Iranian Journal of Animal Biosystematics (IJAB)
Vol. 3, No. 1, 1-14, 2007
ISSN: 1735-434X

Permanent intertidal fish from the Persian Gulf and Gulf of Oman, Iran

M. GHANBARIFARDI AND M. MALEK*

**School of Biology, College of Science, University of Tehran, Tehran, Iran*

The present study provides the first large scale survey on intertidal ichthyofauna along the coastline of Iran from Gawater Bay (Border of Pakistan) in the Gulf of Oman to ArvandKenar (Border of Iraq) in the Persian Gulf. This study was carried out in the years 2005-2006 at 15 stations, including mangrove, mudflat and rocky shores. Specimens were collected at low tide from tide pools, using chlorine and hand net. Although 36 species from 15 families were collected only 17 species including *Alticus kirkii, Antennablennius bifilum, A. variopunctatus, Istiblennius edentulous, I. pox, I. spilotus, Parablennius opercularis, Omobranchus fasciolatus, O. mekranensis, O. punctatus,* (belong to family Blenniidae) and *Boleophthalmus dussumieri, Periophthalmus waltoni, Scartelaos tenuis*, *Acentrogobius dayi*, *Bathygobius meggitti*, *Cryptocentroides arabicus* and *Istigobius ornatus* (belong to family Gobiidae) were regarded as permanent residents.

Key words: Blenniidae, Gobiidae, Intertidal zone, Persian Gulf, Gulf of Oman

INTRODUCTION

Apart from Iran, the intertidal fishes of the Persian Gulf and Gulf of Oman are well studied by Smith (1959a and b), Murdy (1989), Wright *et al.* (1990), Abou-Seedo (1992), Springer and Williams (1994), Randall, *et al.* (1994) and Randall (1995). The first study on the ichthyofauna of Iran was carried out by Danish scientists and the result was published by Blegvad and Loppenthin (1944). In their study 214 species belonging to 70 families were recorded. Other studies are confined to Fisher and Bianchi (1984) and Kuronuma and Abe (1986). Although recently, Iranian scientists (Assadi and Dehghani, 1997; Sadeghi, 2002) have done some surveys on fish, most studies are devoted to commercially important species. Therefore, except for some species recorded by Blegvad and Loppenthin (1944), there are no other studies about the intertidal fish of Iran. The present study aims to document the permanent resident intertidal fish of Iran from a taxonomic and biogeographic point of view.

MATERIAL AND METHODS

Fish were collected along Iranian coasts of the Persian Gulf and Gulf of Oman from 15 stations including mangrove, mudflat and rocky shores during the years 2005 and 2006 (Table 1). Specimens were collected at low tide from tide pools, using chlorine and hand net. Specimens from mangrove and mudflat were caught by hand net. Then, the specimens were preserved in 5% formalin (formalin was injected into the body of larger fish) and for final preservation first washed by freshwater and then transferred to 75% alcohol. Identification was aided using available identification keys, and also deposited materials at the Senckenberg Museum, Frankfurt (SMF) and Zoological Museum,

***CORRESPONDING AUTHOR :** mmalek@khayam.ut.ac.ir

University of Tehran (ZUTC). For all species of the presented study, synonym names, a brief description, material examined, type locality and world geographical distributions are presented.

TABLE 1.- Sampling localities and habitat types.

STATION	GLOBAL POSITION	HABITAT
1- ArvandKenar	29°56'N 48°35'E	Mudflat
2- Mahshahr	30°28'N 49°11'E	Mudflat
3- Shirounak	29°40'N 50°23'E	Mudflat
4- Rig	29°28'N 50°37'E	Mudflat
5- Dayyer	27°50'N 51°56'E	Rocky
6- Bandar-e Lengeh	26°36'N 54°54'E	Rocky
7- Qeshm Island	26°55'N 56°15'E	Rocky
8- Tiab	27°3'N 56°51'E	Mudflat
9- Gatan	25°58'N 57°15'E	Mudflat
10- Bahal	25°42'N 57°54'E	Rocky
11- Shahreno	25°42'N 57°56'E	Mudflat
12- Khurekhalasi	25°35'N 58°02'E	Mangrove
13- Chabahar	25°16'N 60°40'E	Rocky
14- Ramin	25°16'N 60°44'E	Rocky
15- Gawater	25°08'N 61°27'E	Rocky and Mangrove

TAXONOMIC ACCOUNT
Family BLENNIIDAE
Subfamily SALARIINAE
Genus *Alticus* Lacepède, 1800
1- *Alticus kirkii* (Günther, 1868)

Salarias kirkii, **Günther, 1868**
Lophalticus kirkii magnusi, Klausewitz, 1964.
Alticus kirkii, Dor, 1984.

All caudal rays unbranched; gill opening extending below level of pectoral fin base; supraorbital cirrus present; fleshy flap or crest on top of head of both sexes; no lateral line (Smith and Heemstra, 1986, Carpenter, *et al*., 1997).

Material examined: SMF 24780 (B-03/13/02 A), ZUTC Teleost 1107, #20, 8-11cm, Chabahar, 25° 16'N, 60° 40'E, 18.11.2005

Type locality: Zanzibar Island, Tanzania

Distribution: Mozambique and Reunion to India, including the Persian Gulf. Also in the Red Sea

Genus *Antennablennius* Fowler, 1931

2- *Antennablennius bifilum* (Günther, 1861)

Blennius bifilum, Günther, 1861.
Blennius persicus, Regan, 1905.
Antennablennius bifilum, Springer, 1986.
Some caudal rays forked; gill opening extending below level of pectoral fin base; no cirrus on eye; cirri present on rim of anterior nostril; no crest on head in either sexes; a pair of very long close-set cirri on nape (Smith and Heemstra, 1986, Carpenter, *et al.*, 1997).

Material examined: SMF 12773 (B-03/14/01 A), ZUTC Teleost. 1030, #15, 2-7cm, Chabahar 25°16'N, 60°40'E and Ramin, 25°16'N, 60° 40'E, 18.11.2005

Type locality: No locality

Distribution: Persian Gulf to Port Alfred, South Africa

3- *Antennablennius variopunctatus* (Jatzow & Lenz, 1898)

Blennius variopunctatus, Jatzow and Lenz, 1898.
Antennablennius (Litanchus) velifer, Smith, 1959b.
Antennablennius variopunctatus, Randall *et al.*, 1994.

Some caudal rays forked; gill opening extending below level of pectoral fin base; no cirrus on eye; a long downward-projecting tentacle on anterior nostril; a pair of small cirri on nape; no crest on head in either sex (Smith and Heemstra, 1986, Carpenter, *et al.*, 1997).

Material examined: SMF 17062 (B-03/13/02 A), ZUTC Teleost. 1037, #50, 2-6cm, Chabahar, 25°16'N, 60° 40'E, 27.5.2006; ZUTC Teleost. 1129, #250, Qeshm Island, 26° 55' N, 56 °15' E, 9.7.2006

Type locality: Zanzibar Island, Tanzania

Distribution: Mozambique to Pakistan, including the Gulf of Oman and the Persian Gulf.

Genus *Istiblennius* Whitley, 1943

4- *Istiblennius edentulus* (Forster & Schneider, 1801)

Blennius edentulus, Forster and Schneider in Bloch and Schneider, 1801.
Salarias quadricornis, Valenciennes in Cuvier and Valenciennes, 1836.
Istiblinnius edentululus, Allen and Swainston, 1988.
Istiblennius edentulus, Dor, 1984.

Caudal rays forked; gill opening extending below level of pectoral fin base; edge of lips smooth; supraorbital tentacle slender, flattened, simple (without any branch); a pair of cirri on nape; male with a blade like fleshy crest on head (Smith and Heemstra, 1986, Randall, 1995).

Material examined: SMF 1872 (B-03/14/05 A), ZUTC Teleost 1065, #4, 4-8cm, Ramin, 25° 16'N, 60° 44'E, 28.5.2006; ZUTC Teleost 1087, #2, Bahal, 25° 42'N, 57° 54'E, 1.10.2005

Type locality: Tahiti, Society Island.

Distribution: Red Sea and East Africa to the Line, Marquesan and Tuamoto islands, north to southern Japan, south to Lord Howe and Rapa.

5- *Istiblennius pox* Springer & Williams, 1994

Caudal rays forked; gill opening extending below level of pectoral fin base; edge of upper lip crenulate, of lower lip smooth; supraorbital tentacle branched; no cirri on nape; light yellowish gray with blackish longitudinal lines on body; males with small dark red spots on crest; females without crest (Smith and Heemstra, 1986, Randall, 1995).

Material examined: ZUTC Teleost 1038, #15, 4-12cm, Chabahar, 25° 16' N, 60° 40' E, 27.5.2006; ZUTC Teleost 1041, #60, Ramin, 25° 16'N, 60° 44'E, 28.5.2006; ZUTC Teleost 1088, #8, Bahal, 25° 42'N, 57° 54'E, 1.10.2005; ZUTC Teleost 1130, #30, Qeshm Island, 26° 55'N, 56° 15'E, 9.7.2006.

Type locality: Tide pools at Boleji Pt., Karachi, Pakistan

Distribution: southern Red Sea to the Persian Gulf and Pakistan.

6- *Istiblennius spilotus* Springer & Williams, 1994

Caudal rays forked; gill opening extending below level of pectoral fin base; no cirri on nape; margins of lips crenulate; supraorbital tentacle pinnately branched; male with a crest on head; female without crest; dark, posteriorly rounded blotches on body (Smith and Heemstra, 1986, Randall, 1995).

Material examined: ZUTC Teleost 1091, #1, 12cm, Ramin, 25° 16'N, 60° 44'E, 28.5.2006.

Type locality: Tide pools at Boleji Pt., Karachi, Pakistan

Distribution: Pakistan and the Gulf of Oman to Natal, South Africa and Madagascar. Recently reported from Reunion.

Genus *Parablennius* Miranda-Ribeiro, 1915

7- *Parablennius opercularis* (Murray, 1887)

Salarias opercularis, Murray, 1887.
Salarias neilli, Day, 1888.
Parablennius opercularis, Bath, 1989.

A well developed canine tooth posteriorly in both upper and lower jaws; supraorbital tentacle large

with three branches; no cirri on nape; anterior nostril with a small cirrus on posterior rim; anterior lateral line with numerous distinct dorsoventral paired branches terminating in pores (Smith and Heemstra, 1986, Randall, 1995).

Material examined: SMF 21904 (B-03/14/03 B), ZUTC Teleost 1089, #2, 3cm, Ramin, 25° 16' N, 60° 44'E, 28.5.2006

Type locality: Manora rocks, Kurachee, India

Distribution: Persian Gulf to Pakistan and India

Subfamily: Omobranchinae
Genus *Omobranchus* Valenciennes, 1836
8- *Omobranchus fasciolatus* (Valenciennes, 1836)

Blennechis fasciolatus, Valenciennes in Cuvier and Valenciennes, 1836.
Petroscirtes striatus, Jatzow and Lenz, 1898.
Petroscirtes viciguerrae, Borsieri, 1904.
Omobranchus cristatus, Fraser-Brunner, 1951.
Omobranchus fasciolaus, Springer and Gomon, 1975.

All caudal rays unbranched; gill opening not extending below level of pectoral fin base; no cirrus on eye; a crest on top of head of males; approximately 17 vertical, broad, dusky to dark loads on body (Smith and Heemstra, 1986, Springer and Gomon, 1975).

Material examined: SMF 18028 (B-03/14/03 B), ZUTC Teleost 1031, #20, 3-5cm, Chabahar, 25° 16'N, 60° 40'E, 27.5.2006; ZUTC Teleost 1035, #3, Dayyer, 27° 50'N, 51° 56'E, 13.6.2006; ZUTC Teleost 1114, #15, Qeshm Island, 26° 55'N, 56° 15 'E, 9.7.2006

Type locality: Naval Base at Massawa, Eritrea, Red Sea

Distribution: Red Sea south to Inhambane, Mozambique and Persian Gulf to Gulf of Kutch.

9- *Omobranchus mekranensis* (Regan, 1905)

Petroscirtes mekranensis, Regan, 1905.
Petroscirtes cristatus, Zugmayer, 1913.
Omobranchus mekranensis, Springer and Gomon, 1975.

All caudal rays unbranched; gill opening not extending below level of pectoral fin base; no cirrus on eye; a crest on top of head of both sexes; pale to pale dusky with seven pairs of vertical broad, dark bands on body (Smith and Heemstra, 1986, Springer and Gomon, 1975).

Material examined: SMF 13519 (B-03/14/03 A), ZUTC Teleost 1090, #1, 5cm, Gawater, 25° 08'N, 61° 27'E, 18.11.2005; ZUTC Teleost 1097, #50, Gawater, 25° 08'N, 61° 27'E, 28.5.2006

Type locality: Jask, Iran

Distribution: Persian Gulf, Gulf of Oman and Pakistan

10- *Omobranchus punctatus* (Valenciennes, 1836)

Blennechis punctatus, Valenciennes in Cuvier and Valenciennes, 1836.
Petroscirtes dispar, Günther, 1861.
Salarias sindensis, Day, 1888.
Petroscirtes punctatus, Blegvad and Loppenthin, 1944.
Omobranchus punctatus, Springer and Gomon, 1975.

All caudal rays unbranched; gill opening not extending below level of pectoral fin base; no cirrus on eye; no crest on top of head; four or five, more or less parallel, evenly spaced, slightly wavy, dark, horizontal lines present anteriorly on dorsal three- fourths of body (Smith and Heemstra, 1986, Springer and Gomon, 1975).

Material examined: SMF 11861 (B-03/14/03 A), ZUTC Teleost 1023, #9, 5-7cm, Bandar-e Lengeh, 26° 36'N, 54° 54'E, 10.6.2006

Type locality: Bombay, India

Distribution: Persian Gulf to Fiji and north to Japan. Known from Delagoa Bay, Mozambique and Suez Canal on the African coast. Introduced in Trinidad and Panama Canal near Atlantic end.

Family GOBIIDAE
Subfamily OXUDERCINAE
Genus *Boleophthalmus* Valenciennes, 1837
11- *Boleophthalmus dussumieri* Valenciennes, 1837

Boleophthalmus dentatus, Valenciennes in Cuvier and Valenciennes, 1837.
Boleophthalmus chamiri, Holly, 1929.
Boleophthalmus dussumieri, Murdy, 1989.

Lower jaw typically possessing a single row of teeth; pelvic fins are connected and made a pelvic frenum without fleshy lobes; body elongate; eyes located almost dorsally; lower eyelid present; two canine teeth internal to lower jaw symphysis (Larson and Murdy, 2001).

Material examined: ZUTC Teleost 1009, ZUTC Teleost 1048, #5, 5-17cm, Shahreno, 25° 42' N, 57° 56' E, 15.11.2005; ZUTC Teleost 1050, #2, Shirounak, 29° 40'N, 50° 23'E, 14.4.2006; ZUTC Teleost 1053, #5, Rig, 29° 28'N, 50° 37'E, 13.4.2006; ZUTC Teleost 1058, #2, Mahshahr, 30° 28'N, 49° 11'E, 16.4.2006; ZUTC Teleost 1059, #35, Arvandkenar, 29° 56'N, 48° 35'E, 17.4.2006

Type locality: Bombay, India

Distribution: Persian Gulf, Gulf of Oman, Pakistan and India

Genus *Periophthalmus* Bloch & Schneider, 1801
12- *Periophthalmus waltoni* Koumans, 1941

lower jaw typically possessing a single row of teeth; pelvic fins are connected but not totally; eyes located mostly dorsally; lower eyelid present; no canine teeth internal to lower jaw symphysis (Larson and Murdy, 2001).

Material examined: ZUTC Teleost 1011, ZUTC Teleost 1046, #20, 5-15cm, Tiab, 27° 3'N, 56° 51'E, 31.12.2005; ZUTC Teleost 1047, #2, Shahreno, 25° 42'N, 57° 56'E, 15.11.2005; ZUTC Teleost 1054, #5, Rig, 29° 28'N, 50° 37'E, 13.4.2006; ZUTC Teleost 1080, #15, Mahshahr, 30° 6'N, 49° 46'E, 15.4.2006

Type locality: Iraq and Pakistan

Distribution: Persian Gulf, Gulf of Oman and Pakistan

Genus *Scartelaos* Swaison, 1839
13- *Scartelaos tenuis* (Day, 1876)

Boleophthalmus tenuis, Day, 1876.
Scartelaos tenuis, Murdy, 1989.

Lower jaw typically possessing a single row of teeth; pelvic fins are connected and made a pelvic frenum without fleshy lobes; body elongate; eyes located mostly dorsally; lower eyelid present; two canine teeth internal to lower jaw symphysis. Barbels present on outer side of head (Larson and Murdy, 2001).

Material examined: ZUTC Teleost 1015, ZUTC Teleost 1045, #10, 4-15cm, Gawater, 25° 08' N, 61° 27E, 18.11.2005; ZUTC Teleost 1132, #15, Khurekhalasi, 25° 35'N, 58° 02'E, 21.11.2005

Type locality: Estuaries of Karachi, Sind, Pakistan

Distribution: Persian Gulf, Gulf of Oman and Pakistan

Subfamily GOBIINAE
Genus *Acentrogobius* Bleeker, 1874
14- *Acentrogobius dayi* Koumans, 1941

Lower jaw typically possessing several rows of teeth; pelvic fins are connected and made a pelvic frenum without fleshy lobes; scales large and ctenoid posteriorly, progressively smaller anteriorly, becoming cycloid below origin of first dorsal fin, a blue-green to blue spot at upper base of caudal fin but persists as a dark brown spot in preservative (Larson and Murdy, 2001, Randall, 1995).

Material examined: ZUTC Teleost 1052, #1, 5-12cm, Shirounak, 29° 40'N, 50° 23'E, 14.4.2006; ZUTC Teleost 1105, #5, Mahshahr, 30° 28'N, 49° 11'E, 16.4.2006

Type locality: Karachi, Pakistan

Distribution: Persian Gulf, Gulf of Oman and Pakistan

Genus *Bathygobius* Bleeker, 1878
15- *Bathygobius meggitti* (Hora & Mukerji, 1936)

Ctenogobius meggitti, Hora and Mukerji, 1936.
Bathygobius blancoi, Roxas and Ablan, 1940.
Bathygobius meggitti, Randall, 1995.

Lower jaw typically possessing several rows of teeth; pelvic fins are connected and made a pelvic frenum without fleshy lobes; tips of upper pectoral-fin rays free and silk like; scales ctenoid to below middle of first dorsal fin, cycloid anteriorly (Larson and Murdy, 2001, Randall, 1995).

Material examined: ZUTC Teleost 1042, #105, 2-8cm, Ramin, 25° 16'N, 60° 44'E, 18.11.2005; ZUTC Teleost 1115, Chabahar, #100, 25° 16'N, 60° 40 E, 27.5.2006

Type locality: Dagupan, Pangasinan Province, Luzon Island, Philippines.

Distribution: Indo-West Pacific

Genus *Cryptocentroides* Popta, 1922
16- *Cryptocentroides arabicus* (Gmelin, 1789)

Gobius arabicus, Gmelin, 1789.
Gobius bimaculatus, Ehrenberg in Cuvier and Valenciennes,1837.
Flabelligobius arabicus, Smith, 1959a.
Cryptocentroides arabicus, Randall *et al*., 1994.

Lower jaw typically possessing several rows of teeth; pelvic fins are connected and made a pelvic frenum without fleshy lobes; a thin dermal crest on top of head anterior to first dorsal fin; light greenish grey with numerous small red spots and bright blue dots on head and body (Larson and Murdy, 2001, Randall, 1995).

Material examined: SMF 583 (B-04/01/05 A), ZUTC Teleost 1033, #50, 2-10cm, Dayyer, 27° 50' N, 51° 56'E,13.6.2006; ZUTC Teleost 1125, #30, Bandar-e Lengeh, 26° 36'N, 54° 54'E, 10.6.2006

Type locality: Jidda, Saudi Arabia, Red Sea

Distribution: Red Sea to the Persian Gulf.

Genus *Istigobius* Whitley, 1932
17- *Istigobius ornatus* (Rüppell, 1830)

Gobius elegans, Valenciennes in Cuvier and Valenciennes, 1837.
Gobius ornatus, Day, 1870.
Acentrogobius ornatus, Koumans, 1935.
Istigobius ornatus, Akihito in Masuda, *et al*., 1984.

Lower jaw typically possessing several rows of teeth; pelvic fins are connected and made a pelvic frenum without fleshy lobes; tips of upper pectoral-fin rays free and silk like; scales on body ctenoid; two longitudinal rows of deep blue spots, one on mid side mostly as two or three spots together, and one row on lower side (mostly as double spots) (Larson and Murdy, 2001, Randall, 1995).

Material examined: SMF 6450 (B-04/01/05 B), ZUTC Teleost 1029, #150, 2-8cm, Chabahar, 25° 16'N, 60° 40'E, 27.5.2006; ZUTC Teleost 1034, #3, Dayyer, 27° 50' N, 51° 56'E, 12.4.2006, ZUTC Teleost 1043, #5, Ramin, 25° 16'N, 60° 44'E, 28.5.2006

Type locality: Massawa, Eritrea, Red Sea.

Distribution: Red Sea south to northern Mozambique and east to Fiji, north to southern Taiwan, south to New Caledonia. Recently recorded from Tonga.

The geographical distribution of 17 species of the present study is presented in Fig.1.

ZOOGEOGRAPHY

Based on the material from present and previous studies (Blegvad and Loppenthin, 1944; Klausewitz, 1964; Springer and Gomon, 1975; Goren, 1979; Kuronuma and Abe, 1986; Bath, 1989; Murdy, 1989; Springer and Williams, 1994; Randall, 1995; Bishop, 2003; Manilo and Bogorodsky, 2003), seventeen species of the present study could be zoogeographically categorized into three groups based on their distribution pattern including:

1- Endemic to the Persian Gulf, Gulf of Oman, Pakistan and Arabian Sea:
Six species (35%) including *A. dayi, B. dussumieri, P. waltoni, S. tenuis, O. mekranensis* and *P. opercularis* are known as endemic species for the area.

2- Species with West Indian Ocean distribution pattern:
Seven species (41%) are known from the Indian Ocean, five of these are restricted to the tropical-West Indian Ocean (*C. arbicus*, *I. spilotus*, *A. kirkii*. *A. bifilum*, *A. variopunctatus*). Two species, *I. pox* and *O. fasciolatus* are recorded from tropical North Western Indian and tropical Indian Ocean, respectively.

3- Widespread in the Indo-West Pacific region:
Four species (24%) are known from the Indo-West Pacific, three of these are restricted to the pantropical Indo-West Pacific (*I. ornatus*, *I. edentulous*, *O. punctatus*) and *B. meggitti* is recorded from tropical North Indian West Pacific.

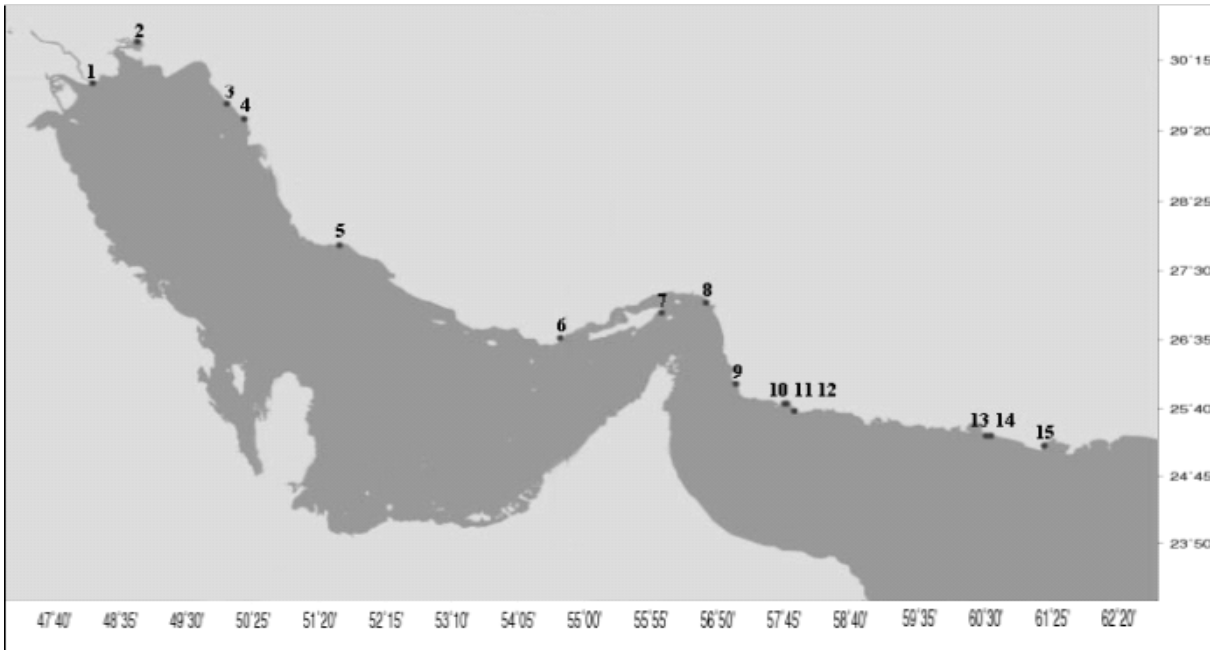

FIG.1. - Distribution of 17 species collected from the Persian Gulf and Gulf of Oman.
1. *Boleophthalmus dussumieri* 2. *Boleophthalmus dussumieri, Acentrogobius dayi* 3. *Boleophthalmus dussumieri, Acentrogobius dayi* 4. *Boleophthalmus dussumieri, Periophthalmus waltoni* 5. *Omobranchus fasciolatus, Cryptocentroides arabicus, Istigobius ornatus* 6. *Omobranchus punctatus, Cryptocentroides arabicus* 7. *Antennablennius variopunctatus, Istiblennius pox, Omobranchus fasciolatus* 8. *Periophthalmus waltoni* 9. *Scartelaos tenuis* 10. *Istiblennius edentulus, Istiblennius pox* 11. *Boleophthalmus dussumieri, Periophthalmus waltoni* 12. *Periophthalmus waltoni, Scartelaos tenuis* 13. *Alticus kirkii, Antennablennius bifilum, Antennablennius variopunctatus, Istiblennius edentulus, Istiblennius pox, Omobranchus fasciolatus, Bathygobius meggitti, Istigobius ornatus* 14. *Istiblennius pox, Istiblennius spilotus, Parablennius opercularis, Bathygobius meggitti, Istigobius ornatus* 15. *Omobranchus mekranensis, Scartelaos tenuis.*

Five species, *A. dayi*, *I. ornatus*, *P. waltoni*, *S. tenuis*, *O. punctatus*, and *A. bifilum* were previously recorded by Blegvad and Loppenthin (1944). Presence of *B. fuscus* was reported by Kuronuma and Abe (1986) from tidepools in Bushehr. *Bathygobius meggitti* is recorded from Oman (Randall, 1995), Qeshm island (Pehpouri, 2004), Arabian Sea (Manilo and Bogorodsky, 2003) and Persian Gulf (present study). None of recent studies recorded *B. fuscus* from the Persian Gulf and Gulf of Oman. It is possible that the specimens studied by Blegvad and Loppenthin (1944) were misidentified and these belong to *B. meggitti*. Therefore, there is a need for reexamination of the material deposited in the Zoological Museum, University of Copenhagen (ZMUC).
It seems that the recorded specimens of *Istiblennius lineatus* by Blegvad and Loppenthin (1944) from the Persian Gulf probably belong to *I. pox*, because their description for *S. lineatus* is very similar to the published description of *I. pox* (Springer and Williams, 1994) and also, some material of *I. lineatus* in ZMUC was identified as *I. pox* by Springer and Williams (1994).
All 17 species of the present study have been reported along Arabian coasts (Randall, 1995; Carpenter, *et al*., 1997; Bishop, 2003), but some species have not previously been recorded from the Iranian coasts. In the present study, for the first time from Iranian waters, *I. pox* (from the Persian Gulf and Gulf of Oman), *I. edentulous*, *I. spilotus*, *A. kirkii* and *A. bifilum* (from the Gulf of Oman) are reported and *Omobranchus fasciolatus* is a new record from Qeshm Island.
The results of the present study provide new collection and biogeographical considerations for permanent intertidal fish of the Iranian coast of the Persian Gulf and Gulf of Oman about forty

years after the comprehensive work by Blegvad and Loppenthin (1944). This includes 17 species with their exact locality of which six species are new records for the area.

ACKNOWLEDGEMENTS

The authors would like to express their sincere gratitude to Dr. F. Krupp, Curator of the fish section, Senckenberg Natural History Museum of Frankfurt for his invaluable help and comments in identification of fish. Financial support was provided by the Ministry of Science, Research and Technology of Iran, University of Tehran and German Academic Exchange Service (DAAD). Thanks are extended to Dr. A. Sari for his help and useful comments. We would like to acknowledge the help of A. Shahdadi, M. Moradmand and A. Kazemi for their support during sampling and K. Borkenhagen for providing some literatures.

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*CORRESPONDING AUTHOR : mmalek@khayam.ut.ac.ir