Ontogenetic Changes in the Activity of Chymotrypsin and Carboxypeptidases A and B in Mud Crab, *Scylla serrata*

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(Received 4.8.12, Accepted 14.12.12)

Key words: ontogeny, *Scylla serrata* larvae, chymotrypsin, carboxypeptidase A, carboxypeptidase B

**Abstract**

The ontogenetic pattern of an endopeptidase (chymotrypsin) and two exopeptidases (carboxypeptidases A and B) in larvae of the mud crab, *Scylla serrata*, are described. Specific activity of chymotrypsin was detected in all larval stages. The activity was about 25% of the maximum at stage Z1, doubled at Z2 and Z3, declined to 40% at Z4 and Z5, abruptly increased to maximum activity during the megalopa stage, and fell to about 33% at the first crab stage, CI. Carboxypeptidase A activity was low at Z1, gradually increased from 4% to 13%, 19%, and 27% of the maximum at Z5, markedly increased to 68% at the megalopa stage, and finally peaked at CI. Carboxypeptidase B activity started at 9%, declined to 4%, abruptly increased to almost 50% at Z3, remained high at Z4, Z5, and the megalopa stage (50%, 61%, and 50% of the maximum), and finally peaked at CI. The overall changes could be related to changes in diet and feeding habits, or to behavioral, mechanical, and physiological changes, or their combination during development of *S. serrata* larvae.

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