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# Hemotropic *Mycoplasma* spp. in Aquatic Mammals, Amazon Basin, Brazil

## Appendix

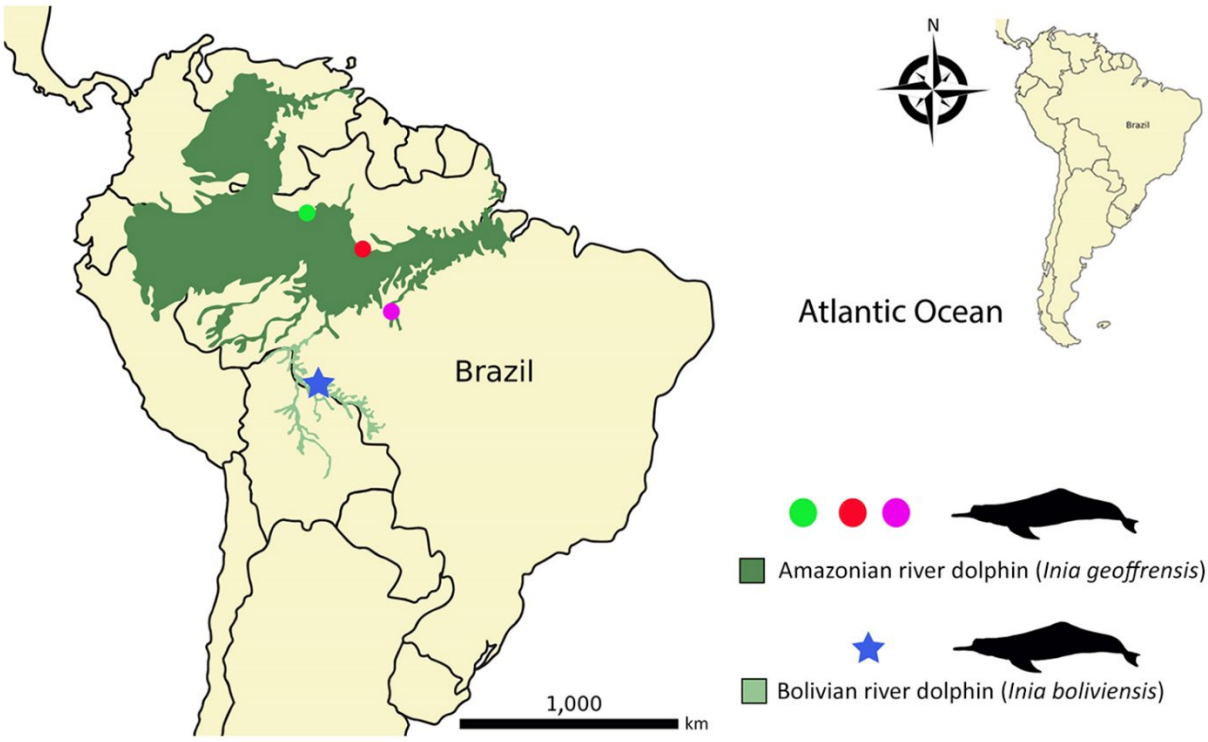
**Appendix Table 1.** Hematology of Amazon river dolphins (*Inia geoffrensis*) captured in Balbina in 2020 in a study of Hemotropic mycoplasma in Aquatic Mammals, Amazon Basin, Brazil*

| Sample no. | RBC, $\times10^{12}$/L | Hct, L/L | MVC, fL | Cells $\times10^{9}$/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Platelets | Leuk | Monocyte (%) | Neutrophil (%) | Band (%) | Lymphocyte (%) | Eosinophil (%) | Baso (%) |
| 29 | 3.44 | 0.40 | 107.24 | ND | 8.45 | 0.34 (4) | 4.14 (49) | 0 | 3.21 (38) | 0.76 (9) | 0 |
| 30 | 3.67 | 0.36 | 104.65 | ND | 10.7 | 0.74 (7) | 7.28 (68) | 0 | 2.46 (23) | 0.21 (2) | 0 |
| 31 | 3.18 | 0.38 | 103.54 | ND | 8.9 | 0.27 (3) | 4.72 (53) | 0 | 2.85 (32) | 1.07 (12) | 0 |
| 32 | 3.99 | 0.36 | 113.21 | ND | 9.85 | 0.30 (3) | 6.30 (64) | 0 | 1.08 (11) | 2.17 (22) | 0 |
| 33 | 3.11 | 0.38 | 95.24 | ND | 13.85 | 0.55 (4) | 10.25 (74) | 0 | 1.39 (10) | 1.66 (12) | 0 |
| 34 | 3.31 | 0.38 | 122.19 | 300 | 10.65 | 0.11 (1) | 6.60 (62) | 0.11 (1) | 1.92 (18) | 1.92 (18) | 0 |
| 35 | 2.88 | 0.38 | 114.80 | 352 | 7.35 | 0.15 (2) | 4.19 (57) | 0 | 1.25 (17) | 1.76 (24) | 0 |
| 36 | 4.52 | 0.38 | 135.42 | 280 | 10 | 0.30 (3) | 7.60 (76) | 0.1 (1) | 1.60 (16) | 0.40 (4) | 0 |
| 37 | 3.47 | 0.39 | 88.50 | 190 | 10.05 | 0.20 (2) | 6.43 (64) | 0 | 1.91 (19) | 1.51 (15) | 0 |
| 38 | 3.49 | 0.40 | 109.51 | 60 | 6.5 | 0.13 (2) | 4.29 (66) | 0.07 (1) | 1.17 (18) | 0.91 (14) | 0 |
| 39 | 3.16 | 0.38 | 108.88 | 256 | 9.5 | 0.38 (4) | 6.75 (71) | 0 | 1.81 (19) | 0.57 (6) | 0 |
| 40 | 3.68 | 0.38 | 129.75 | 190 | 7.75 | 0.31 (4) | 3.49 (45) | 0 | 2.33 (30) | 1.63 (21) | 0 |
| 41 | 3.02 | 0.41 | 95.11 | 110 | 10.6 | 0.32 (3) | 7.53 (71) | 0 | 1.70 (16) | 1.06 (10) | 0 |
| 42 | 2.78 | 0.35 | 139.07 | 298 | 7.1 | 0.14 (2) | 4.69 (66) | 0 | 0.57 (8) | 1.70 (24) | 0 |
| 43 | 3.22 | 0.42 | 136.69 | 292 | 8.85 | 0.35 (4) | 5.31 (60) | 0 | 1.68 (19) | 1.50 (17) | 0 |
| 44 | 3.64 | 0.38 | 111.80 | 154 | 5.8 | 0.12 (2) | 3.48 (60) | 0 | 1.22 (21) | 0.99 (17) | 0 |
| 45 | 3.64 | 0.36 | 104.40 | 194 | 7.8 | 0.39 (5) | 4.29 (55) | 0 | 1.95 (25) | 1.17 (15) | 0 |
| 46 | 3.3 | 0.38 | 104.40 | 336 | 9.5 | 0.38 (4) | 5.80 (61) | 0 | 0.86 (9) | 2.47 (26) | 0 |
| 47 | 4.47 | 0.40 | 121.21 | 234 | 12.35 | 0.12 (1) | 6.92 (56) | 0 | 2.10 (17) | 3.21 (26) | 0 |
| 48 | 3.37 | 0.41 | 91.72 | 166 | 14.5 | 0.58 (9) | 10.44 (72) | 0 | 1.31 (9) | 2.18 (15) | 0 |
| 49 | 3.13 | 0.40 | 118.69 | 346 | 6.85 | 0.41 (18) | 4.11 (60) | 0 | 1.23 (18) | 1.10 (16) | 0 |
| 50 | 3.44 | 0.35 | 111.82 | 150 | 8.95 | 0.36 (11) | 6.62 (74) | 0 | 0.98 (11) | 0.98 (74) | 0 |
| Ref† | 3.77–4.01 | 0.39–0.40 | 101–107 | 277–317 | 15.8–17.4 | 0.35–1.04<br>2.47–3.24 | 7.64–8.91<br>46.16–49.65 | 0.14–0.24<br>0.83–1.30 | 5.68–6.91<br>33.41–36.75 | 2.04 – 2.79<br>11.86–14.27 | ND |

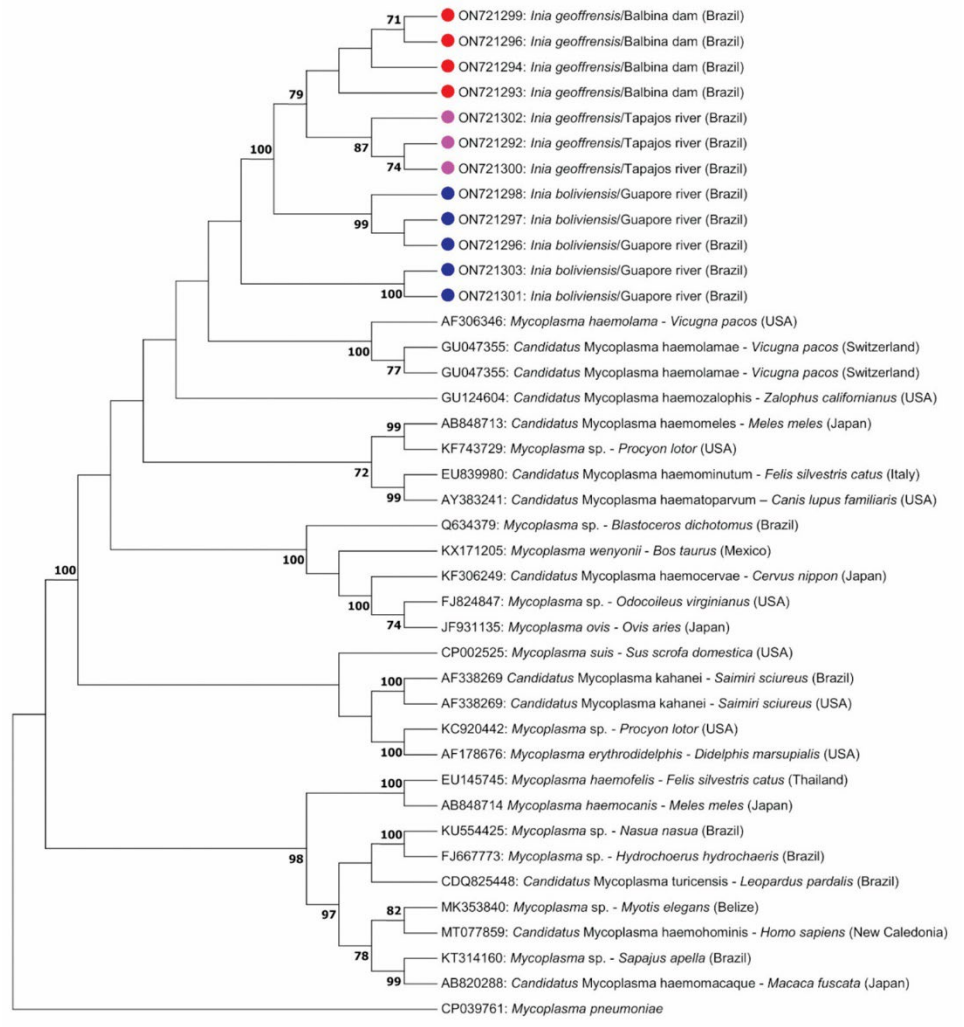
*Hematology performed according to conventional techniques for manual cell counting in mammals. Baso, basophil; HCT, hematocrit; Leuk, leukocyte count; MVC, mean corpuscular volume; RBC, red blood cell count; Ref, reference range.
†Mello DMDd, da Silva VMF. Hematologic profile of Amazon river dolphins *Inia geoffrensis* and its variation during acute capture stress. PLoS ONE. 2019;14(12):e0226955.

**Appendix Table 2.** Epidemiologic data and outcome of Amazonian manatees (*Trichechus inunguis*) under human care in Manaus (Amazonas state, Brazil) in a study of Hemotropic mycoplasma in Aquatic Mammals, Amazon Basin, Brazil*

| Sample no. | Age class | Sex | Year of rescue | Outcome |
|---|---|---|---|---|
| 1 | Calf | F | 2020 | Under rehabilitation |
| 2 | Juvenile | F | 2019 | Under rehabilitation |
| 3 | Juvenile | F | 2019 | Under rehabilitation |
| 4 | Juvenile | M | 2019 | Under rehabilitation |
| 5 | Adult | F | 1974 | Under rehabilitation |
| 6 | Juvenile | F | 2019 | Under rehabilitation |
| 7 | Juvenile | M | 2018 | Under rehabilitation |
| 8 | Juvenile | M | 2019 | Under rehabilitation |
| 9 | Adult | F | 2005 | Under rehabilitation |
| 10 | Adult | F | 2002 | Permanent resident |
| 11 | Juvenile | M | 2016 | Under rehabilitation |
| 12 | Calf | M | 2019 | Under rehabilitation |
| 13 | Juvenile | M | 2019 | Under rehabilitation |
| 14 | Calf | M | 2019 | Under rehabilitation |
| 15 | Adult | F | 1984 | Under rehabilitation |
| 16 | Juvenile | F | 2019 | Under rehabilitation |
| 17 | Adult | F | 1984 | Under rehabilitation |
| 18 | Calf | M | 2020 | Under rehabilitation |
| 19 | Calf | F | 2020 | Under rehabilitation |
| 20 | Juvenile | M | 2019 | Under rehabilitation |
| 21 | Adult | M | 2021 | Under rehabilitation |
| 22 | Adult | F | 2013 | Under rehabilitation |
| 23 | Juvenile | M | 2020 | Under rehabilitation |
| 24 | Juvenile | F | 2019 | Under rehabilitation |
| 25 | Juvenile | M | 2018 | Under rehabilitation |
| 26 | Adult | M | 2007 | Under rehabilitation |




**Appendix Figure 1.** Map of sampling sites in a study of Hemotropic mycoplasma in aquatic mammals, Amazon Basin, Brazil. Inset shows the location of the study area in South America. Dark green area indicates range of Amazon river dolphins (*Inia geoffrensis*), which we captured and sampled in 3 locations: Negro River (green dot), Balbina Dam (red dot), and Tapajós River (pink dot). Light green area indicates range of Bolivian river dolphins (*I. boliviensis*), which we captured and sampled from the Guaporé River (blue star).




**Appendix Figure 2.** Phylogenetic tree of Hemotropic mycoplasma in aquatic mammals, Amazon Basin, Brazil. We used general time-reversible plus inversion plus gamma distribution to create a maximum-likelihood phylogram of a 1,200-bp fragment of mycoplasma nucleotide sequences obtained from aquatic mammals in this study and other hemotropic mycoplasma sequences retrieved from GenBank. We selected *Mycoplasma pneumoniae* as an outgroup. Red dots indicate sequences obtained from dolphins near Balbina Dam; pink dots from dolphins in Tapajós River; and blue dot is from dolphins in Guaporé River.