

Occurrence of invasive species Drosophila nasuta in Atlantic Rainforest, Brazil.

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In March 2015, Vilela and Goñi (2015) reported the occurrence of invasive species *Drosophila nasuta* in the city of São Paulo, Brazil. We have been monitoring shifts in chromosomal inversion frequencies of D. *mediopunctata* from the Parque Nacional do Itatiaia, RJ, Brazil (22°26'S, 44°37'W) in the last 30 years (Ananina *et al.* 2004; Batista *et al.*, 2012; Batista and Klaczko, 2013). We had never collected a single specimen of D. *nasuta* in this well preserved National Forest that belongs to the Atlantic Rainforest in Brazil. When sorting collected flies in March 2015, we observed orange colored flies with one row of cuneiform setae on anteroventral side of profemur. We confirmed their identification as D. *nasuta* by examining external morphology and the genitalia of males collected and compared them to the description made by Vilela and Goñi (2015). Thus, for the first time, this species was collected at the Parque Nacional do Itatiaia, RJ, Brazil (N = 60). In our following collection (September 2015), we did not observe D. *nasuta* among the collected flies. However, the species was collected again in our two following field trips: November 2015 (N = 14) and March 2016 (N = 19).

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High abundance of exotic drosophilids in a gallery forest of the Brazilian savanna.

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Introduction

Among the terrestrial environments, forests shelter the highest biodiversity because of their environmental heterogeneity. The Brazilian savanna holds a complex of very rich vegetal formations, located mainly in central Brazil. Forests occupy only 5% of this biome, but contain the highest biodiversity of this region, because they harbor most of the unique and rare species, as well as common species of its different environments (Mittermeier *et al.*, 2005; Tidon, 2006). Nevertheless, countless gallery forests of the Brazilian savanna have not yet been studied and so are extremely threatened by anthropogenic pressures (fragmentation,