROL - TRT1	-2230	-651	651	3533	
CONTROL - TRT3	-1689	1245	1245	4179	
CONTROL - TRT2	-1058	1777	1777	4612	
TRT1 - CONTROL	-3533	-651	-651	2230	
TRT1 - TRT3	-2386	593	593	3573	
TRT1 - TRT2	-1756	1126	1126	4007	
TRT3 - CONTROL	-4179	-1245	-1245	1689	
TRT3 - TRT1	-3573	-593	-593	2386	
TRT3 - TRT2	-2402	532	532	3466	
TRT2 - CONTROL	-4612	-1777	-1777	1058	
TRT2 - TRT1	-4007	-1126	-1126	1756	
TRT2 - TRT3	-3466	-532	-532	2402	

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD
 20. ANALYSIS OF FOOD CONSUMPTION

 09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnett's One-tailed T tests for variable: FOOD

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 57 MSE= 9177759
 Critical Value of Dunnett's T= 2.110

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

General Linear Models Procedure
Least Squares Means

LEVEL	POSTM LSMEAN	Std Err LSMEAN	Pr > T HO:LSMEAN=0	LSMEAN Number
CONTROL	1253.57192	21.21352	0.0001	1
TRT1	1286.91551	21.90807	0.0001	2
TRT2	1246.91084	21.26532	0.0001	3
TRT3	1240.43621	22.01227	0.0001	4

Pr > |T| HO: LSMEAN(i)=LSMEAN(j)

i/j	1	2	3	4
1		0.2788	0.8252	0.6693
2	0.2788		0.1952	0.1402
3	0.8252	0.1952		0.8338
4	0.6693	0.1402	0.8338	

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

21. COVARIATE ANALYSIS OF MALE BODY WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: POSTM

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 57 MSE= 7198.764
Critical Value of Studentized Range= 3.743

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

LEVEL Comparison	Simultaneous		Difference		Simultaneous
	Lower Limit	Confidence	Between Means	Confidence	Upper Limit
TRT1 - TRT2	-51.72	-28.98	28.98	109.68	
TRT1 - CONTROL	-48.09	32.61	32.61	113.31	
TRT1 - TRT3	-15.46	66.53	66.53	148.52	
TRT2 - TRT1	-109.68	-28.98	-28.98	51.72	
TRT2 - CONTROL	-75.76	3.63	3.63	83.01	
TRT2 - TRT3	-43.15	37.55	37.55	118.25	
CONTROL - TRT1	-113.31	-32.61	-32.61	48.09	
CONTROL - TRT2	-83.01	3.63	3.63	75.76	
CONTROL - TRT3	-46.77	33.92	33.92	114.62	
TRT3 - TRT1	-148.52	-66.53	-66.53	15.46	
TRT3 - TRT2	-118.25	-37.55	-37.55	43.15	
TRT3 - CONTROL	-114.62	-33.92	-33.92	46.77	

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

21. COVARIATE ANALYSIS OF MALE BODY WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dunnnett's One-tailed T tests for variable: POSTM

Simultaneous

Lower Confidence Limit

Difference Between Means

Upper Confidence Limit

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

21. COVARIATE ANALYSIS OF MALE BODY WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

21. COVARIATE ANALYSIS OF MALE BODY WEIGHT

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: POSTM

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	551330.32	137832.58	19.15	0.0001
Error	57	410329.55	7198.76		
Corrected Total	61	961659.87			
R-Square					
0.573311		6.751229	84.846		1256.7

C.V. Root MSE

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	33399.79	11133.26	1.55	0.2124
PREM	1	517930.54	517930.54	71.95	0.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LEVEL	3	19333.33	6444.44	0.90	0.4493
PREM	1	517930.54	517930.54	71.95	0.0001

EFFECTS OF TSULFENTRAZONE ON REPRODUCTION OF THE MALLARD

21. COVARIATE ANALYSIS OF MALE BODY WEIGHT

09:30 Wednesday, August 16, 1995

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 57 MSE= 7198.764
Critical Value of Dunnett's T= 2.109

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

LEVEL Comparison	Simultaneous Lower Confidence Limit			Difference Between Means			Simultaneous Upper Confidence Limit		
	CONTROL	TRT1	TRT2	TRT3	CONTROL	TRT1	TRT2	TRT3	CONTROL
CONTROL	-31.69	32.61	3.63	-33.92	96.91	66.88	30.38		
TRT1	-59.63								
TRT2	-98.23								
TRT3									

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD 22. COVARIATE ANALYSIS OF FEMALE BODY WEIGHT *****

09:30 Wednesday, August 16, 1995

General Linear Models Procedure Class Level Information

Class	Levels	Values
LEVEL	4	CONTROL TRT1 TRT2 TRT3

Number of observations in data set = 64

NOTE: Due to missing values, only 62 observations can be used in this analysis.

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD 22. COVARIATE ANALYSIS OF FEMALE BODY WEIGHT *****

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Dependent Variable: POSTF					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	139191.80	34797.95	1.54	0.2037
Error	57	1290240.54	22635.80		
Corrected Total	61	1429432.34			
R-Square					
		C.V.	Root MSE		POSTF Mean
	0.097376	11.90543	150.45		1263.7
Pr > F					
Source	DF	Type I SS	Mean Square	F Value	Pr > F
LEVEL	3	76891.130	25630.377	1.13	0.3437
PREF	1	62300.670	62300.670	2.75	0.1026
Pr > F					
Source	DF	Type III SS	Mean Square	F Value	Pr > F
LEVEL	3	64803.691	21601.230	0.95	0.4206
PREF	1	62300.670	62300.670	2.75	0.1026

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD 22. COVARIATE ANALYSIS OF FEMALE BODY WEIGHT *****

09:30 Wednesday, August 16, 1995

General Linear Models Procedure Least Squares Means

LEVEL	POSTF LSMEAN	Std Err LSMEAN	Pr > T H0:LSMEAN=0	LSMEAN Number
CONTROL	1262.28603	37.73834	0.0001	1
TRT1	1262.92800	38.89423	0.0001	2
TRT2	1309.23594	37.88023	0.0001	3
TRT3	1217.51524	38.84873	0.0001	4

Pr > |T| H0: LSMEAN(i)=LSMEAN(j)

i/j	1	2	3	4
1		0.9906	0.3859	0.4121
2	0.9906		0.3986	0.4123
3	0.3859	0.3986		0.0962
4	0.4121	0.4123	0.0962	

NOTE: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

EFFECTS OF TSULENTRAZONE ON REPRODUCTION OF THE MALLARD 22. COVARIATE ANALYSIS OF FEMALE BODY WEIGHT *****

09:30 Wednesday, August 16, 1995

General Linear Models Procedure

Tukey's Studentized Range (HSD) Test for variable: POSTF

NOTE: This test controls the type I experimentwise error rate.

Alpha= 0.05 Confidence= 0.95 df= 57 MSE= 22635.8
Critical Value of Studentized Range= 3.743

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

LEVEL Comparison	Simultaneous Lower Confidence Limit		Difference Between Means		Simultaneous Upper Confidence Limit	
	CONTROL	TRT1	CONTROL	TRT1	CONTROL	TRT1
TRT2	-86.15	56.95	56.95	200.05	200.05	241.59
TRT2	-81.27	59.50	59.50	200.27	200.27	241.59
TRT2	-44.61	98.49	98.49	241.59	241.59	286.15
TRT1	-200.05	56.95	-56.95	86.15	145.65	186.92
TRT1	-140.55	2.55	-2.55	41.53	81.27	140.55
TRT1	-103.86	41.53	41.53	186.92	186.92	241.59
CONTROL	-200.27	56.95	-59.50	81.27	140.55	182.09
CONTROL	-145.65	2.55	-2.55	41.53	81.27	140.55
CONTROL	-104.11	41.53	38.99	182.09	182.09	241.59
TRT3	-241.59	56.95	-98.49	44.61	103.86	186.92
TRT3	-186.92	2.55	-41.53	81.27	140.55	182.09
TRT3	-182.09	41.53	-38.99	182.09	182.09	241.59

General Linear Models Procedure

Dunnnett's One-tailed T tests for variable: POSTF

NOTE: This tests controls the type I experimentwise error for comparisons of all treatments against a control.

Alpha= 0.05 Confidence= 0.95 df= 57 MSE= 22635.8
 Critical Value of Dunnnett's T= 2.109

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

LEVEL Comparison	Simultaneous		Difference		Simultaneous
	Lower Confidence Limit	Upper Confidence Limit	Between Means	Between Means	Upper Confidence Limit
TRT2 - CONTROL	-52.67	59.50	59.50	171.67	171.67
TRT1 - CONTROL	-111.48	2.55	2.55	116.57	116.57
TRT3 - CONTROL	-133.01	-38.99	-38.99	75.04	75.04