

Amphipoda

Corophiidae

*** ** *

.Amphipoda	Gammaridea	Corophiidae
	Corophiidae	
<i>Erichthonius</i> <i>Corophium</i>	<i>E.brasiliensis</i>	<i>C. acutum</i>

Corophiidae Gammaridea :

()

(A1) Antenna 1
(A2)Antenna 2

Corophiidae
Amphipoda Gammaridea
Malacostraca

Crustacea
Pericarida

(Thorax or Pereon) Head
(1) (Pleon or Abdomen)

A1 :

Accessory flagellum

A2

*
**

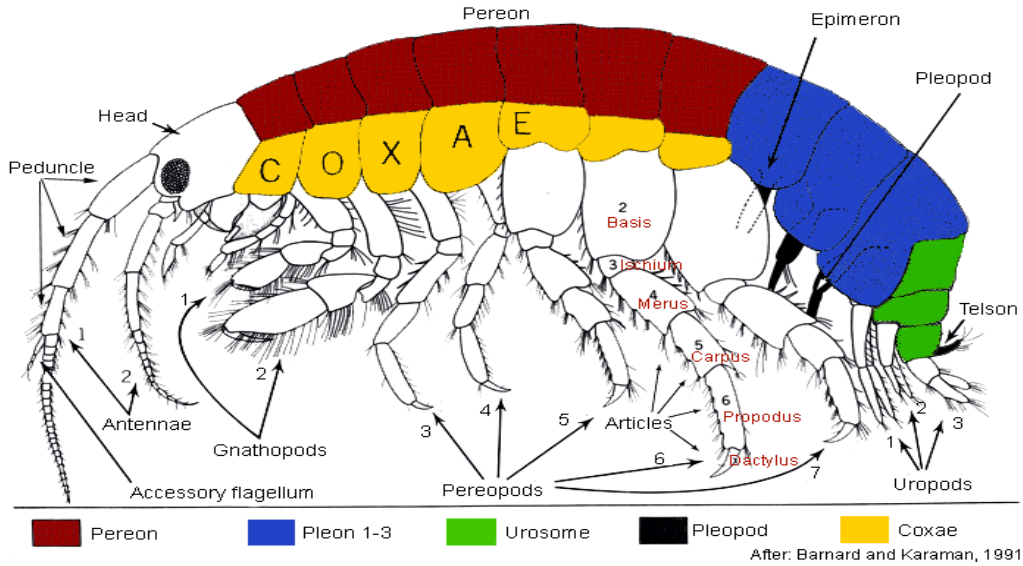
/

2008 ©

-427-

.2008/6/5

2007/4/10



.(Thomas , 1993) Amphipoda

:(1)

First maxillae

•
.(Mx1)

: (2)

Second maxillae

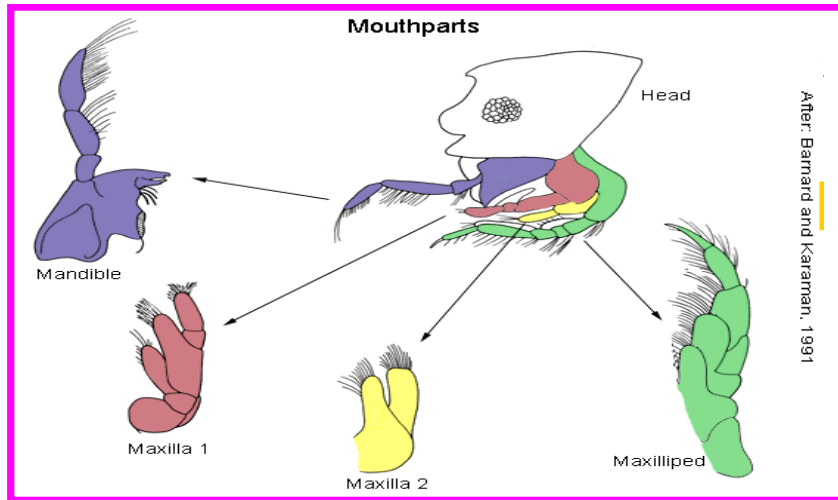
•
.(Mx2)

.Upper lip •
.Lower lip •

.(Mxp.) Maxillipeds

•

.(Md) Mandibles() •



.الشكل (2): أجزاء الفم عند طرفيات الأرجل (Thomas , 1993).

(b a)

:
:
:

Pereopods

: Pereon

(Gn)Gnathopods

(Oostegites)

5 -2

.7 -2

:Abdomen

:

Pleon

Pleopods

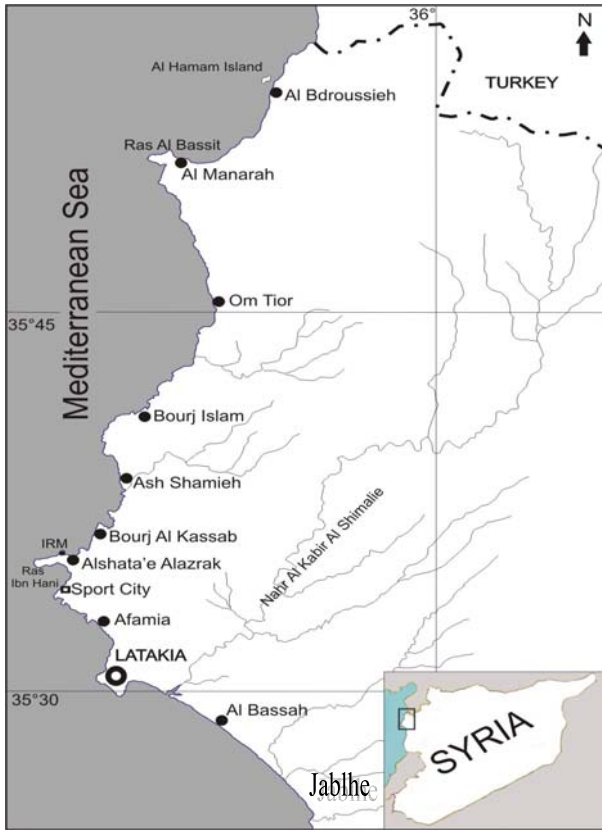
. Epimera

Urosome

(U) Uropods

(T) Telson

Corophiidae



الشكل (3): المواقع المدروسة.

5

)

(

)

(...

(5-3)

10

.(3)

25.29

1b

0.5

/ 3.1

%70

%4

/ 8.22

(Sandro *et al.* 1982; Kenneth and Gosner,)

.1971

(2) (1b 1a)

(BOD5)

BOD5

Constantinov, 1979

Goncharuco, 1982)

(Teichenco, 1968

BOD5

/ 2

/ 10.2 1b

()

² /

.(3)

()

² 4

1b 1a

BOD5

(COD)

()

/

Jaden and Gerd, 1961)

13.2

(Bosnic and Buljan, 2000 Telichenco, 1968

34.5 1b

COD

1b

.(1)

55.55

27.37

(Schellenberg, 1928)

(Schellenberg, 1936)

***Erichthonius* Milne Edwards, 1830 -2**

Erichthonius Milne Edwards, 1830, Stebbing, 1906 and J. L. Barnard, 1969. *Pyctilus* Dana, 1852.

***C. acutum* chevreux, 1908**

Corophium acutum Chevreux, 1908, Cheveux and Fage, 1925, Schllenberg, 1928 and Crawford, 1937.

3

:

A2 A1

6

Gn1

Gn2

U3

3-1

E. brasiliensis

***E. brasiliensis* (Dana, 1855)**

(6)

Pyctilus brasiliensis Dana, 1855

(5)

Erichthonius difformis Della Valle, 1893, Chevreux and Fage, 1925, Schellenberg, 1925 and 1928, Shoemaker, 1935.

4

(5)

6-4

7

) 6- 4

14

.2-1

(5)

12

3

6-4

COD *E. brasiliensis*
 : BOD5
 R=0.027936 R=0.035835 R= 0.02877
 R²=0.0008 R²=0.0013 R²=0.0008

:
 Y=0.8141X+19.732 Y= 0.0057X+ 22.825
 (9.8) Y=1.1811X+16.886
 BOD5 COD X
E. brasiliensis Y

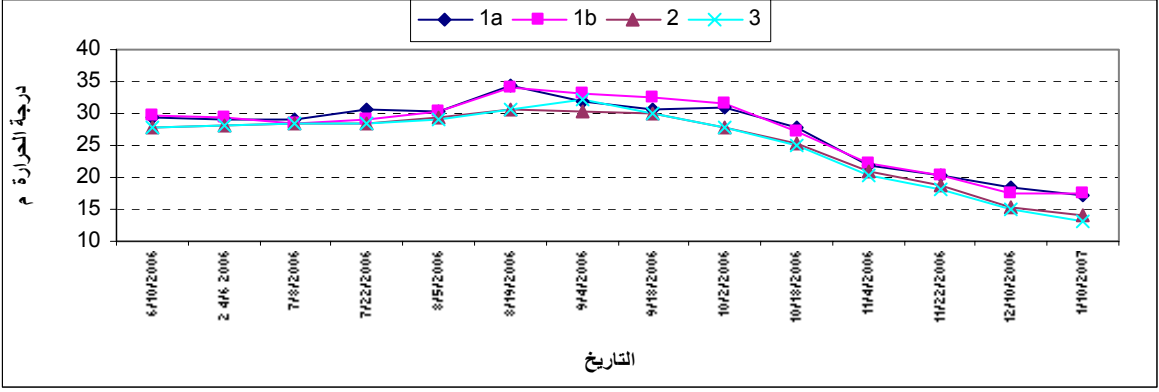
R= - 0.13068
 : R²=0.0154
 X Y=- 1.2166X+57.316
E. brasiliensis Y

BOD5 COD *C. acutum*
 R=0.38894 : R
 R=0.295205 R=0.307104
 R²=0.0914 R²=0.0943 R²=0.151
 :

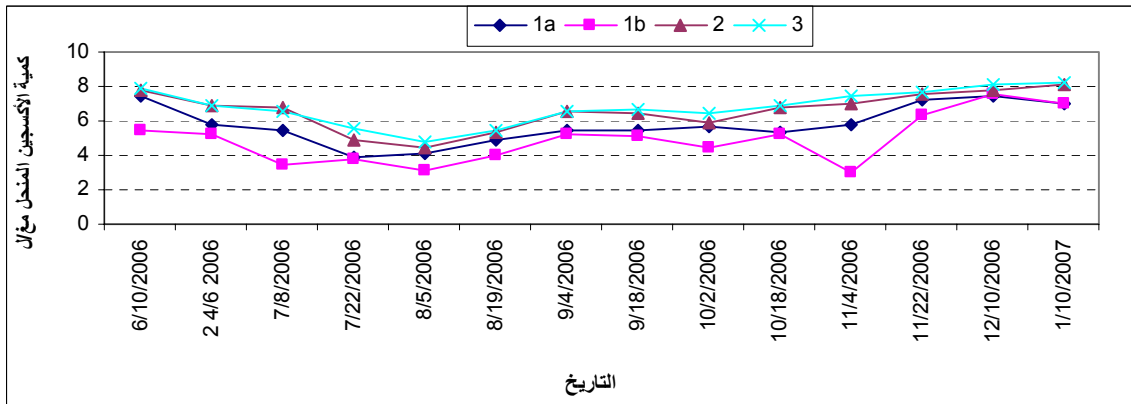
Y=9.077X-15.939 Y=0.1005X-11.284
 X (10.9.7) Y=3.8574X-69.554
 BOD5 COD
C. acutum Y

R²=0.1596 R²=- 0.3995
 X (8) Y=-21.973X+161.88
C. acutum Y

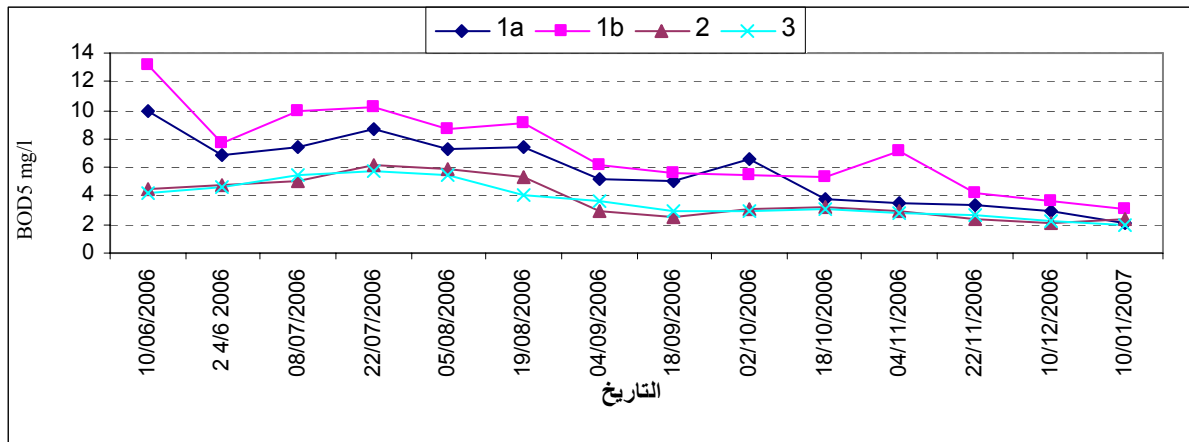
3



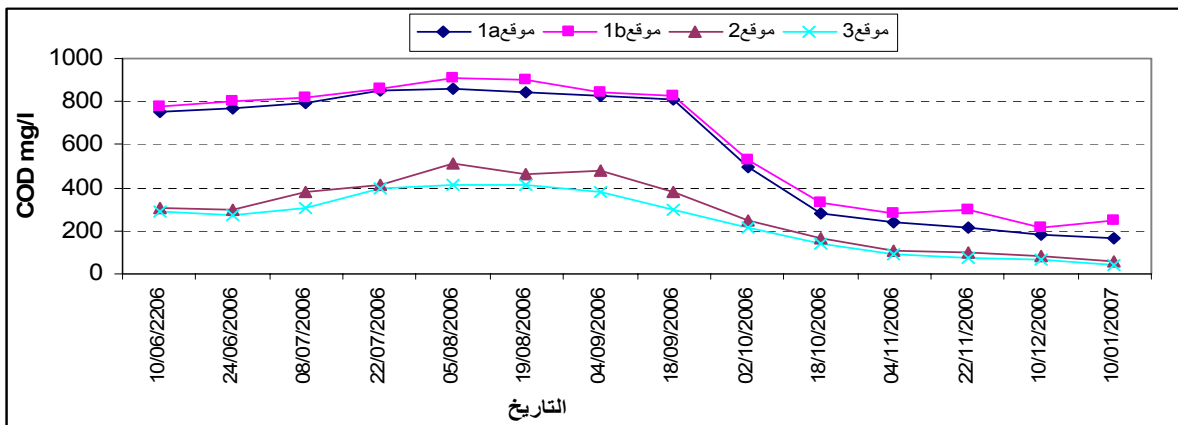
:(1)



(2):



BOD5 (3):



COD (4):



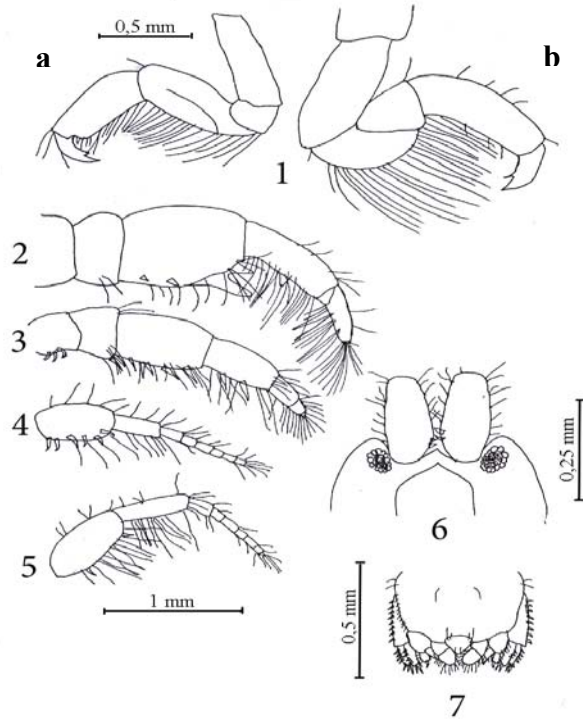
.Corophium : (4)



15 X A

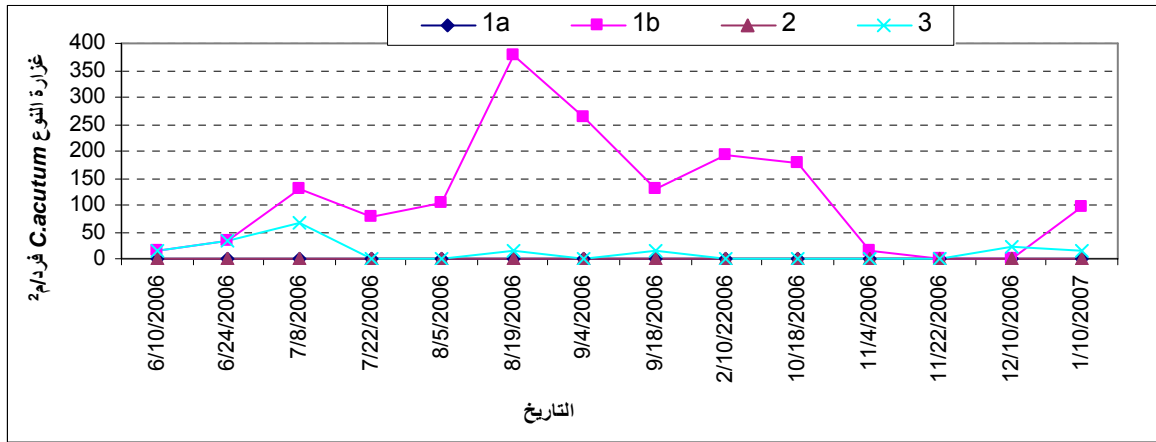


50 X C



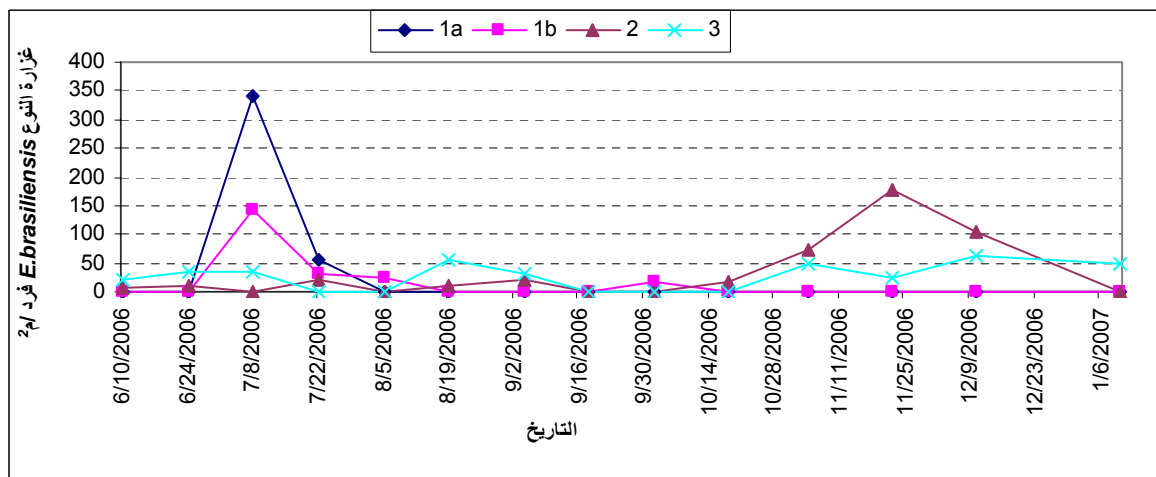
B After (Sandro *et al.*, 1982)

♀ :A - *Corophium acutum* : (5)
 b : :a - 1 : B
 ♀ - 4 ♀ - 3 ♂ - 2
 ♂ - 7 - 6 ♂ - 5
 ♀ :C



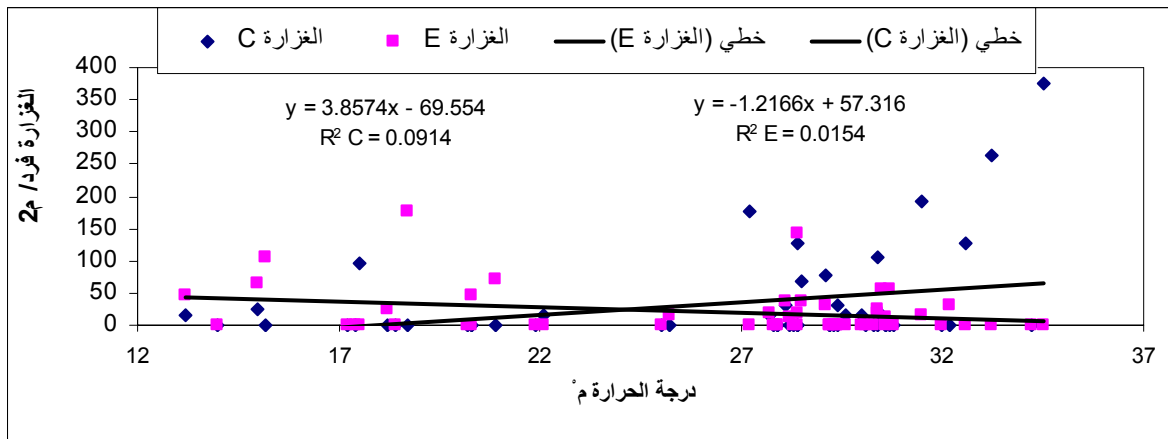
Corophium acutum

:(5)

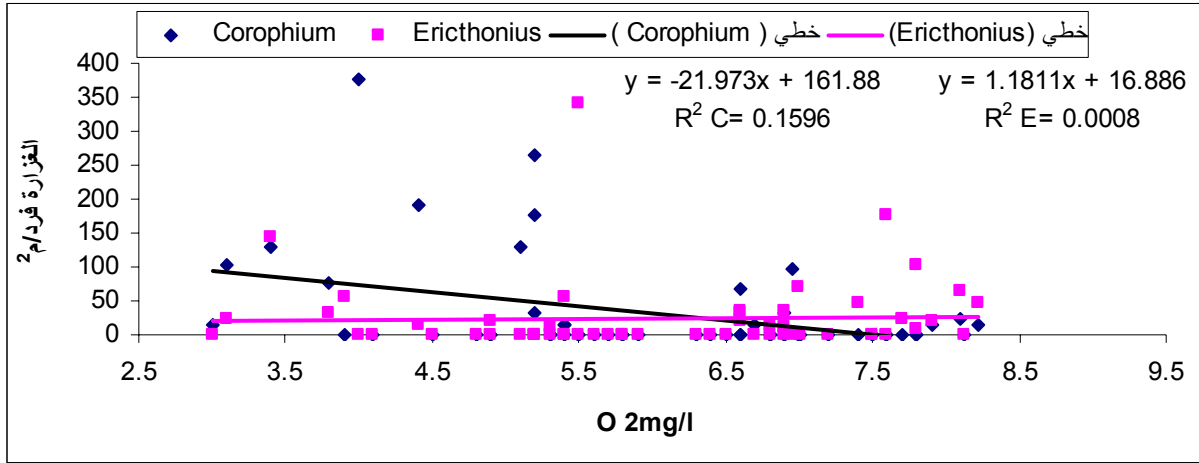


Erichthonius brasiliensis

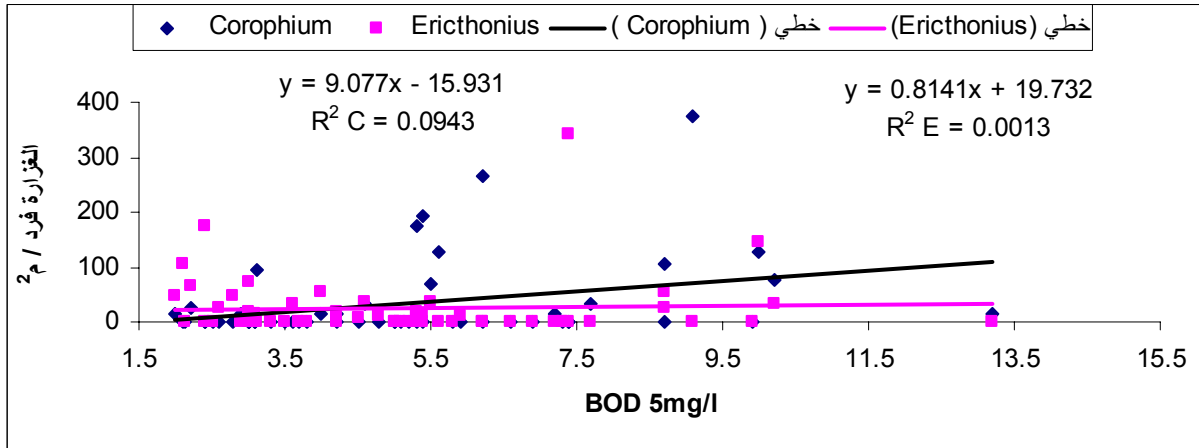
:(6)



:(7)

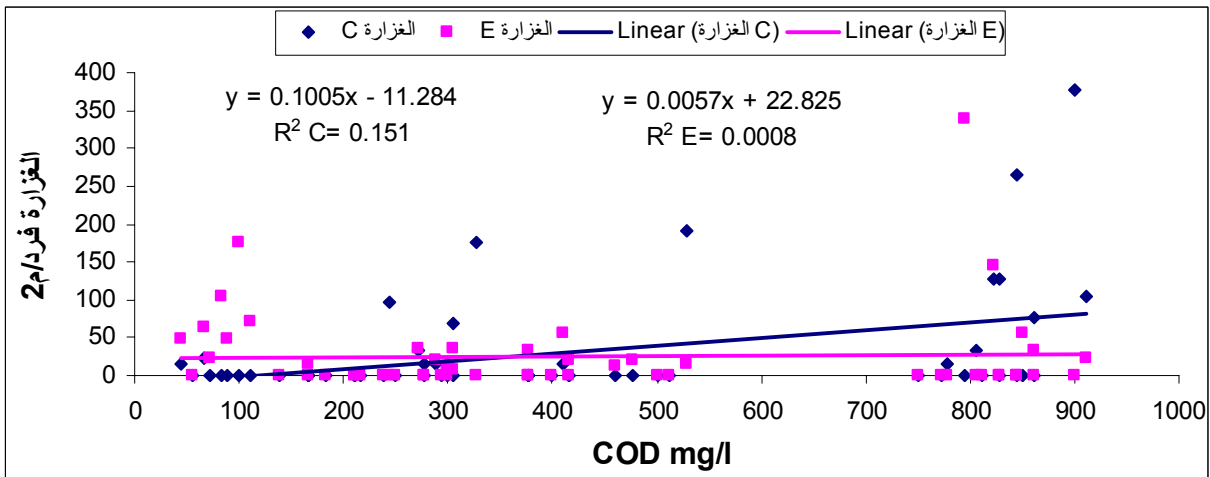


: (8)



.BOD5

: (9)



.COD

: (10)

:(1)

Confidence Level 95%	CV%	SD	\bar{X}		
3.145	% 19.974	5.447	27.27	1a	
3.305	% 20.917	5.725	27.37	1b	
3.307	% 22.586	5.728	25.36	2	
3.507	% 24.017	6.074	25.29	3	
169.9869	%50.95	294.409	577.77	1a	COD
162.9695	%45.74	282.255	617.05	1b	
91.643	%55.63	158.721	285.31	2	
79.486	%56.79	137.66	242.40	3	
1.3607	%41.16	2.356	5.723	1a	BOD5
1.6576	%40.35	2.871	7.115	1b	
0.8196	%37.127	1.419	3.822	2	
0.72238	%33.88	1.251	3.692	3	
0.6624	%19.79	1.147	5.793	1a	O ₂
0.8074	%28.507	1.398	4.904	1b	
0.6407	%16.78	1.109	6.608	2	
0.5939	%15.115	1.028	6.801	3	
0	0	0	0	1a	<i>C. acutum</i>
63.097	%95.382	109.281	114.571	1b	
0	0	0	0	2	
11.005	%141.946	19.061	13.428	3	
52.513	%321.548	90.95	28.285	1a	<i>E. brasiliensis</i>
22.223	%249.481	38.49	15.428	1b	
29.7680	%164.044	51.556	31.428	2	
13.367	%89.042	23.151	26	3	

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Taxonomical and Ecological Study of Corophiidae Family (Amphipoda) in the Coastal Region of Lattakia

*Mahmoud Karrum **, *Adib Zeini *** and *Amine Alnesser ****

ABSTRACT

The family of Corophiidae belongs to the suborder Gammaridea and the order Amphipoda. These Crustaceans have an important role in the food chains in the sea environment and contribute to the fish and benthic invertebrates nutrition. They are considered as bioindicators for sea pollution. They also help in the cleaning of the environment.

This study aimed to identify Corophiidae species and to establish a map for their distribution in the coastal areas of Lattakia.

The study was conducted in 3 regions (Ras ibnHani, Marine Research Institute and Shkayfat near Jableh). Samples were collected periodically. Characterization for samples was based on the international criteria of taxonomy.

Our results detected the presence of the two species *C. acutum* and *E. Brasiliensis* belonging to the genera *Corophium* and *Erichthonius*, respectively, in the coastal regions of Lattakia for the first time. The abundance of individuals of these species was evaluated and the changes in numbers and places were estimated during the period of the study.

This study contributes positively to the national project of marine biodiversity.

KEYWORDS: Taxonomy, Gammaridea, Corophiidae, abundance, Ecology, Pollution, Lattakia, Syria.

* Zoology Department, Faculty of Science, Aleppo University, Syria.

** Zoology Department, Faculty of Science, Tishreen University, Syria.

*** Faculty of Agriculture, Tishreen University, Syria.

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