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Sympatry and New Locality for *Alouatta belzebul discolor* and *Alouatta seniculus* in the Southern Amazon

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In September 1999, when beginning a research project on *Alouatta* ecology at Paranaíta, northern Mato Grosso, Brazil, we discovered two distinct howler species, *Alouatta belzebul discolor* and *Alouatta seniculus*, living in neighboring and partially overlapping home ranges. The study site (9°34.197 S; 56°19.381 W; Fig. 1), located on the left bank of the Rio Santa Helena, a tributary of the Rio Teles Pires, comprises part of the legally conserved vegetation of the Fazenda Universal cattle ranch, and is contiguous with the protected vegetation of neighboring ranches, forming approximately 10,000 ha of continuous forest. The regional climate is type AW1 (Köppen), tropical rainy with a marked dry season, with a mean annual temperature of 26°C. The dry season is from May to August. In some years total rainfall surpasses 2,800 mm (Empaer, 1999).

A. belzebul discolor occurs south of the Amazon River in the states of Maranhão, Pará e Mato Grosso (Hill, 1962). At Pavanaita, we are studying activity pattern, diet and use of space. The study group has seven individuals, all with pelage characteristics typical for the species (Emmons and Feer, 1990): one adult male, three adult females, two juvenile females and one infant male.

A. seniculus is widespread north of the Amazon river which bends southwestward to the Rio Guaporé basin (Hill, 1962; Setz, 1991) and the only previous record from the north of the state of Mato Grosso, is at Aripuanã, on both banks of Aripuanã River (Ayres, 1981). The *A. seniculus* group observed had five individuals: one adult male, two adult females, one sub-adult female and one juvenile male. During a period of 140 days between September and May 1999, we observed the *A. seniculus* group on four occasions at the edge of the *A. belzebul discolor* group's home range. Twice in October 1999, agonistic interactions occurred when both groups attempted to use the same feeding tree. The encounters were accompanied by agitated vocalizations during 34 and 10 minutes respectively, once in the morning (starting at 9:30 am) and another in late afternoon (starting at 6:15 pm), by the adult males of both groups. In both events the adult male *A. belzebul discolor* actively pursued *A. seniculus* group members.

We observed four other *A. seniculus* groups in forest contiguous with the study area, and also found a dead adult male, which will be deposited in the Museu de Zoologia of the Universidade de São Paulo. It was not possible to obtain a specimen of *A. belzebul discolor*, but based on geographical distribution and pelage characteristics of the group members, R. Gregorin (pers. comm.) confirmed the species' identification. As is apparently the case with other primate species (see Hershkovitz, 1977), we expected that the Rio Teles Pires would present a natural barrier to *Alouatta* dispersal, and that *A. belzebul discolor* would occur only on its right (east) bank. However, this river has numerous islands, and some animals might cross the river in periods of marked dryness.

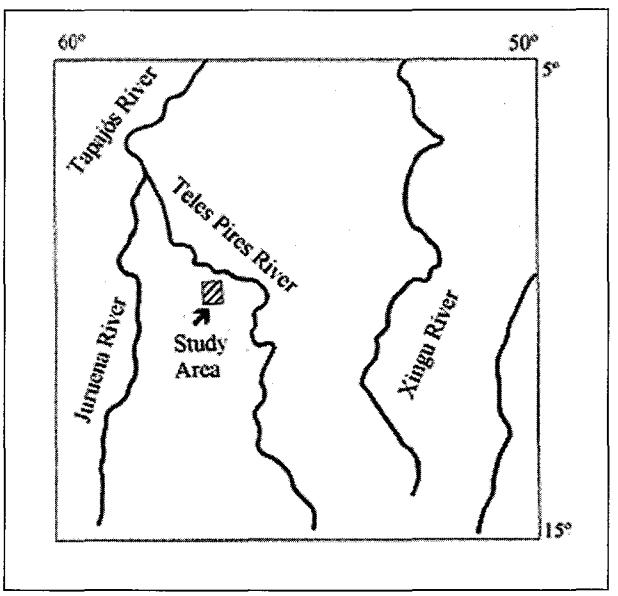

Figura 1. Location of the study area, in southern Amazon, Brazil.

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New localities for Coimbra-Filho's titi monkey, *Callicebus coimbrai*, in North-east Brazil

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Callicebus coimbrai was described in 1999 by Kobayashi and Langguth, based on differences in the skull, dental morphology and pelage when compared to the other Atlantic forest titis. Five specimens were examined for description, all of them from the Atlantic forest in the state of Sergipe, between the Rio São Francisco and Rio Real, in Pacatuba, Maruim and Cristinápolis. However, the limits of its geographic range have yet to be defined. Here I report on two new localities in Sergipe, and one in the extreme north of the state of Bahia.

Mata do Crasto, municipality of Santa Luzia do Itanhy, state of Sergipe. About 900 ha in size, this is one of the most important areas of remnant Atlantic forest in the state of Sergipe. Although still relatively well preserved when compared to other forest fragments, the Mata do Crasto is threatened. It has no status as a protected area, and its continued existence depends on the goodwill and good sense of the few major landowners in the region. Illegal logging is frequent, and regional development programs related to promoting tourism include paving roads around and even in some parts of the forest. This is the largest forest fragment in the state, and perhaps has the largest existing population of *C. coimbrai*. I have consistently seen groups in this forest over the last nine years, but the risk of them disappearing is real.

Mata do Dira, municipalities of Itaporanga and Laranjeiras, state of Sergipe. Covering more than 800 ha, the Dira forests were, until very recently, one of the most important in the northern part of the state. However, squatters and Agrarian reform settlement schemes for the landless, deforestation, and the creation of pasture for cattle ranching have destroyed a good part of the forests in this municipality. Currently the forest is degraded, especially due to forest fires in recent years as well as human use and exploitation. Selective logging has opened up many clearings, which are very slow to regenerate.

Matas do Conde, municipalities of Conde and Jandaíra, state of Bahia. I heard titi monkeys vocalizing in this forest in August 1996, which supports Kobayashi and Langguth's (1999) indication that they occur in northern Bahia. The majority of the forest fragments which support populations of *C. coimbrai* there are surrounded by *Pinus* and *Eucalyptus* plantations, and are along the perimeter of the Environmental Protection Area (APA) of the North Bahian Coast. However, they are undoubtedly threatened by selective logging, hunting, and land speculation.

Callicebus can be found in highly disturbed forests, in dense, young, and older, secondary growth, but it is evident that populations have been decreasing drastically over the years, mainly through forest loss and hunting and, more recently, with increasing tourism, the establishment of numerous settlement schemes throughout its range, and the lack of any environmental awareness programs in the region. The status of this species is obviously critical. They do not occur in any protected areas, the creation of which is a vital first step for the conservation of the titis and their forests.

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