



FIGS. 3-4. Fig. 3. Encapsulated and developing tumors. PAS, $\times 40$. Fig. 4. Encapsulated tumor showing spindle cells PAS, $\times 600$.

adjacent tissue. These findings are also supported by Duijn².

The present findings are of utmost importance since these indicate the carcinogenicity of alloxan which is till now regarded as diabetogen.

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DOMINANT LETHALS INDUCED BY CADMIUM CHLORIDE IN *DROSOPHILA MELANOGASTER*

CADMIUM pollution is a serious environmental problem due to its extensive use in industries. It has been reported that cadmium is teratogenic—in mouse^{1,2}, rat³, and hamster⁴. In *Drosophila* Vasudev and Krishnamurthy⁵ and Sorsa and Pfeifer⁶ have shown that at a concentration of 50 ppm it could cause delay in the rate of development. Cadmium chloride is also found to induce infertility in male mice⁷; in consistent with this, Kar *et al.*⁸ and Parizek⁹ have reported the "cytotoxic" effects on spermatogenic cells. The effect on the chromosomes of *Poecilocus pictus* has also been investigated¹⁰. Thus there is some evidence to support the possible drastic effects of cadmium on cell and hence the present studies were undertaken to study this chemical in relation to its ability to induce dominant lethals in *D. melanogaster*.

Male flies emerged out of media mixed with 5, 10 and 20 ppm of cadmium chloride, were aged for five days and used in the present experiments. The tests for the induction of dominant lethals were carried out according to the methods described by Sankaranarayanan¹¹. The results are presented in Table I.

TABLE I
Induction of dominant lethals by cadmium chloride in *Drosophila melanogaster*

Concentration	No. of eggs counted	No. of eggs unhatched	% dominant lethals
Control	1076	52	4.83
5 ppm	1244	147	11.8*
10 ppm	1375	196	14.3*
20 ppm	1390	199	14.3*

* Significant at 5% level.

A dominant lethal mutation indicates a major genetic damage, which kills an individual heterozygous to it. Perusal of Table I indicates that all the concentrations of cadmium chloride tested induced significant percentage of dominant lethals. There is also a dose dependent relationship in the production of dominant lethals. These results are similar to those of Shiraishi *et al.*¹², Shiraishi and Yoshida¹³ and Bauchinger *et al.*¹⁴ where they have shown the chromosome breaking ability in human lymphocytes. In

*Allium cepa*¹³, it has been shown to induce c-mitosis. Contrary to the above findings, Suter¹⁶ has demonstrated that cadmium chloride is unable to induce dominant lethals in mice.

The present results support the view of possible mutagenic effects of cadmium chloride as suggested by Shimada *et al.*¹⁷, Bui *et al.*¹⁸, Shiraishi *et al.*¹² and Shiraishi¹⁹. Though drastic changes are known to be caused by cadmium chloride in certain test systems, yet more data on its mutagenicity are necessary before a generalised inference is made.

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THE FAMILY OF CATFISHES OF THE GENUS *ARIUS* (SILURIFORMES)

REGAN¹ proposed for the first time the name Ariidae for the fishes of the genera *Pimelodus*, *Silurus*, *Arius*, *Pogonathus*. Subsequently Fowler² changed it to Tachysuridae.

The generic name *Tachysurus* with *Tachysurus sinensis* as the type species was proposed by Lacépède³ in the year 1803. In 1804 he⁴ published an illustration of this fish based on a picture displayed in the Natural History Museum, Paris. Valenciennes⁵ in 1840 proposed the name *Arius* with *Pimelodus arius* as the type species. He considered Lacépède's *Tachysurus* as invalid since it was based only on a picture of an unidentifiable fish.

Inasmuch as the name *Tachysurus* was proposed earlier by Lacépède with a valid type designation, it has precedence over the name *Arius* under the provisions of the law of priority, Article 23 of the International Code of Zoological Nomenclature. Moreover, rules under the Articles 11C (ii) and 16a (ii) of the International Code of Zoological Nomenclature provide that even when a species is based on a picture, it has validity so long the author has adopted consistent binominal nomenclature. Further, the code states that the discovery of an earlier valid homonym for the generic name need not necessarily effect a change in the family name also.

On the same analogy the family name Ariidae remains valid and the generic name *Tachysurus* Lacépède replaces *Arius* Valenciennes.

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FIRST RECORD OF *ALLOXYSTA* SP., A HYPERPARASITOID OF *TRIOXYS* (*BINODOXYS*) *INDICUS* SUBBA RAO AND SHARMA (APHIDIIDAE: HYMENOPTERA)

DURING a survey for hymenopteran parasitoids of crop pests in 1976-79 in eastern Uttar Pradesh, extensive collection of the pigeon pea aphid, *Aphis craccivora*