

Revista de Saúde Pública

JOURNAL OF PUBLIC HEALTH

Notas e Informações

Notes and Information

Rabies in the insectivorous bat *Tadarida brasiliensis* in Southeastern Brazil

***Raiva no morcego insetívoro *Tadarida brasiliensis*
na região Sudeste do Brasil***

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UIE DA, Wilson. *Rabies in the insectivorous bat *Tadarida brasiliensis* in Southeastern Brazil*
Rev. Saúde Pública, 32 (5): 484-5, 1998

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Raiva no morcego insetívoro Tadarida brasiliensis na região Sudeste do Brasil

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Abstract

This is the first recorded case of rabies in the insectivorous bat *Tadarida brasiliensis* in the State of S. Paulo, Southeastern Brazil. The infected bat was found in the afternoon while hanging on the internal wall of an urban building. This observation reinforces the notion as to the caution one must exercise regarding bats found in unusual situations.

Rabies. Chiroptera.

Resumo

É registrado o primeiro caso de raiva no morcego insetívoro *Tadarida brasiliensis* no Estado de São Paulo. O animal raivoso foi encontrado vivo no período da tarde, enquanto pendurado na parede interna de um prédio urbano, o que reforça a noção que se deve ter cuidado com morcegos encontrados em situações não usuais

Raiva. Quirópteros.

Among insectivorous bats, several species of the family Molossidae are gregarious and inhabit urban areas of tropical and temperate regions of the world. Eighteen species of this family have been recorded in Brazil⁸, most of them being of frequent occurrence in urban areas. The presence of these bats in this kind of environment may be inconvenient for people due to their presence around houses, inside attics and roofs, and the accumulation of feces or transmission of diseases³. The main disease known to be associated with bats is rabies^{1,3,4} and 27 species have already presented positive test results for it in Brazil^{3,7}.

In the region of Botucatu, S. Paulo, rabid specimens have been recently found only in three

species (*Desmodus rotundus*^{5,7}, *Carollia perspicillata*⁷ and *Molossus molossus*^{6,7}).

In the afternoon of February 11th, 1996, it was captured a specimen inside a building belonging to the State University of S. Paulo (UNESP) in Botucatu (48°26'W, 22° 52'S), State of S. Paulo, Southeastern Brazil. The bat was a non-reproductive adult male *Tadarida brasiliensis* (Molossidae) that was hanging upside down on a wall at a height of 1.5 m (Fig.). Despite the fact that some people were disturbing it, the bat remained quiet and motionless, showing no aggressive behavior. The specimen was photographed and collected at 15:00h -an unusual place and time for a bat to be found and the suspicion

was that it was sick, probably with rabies, a suspicion also supported by its behavior, since motionlessness suggests muscle paralysis due to rabies. Uieda et al.⁶ compiled 19 cases of rabid-infected bats found in unusual situations in urban areas a list of and, according to the authors, muscle paralysis seems to be frequent. Bauer and Crusius² reported a paralytic and rabid specimen of *Tadarida brasiliensis* found inside a house in S. Leopoldo, Southern Brazil. That case seems to be similar to this one found in Botucatu.

The apparently sick animal was sacrificed and sent for laboratorial rabies exams at the "Departamento de Higiene Veterinária e Saúde Pública, Faculdade de Medicina Veterinária e Zootecnia, UNESP". The diagnosis was positive by both the direct immunofluorescence and the animal inoculation tests. This finding adds to the cautionary note made by several authors^{1,3,4,6} that people must be careful with bats found in unusual situations.

In the light of its gregarious habits and its roosting mainly in artificial shelters, a search was made for other individuals of *T. brasiliensis* in that same building but was unsuccessful. It seemed that the specimen must have been living in some other building nearby and that, due to its illness, had been unable to find its way back. No other infected specimens were found in the same place. These data will be useful in attempting to understand rabies infection in this species in a town of the size of Botucatu (c. 100,000 inhabitants).

The present note is the first record of a rabid individual of *T. brasiliensis* in the State of S. Paulo and only the second in Brazil.



Figure. A rabid specimen of the insectivorous bat *Tadarida brasiliensis* while hanging on an internal wall of a building from the urban area of Botucatu, S.Paulo, Brazil. From knowledge of the author this is the first picture of a live rabid bat found under natural rabies infection.

ACKNOWLEDGMENT

To Miriam M. Hayashi and Glaucia A. Morelli for field assistance, Drs. Luiz Carlos de Souza and Helio Langoni for the rabies exams of the bat.

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