12.38; $df = 2$; $P < 0.05$). In the case of CS larvae the percentages were, respectively, 24.69% (illuminated area), 72.21% (dark zone), and 3.10% (limit between the zones) (*G*-test of independence, $\chi^2 = 15.26$; $df = 2$; $P < 0.05$).

Larval locomotion of the Oregon R-c and CS strains was also greater than that of the *norpA*^{7} larvae (*t*-test, Oregon versus *norpA*^{7}, $t = 4.34$, $df = 58$; $P < 0.05$. CS versus *norpA*^{7}, $t = 5.25$, $df = 58$; $P < 0.05$). Larvae of the three strains did not show significant differences in number of turns made to crawl on agar (*t*-test).

Discussion

A variety of behavioral factors are involved in habitat choice in *Drosophila* (Powell, 1997). The present work indicates that *D. melanogaster* larvae may use their photoresponse to influence the direction of their movements. Differences in photoresponse between larvae of different genetic backgrounds indicate the importance of genotype in habitat selection in *Drosophila* larvae. On the other hand, the data suggest that neurological mutants that affect the sensory system of *Drosophila* larva by altering the signal transduction pathways could help us to link cell biology of nervous system with ecology of *Drosophila* breeding sites. Additionally, neurological mutants may also provide a means to understand how *Drosophila* larvae perceive and react to some environmental cues associated with the distribution and abundance of resources such us food. Little work has been done on the relationship between mutants that affect specific neural circuits and the ecology of larval stage. The altered response to light of *Drosophila* larva produced by the *norpA*^{7} mutation could serve as a model system to understand the functioning of their nervous system in relationship with the ecology of *Drosophila* larval stage.

Acknowledgments: We are indebted to Dr. Marta Zlatic who provided us the *norpA*^{7} mutant strain and the wild type CS strain. We thank Drs Patricia Iturra and Héctor Toledo for financial support.

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First record of *Zaprionus indianus* (Diptera: Drosophilidae) in the Urucu Petroleum Province in Amazonas, Brazil.

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The genus *Zaprionus* Coquilet 1901 (Diptera Drosophilidae) is composed of two subgenera and 56 species. By now, only one species was found in other tropical areas of the world (De Toni *et al.*, 2000).

Zaprionus indianus Gupta, 1970 (Diptera: Drosophilidae) is from Africa, and their first record in the American continent was in 1999 in a metropolitan area in São Paulo city, State of São Paulo, Brazil (Vilela, 1999). Since this time the species has expanded quickly to Brazil (Santos *et al*., 2003; Tidon *et al*., 2003).

In May 2008 *Z. indianus* was registered for the first time in the URUCU Petroleum Province in the Amazon forest, Coari city, state of Amazonas, North of Brazil. The area is composed by a primary forest matrix with several clearings for wells and extraction, opened by the Petroleum Brazilian Company.

Drosophilids have been monitored in URUCU area since 2003 (Lima *et al.,* 2008). In this six years of monitoring were realized nine expeditions, with 476 samples in forest and clearing habitats. *Z. indianus* was collected with specific traps (Martins *et al.,* 2008) with banana baits exposed in clearings. Until now no *Zaprionus* was collected in traps in the interior of primary forest.

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First record of *Zaprionus indianus* (Diptera, Drosophilidae) in Fernando de Noronha, an Oceanic Island of Pernambuco State, Brazil.

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Introduction

Zaprionus indianus is an invader species in Brazil and America. It is the most common fly of the genus in the African continent, and it probably originated from the Afrotropical zone (Tsacas, 1985). *Zaprionus indianus* represents one of the most successful colonizing species of this genus (Chassagnard and Tsacas, 1993) and their first occurrence in Brazil was recorded in 1999, in São Paulo State (Vilela, 1999; Tidon *et al.*, 2003). Since then the species has been able to successfully colonize the whole Brazilian territory (review in Gottschalk *et al.*, 2008) and become one the most abundant species of drosophilids in open and disturbed areas (Tidon *et al.,* 2003; Silva *et al.,* 2005). In Pernambuco State, northeast of Brazil, this species was collected for the first time in April, 2000, in the cities of Recife and Bezerros (Santos *et al.*, 2003). Between June 2000 and August 2002 these authors also collected *Z. indianus* in seven other cities of Pernambuco, and in Paraiba and Bahia States. The aim of the present study is to contribute to the knowledge of the process of colonization of *Z. indianus* in north-eastern Brazil, where the drosophilid fauna is very poorly studied and only a few species have been recorded. We present here the first data of collections of *Z. indianus* in one