later instars, they completed the larval stage but died at the pupal stage.

The reaction of the polyhedra to Giemsa's stain and the symptomatology proved that the disease was a nuclear polyhedrosis.

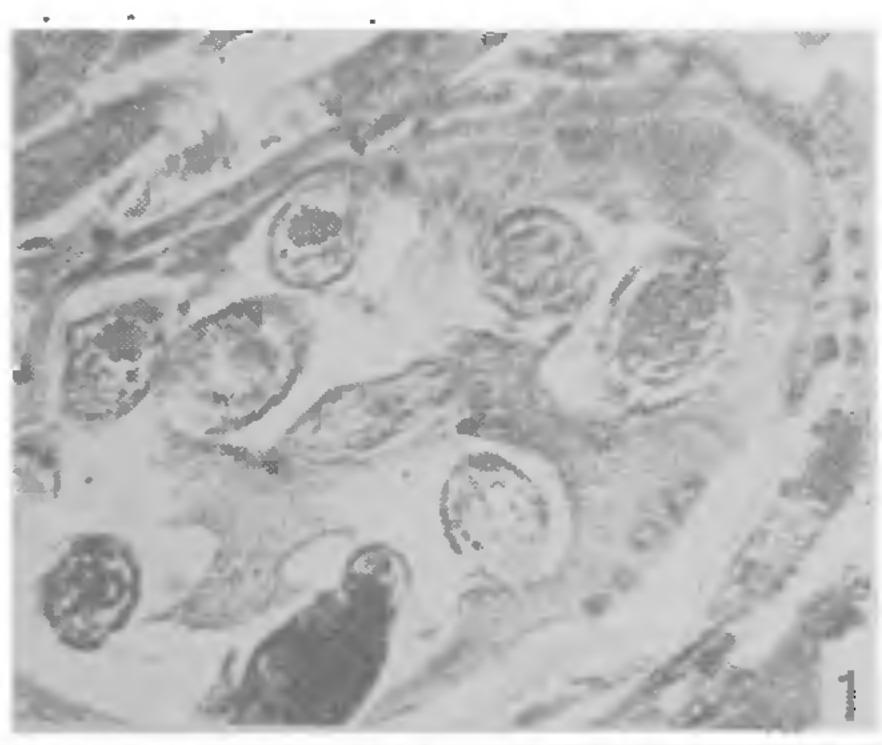
There is no previous record of any viral pathogen affecting the larvae of rice case worm.

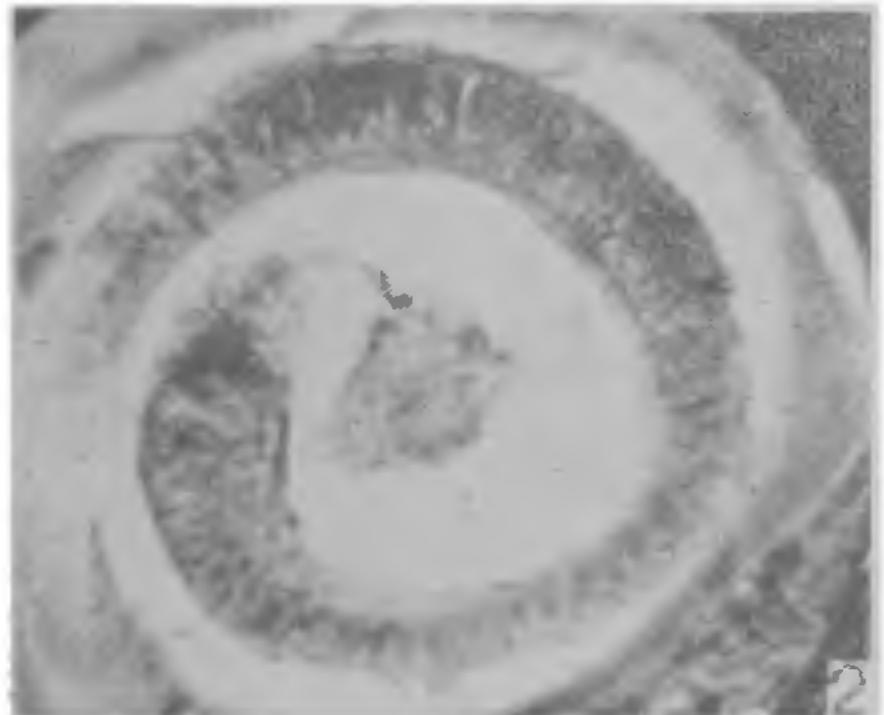
Division of Entomology, College of Agriculture, Vellayani 695 522, Kerala, March 9, 1978.

Abraham Jacob. K. Sasidharan Pillaj, P. A. Rajan Asari.

LARVAL TRICHINELLID IN CAPSULES OF DIAPHRAGM AND STRIATED MUSCLES OF ALBINO RATS

THE encapsulation of Trichinella spiralis has been studied in striated muscles of hosts¹. Capsules harbouring larvae within them gain optimum size in 50 days Pl¹. Records of a maximum number of nine larvae in a capsule are available.²





Figs. 1-2. Fig. 1. L.S. through the capsule of diaphragm tissue showing ten larvae of *Trichinella spiralis* (× 400). Fig. 2. Part of L.S. through the capsule of skeletal muscles showing one *T. spiralis* larva (× 500).

Presently a strain of T. spiralis, brought from Calcutta School of Tropical Medicine and maintained in the albino rats for six years, was subjected to the study of larvae present in the capsule of diaphragm and skeletal muscles. 6μ sections of the diaphragm and skeletal muscles were stained with haematoxylene and eosin following standard histological procedures.

The number of larvae in a capsule varies between one and ten (Fig. 1) in diaphragm tissues, while in the skeletal muscles the number is found to be one in a capsule (Fig. 2). The present finding is a departure from earlier ones². Moreover, variations in the number of larvae of different regions (i.e., diaphragm and skeletal muscles) are apparent in the present case and is in consonance with the proposed frequency pattern³. This might be correlated with variations in visceral larval migrans of the trichinid larvae in the definitive site of the host concerned.

Thanks are due to Professor D. K. Choudhuri, Head, Zoology Department, for providing laboratory facilities and to the University of Burdwan for award of a research fellowship to one of us (J. N. S.).

Parasitology Laboratory, Zoology Department, Burdwan University, Burdwan 713 104, West Bengal, April 24, 1978.

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- Teppema, J. S., Robinson, J. E. and Ruitenberg, E. J., Parasitol., 1973, 66, 291.
- 2. Perez, C. and Luengo, J., Boln chil Parasit., 1969, 24 (314), 163.
- 3. Fassbender, C. P. and Meyer, P., Animal Research and Development, 1976, 4, 55.

SEX EXPRESSION IN CORIANDER (CORIANDRUM SATIVUM L.) AS AFFECTED BY GROWTH REGULATORS

COPIANDER (Corianderum satirum L.), an aromatic plant valued for leaves and seeds is andromonoecious and the sex balance is towards maleness. There have been numerous reports on the chemical control of sex expression in plants¹⁻³. Singh and Ramanujam⁹ have reported the effect of maleic hydrazide, F.W. 450 and 1BA on sex expression in coriander. The present study reportts the pattern of sex expression in coriander as affected by gibberellic acid (GA₃), ethrel and cycocel (CCC).

The study was carried out with the local variety of coriander grown in 12" dia, pots in the premises of Lalbagh. Bangalore. GA₃, ethrel and CCC, each at 100 ppm, were administered in aqueous foliar spray, along with 0.1% tween 20 on plants once at 5-leaf stage. The treatment was replicated 5 times in a randomized block layout.

TABLE I	
Response of the local variety of cortander (Cortandrum sativum Average of 5 replication	- · · · · · · · · · · · · · · · · · · ·

Treatment	Bisexual flowers per umbel	Male flowers per umbel	Total flowers per umbel	Bisexual: Male
Control	28·6±1·85	34·4±1·85	63·00±2·70	$1:1\cdot 20\pm 0\cdot 12$
GA ₃ (100 ppm)	28.6 ± 1.15	52·0±2·50*	80·67±7·60*	$1:1.82\pm0.08*$
Ethrel (100 ppm)	30.6 ± 2.65	29.2±0.85*	59·80±3·55	1:0.96±0.05*
CCC (100 ppm)	$32 \cdot 6 \pm 3 \cdot 10$	25·6±2·00*	58・20 ±4・54	1:0.79±0.05*

^{*} Significant at P = 0.05.

The data as summarized in Table I reveal that GA, increased and ethrel and CCC decreased the total number of flowers per umbel. While the ratio of bisexual to male flowers was 1:1·2 in control, it increased to 1:1·82 by GA₃ brought about by an increase in the number of male flowers. On the other hand, ethrel and CCC gave a ratio of 1:0·96 and 1:0·79 respectively brought about by both decrease in the number of male flowers and concomitant increase in that of bisexual flowers—CCC being more efficient in this regard.

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AMRUTHAVALLI.

- 1. Ito, H. and Saito, T., J. Hort. Asso. Japan, 1956, 25, 101.
- 2. Mitchell, W. D. and Wittwer, S. H., Science, 1962, 136, 8801.
- 3. Negi, C. S. and Olmo, H. P., Ibid., 1966, 152, 1624.
- 4. Iwahori, G., Lyons, J. M. and Sims, W. L., Nature, 1969, 222. 171.
- 5. Krishnamoorthy, H. N., Z. Pflanzenphysiol., 1971, 65, 88.
- 5. Singh, V. P. and Ramanujam, S., Euphytica, 1973, 21, 181.

ON THE LITTLE KNOWN PONY FISH, GAZZA ACHLAMYS JORDAN AND STARKS (PISCES: LEIOGNATHIDAE) IN THE INDIAN WATERS

THE Indo-Pacific genus Gazza Ruppell is known by its type species, Gazza minuta (Bloch) and the little known Gazza achlamys Jordan & Starns. Jordan and Starks¹ described and figured Gazza achlamys on the basis of 5 specimens from Sri Lanka and 2 specimens from the Philippines. Subsequent to its original dis-

covery, the species has been listed from the Philippines (Herre²; Tiews and Caces-Borja³) and briefly redescribed from Sri Lanka (Munro⁴). In spite of these earlier reports, the species is neither described nor listed by Weber and de Beaufort⁵ from the Indo-Australian archipelago, nor by Fischer and Whitehead⁶ in the FAO species identification sheets for the Eastern Indian Ocean and the Western Central Pacific. In the present communication the identity of the species is discussed and reported for the first time in the Indian waters based on a specimen from the Great Nicobar Island in the Andaman Sea.

Gazza achlamys Jordan & Starks
(Fig. 1)

Gazza achlamys Jordan' & Starks¹, 1917, 446, pl. 45; Munro,⁴ 1955, 147, fig. 426; Tiews and Caces-Borja,⁸ 1965, 59.

Gazza minuta Menon and Talwar⁷ (nec Bloch), 1972, 44.

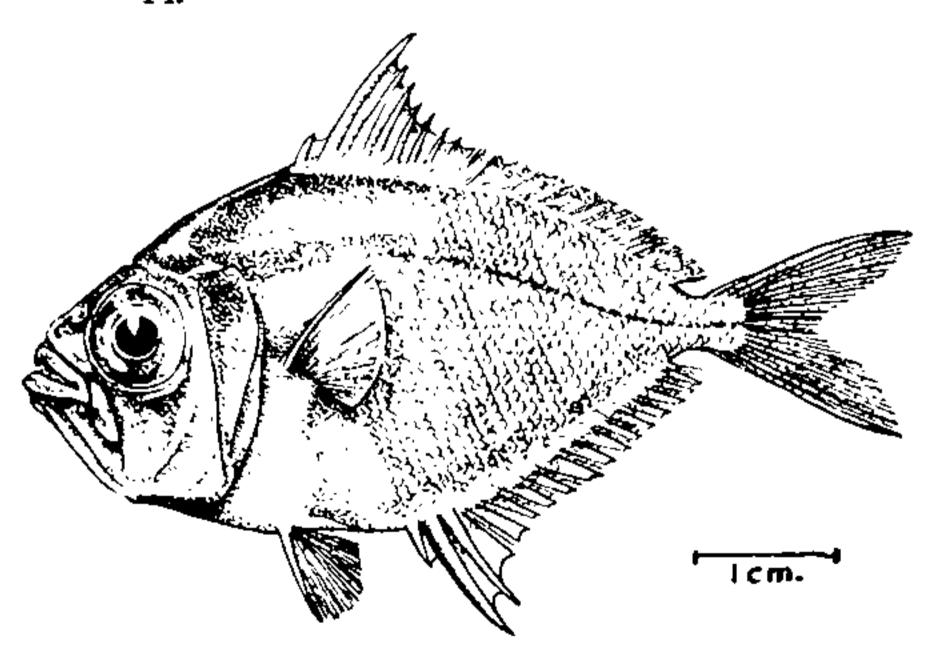


Fig. 1. Gazza achlamys Jordan & Starks

Material: One ex., 50 mm in standard length; Shampen village, Dogma river (Great Nicobar Is.); 10th April 1966; coll. A. Daniel; Zoological Survey of India regd. no. F. 7404/2.

Distinguishing characters: This species differs from all other members of the family except Gazza miunta (Bloch) in having distinct canine teeth in both jaws and may be easily distinguished from