

affected. In most cases 2–3 terminal oocytes developed and the rest of them were resorbed (figure 4), while in some other cases each ovariole consisted of 2 to 4 oocytes enclosed in a common sheath. These occupied either the terminal position or between distal and terminal oocytes. Such oocytes were yolk laden (figure 5). In certain insects more than 4 oocytes were found in a common sheath in the terminal region but these underwent resorption and formed a loose meshwork of ovarian tissue (figure 6). Often in some insects the number of oocytes increased two-fold forming a long ovariole. These oocytes were smaller in size and the vitellogenic oocytes were found between the resorbing oocytes (figure 7). Inhibition of ovarian development by steroids was also reported earlier^{4–6}.

The ingestion of 25-azacholesterol inhibits ovarian development and suggests its use for the development of safe and specific anti-fertility agent for *D. similis*.

The authors acknowledge with thanks the generous gift of 25-azacholesterol by Dr J. A. Svoboda, Insect Physiology Laboratory, USDA, Beltsville, Maryland. The authors (AK and SSR) thank UGC, New Delhi for financial assistance.

18 July 1986

1. Robbins, W. E., Kaplanis, J. N., Svoboda, J. A. and Thompson, M. J., *Annu. Rev. Entomol.*, 1971, **16**, 53.
2. Svoboda, J. A., Thompson, M. J., Robbins, W. E. and Kaplanis, J. N., *Lipids*, 1978, **13**, 742.
3. Kaplanis, J. N., Robbins, W. E., Monroe, R. E., Shortino, T. J. and Thompson, M. J., *J. Insect Physiol.*, 1965, **11**, 251.
4. Al Izzi, M. A. J. and Hopkins, T. L., *J. Insect Physiol.*, 1982, **28**, 267.
5. Robbins, W. E., Kaplanis, J. N., Thompson, M. J., Shortino, T. J., Cohen, C. F. and Joyner, S. C., *Science*, 1968, **161**, 1158.
6. Amarjit, K., Raja, S. S., Thakur, S. S. and Kishen Rao, B., *Curr. Sci.*, 1986, **55**, 674.

A NEW RECORD OF *HEXAMERMIS* SP (MERMITHIDAE — NEMATODA) FROM THE LARVA OF *CYDIA LEUCOSTOMA* MEYR (EUCOSMIDAE — LEPIDOPTERA)

K. SUBBIAH

Department of Zoology, Government Arts College, Ooty 643 002, India.

TEA plants are frequently attacked by a wide variety of insect and mite pests and a few root-feeding nematodes resulting in crop and capital loss¹. One of the most serious insect pests is the larva of *Cydia leucostoma* Meyr commonly called as flushworm.

The survey of literature shows that the mermithids are recorded from fifteen of the insect orders, the widest host range for any of the entomophilic nematodes, but not on the flushworm. The present author recorded the presence of juvenile *Hexameris* sp in flushworm in and around Kil-Kotagiri, Nilgiris District, Tamilnadu (4800' to 5500' above mean sea level) especially during the rainy months viz October, November and December. The presence of *Hexameris* sp in flushworm is a new host record. One to five juveniles were found within the haemocoel deriving the nutrients through transcuticular absorption. The juveniles are parasitic and the adults are free living. Parasitization by these juveniles resulted in host mortality even before their emergence.

The biology of *Hexameris* sp and its possible application in the biological control of insect pests are under investigation. This living pesticide, being non-host specific, could be used to control flushworm and other insect pests.

The author is thankful to Dr D. J. Hunt, Director, Commonwealth Institute of Helminthology, U.K. for identification of the specimen and for suggestions.

11 August 1986

1. Das, G. M., *Pests of tea in North-East India and their control*, Memorandum No. 27, Tocklai Experimental Station, Cinnamara, Assam, India, 1965.