

IDENTIFICATION OF ANTIFUNGAL FACTOR FROM *ANOPHELES* EGGSHELL.

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Insect represent a successful group in nature because it has diversified capability of reproduction and defense against microorganisms. In fact, insects can organize a very efficient and immediate immune response. Our group is interested on the eggshell immune mechanisms. In mosquito, the embryo is isolated from environment by a proteinaceous membrane called chorion, which is supposed to have a protective role. The main objective of this work was to investigate the presence of soluble antifungal factors present in the posture water of *Anopheles gambiae*. Posture water (PW) was kindly provided by Dr. J. M. Ribeiro (NHI/USA). PW was concentrated up to a 200 μ L-final volume. Samples were submitted to gel filtration chromatography using a Superdex-75 (Amersham-Pharmacia) in a HPLC (Shimadzu LC-10AT). Column was stabilized in PBS pH 7.4 under a continuous flow of 0.5mL/min. The peaks were detected using 220 and 280nm. All fractions were tested against *Aspergillus niger*. Fractions were concentrated and the pellet resuspended in 100 μ L of Saboroud medium content 3x10²conidia/mL. Only the 14min-retention-time fraction had showed activity. Culture was observed by optical microscopy and showed spores with disorganized mycelia. Most of cells presented structural alterations. Clearly cellular division was compromised when compared with control, which showed normal cellular development. Those results suggest that the PW of *Anopheles*, as we already observed for *Aedes* and *Rhodnius*, have an antifungal soluble factor.

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