Statistical Methods in Biology: Design and Analysis of Experiments and Regression (Welham, Gezan, Clark & Mead)

List of Errata (31/08/15)

<u>**Chapter 5**</u>

Page 101, line 18. The formula for the Q-Q plot should use N (the total number of observations) rather than n (number of replicates) and should read "$100(i-0.375)/(N+0.25)$th percentile". (Reported 25/8/14)

Page 102, line 3. The formula for the half-Normal plot should use N (the total number of observations) rather than n (number of replicates) and should read "$[50+50(i-0.375)/(N+0.25)]$th percentile". (Reported 25/8/14 – page ref corrected 3/5/15)

<u>**Chapter 7**</u>

Page 137, Table 7.4. In ANOVA table, P for Block should be 0.281 (not 0.283). (Reported 25/8/14)

<u>**Chapter 8**</u>

Page 190, Figure 8.7. The vertical bar labelled 'SED' is in fact the LSD. (Reported 25/8/14)

Page 187, lines 4-6. The value and SE presented are from the normalised contrast. Using the contrast as given, the section should read as:

"Contrast ψ_1 is estimated as −197.9 (SE 32.99), indicating that the yield of the control treatment is 198 units less than the average yield of the fungicide treatments with 95% CI calculated as −197.9 ± (32.99×2.179) = (−269.8, −126.0)." (Reported 25/8/14)

<u>**Chapter 11**</u>

Page 258, Table 11.1. In both ANOVA tables, the residual df should be 37 (not 36). (Reported 25/8/14)

Page 279, Figure 11.5 legend. Min SED=1.41 (not 1.14). (Reported 25/8/14)

Page 283, Figure 11.6 legend. Min SED=1.430 (not 1.449). (Reported 25/8/14)

<u>**Chapter 12**</u>

Page 323, Exercise 12.6. Although we return to the same data set in Exercises 13.1 and 17.2, those exercises analyse different variates, so are not directly related. (Reported 31/8/14)

<u>**Chapter 14**</u>

Page 351, line -10. The mean of hardness (x_2) is −13.297 (not 13.297). (Reported 25/8/14)

Page 351, line -6. There are two missing minus signs in the last brackets, so although the result is correct, it would be more helpful it had been written as

$$28.66 - (16.93 \times 3.30) - (-0.049 \times -13.30) = -27.795$$

(Reported 25/8/14)

Page 363, Table 14.9. Some values in the last column of values (VIF) are incorrect (due to rounding error in calculations) and should appear as

Variate	R^2	VIF
Length	0.998	538.01
Hardness	0.029	1.03
Moisture	0.017	1.02
Diameter	0.998	537.89

(Reported 25/8/14)

Page 363, Table 14.10. The last column (P) is incorrect and should appear as:

Term	Parameter	Estimate	SE	t	P
[1]	α	-12.970	10.1545	-1.277	0.203
Length	β_1	-40.155	14.5518	-2.759	0.006
Hardness	β_2	-0.052	0.0162	-3.238	0.001
Moisture	β_3	-1.805	0.9391	-1.922	0.056
Diameter	β_4	90.943	23.1755	3.924	<0.001

(Reported 25/8/14)

Page 379, Exercise 14.4. Some units with missing observations had been erroneously included in the data set SLASH.DAT. This has now been updated on the website, but leaves only 160 trees from 49 plots (previously 174 trees from 50 plots). (Reported 6/9/14, exercise number corrected 3/5/15)

Chapter 15

Page 412, line 15. The denominator degrees of freedom for the Trt F-statistic should be 19 (not 16). (Reported 25/8/14)

Chapter 16

Page 437, line 14. Reference should be to Example 9.5 (not Example 9.2). (Reported 25/8/14)

Chapter 17

Page 476, Exercise 17.6 should be marked with an asterisk. (Reported 25/8/14)

Chapter 18

Page 515, Exercise 18.11 the description has got mangled and should read as follows: "The viability of carrot seed depends greatly on the conditions under which it is stored. Replicate batches of 100 seeds were stored in each of four different conditions (labelled A–D). Four replicate batches were sampled from each condition at pre-specified times: conditions A and B were sampled approximately every 60 days …" (Corrected 31/8/15)