

Bombali Virus in *Mops condylurus* Bats, Guinea

Appendix

Methods

Animal Sampling

We trapped bats in the villages of Yalenzou (7°42'29.99" N, 8°41'20.60" W) and Gbao (7°32'19.42" N, 8°46'18.17" W) in N'Zerekore Prefecture, Guinea in May 2018. In both villages, bats had roosted under the corrugated tin roofs of houses and granaries. We captured 26 free-tailed bats in Yalenzou and 1 bat in Gbao.

In March 2019, we conducted a second trapping session in N'Zerekore Prefecture. We captured 30 free-tailed bats in Yalenzou and 76 free-tailed bats in 3 different sites of N'Zerekore city (a school, a house, and a gazebo in the yard of another house). In addition, we trapped 11 Angolan free-tailed bats in Bololowee village in Liberia (7°41'19.21" N, 8°40'32.47" W), and 22 bats in Dar Salam village (9°58'36.88" N, 12°20'21.08" W) in Madina Oula Prefecture, Guinea.

We weighed; morphologically described; and measured the length of the head and body, forearm, tail, tibia, hind foot, and ear of trapped bats. Then we genotyped them by sequencing the cytochrome c oxidase subunit I (COI) gene using the following primers: ST-COI-F2 5'-CTCYACYAAWCAAYAAAGACATTGGAAC-3' (1) and jgHCO2198 5'-TAIACYTCIGGRTGICCRARAAYCA-3' (2).

We used cardiac puncture to collect blood into sterile tubes with 0.5 M EDTA. We then euthanized the animals and obtained sections of the brain, liver, spleen, kidney, lung, and intestines through sterile necropsy. In 2018, we collected a blood sample, a pool of lung and kidney tissues, and a pool of liver and spleen tissues from each animal. In 2019, we expanded the sample panel and separately collected the following into sterile tubes: blood; an oral swab; a

rectal swab; and lung, kidney, and intestine samples. Because previous reports did not find viral RNA in the liver or spleen (3,4), we homogenized these tissues in a single pool for each animal.

We stored blood fractions from N’Zerekore Prefecture at 10°C for 5–7 days, and at –28°C for the next 10 days before studying. We collected tissue samples in RNAlater (ThermoFisher Scientific, <https://www.thermofisher.com>) and stored them at 6–10°C for 12–15 days before studying. We stored samples from Madina Oula Prefecture at –70°C. We followed standard methods for the safe handling and sampling of small mammals potentially infected with infectious pathogens (5).

PCR Array and Sequencing Analyses

We extracted total RNA from blood, brain, and internal organs (lung, liver, spleen, kidney, and intestines) by using RIBO-prep kit (Central Research Institute of Epidemiology, Moscow, Russia, <http://www.crie.ru>). Then we prepared cDNA by using REVERTA-L (Central Research Institute of Epidemiology, Moscow, Russia). We screened samples for Bombali virus RNA by quantitative reverse transcription PCR by using Filo_UCD_qFor and Filo_UCD_qRev primers, and the Filo_UCD_probe probe sequence (3). We amplified cDNA with the Filo-MOD-FWD and FiloL.conR primers, and sequenced it with Filo-MOD-RVS probe (3).

References

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