Localization and Process Pathway of Allatostatin in the Central Nervous System of Lepidoteran Moth, Agrius Convolvuli

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Over the last decade, a large number of insect neuropeptides have been identified. Allatostatin are a family of insect neuropeptides that inhibit juvenile hormone (JH) biosynthesis by the corpora allata. The rate of juvenile hormone biosythesis in different insect species can either be stimulated or inhibited by allatotropic and allatostatic neuropeptides. In this investigation, localization of allatostatin-producing neuron were observed in the central nervous system of 5th instar larva from lepidoteran moth, *Agrius convuli* using an immunocytochemical methods. The brain contains about 43 pairs of bilateral ATSs-immunoreactive cell bodies and they show bilateral localization of most of the cells in their ventral ganglia. The distribution pattern of neuronal cells of all the abdominal ganglia is very similar except for terminal abdominal ganglion.