TITLE SELECTED CATEGORY: DIAGNOSTIC, EPIDEMIOLOGY AND SURVEILLANCE

Surveillance of Hematophagous Bats and Rabies Control in the State of Mato Grosso do Sul, Brazil

Authors: Letícia da Silva Ferreira Ribeiro Mathias[1], Isaias Simoel Gimenez Miotti[1], Vinicius Oliveira Batista[1], Fábio Shiroma Araújo[2], Juliana Arena Galhardo[1], Leila Sabrina Ullmann[1]

Thanks: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior, Brasil (Finance Code 001)

INTRODUCTION

Rabies is an endemic anthropozoonosis in Mato Grosso do Sul state, mainly transmitted to livestock by ***Desmodus rotundus*** hematophagous bats**,** widely spread in the state due to the favorable topography, climate, abundance of shelters and food sources**.** This study aimed to analyze the number of rabies outbreaks in livestock from 2019 to 2023 and correlate them with the presence of hematophagous bat shelters.

METHODS

Database 2019 to 2023 → Cattle population; Rabies outbreaks; Bat shelters → Descriptive statistics

RESULTS

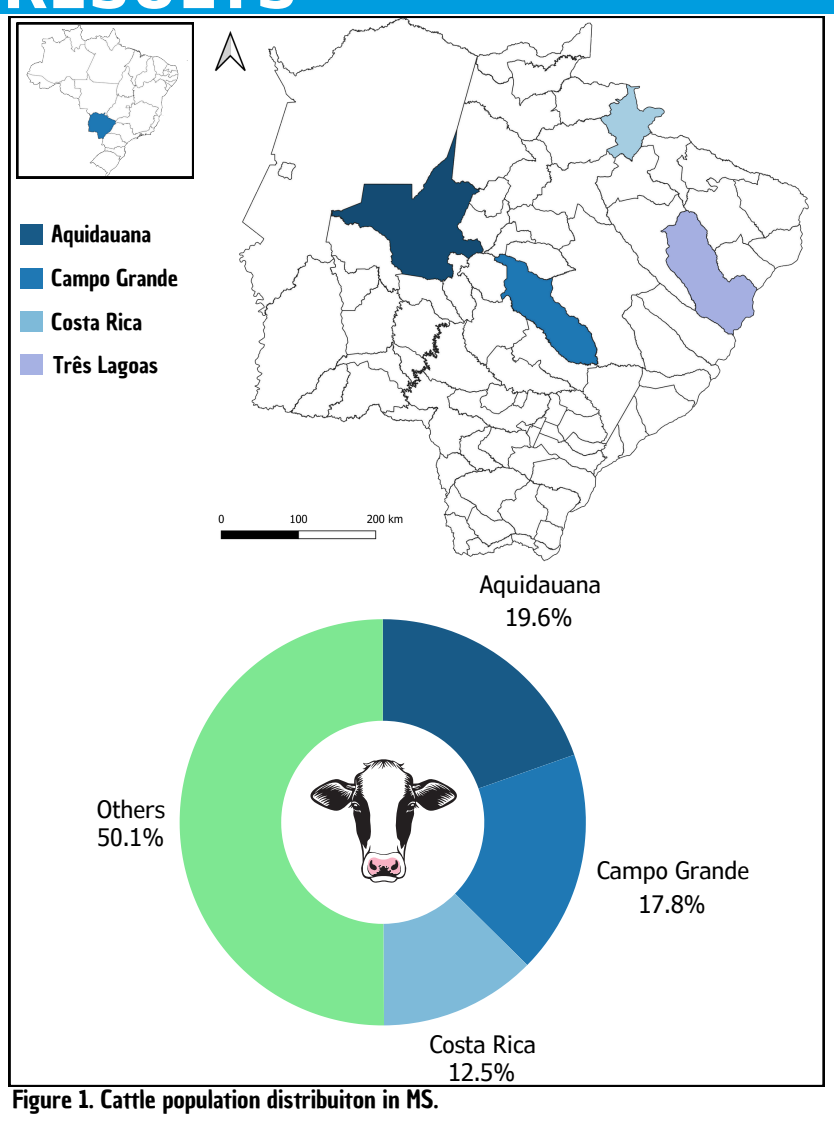

Figure 1. Cattle population distribuiton in MS.

2,388 outbreaks

307 (12.9%) Campo Grande

260 (10.9%) Costa Rica

Surveillance

4,203 bat shelter inspections

17,078 captured bats

307 (12.9%) Costa Rica

260 (10.9%) Três Lagoas

CONCLUSION

Monitoring hematophagous bat shelters constitutes an important tool for rabies surveillance in rural cycles, as the proximity of these animals to cattle favors its occurrence. Additionally, environmental degradation (e.g., fires in the Pantanal) and changes in agricultural production, such as the establishment of pulp factories and the consequent replacement of cattle farming with eucalyptus plantations, lead to the displacement of bat colonies in search of food, favoring the emergence of rabies in livestock in other parts of the state.

References:xxxxxx

leticia.mathias@ufms.br