# 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 | 22.83 | 0.50 | 44.81 | 2355.22 | 1.00 |
| mu_a_sp | -0.13 | -22.02 | 22.16 | 2384.01 | 1.00 |
| sigma_a_sp | 2.34 | 0.35 | 1.98 | 677.71 | 1.00 |
| sigma_a_pop | 2.61 | 0.35 | 1.91 | 737.45 | 1.00 |
| sigma_y | 9.03 | 8.85 | 9.20 | 5107.48 | 1.00 |

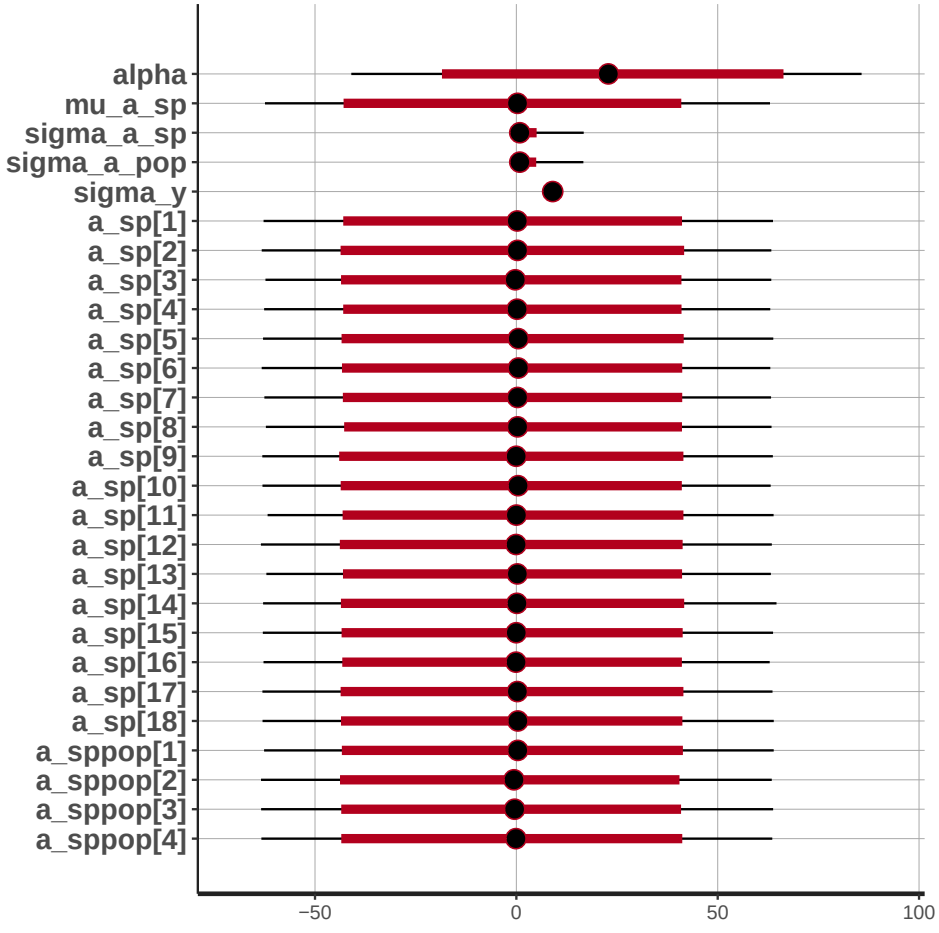
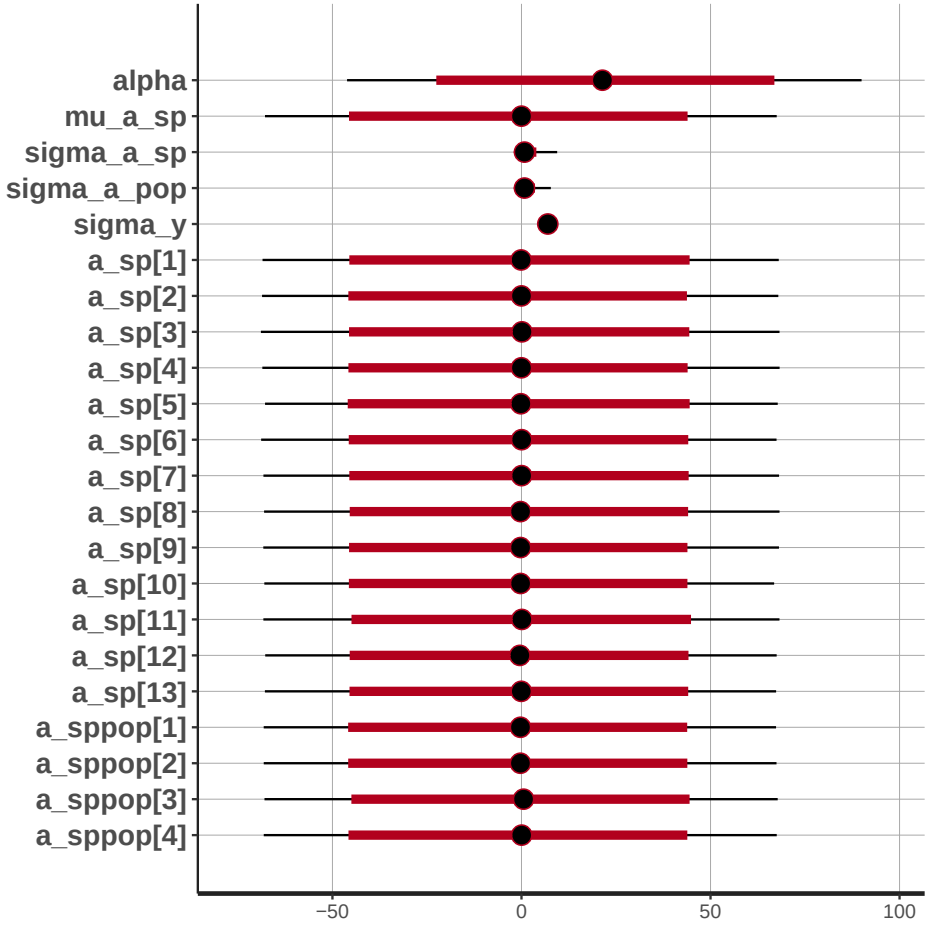


Table 2: Summary of the intercept only model for SLA in 2022 (n = 446) with species (n = 13) and population (n = 5).

| | mean | 25% | 75% | n_eff | Rhat |
|---|---|---|---|---|---|
| alpha | 21.47 | -2.22 | 44.82 | 2443.48 | 1.00 |
| mu_a_sp | -0.12 | -23.89 | 23.51 | 2435.27 | 1.00 |
| sigma_a_sp | 1.76 | 0.32 | 1.74 | 1374.24 | 1.00 |
| sigma_a_pop | 1.55 | 0.36 | 1.73 | 1221.42 | 1.00 |
| sigma_y | 6.96 | 6.80 | 7.12 | 5195.34 | 1.00 |

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## 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 | 316.79 | 294.95 | 338.62 | 7659.10 | 1.00 |
| mu_a_sp | 0.47 | -21.34 | 21.63 | 7998.17 | 1.00 |
| sigma_a_sp | 7.81 | 2.05 | 9.64 | 3423.79 | 1.00 |
| sigma_a_pop | 9.28 | 2.09 | 10.00 | 2771.55 | 1.00 |
| sigma_y | 50.41 | 49.46 | 51.30 | 14596.00 | 1.00 |

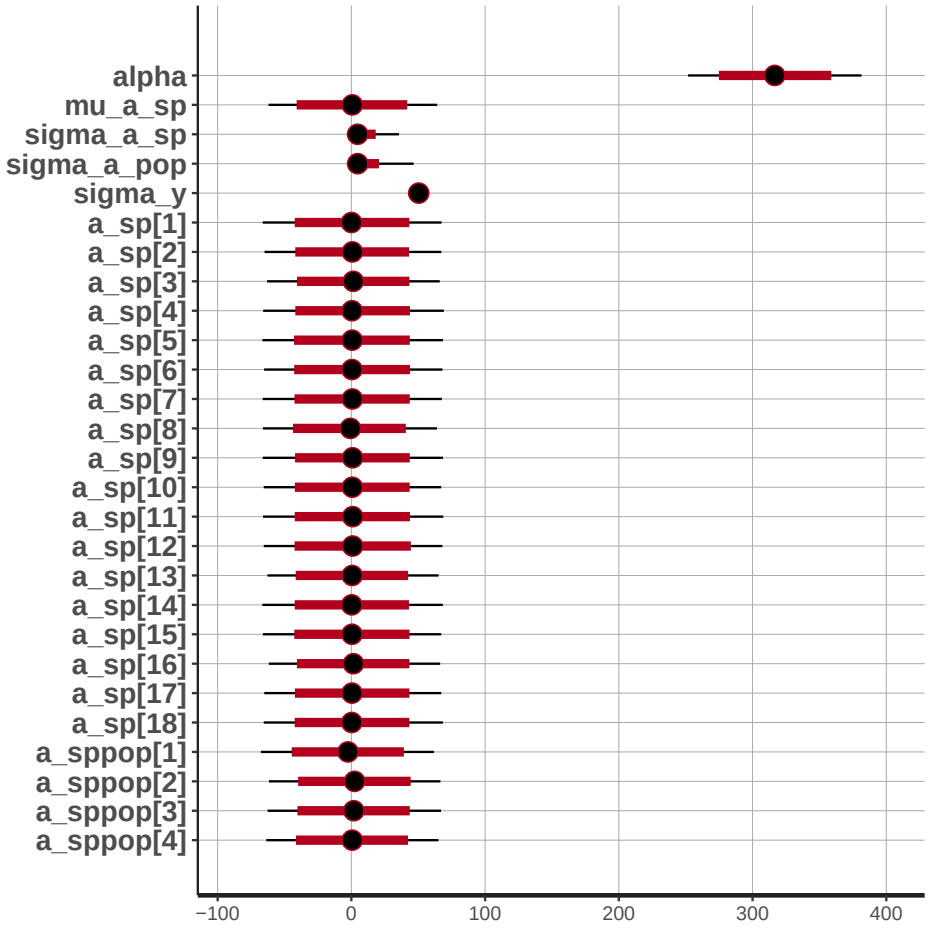
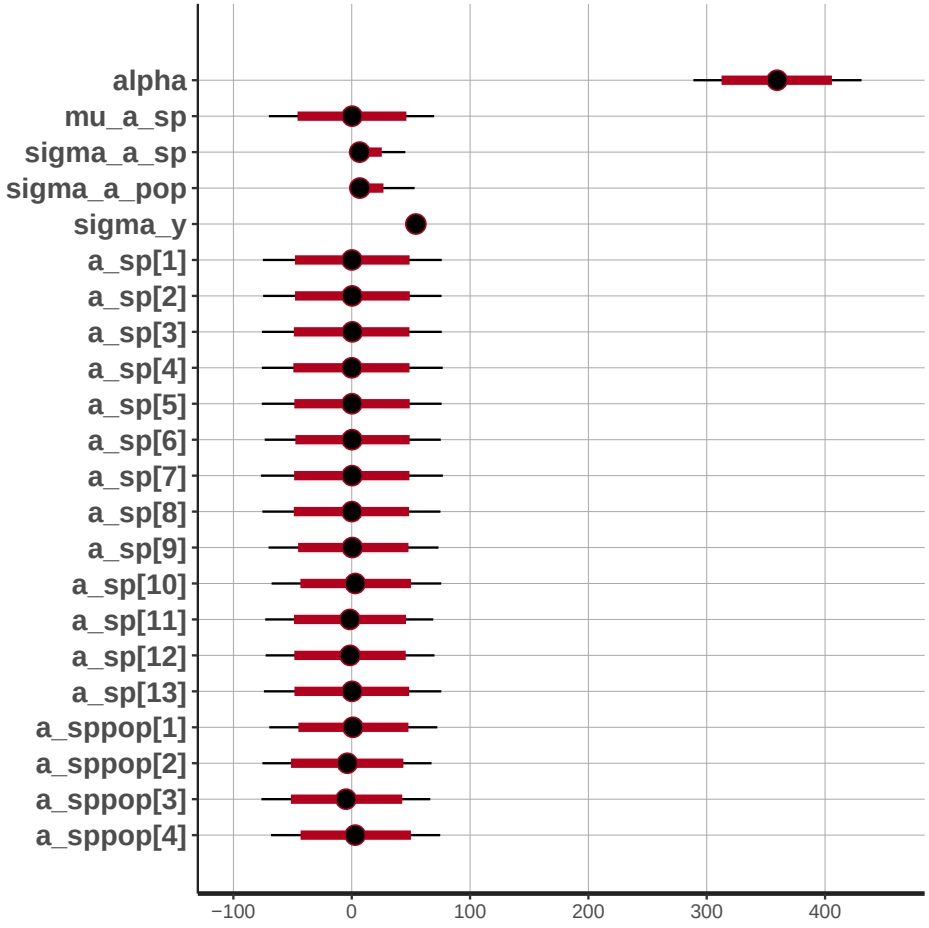


Table 4: Summary of the intercept only model for LDMC in 2022 (n = 446) with species (n = 13) and population (n = 5).

| | mean | 25% | 75% | n_eff | Rhat |
|---|---|---|---|---|---|
| alpha | 359.39 | 334.71 | 384.42 | 5841.73 | 1.00 |
| mu_a_sp | 0.18 | -23.89 | 24.66 | 6492.35 | 1.00 |
| sigma_a_sp | 10.71 | 2.96 | 13.51 | 2739.33 | 1.00 |
| sigma_a_pop | 11.62 | 3.01 | 14.21 | 2800.51 | 1.00 |
| sigma_y | 54.22 | 53.08 | 55.33 | 11739.88 | 1.00 |



## 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 | 0.50 | -21.64 | 21.86 | 3972.26 | 1.00 |
| mu_a_sp | 0.44 | -20.93 | 22.68 | 3984.25 | 1.00 |
| sigma_a_sp | 0.87 | 0.12 | 0.56 | 454.88 | 1.02 |
| sigma_a_pop | 0.91 | 0.12 | 0.59 | 467.36 | 1.02 |
| sigma_y | 0.55 | 0.54 | 0.57 | 7818.03 | 1.00 |

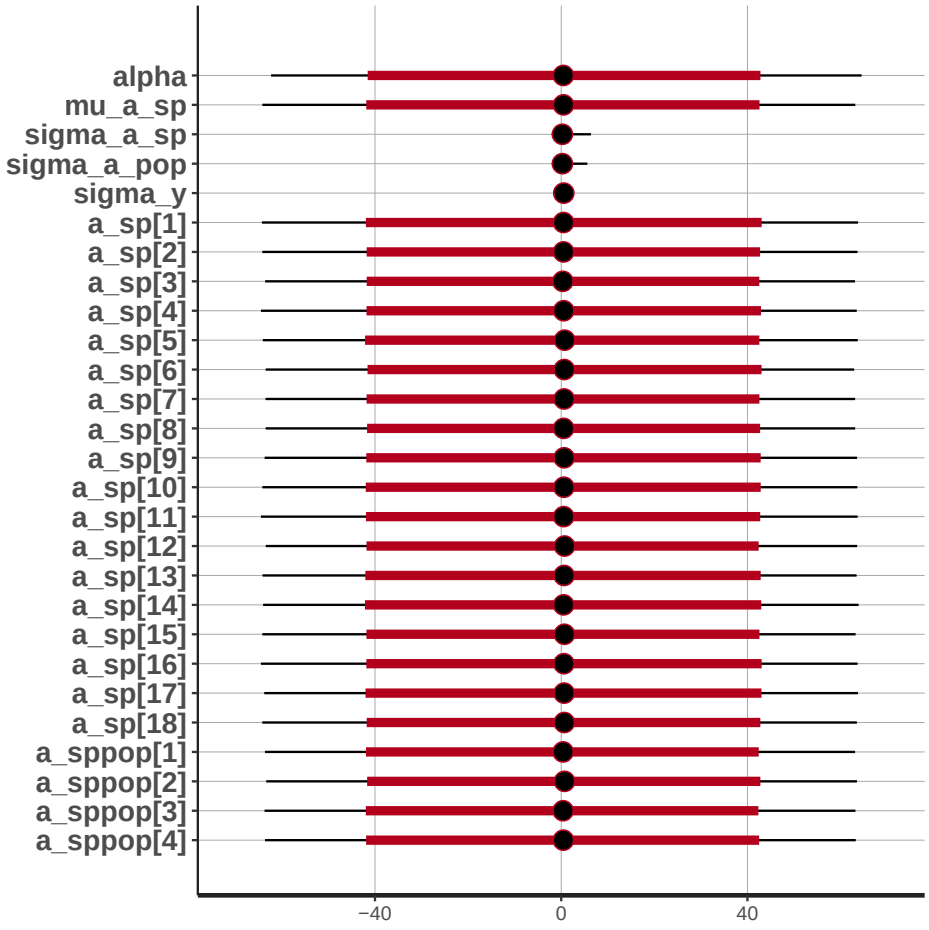


Table 6: Summary of the intercept only model for plant height in 2021 (n = 257) with species (n = 16) and population (n = 5).

| | mean | 25% | 75% | n_eff | Rhat |
|---|---|---|---|---|---|
| alpha | 1.72 | -21.58 | 24.13 | 2548.62 | 1.00 |
| mu_a_sp | 1.20 | -21.10 | 24.28 | 2576.36 | 1.00 |
| sigma_a_sp | 5.03 | 1.08 | 5.70 | 1143.48 | 1.00 |
| sigma_a_pop | 0.66 | 0.14 | 0.66 | 1039.49 | 1.00 |
| sigma_y | 1.41 | 1.37 | 1.45 | 4852.14 | 1.00 |

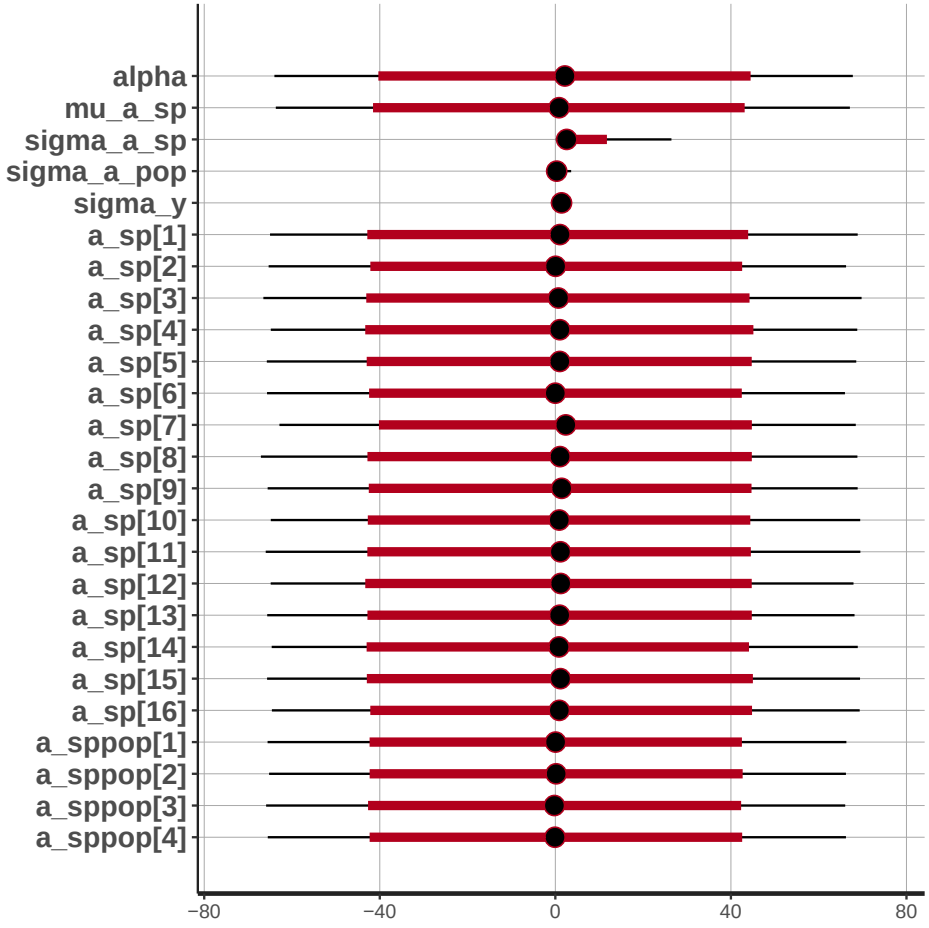
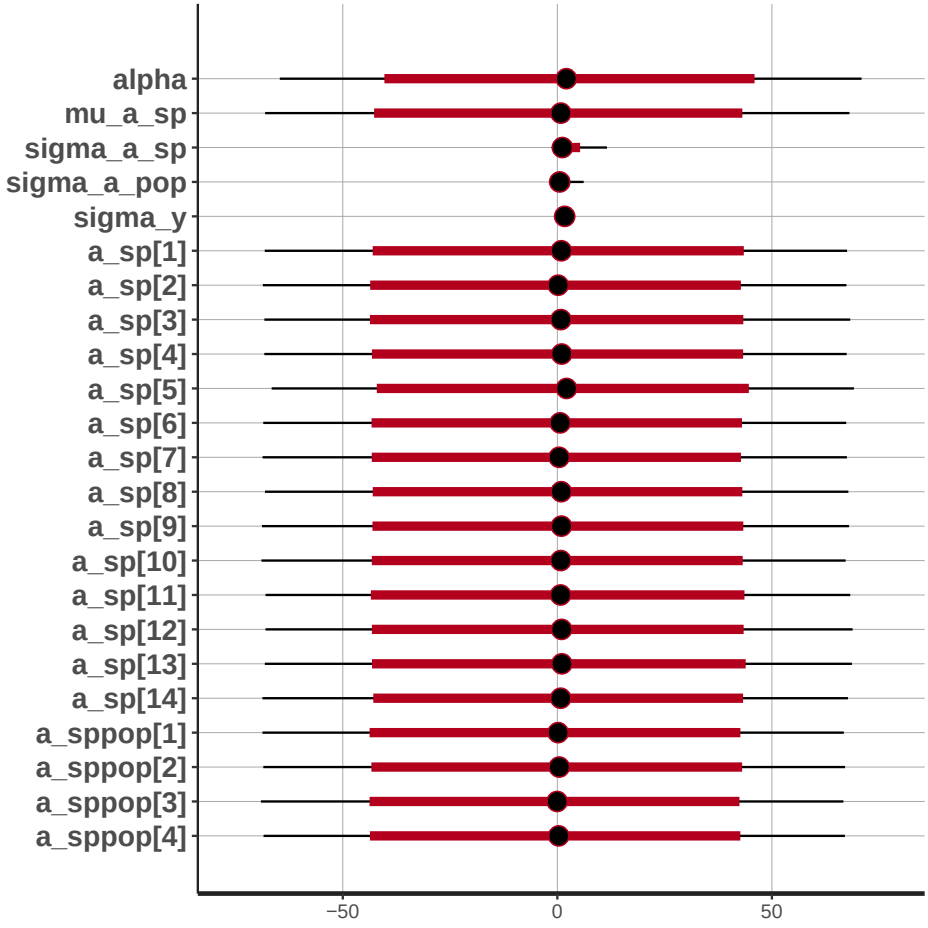


Table 7: Summary of the intercept only model for plant height in 2022 (n = 240) with species (n = 14) and population (n = 5).

| | mean | 25% | 75% | n_eff | Rhat |
|---|---|---|---|---|---|
| alpha | 2.68 | -19.91 | 26.04 | 2576.53 | 1.00 |
| mu_a_sp | 0.10 | -23.40 | 22.60 | 2563.76 | 1.00 |
| sigma_a_sp | 2.29 | 0.39 | 2.69 | 760.28 | 1.00 |
| sigma_a_pop | 1.19 | 0.21 | 1.37 | 876.23 | 1.00 |
| sigma_y | 1.72 | 1.66 | 1.77 | 6406.37 | 1.00 |

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## 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 |