

ERRATA FOR STATISTICAL GENETICS NOTES

Chapter 2
 ALLELIC, GENOTYPIC, AND GAMETIC FREQUENCIES

Location	Change
p. 14, eq. number (2.21) itself	move up 1 1/2 inch
p. 34, l. 2 below eq. (2.56)	change “both segments themselves” to “at least one segment”
p. 34, last line on page	label as eq. “(2.56A)”
p. 45, l. 3	insert “and plus signs for those terms not given” before period
p. 45, l. 4 below eq. (2.67A)	insert “i.e.,” after “concordance”
p. 45, l. 7 below eq. (2.67A)	change disconcordance” to discordance”
p. 57, eq. (2.72I)	change $M * cN$ to $M * \subset N$ under Σ
p. 79, l. 4 below eq. (2.108)	change “(see i” to “(see i =”
p. 79, l. 5 below eq. (2.108)	change “(see j” to “(see j =”

Chapter 3
 LARGE, RANDOM-MATING POPULATIONS

Location	Change
p.4, l. 7 below eq. (3.1)	insert “(2.12)” before “for n independent”
p. 7, eq. (1) in Box 3.0	change $A_k A_l C_o D_p$ to $A_k A_l C_o C_p$
p. 7, eq (2) in Box 3.0	change $A_i B_l C_n D_p E_r$ to $A_j B_l C_n D_p E_r$
p. 15, l. 6 from bottom	change ore to or
p. 23, l. 3	change $p(G_i^m \cdot G_j^f)$ to $p(G_i^m \cap G_j^f)$
p. 27, eq. (3.36)	put a bar over A above brace
p. 31, eq. (3.44)	put radical sign over $p_{AA} p_{\overline{AA}}$ and also over $p^2 (1-p)^2$
p. 37, l. 1 below eq. (3.56)	change p_{he} to p_H

p. 41, l. 8	change “gametic frequencies” to “four gametic frequencies on the right side”
p. 45, eq. (3.74)	1) place a brace over first two terms under nonrecombinant gametes; 2) place a brace over last two terms under recombinant gametes
p. 48, last two lines of eq. (3.83A)	change to: $= p_{A_i} p_{B_j} + \rho_0 (p_{A_i B_{j,t-1}} - p_{A_i} p_{B_j})$ $= p_{A_i} p_{B_j} + \rho_0 (\Delta_{A_i B_{j,t-1}})$
p. 56, l. 3 from bottom	1) insert “below” after “given”; 2) delete “s” from rows 3) insert “one” after “row”
p. 56, l. 2 from bottom	insert “followed by those within successive rows”
p. 62, l. 7	insert “parental” after “each”
p. 102, l. 11	insert “or X-linked genes” after “genes”

Chapter 4

GENETIC RELATIONSHIPS BETWEEN RELATIVES

Location	Change
p. 3, l. 18	delete the second period
p. 8, l. 1	change “Box 0A” to “Box 4.0A”
p. 15, l. 1	change “Box 0B” to “Box 4.0B”
p. 19, l. 1	change “Box 0C” to “Box 4.0C”
p. 53, l. 1	change F_I to F_J
p. 55, l. 1	insert heading before Wright: “1) Wright’s coefficient of relationship between two individuals.”
p. 56, l. 17	insert heading before “We now turn ...”: “2) Wright’s coefficient of relationship of an individual with itself.”
p. 57, l. 7	insert heading before “The coefficient of ...”: “3) Coefficient of inbreeding.”
p. 65, l. 9	change “for each three-gene ...” to “of each three-gene ...”
p. 66, l. 2 from bottom	insert " $\gamma_{\ddot{X}Y} =$ " before γ_{abc}
p. 66, l. 1 from bottom	insert " $\gamma_{\ddot{X}.Y} =$ " before γ_{ab}

p. 67, l. 1	insert " $\gamma_{\ddot{X}+Y} =$ " before γ_{ac}
p. 67, l. 2	insert " $\gamma_{\overline{XY}} =$ " before γ_0
p. 72, eq. (4.80), item 1	for completeness sake, insert another " $= \delta_{abcd}$ " immediately after $\delta_{\ddot{X}YZ}$
p. 75, eq. (4.82), l. 4	change " $\Delta_2 = 2\delta_{\ddot{X}\ddot{Y}}$ " to " $\Delta_2 = 2\delta_{\ddot{X}Y}$ "
p. 75, eq. (4.82), l. 12	change " $\Delta_9 = \delta_{\overline{XY}} = \delta_0 + \delta_{13} + \delta_{14}$ " to " $\Delta_9 = \delta_{\overline{XY}} = \delta_0$ "
p. 105, rule 28a	change Δ_{X+YZ} to $\Delta_{\ddot{X}+YZ}$
p. 110, l. 10	change " $\theta_{ST} = \gamma_{\ddot{S}T}$ " to " $\theta_{ST} + \gamma_{\ddot{S}T}$ "
p. 122, l. 6	delete commas (4 places)
p. 127, eq. (4.175Xb)	change " ${}_{11}F1^{11} + {}_{00}F1^{01^0}$ " to " ${}_{11}F_{11}^{11} + {}_{00}F_{11}^{00}$ "
p. 127, l. 1 below (4.175Xc)	change semicolon to comma
p. 128, l. 6	place a brace above 5 terms pointed to "for F_1 . only"
p. 131, l. 7	insert "or X-linked genes" after "genes"
p. 138, Table 4.11	in H^h , I cell, change 21/64 to 37/64
p. 139, l. 3	insert "or X-linked genes" after "genes"

Chapter 5

INBREEDING WITHIN A LARGE SINGLE POPULATION

Location	Change
p. 4, l. 6 from bottom	change "probabilities and" to "probabilities times"
p. 13, Fig. 5.2 caption	change " p_1 and p_2 " to " P_1 and P_2 "
p. 15, Fig 5.3, label for vertical axis	change to "Frequency of all heterozygotes (H_F) or ij th heterozygote $2p_{ij}F$ "
p. 25, l. 3	change " $(1 - 2)0$ " to " $(1 - s)0$ "

Chapter 6

INBREEDING IN POPULATIONS OF FINITE SIZE

Location	Change
Table of Contents, 6.4.1.1	change fertiliation to fertilization

p. 3, l. 5	insert space after Hartl
p. 15, l. 3 below eq. (6.17)	1) insert “Repeated use of“ before Equation; 2) do not capitalize Equation
p. 32, l. 1	place a bar over θ_t
p. 35, l. 16	left of equal sign is the binomial coefficient $\binom{N}{2}$
p. 113, l. 1 below eq. (6.219)	capitalize when
p. 145, eq. (6.275)	change N_i to N_A

Chapter 7

RECURRENCE RELATIONS AND TRANSITION MATRIX THEORY OF INBREEDING

Location	Change
p. 28, eq. (7.62)	1) place brace under matrices enclosed by first inner set of parentheses pointing to Step 1; 2) place another brace under Step 1 spanning that enclosed by the second outer set of parentheses pointing to Step 2; 3) place another brace under Step 2 spanning that enclosed by the third or most outer set of parentheses pointing to Step 3;
p. 30, l. 8 below eq. (7.68)	1) place wavy line under second P and second I; 2) change c_{ij} to c_{1j}
p. 31, l. 2	change g_j to λ_j
p. 31, l. 11	change g_j to λ_j
p. 31, l. 13	change c_{ij} to c_{ij}
p. 31, l. 14	change c_{ij} to c_{ij}
p. 38, l. 3 from bottom	change first 1971 to 1960
p. 70, l. 5	change $\mathbf{c}_1 \mathbf{d}'$ to $\mathbf{c}_1 \mathbf{d}'_1$
p. 76, last line	change “ $p_{aa} = 0.1$ ” to “ $p_{aa} = 0.16$ ”
p. 81, l. 5	change .1080375 to .10803750
p. 86, l. 2	change η to λ (3 places)
p. 86, last line	1) \mathbf{c}_j to \mathbf{c}_j ; 2) change g_j to λ_j

- p. 87, eq. (7.223) insert a right bracket for 7×7 matrix
- p. 131, l. 9 change aaBB to aaBb

Chapter 8

POLYGENIC OR QUANTITATIVE INHERITANCE: NONINBRED POPULATIONS

- | Location | Change |
|---------------------|--|
| p. 6, eq. (8.6b) | change " α^m :" to " α_i^m :" |
| p. 7, eq. (8.6c) | change " α^f :" to " α_j^f :" |
| p. 9, l. 1 | change α^m to α_i^m |
| p. 9, eq. (8.10) | " α^m :" to " α_i^m :" |
| p. 33, eq. (8.63) | delete " $\hat{\beta} =$ " |
| p. 67, l. 9 | change transfer to convert |
| p. 76, l. 1 | in last term, raise 2 to be the power of $\frac{1}{2}$ |
| p. 105, l. 10 | assign equation number (8.165B) |
| p. 123, eq. (8.172) | insert $\sum_i \sum_j$ after equal sign |

Chapter 9

COVARIANCE BETWEEN NONINBRED RELATIVES

- | Location | Change |
|--------------------------------|---|
| p. 52, Table 9.5 caption, l. 3 | 1) insert "common" after "all";
2) insert "of the relatives" after ancestors |
| p. 57, l. 2 of eq. (9.115) | 1) replace R with Σ (two places);
2) raise 2 to power;
3) replace } with \equiv (two places) |
| p. 67, l. 3 | change $(\theta_{XY})^2$ to $(2\theta_{XY})^2$ |
| p. 75, eq. (9.158) | change λ_{ij}^2 to λ_{ij}^2 |

Chapter 10
ESTIMATION OF GENETIC VARIANCES

Location	Change
p. 7, Fig. 10.1	1) cross-hatch all nine diagonal cells; 2) in 1×1 cell, draw short arrow pointing to the right to boundary between cell 1×1 and cell 1×2 3) in 1×1 cell, draw a second short arrow pointing downward to boundary between cell 1×1 and cell 2×1

Chapter 11
INBRED POPULATIONS AND COVARIANCES BETWEEN INBRED RELATIVES

Location	Change
p. 3, l. 1 of eq. (11.3)	change μ to μ_0
p. 9, l. 2 below eq. (11.18)	1) place period after Wright; 2) replace “namely,” with “Starting with (11.14)”
p. 13, References	add “Stuber, C. W., 1970, Estimation of genetic variances using inbred relatives. Crop Sci. 10:129-135.”

Chapter 12
SELECTION

Location	Change
p. 8, l. 2	change 10.4 to 12.4
p. 21, l. 5 below eq. (12.53)	change $1/8$ to $1/16$
p. 23, l. 14	change 10.5 to 12.5
p.23, l. 19	change 10.6 to 12.6
p. 28, l. 7	change \mathbf{b}^* to $\hat{\mathbf{b}}^*$

Chapter 13
FIXED GENETIC MODELS: EBERHART-GARDNER MODEL

Location	Change
p. 3, l. 4 or l. 4 from bottom, last k in line (last k in line is a sub-sub k)	change k to k'
p. 21, l. 4	insert “and putting the prime for the i' population on p itself” after (13.23)