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PARASITES OF ALIEN FISHES *SPHYRAENA FLAVICUDA* Rupplell, 1838 and *SPHYRAENA CHRYSOTAENIA* Klunzinger, 1884 IN WESTERN COAST OF LIBYA

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Introduction

Marine ecosystems of the Mediterranean have changed at an alarming rate over the past two centuries, due to the human-mediated arrival of new species (Rilov and Galil, 2009). Marine organisms are serve as hosts for various parasites and other pathogens. Mortality affect the host population and ecosystems, consequently , it will affect the food chain and economy and nutrition (Lessios, 1988). This study aimed to investigate whether parasites accompanied with alien fishes come from the origin area (Red Sea), or the native parasites have found a new host in the Libyan water as well as, to fill the gap of a knowledge in this field.

Material and methods

Fishes were collected from fishermen directly from the western coast of Libya, the freshens were considered, The study was focused on metazoan parasites. the parasites examination was carried out according to Heil, (2009).

Results

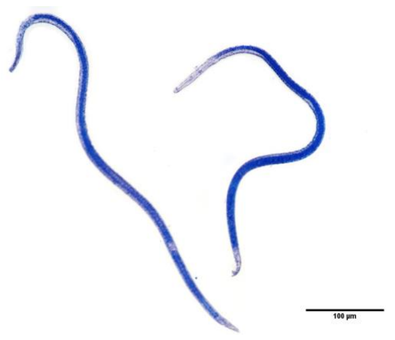
A total of 46 and 10 individuals of *S . flavicuda* and *S.chrysotaenia* respectively have been collected from the fishermen in the western coast of Libya, the rates of infection in *S. flavicauda* and *S. chrysotaenia* were 46% and 32% respectively, seven parasites species have found . The prevalence, intensity and abundance have been calculated for parasites (Table. 1).

Table .1. Prevalence, intensity and abundance for parasites in *S. flavicauda* and *S. chrysotaenia* in the western coast of Libya

Host	*S. flavicuda*			*S. crythesotina*		
	Prevalence	Intensity	Abundance	Prevalence	Intensity	Abundance
Hysterothylacium aduncum	6.52	1	0.06	-	-	-
Contracaecum type III	4.35	3	0.04	-	-	-
Diplectanum cazauxi	95.7	1.36	0.95	-	-	-
Diplectanum dunanchae	85.1	1.48	0.85	30	0.30	0.30
Gnathia sp	30.4	2	0.30	-	-	-
Halacarus sp.	-	-	-	70	0.70	0.70
Paraclanus paravus	21.2	10	0.21	-	-	-

Conclusions

- Seven parasite species have been found in the both fish species
- A total of 119 different individual of parasites have been collected
- The rates of infection in *S. flavicauda* and *S. chrysotaenia* were 46% and 32% respectively.
- The highest prevalence was in *D. cazauxi* and the lowest was in *Contracaecum* type III for *S. flavicauda*.
- The highest prevalence in *S. chrysotaenia* was in *halacarus* sp. and the lowest was in *Diplectanum dunanchae*.
- The NIS *D. cazauxi* and *D. dunanchae* (Monogeneans) have been found in these fishes .

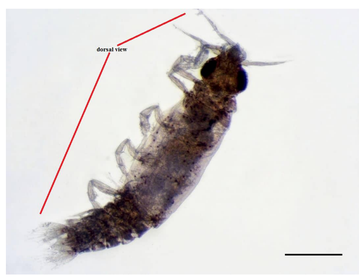


Contracaecum type III

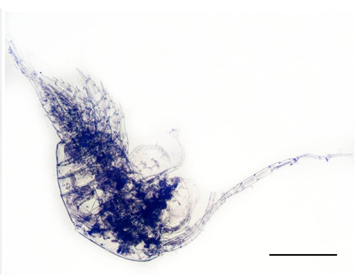
Hysterothylacium aduncum

Diplectanum cazauxi

Diplectanum dunanchae



Gnathia sp



Calanus parvus

halacarus sp.

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