

Localization of Allatotropin in the Central Nerve System of *Agrius convuli*

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Polyclonal antisera against *Manduca sexta* allatotropin have been utilized to determine localization of allatotropin-immunoreactive (AT-IR) cells in the nervous system and gut of the sweet potato worm *Agrius convuli*. Allatotropin-labeled nervous were found in all larval brain and ganglion. Subesophageal ganglia of the second to fifth instar larvae show immunoreactive cell bodies. One pair of labeled cell bodies is localized in each of abdominal ganglia 5th instar larvae. The seventh neuromeres of terminal abdominal ganglia 5th instar larvae two labeled large cell bodies. There are two large and two small neurons in the frontal ganglion of the larvae. These cell bodies show allatotropin-immunoreactivity which is similar in appearance within each of abdominal ganglia 1 to 7. Some labeled axons, projected from AT-IR cells in each of those abdominal ganglia, are extended to the nerves N1 and N2. Labeled axons and cell were also demonstrated in the larval midgut.