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Differentiation of Brain Neurosecretory Cells Depending on Ecdysteroid Content of  
Haemolymph During 5 th. Instar Larval Stage of Silkworm, *Bombyx mori*

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**Abstract:** In this study, the differentiation in the lateral neurosecretion cells of pars intercerebralis of brain, depending on the different ecdysteroid contents which was determined in the hemolymph of silkworm by radioimmunoassay has been studied using light microscopy. The brains of silkworms in the time of low and high hemolymph ecdysteroid content were fixed in Bouin solution, and the cross sections were stained with PAF after dehydration. Results shown that the density of fine secretion granules increased in the cytoplasm of neurosecretion cells just before the increase of ecdysteroid content in hemolymph. It was also observed that the ecdysteroid content in hemolymph increased in the following day of excretion.

**Key Words:** *Bombyx mori*, Radioimmunoassay, Ecdysteroid, pars intercerebralis

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