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**MORPHOLOGY OF TELOTHA SPP. (CRUSTACEA : ISOPODA)  
FROM EL KAHLA FISH "OBLADA MELANURA" IN ALEXANDRIA  
(With 5 Figs.)**

By  
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دراسة مورفولوجية عن التيلودا ( قشريات ) من سمكة الكحللة  
( أوبلادا ميلانورا ) في الإسكندرية بمصر

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بفحص ١٠٨ سمكة الكحللة (أوبلادا ميلانورا) تم إصطيادهم من البحر الأبيض المتوسط عند الإسكندرية تبين أن ٢٧ سمكة (٢٥%) وجدت مصابة بنوع من القشريات تتبع عائلة سيموثويدى ومن جنس التيلودا ولقد تم توضيح الشكل الخارجى لها بالتفصيل بالرسم والتصوير وبمقارنة ماتقدم من مراجع بالعينات الموجودة لدينا وجد أنها احتمال أن تكون تيلودا سيليبورى (زدات وشبرت ١٩٦٠) . ومن الجدير بالذكر أن هذا النوع من القشريات تذكر لأول مرة في مصر لأول مرة في هذا العائل .

### SUMMARY

Examination of 108 El-Kahla fish "Oblada melanura" collected from the Mediterranean sea at Alexandria showed that 27 fishes (25%) were infested with an Isopoda. Identification of the collected specimens revealed that they were belonging to family Cymothoidae, Genus Telotha (SCHIOEDTE and MEINERT, 1884). The morphological characteristics of this species were discussed in details. Comparing the present specimens with the previously reported Telotha spp. showed that our material could belong to Telotha silurii (SZIDAT and SCHUBART, 1960).

### INTRODUCTION

Fish is considered as one of the most important sources of human protein and minerals. Among the parasites which cause serious diseases, crustacean ectoparasites induce variable effects on fish production. KABATA (1964) mentioned that, in cases where only few specimens of crustacea are present, the damage is probably inconsequential, but heavy infestations of certain species, have very deleterious effects. However, high infestations must be detrimental to the host. In other cases the damage done is not great, but secondary infection of the wound with bacteria or fungi may follow. MONOD (1931), DARTEVELLE (1951), SZIDAT and SCHUBART (1960) and FRYER (1986) reported numerous species of Isopoda from the tropical and subtropical countries. In

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Egypt previous reports on this subject are scantily. The only available report was given by WUNDER (1962) who described *Nerocila orbignyi* (Isopoda) from *Tilapia galilaea* collected at Borullus lack, Egypt. The aim of the present study was to identify an isopod lodged in the buccal cavity of a fish commonly known as El-Kahla (*Oblada melanura*) from the Mediterranean sea at Alexandria Egypt.

**MATERIAL and METHODS**

The material used in the present study were collected from fish called El-Kahla (*Oblada melanura*) belonging to Family Sparidae, which were caught from the Mediterranean sea at Alexandria. The fish was identified according to DAVIDSON (1972). 108 fishes were captured fresh and examined externally for infestation with ectoparasites. The walls of the gill-chambers, buccal cavities and outer surfaces of the fins and tail were investigated. The collected ectoparasites were washed in saline, fixed and preserved in glycerine alcohol. Unstained whole mounted specimens were prepared by clearing in glycerine and mounted in glycerine - gelatine (LUCKY, 1977). The identification of the parasite was carried out according to SZIDAT and SCHUBART, 1960. Camera Lucida drawing and microphoto were performed to clarify the detailed morphology of that Isopoda.

**RESULTS**

108 of El-Kahla fish (*Oblada melanura*) were collected from the Mediterranean sea in Alexandria. Examination of captured fishes revealed that 27 fishes harboured the isopod with a prevalent rate of 25%.

Each parasitized fish had a single parasite only. The parasite was identified as Isopoda (Telotha spp.) belonging to Family Cymothoidae. The isopods were found attached to the dorsal surface of the tongue; being strongly fixed with their strong hooked legs and the anterior end was directed to the tip of the tongue (Fig. 1).

The collected specimens were differentiated into males and females. The number of males were 7 specimens while the number of females were 20. The male measured 3-7 mm in length and 1-2 mm in breadth, while the female were 7-13x3-5 mm in length and breadth respectively (Fig. 2). The elongated body was dorsoventrally compressed. The dorsal surface was always arched and distinctly differentiated into head, thorax and abdomen. Dorsally, the head had two lateral, large eyes of elliptical shape. There was one pair of antennules, each was formed of 7 segments (Fig. 3 a) and one pair of 9 segmented antennae in which the last one was pointed (Fig. 3 b). The mandipular palps were (602 x 104 u) and had 3 segments containing serrated cutting blade of 10 setae of variable sizes (Fig. 3 c). The maxilla was (258 x 149 u) and had 2 unequal processes (Fig. 3 d) while the maxillule was (688 x 86 u), and formed of one long segment ending with 4 processes (Fig. 3 e). The maxilliped was (278 x 152 u), thick and had two processes (Fig. 3 f).

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The thorax consisted of 7 segments, each had one pair of legs which increased in length posteriorly. They appeared very strong consisting of coxa, trochanter, femer and three tarsal segments of which the last one ended with long bent powerful hook. The parasite used its legs for fixation to the dorsal surface of the tongue and bleeding occurred after removal of the parasite with force. It was observed that, after the death of the fish, the parasite began to leave its place to be attached to the outer side of the mouth.

The abdomen consisted of 5 segments. Each abdominal segment was comparatively shorter than the thoracic one and without appendages. The posterior segment carried a broad telson without hairs and had one pair of uropod. In the male, the uropodes were unequal with very delicate setae (Fig. 4) while in the female, they were equal in size and without setae (Fig. 5). Moreover, the female carried a single poket attached to the last thoracic segment.

It has been observed during the present study that during the separation of a larga female isopod from the tongue, the pocket contained a large number of larvae. The larvae were 1 mm in length x 250 u in breadth. They had the same characters of the adult but were weakly pigmented. In addition, the abdominal segments were longer in length and more thicker than the adult.

## DISCUSSION

The present study reported for the first time in Egypt, that the fish El-Kahla (Oblada melanura) was parasitized with a crustacean parasite (Telotha spp.) at the rate of 25%. The morphological characters showed great similarity with Telotha silurii (SZIDAT and SCHUBART, 1960) described from the gills and gill-covers of a fish Iheringichthys labrosus from Brasil. They mentioned that the mature female measured not more than 13 mm in length. The dimension of males and females in our material was comparatively similar to those given.

MONOD (1931) recovered the larval stages and males of Telotha spp. on Braga patagonica in Rio paraguay. In 1937, cordero described another species of Telotha (T. Henselii) from the gills of Iheringichthys labrosus and Hoplias malabarica in Uruguay, which were 16-18 mm in length and 10 mm in breadth and the posterior border of the body segments were swollen. SCHON (1955) found an isopod (Telotha spp.) on Braga patagonica in Rio paraguay which was differ from the morphology of Telotha in our results. He found that the females were ivory in colour with very scanty pigments while the males were darker in colour. They had dark coloured stripes on the middle line of the abdomen and the telson. Moreover, the uropode were equal with long setae in male and unequal without setae in female. Hence, it could be concluded that, this crustacea Telotha spp. is an ectoparasite of the fish Oblada melanura which is described for the first time from the Mediterranean sea, Egypt.

Comparing the present specimen with the previously reported about Telotha spp. it was found that our material could belong to Telotha silurii.

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**Fig. (1 to 5):** *Telotha* spp. 1. *Oblada melanura* harbor *Telotha* spp. On its tongue 2. Female measured 11x4 mm 3a. Antennule 3b. Antenna 3c. Mandipular plape 3d. Maxilla 3e. Maxillule 3f. maxilliped 4. Uropod of male (unequal with very delicate setae) 5. Uropod of female (equal without setae).

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