

Supplementary material

Table S1. List of acoustic traits analyzed and the Raven functions used for their measurements.

| Acoustic trait | Raven function for measurement |
|---|--|
| Note duration (s) | Delta time |
| Minimum frequency (Hz) | Frequency 5% (minimum frequency, ignoring 5% below the total energy in the selected call) |
| Peak of dominant frequency (Hz) | Peak frequency |
| Maximum frequency (Hz) | Frequency 95% (maximum frequency, ignoring 5% above the total energy in the selected call) |
| Frequency bandwidth (as maximum subtracted by minimum) (Hz) | Bandwidth 90% (band frequency that includes 90% of the energy of the sound) |

Table S2. Results of Fisher LSD analysis comparing notes duration among Atlantic Forest Rocket Frogs populations.

| Interaction | Difference | Statistic test | <i>P</i> level |
|------------------------------------|------------|----------------|--------------------|
| Igrapiúna x Ituberá | 0.00997 | 3.452 | 0.00063 |
| Igrapiúna x Passo de Camaragibe | 0.02005 | 9.463 | 0.E+0 |
| Igrapiúna x Porto Seguro | -0.00228 | 0.967 | 0.33381 |
| Igrapiúna x Teresópolis | -0.00412 | 1.478 | 0.00251 |
| Ituberá x Passo de Camaragibe | 0.01008 | 3.047 | 0.14019 |
| Ituberá x Porto Seguro | -0.01225 | 3.537 | 0.00047 |
| Ituberá x Teresópolis | -0.01409 | 3.738 | 0.00022 |
| Passo de Camaragibe x Porto Seguro | -0.02233 | 7.825 | 8.01581E-14 |
| Passo de Camaragibe x Teresópolis | -0.02417 | 7.512 | 6.24167E-13 |
| Porto Seguro x Teresópolis | -0.00184 | 0.544 | 0.58663 |

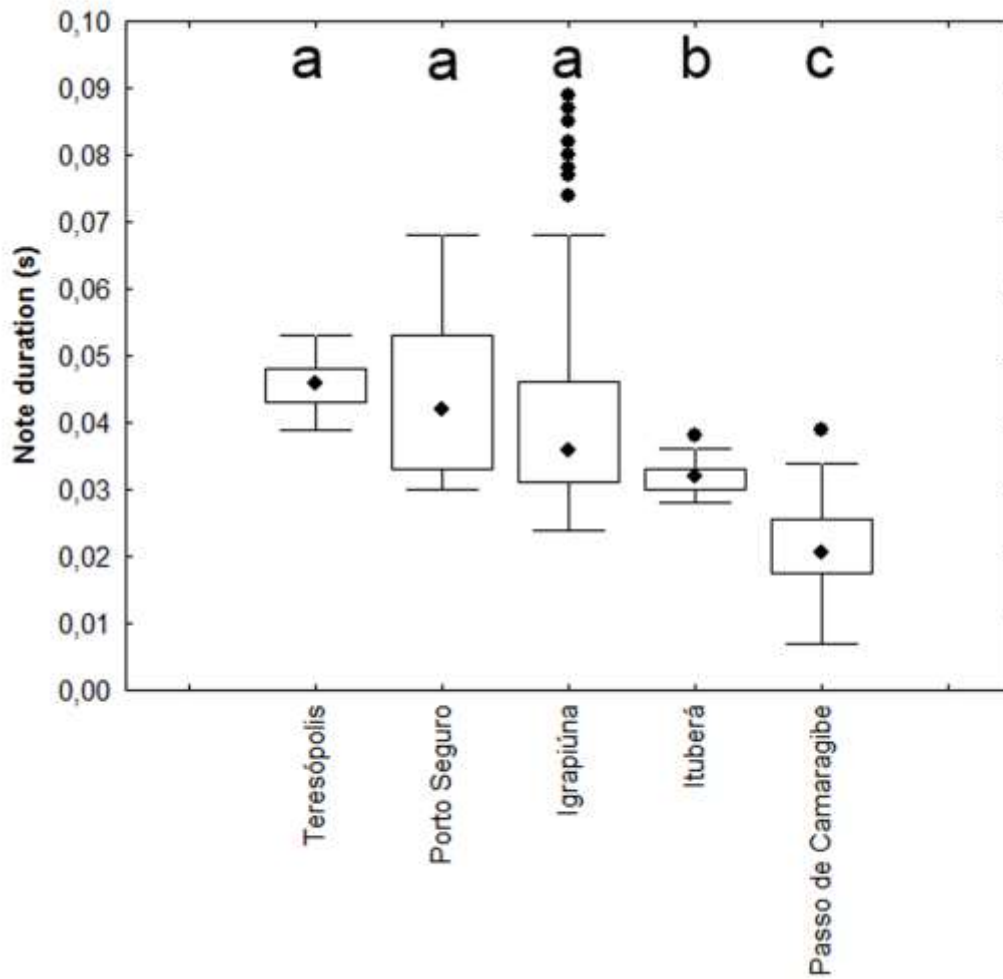


Figure S1. Note duration variation among Atlantic Forest Rocket Frogs populations. Box plot configuration = diamond: median, whiskers: non-outlier ranges, circles: outliers, box: 25% - 75% of data distribution. Letters a, b and c indicate statistical differences.