

Running Cat’s models

Specific leaf area

Table 1: Summary of the intercept only model for SLA in 2019 (n = 599) with species (n = 18) and population (n = 5).

| | mean | 25% | 75% | n_eff | Rhat |
|-------------|-------|--------|-------|---------|------|
| alpha | 22.22 | -3.85 | 48.51 | 3272.72 | 1.00 |
| mu_a_sp | 0.52 | -22.76 | 23.83 | 3982.78 | 1.00 |
| sigma_a_sp | 29.60 | 11.85 | 41.73 | 4131.24 | 1.00 |
| sigma_a_pop | 0.88 | 0.24 | 1.05 | 2095.84 | 1.00 |
| sigma_y | 9.03 | 8.84 | 9.20 | 6772.40 | 1.00 |

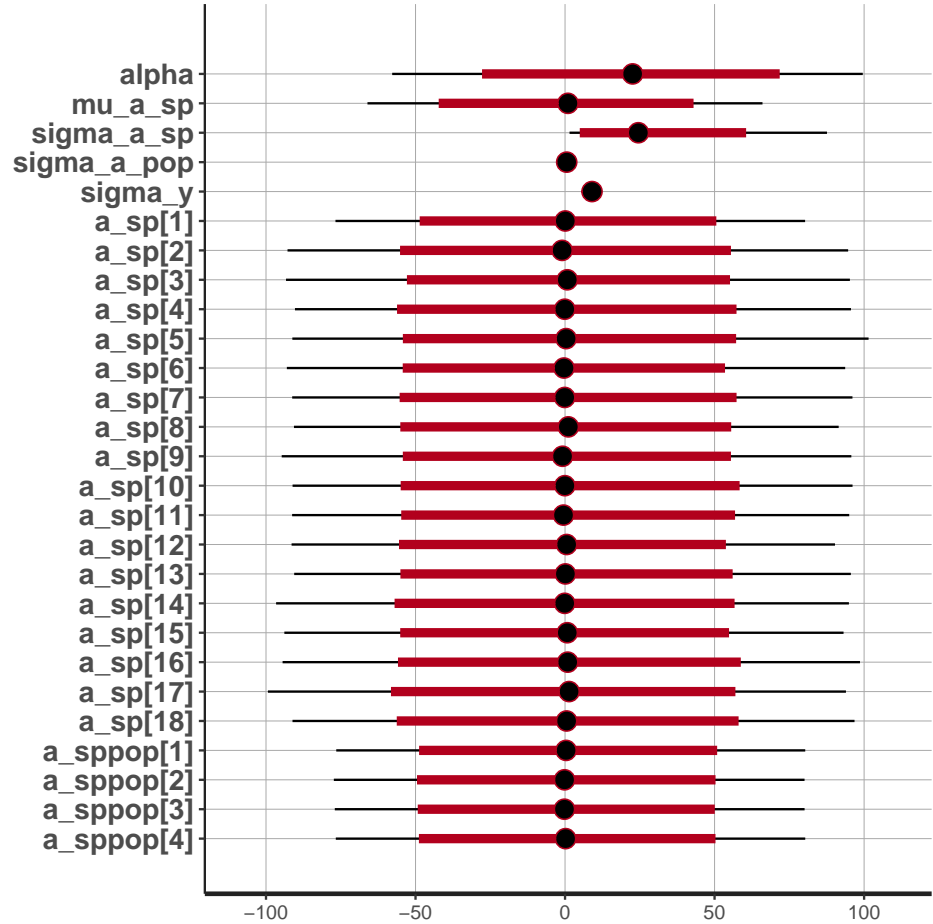


Table 2: Summary of the intercept only model for SLA in 2022 ($n = 446$) with species ($n = 13$) and population ($n = 5$).

| | mean | 25% | 75% | n_eff | Rhat |
|-------------|-------|--------|-------|---------|------|
| alpha | 21.23 | -3.33 | 45.37 | 2283.14 | 1.00 |
| mu_a_sp | -0.35 | -24.51 | 23.35 | 2224.31 | 1.00 |
| sigma_a_sp | 5.53 | 0.90 | 6.03 | 1582.09 | 1.00 |
| sigma_a_pop | 1.12 | 0.28 | 1.26 | 1415.77 | 1.00 |
| sigma_y | 6.96 | 6.80 | 7.11 | 4515.33 | 1.00 |

4 Leaf dry matter content

Table 3: Summary of the intercept only model for LDMC in 2019 ($n = 599$) with species ($n = 18$) and population ($n = 5$).

| | mean | 25% | 75% | n_eff | Rhat |
|-------------|-------|--------|-------|---------|------|
| alpha | 21.23 | -3.33 | 45.37 | 2283.14 | 1.00 |
| mu_a_sp | -0.35 | -24.51 | 23.35 | 2224.31 | 1.00 |
| sigma_a_sp | 5.53 | 0.90 | 6.03 | 1582.09 | 1.00 |
| sigma_a_pop | 1.12 | 0.28 | 1.26 | 1415.77 | 1.00 |
| sigma_y | 6.96 | 6.80 | 7.11 | 4515.33 | 1.00 |

Table 4: Summary of the intercept only model for LDMC in 2022 ($n = 446$) with species ($n = 13$) and population ($n = 5$).

| | mean | 25% | 75% | n_eff | Rhat |
|-------------|-------|--------|-------|---------|------|
| alpha | 21.23 | -3.33 | 45.37 | 2283.14 | 1.00 |
| mu_a_sp | -0.35 | -24.51 | 23.35 | 2224.31 | 1.00 |
| sigma_a_sp | 5.53 | 0.90 | 6.03 | 1582.09 | 1.00 |
| sigma_a_pop | 1.12 | 0.28 | 1.26 | 1415.77 | 1.00 |
| sigma_y | 6.96 | 6.80 | 7.11 | 4515.33 | 1.00 |

5 Height

Table 5: Summary of the intercept only model for plant height in 2019 ($n = 302$) with species ($n = 18$) and population ($n = 5$).

| | mean | 25% | 75% | n_eff | Rhat |
|-------------|-------|--------|-------|---------|------|
| alpha | 1.26 | -20.15 | 22.84 | 2805.38 | 1.00 |
| mu_a_sp | -0.34 | -21.96 | 21.13 | 2811.38 | 1.00 |
| sigma_a_sp | 0.64 | 0.12 | 0.55 | 1005.87 | 1.00 |
| sigma_a_pop | 0.65 | 0.12 | 0.55 | 1054.36 | 1.00 |
| sigma_y | 0.55 | 0.54 | 0.57 | 6267.25 | 1.00 |

Table 6: Summary of the intercept only model for plant height in 2021 ($n = 257$) with species ($n = 16$) and population ($n = 5$).

| | mean | 25% | 75% | n_eff | Rhat |
|-------------|-------|--------|-------|---------|------|
| alpha | 2.74 | -18.60 | 24.61 | 3564.99 | 1.00 |
| mu_a_sp | -0.01 | -21.64 | 21.83 | 3547.77 | 1.00 |
| sigma_a_sp | 4.22 | 0.79 | 4.37 | 1336.33 | 1.00 |
| sigma_a_pop | 0.58 | 0.13 | 0.60 | 1114.62 | 1.00 |
| sigma_y | 1.41 | 1.37 | 1.45 | 7806.45 | 1.00 |

Table 7: Summary of the intercept only model for plant height in 2022 ($n = 240$) with species ($n = 14$) and population ($n = 5$).

| | mean | 25% | 75% | n_eff | Rhat |
|-------------|-------|--------|-------|---------|------|
| alpha | 3.05 | -19.58 | 25.59 | 2009.90 | 1.00 |
| mu_a_sp | -0.15 | -22.67 | 22.44 | 2019.33 | 1.00 |
| sigma_a_sp | 2.31 | 0.45 | 2.80 | 957.30 | 1.00 |
| sigma_a_pop | 1.13 | 0.24 | 1.28 | 995.85 | 1.01 |
| sigma_y | 1.72 | 1.66 | 1.77 | 4029.93 | 1.00 |

6 Stem specific density

Table 8: Summary of the intercept only model for plant SSD in 2022 ($n = 240$) with species ($n = 14$) and population ($n = 5$).

| | mean | 25% | 75% | n_eff | Rhat |
|-------------|-------|--------|-------|--------|------|
| alpha | 2.06 | -26.84 | 32.81 | 276.07 | 1.01 |
| mu_a_sp | -3.51 | -32.03 | 24.16 | 292.76 | 1.01 |
| sigma_a_sp | 40.00 | 15.98 | 56.32 | 609.38 | 1.01 |
| sigma_a_pop | 0.01 | 0.00 | 0.02 | 638.44 | 1.00 |
| sigma_y | 0.09 | 0.08 | 0.09 | 574.88 | 1.00 |