



Traps adapted to drosophilid collections in tropical rain forest.

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Drosophilid adult collections in tropical rain forest have traditionally used swiping over banana baits (Pavan, 1959; Pavan *et al.*, 1950). Closed traps have been used with success in Atlantic forest (Medeiros and Klaczko, 1999; Penariol *et al.*, 2008). For ecological and comparative survey studies, it is necessary to control effort and guaranty independence among samples. We developed traps to catch adults and immature drosophilids which permit both. One additional advantage of these traps is the resistance to heavy Amazonian rain and sun exposure.

The traps are made of PVC tubes about 25 cm in length and 10 cm across. A plastic transparent funnel, up-side down, at the bottom and inside the tube constitutes the entry to the trap. Baits are deposited in a plate attached to this funnel. This plate maximum weight capacity is 100 grams. The bait odor dissipates through two 5×4 cm windows covered by fine nets. A transparent acrylic plate with a central hole covers the upper part of the tube. The hole is closed by foam (Figure 1).

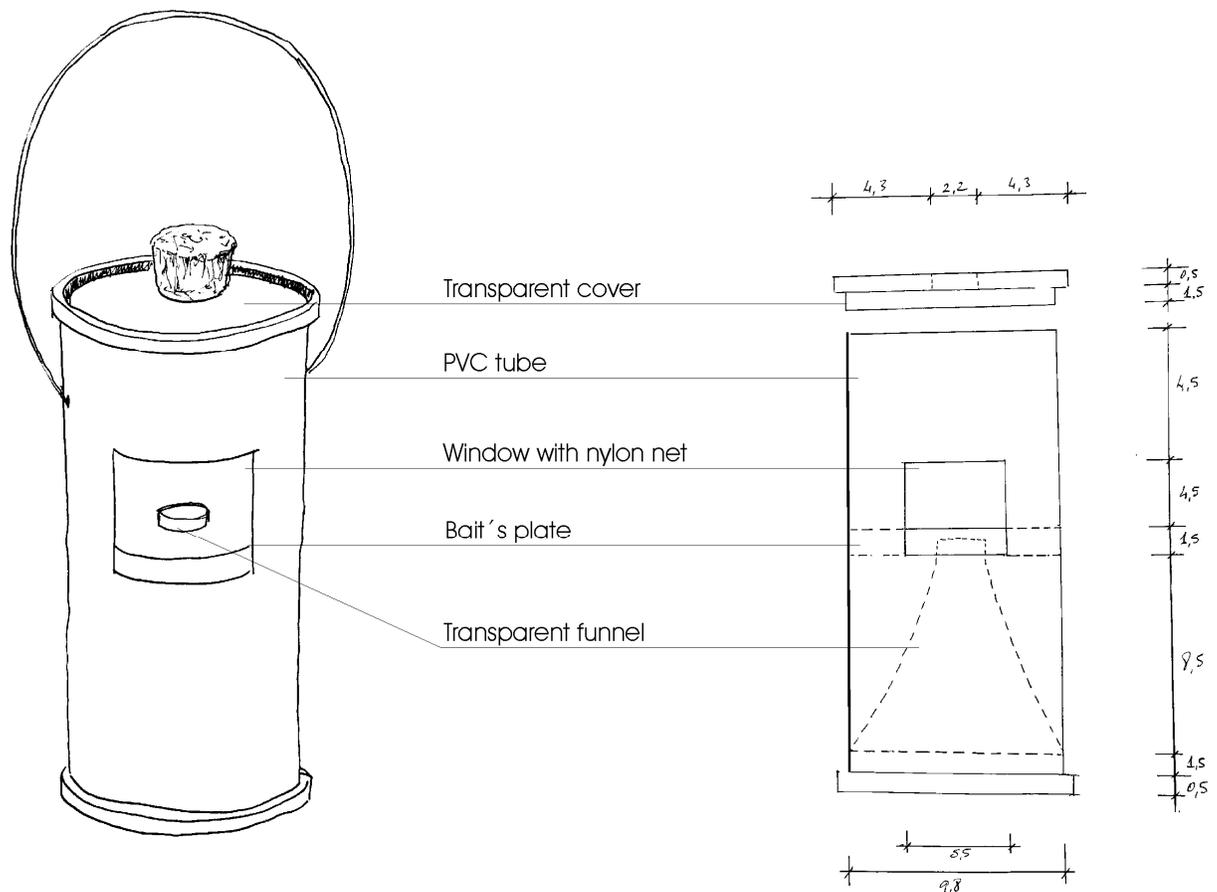


Figure 1. Trap drawing.

The traps can be attached by a nylon wire and can be exposed at different heights from the soil. The flies come in through the inferior orifice inside the tube and stay in contact to the bait. Trapped flies can be collected alive in the field or in the laboratory by a mechanical aspirator. The trap can also be reserved for adult emergence or larvae collection.

These traps have been used in some ecological studies in Brazilian Amazon with success in forested or open habitat (Barlow *et al.*, 2007; Furtado and Martins, in press).

The average number of insect per traps is 20 and 100, and maximum number of species recorded until now is over 20 in one trap, with a modal number of 5 species per trap.

References: Barlow, J., T.A. Gardner, I.S. Araujo, T.C. Avila-Pires, *et al.*, 2007, Proc. Natl. Acad. Sci. USA 104(47): 18555-18560; Furtado, I.S., and M.B. Martins. Utilização de Drosophilidae como indicador das condições ambientais na área de exploração petrolífera do Urucu. Acta Amazônica. In press; Medeiros, H.F., and L.B. Klaczko 1999, Dros. Inf. Serv. 82: 100-102; Pavan, C., 1959, Relações entre populações naturais de *Drosophila* e o meio ambiente. Bol. Fac. Filos. Cienc. e Letras Univ. S. Paulo (86), Biologia Geral 11:7-81.; Pavan, C., Th. Dobzhansky, and H. Burla 1950, Ecology 31: 36-43; Penariol, L., H.E.M.C. Bicudo, and L. Madi-Ravazzi 2008, Biota Neotrópica 8(2): 45-53.



A new version of *Drosophila* Proteome Atlas.

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Drosophila Proteome Atlas originally constructed by Matsumoto *et al.* (2007) opened to the public at both The University of Oklahoma and Drosophila Genetic Resource Center (DGRC), Kyoto Institute of Technology. The *Drosophila* protein database provides protein maps displayed on two-dimensional (2D) gel electrophoresis. Protein was identified by peptide mass fingerprinting followed by the confirmation by MS/MS (Matsumoto *et al.*, 2005; Takemori *et al.*, 2007). The 2D gel electrophoresis renders a map of proteins that exist in the sample of interest with rich information on proteome, including post-translational modification and the comparative quantities of expressed proteins.

We are now extending proteome studies to the reproductive system in both males and females, and also in the course of fertilization (Takemori and Yamamoto, 2009). These new data sets will be uploaded and opened in turns from July 2009, and further additional data will be similarly accessed through the URL (<http://www.DGRC.kit.ac.jp/~jdd/proteome/>).

We are pleased to release a new version of *Drosophila* Proteome Atlas with a new Atlas Viewer, with which protein map and corresponding protein information can be viewed more easily, and all proteins we analyzed are linked to FlyBase. The original sets of data previously announced (http://www.DGRC.kit.ac.jp/~jdd/proteome/Proteomics_Home.htm) on the brain and compound eyes will also be released with the new viewer in January 2009 at the new URL mentioned above. This database surely provides extensive information on *Drosophila* proteome dynamics when it comes to understanding biological functions of various proteins in the tissues and organs concerning the reproductive system in the process of gamete formation, maturation, storage, and fertilization.