PARTIAL CHARACTERIZATION OF TRYPTIC ACTIVITY FROM HARPACTICOID COPEPOD (*Tisbe biminiensis*)

França, R. C. P[1].; Amaral, I. P. G[1].; Marcuschi, M[1].; Santos, J. F[1].; Santos, F. M. S[1].; Costa, H. M. S[1].; Santana, W.M[1]., Souza-Santos, L. P[2]., Carvalho Jr. L. B[1]., and Bezerra, R. S[1].

[1]Laboratório de Enzimologia (LABENZ), Departamento de Bioquímica, and Laboratório de Imunopatologia Keizo Asami (LIKA), Universidade Federal de Pernambuco, [2]Departamento de Oceanografia (UFPE)

The harpacticoid copepod *Tisbe biminiensis* is a potential alternative of live prey in the marine shrimp *Litopenaeus vannamei* larviculture. Trypsin activity was assayed in the crude extract prepared by homogenization of specimens reared under controlled laboratory conditions at 29°C, salinity of 33-35 ‰, 12h day/light photoperiod and fed on diatoms and comercial fish ration. The physical-chemical and kinectics parameters were determined using benzoyl–DL-arginine-p-nitroanilide (BApNA) as substrate. The influence of pH (7.2-11.0), temperature (25-70ºC) and trypsin inhibitors on the tryptic activity was also studied. For thermostability, samples were incubated during 30 min at temperatures ranging from 25 to 70ºC. Optima pH and temperature were 9.0 and 55ºC, respectively. This proteolytic activity was thermostable at 55ºC. Michaelis-Menten constant was 0.69mM. Moreover, it was strongly inhibited by specific trypsin inhibitors: TLCK (100%), benzamidine (91%) and SBTI (100%). These results show that *T. biminiensis* produces trypsin-like enzymes. These enzymes may play an important role as source of exogenous enzymes in the digestion of early life stages of fish and crustacean larvae.

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