

A CHECK-LIST OF SPECIES OF ADRIATIC BLENNIOIDEA  
(PISCES, TELEOSTEI, PERCIFORMES)

Armin PALLAORO<sup>1</sup> and Zdravko ŠTEVČIĆ<sup>2</sup>

A b s t r a c t

The fauna of the Adriatic Blennioidea species is revised. The check-list comprises species names (valid and synonyms) as well as data on habitat, abundance and localities. The validity of some species, their names and occurrence in the area are discussed.

PREGLEDNA LISTA VRSTA BLENNIOIDEA JADRANSKOG MORA  
(PISCES, TELEOSTEI, PERCIFORMES)

I z v o d

U radu je dana revizija jadranskih vrsta Blennioidea. Lista sadrži nazive vrsta (validne i sinonime), kao i podatke o staništu, brojnosti i lokalitetima na kojima su do sada zabilježene. Diskutira se o validnosti nekih vrsta, njihovim imenima i prisustvu na jadranskom području.

I n t r o d u c t i o n

The order Blennioidea (Clinidae, Blenniidae and Tripterygiidae families) of the Adriatic Sea, judging by the number of references, has been extensively investigated. The history of the research on Blennioidea is very long, but of particular importance are investigations of Steindachner and Kolombatović at the end of the last century, and more recently those of Bath, Zander and Abel. As a result of the investigations of the Adriatic, the Blennioidea fauna is rather well known. Moreover it is noteworthy

<sup>1</sup> Institute of Oceanography and Fisheries, 58001 Split

<sup>2</sup> Ruđer Bošković Institute, Center for Marine Research, 52210 Rovinj

that three species (*Lipophrys adriaticus*, *L. dalmatinus* and *Parablennius zvonimiri*), one species and subspecies (*Lipophrys nigriceps nigriceps*) and one subspecies (*Tripterygion melanurus minor*) of the 21 species recorded in the area (17 Blenniidae, 3 Tripterygiidae and 1 Clinidae) were described as Adriatic specimens. In spite of this knowledge, several problems remained unclarified, and Morović (1979) focused his attention on these. His critics called for a review of all precedent investigations of the Adriatic blenniid fishes. Accordingly, a check-list of the Blennioidea species has been prepared, which includes valid scientific names, synonyms and authors who cited their occurrence in the Adriatic Sea, and, data on their habitat, distribution and abundance inside the area. As a nomenclatural basis we accepted the classification adopted by Bauchot (1987).

In the present check-list the genera and species have been listed in alphabetical order, while synonyms and authors using them are given chronologically. The localities were cited according to their geographical position moving from north to south, first on the mainland and then on the islands. The new findings of species, given by authors of this paper, are from Poreč, the entire middle Adriatic area, Boka Kotorska bay and the southern Adriatic area.

In the Adriatic Sea the following species were recorded:

#### I. BLENNIIDAE

##### *Aidablennius* Whitley, 1947

##### *Aidablennius sphynx* (Valenciennes, 1836)

*Blennius sphynx*: Botteri - Heckel - Lanza, 1845 (Brusina, 1892); Boglić - Botteri, 1849 (Brusina, 1847); Botteri - Bellotti - Danilo, 1854 (Brusina, 1892); Steindachner, 1868, 1876; Stossich, 1879; Kolombatović, 1881, 1882a, 1882b, 1884, 1886, 1888, 1892a; Perugia, 1881, Faber, 1883; Carus, 1893; Kišpatić, 1893; Griffini, 1903; Lorini, 1903; Langhoffer, 1904; Ninni, 1912; Šoljan, 1948, 1963, 1965, 1975; Poljakov et al., 1954; Zei, 1963; Pavletić, 1965; Bini, 1968; Segatin, 1968; Zei & Abel, 1970; Bath, 1973, 1979a; Tortonese, 1975; Zander & Jelinek, 1976; Obrenović & Števcíć, 1977; Goldschmid et al., 1980; Radić, 1982; Abel, 1983; Jardas, 1985.

*Aidablennius sphynx*: Bath, 1977; Goldschmid et al., 1980; Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: very shallow, rocky, mediollitoral and upper infralittoral biotopes not deeper than 1 m, exposed to sunlight and surf; on horizontal, algae-covered terraces.

Adriatic distribution: Venice, Trieste, Muggia, Rovinj, Medulin (Ceja island), Karlobag, Kornati islands, Channel of Zadar, the entire middle adriatic area: Šibenik, Split, Makarska, Podaca (near Kardeljevo), Orebić and islands (Brač, Šolta, Drvenik, Hvar, Vis, Lastovo, Korčula), Lokrum island, Boka Kotorska bay.

Abundance: scarce throughout the entire area.

*Blennius* Linnaeus, 1758

*Blennius ocellaris* Linnaeus, 1758

*Blennius ocellaris*: Nardo, 1827; Martens, 1838; Botteri - Heckel - Lanza, 1845 (Brusina, 1892); Boglić - Botteri, 1849 (Brusina, 1874); Botteri - Bellotti - Danilo, 1854 (Brusina, 1892); Steindachner, 1868, 1876; Stossich, 1879; Kolombatović, 1881, 1882b, 1884, 1886, 1888, 1892a, Perugia, 1881; Faber, 1883; Pregl, 1883; Graeffe, 1888; Kosić, 1889, 1903; Carus, 1893; Kišpatić, 1893; Sucker, 1895; Griffini, 1903; Lorini, 1903; Langhoffer, 1904; Zimmermann, 1906; Ninni, 1912; Vatovala, 1928; Šoljan, 1948, 1963, 1965, 1975; Poljakov et al., 1954; Zei, 1963; Lepetić, 1965, Pavletić, 1965; Grubišić, 1967, 1982; Bini, 1968; Segatin, 1968; Zei & Abel, 1970; Bath, 1973, 1977, 1979a; Štirn & Valentinčič, 1975; Tortonese, 1975; Obrenović & Štević, 1977; Stjepčević & Parenzan, 1980; Radić, 1982; Abel, 1983; Onofri, 1983; Jardas, 1985; Zander, 1986; Bauchot, 1987; Pallaoro, 1987a, 1987b.

Habitat: all types of mobile (clayey, loamy and sandy) bottoms of lower infralittoral and circalittoral zones, with marked preference to sandy bottoms, that is bottoms with coarser sediment structure; from 10-200 m (300 m) depth range, but more numerous from 50-150 m.

Adriatic distribution: the shelf of the entire eastern Adriatic, more numerous in the channels of the middle and open southern Adriatic than in the northern and open middle Adriatic.

Abundance: northern and open middle Adriatic: rather scarce, channel area of middle Adriatic and open southern Adriatic: slightly more numerous.

*Coryphoblennius* Norman, 1943

*Coryphoblennius galerita* (Linnaeus, 1758)

*Blennius alauda*: Nardo, 1827.

*Blennius montagui*: Botteri - Heckel - Lanza, 1945 (Brusina, 1892); Stossich, 1879; Kosić, 1889.

*Blennius galerita*: Boglić - Botteri, 1849 (Brusina, 1874); Steindachner, 1868, 1876; Kolombatović, 1881, 1882a, 1882b, 1886, 1888, 1892a; Perugia, 1881, Faber, 1883, Carus, 1893; Kišpatić, 1893; Griffini, 1903; Lorini, 1903; Langhoffer, 1904; Zimmerman, 1906; Ninni, 1912; Vatovala, 1928; Šoljan, 1932, 1948, 1963, 1965, 1975; Poljakov et al., 1954; Zei, 1963; Pavletić, 1965; Bini, 1968; Zei & Abel, 1970; Marcuzzi, 1972; Štirn & Valentinčić, 1975; Zander & Jelinek, 1976; Obrenović & Števcic, 1977; Goldschmid et al., 1980; Radić, 1982; Abel, 1983.

*Ichthyocoris galerita*: Botteri - Bellotti - Danilo, 1854 (Brusina, 1892).

*Ichthyocoris montagui*: Botteri - Bellotti - Danilo, 1854 (Brusina, 1892).

*Coryphoblennius galerita*: Segatin, 1968; Bath, 1973, 1977, 1979a, 1979b; Tortonese, 1975; Goldschmid et al., 1980; Jardas, 1985; Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: steep rocky mediolittoral biotopes, explicitly along the coasts exposed to high waves, not deeper than 0,1 m; in rockpools and sometimes in supralittoral zone.

Adriatic distribution: Venice, Trieste, Savudrija, Rovinj, Medulin (Ceja island), Kornati islands, Channel of Zadar, the entire middle Adriatic area, in particular islands: Split, Makarska, Podaca (near Kardeljevo), Trpanj, Brač, Šolta, Hvar, Vis, Biševo, Palagruža, Sušac, Lastovo, Korčula, then Trašće cove, Budva, Sveti Stefan.

Abundance: northern Adriatic: abundant; middle Adriatic: abundant, along the coasts of outward middle Adriatic and Kornati islands: very abundant.

*Lipophrys* Gill, 1896

*Lipophrys adriaticus* (Steindachner & Kolombatović, 1883)

*Blennius adriaticus*: Steindachner & Kolombatović, 1883; Kolombatović, 1884, 1886, 1888, 1892a; Carus, 1893; Lorini, 1903; Ninni, 1912; Šoljan, 1948, 1963, 1965, 1975; Pavletić, 1965; Bini, 1968; Segatin, 1968; Zei & Abel, 1970; Bath, 1971, 1973, 1979a; Tortonese, 1975; Zander & Jelinek, 1976; Obrenović & Štević, 1977; Goldschmid et al., 1980; Radić, 1982; Abel, 1983; Jardas, 1985.

*Lipophrys adriaticus*: Bath, 1977; Goldschmid et al., 1980; Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: sheltered rocky mediolittoral areas with very rare algae (Cyanophyta) cover, mainly at 0,1-0,5 m, at steep walls, also in intertidal rockpools.

Adriatic distribution: Venice, Trieste, Rovinj, Medulin (Ceja island), Karlobag, Šibenik, Vranjic (near Split), Split, Makarska, Brač, Šolta, Hvar, Vis, Korčula, Pelješac, Lopud, Boka Kotorska bay.

Abundance: northern Adriatic: scarce; middle Adriatic area: not numerous except in sheltered long terrestrial bays (Rogoznica, Kaštela and Boka Kotorska bays) where is abundant.

*Lipophrys basiliscus* (Valenciennes, 1836)

*Ichthyocoris basiliscus*: Boglić - Botteri, 1849 (Brusina, 1874), Botteri - Bellotti - Danilo, 1854 (Brusina, 1892).

*Blennius basiliscus*: Stossich, 1879; Faber, 1883; Kolombatović, 1893; Griffini, 1903; Ninni, 1912; Šoljan, 1948, 1963, 1965, 1975; Bini, 1968; Segatin, 1968; Bath, 1973, 1979a; Tortonese, 1975; Radić, 1982; Jardas, 1985.

*Salaria basilisca*: Bath, 1977.

*Lipophrys basiliscus*: Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: occurs on sandy bottoms of infralittoral zone, between seagrass, sometimes on rocky substratum, at 2-15 m depth range.

Adriatic distribution: Piran, Makarska??, probably not occurring in the Adriatic Sea, except in its most southern areas; the occurrence needs recent confirmations.

Abundance: probably very rare throughout the entire area.

*Lipophrys canevai* (Vinciguerra, 1880)

*Blennius canevae*: Kolombatović, 1881, 1882a, 1882b, 1886, 1888, 1892a; Faber, 1883; Steindachner & Kolombatović, 1883; Carus, 1893; Kišpatić, 1893; Griffini, 1903; Lorini, 1903; Ninni, 1912; Šoljan, 1948, 1963, 1965, 1975; Pavletić, 1965; Bini, 1968, Zei & Abel, 1970; Bath, 1973, 1979a; Zander & Jelinek, 1976; Obrenović & Štević, 1977; Goldschmid et al., 1980; Abel, 1983.

*Blennius lineatus*: Kolombatović, 1886, 1888; Carus, 1893.

*Blennius canevai*: Segatin, 1968; Tortonese, 1975; Jardas, 1985.

*Lipophrys canevae*: Bath, 1977; Goldschmid et al., 1980.

*Lipophrys canevai*: Zander, 1986; Bauchot, 1987; Palaoro, 1987a.

Habitat: occurs on rocky upper infralittoral biotopes, at depths of 0,5-2 m; prefers steep walls with dense phytal cover (Rhodophyta, Phaeophyta).

Adriatic distribution: Venice, Rovinj, Medulin (Ceja island), Karlobag, Kornati islands, Kaštela bay, Split, Makarska, Tрпињ, Brač, Hvar, Šolta, Vis, Palagruža, Sušac, Lastovo, Korčula, Pelješac, Lokrum, Dubrovnik, Boka Kotorska bay, Trašte cove, Budva.

Abundance: very abundant throughout the entire area.

*Lipophrys dalmatinus* (Steindachner & Kolombatović, 1883)

*Blennius dalmatinus*: Steindachner & Kolombatović, 1883, Kolombatović, 1884, 1886, 1888, 1892a; Carus, 1893; Kišpatić, 1893; Lorini, 1903; Ninni, 1912; Šoljan, 1948, 1963, 1965, 1975; Zei, 1963; Pavletić, 1965; Bini, 1968; Segatin, 1968; Bath, 1969, 1973, 1979a; Zei & Abel, 1970; Tortonese, 1975; Obrenović & Štević, 1977; Goldschmid et al., 1980; Radić, 1982; Abel, 1983; Jardas, 1985.

*Lipophrys dalmatinus*: Bath, 1977; Goldschmid et al., 1980; Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: sheltered rocky mediolittoral and upper infralittoral areas exposed to sunlight, occurs on filamentous algae-covered terraces, at 0,5-1,5 m; sometimes in intertidal rock-pools.

Adriatic distribution: Venice, Muggia, Rovinj, Medulin (Ceja island), Biograd, Vranjic (near Split), Split, Makarska, Brač, Šolta, Hvar, Lastovo, Korčula, Dubrovnik, Boka Kotorska bay.

Abundance: northern Adriatic and middle Adriatic: abundant.

*Lipophrys fluviatilis* (Asso, 1801)

*Blennius cagnota*: Botteri - Heckel - Lanza, 1845 (Brusina, 1892); Carrara, 1846; Boglić - Botteri, 1849 (Brusina, 1874); Kolombatović, 1881, 1882b, 1884, 1886, 1888; Ninni, 1912.

*Blennius vulgaris*: Martens, 1838; Steindachner, 1868, 1876; Faber, 1883; Kolombatović, 1892a, 1896; Carus, 1893; Kišpatić, 1893; Griffini, 1903; Lorini, 1903; Mirović, 1978, 1979.

*Blennius varus*: Faber, 1883; Graeffe, 1888.

*Blennius inequalis*: Griffini, 1903; Bath, 1968a; Segatin, 1968.

*Blennius fluviatilis*: Šoljan, 1948, 1963, 1965, 1975; Bath, 1968a; Vuković & Ivanović, 1971; Tortonese, 1975, Jardas, 1985.

*Salaria fluviatilis*: Bath, 1977.

*Lipophrys fluviatilis*: Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: occurs in clear fresh and slightly brackish waters up to  $15 \times 10^{-3}$  salinity, preferring biotopes with rocky bottoms and rapid stream, also on rocky-muddy bottoms along ports.

Adriatic distribution: Garda Lake, Vrana Lake, mouth of river Krka, mouth of river Jadro (Kaštela bay), Bačina Lakes, Rastok, Busine (near Vrgorac), mouth of river Neretva, Skadar Lake.

Abundance: scarce, probably throughout the entire area.

*Lipophrys nigriceps nigriceps* (Vinciguerra, 1883)

*Blennius nigriceps*: Vinciguerra, 1883; Kolombatović, 1884, 1886, 1888, 1892a; Carus, 1893; Kišpatić, 1893; Lorini, 1903; Ninni, 1912; Šoljan, 1948, 1963, 1965, 1975; Zei, 1963; Pavletić, 1965; Bini, 1968; Segatin, 1968; Zei & Abel, 1970; Tortonese, 1975; Zander & Jelinek, 1976; Obrenović & Štević, 1977; Goldschmid et al., 1980; Stjepčević & Parenzan, 1980; Radić, 1982.

*Blennius nigriceps nigriceps*: Bath, 1972, 1973, 1979a; Abel, 1983; Jardas, 1985.

*Lipophrys nigriceps nigriceps*: Bath, 1977; Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

*Lipophrys nigriceps*: Goldschmid et al., 1980.

Habitat: occurs in sea caves, semicaves, under the overhanging rocks and other more dimly lit biotopes, not deeper than 6 m, clinging to walls or ceiling of caves.

Adriatic distribution: Venice, Rovinj, Medulin (Ceja island), Karlobag, Kornati islands, everywhere on middle Adriatic area, in particular islands: Šibenik, Split, Omiš, Makarska, Dubrovnik, Brač, Šolta, Hvar, Vis, Lastovo, Sušac, Kopačevo, Korčula, Pelješac; Boka Kotorska bay, Trašte cove, Budva.

Abundance: rather common throughout the entire area.

*Lipophrys pavo* (Risso, 1810)

*Blennius pavo*: Botteri - Heckel - Lanza, 1845 (Brusina, 1892); Steindachner, 1868, 1876; Stossich, 1879; Kolombatović, 1881, 1882b, 1884, 1886, 1888, 1892a; Perugia, 1881; Faber, 1883; Graeffe, 1888; Carus, 1893; Kišpatić, 1893; Sucker, 1895; Griffini, 1903; Lorini, 1903; Langhoffer, 1904; Ninni, 1912; Šoljan, 1948, 1963, 1965, 1975; Poljakov et al., 1954; Zei, 1963; Pavletić, 1965; Bini, 1968; Segatin, 1968; Zei & Abel, 1970; Marcuzzi, 1972; Bath, 1973, 1979a; Štirn & Valentinčić, 1975; Tortonese, 1975; Obrenović & Štević, 1977; Goldschmid et al., 1980; Radić, 1982; Abel, 1983; Jardas, 1985.

*Blennius erythrocephalus*: Griffini, 1903; Langhoffer, 1904.



*Ichthyocoris pavo*: Botteri - Bellotti - Danilo, 1854 (Brusina, 1892).

*Salaria pavo*: Bath, 1977; Goldschmid et al., 1980.

*Lipophrys pavo*: Zander, 1986; Bauchot, 1987; Pallaro, 1987a.

Habitat: mediolittoral and upper infralittoral bottoms, not deeper than 1 m; on rocks and sand between pebbles and chlorophyta vegetation, often in intertidal rock-pools and in brackish waters down to  $5 \times 10^{-3}$  salinity.

Adriatic distribution: Venice, Trieste, Muggia, Savudrija, Poreč, Lim channel, Rovinj, Medulin (Ceja island), Krk island, Kornati islands, Zadar, Biograd, Šibenik, Rogoznica bay, Split, Kaštela bay, Makarska, Podaca (near Kardaševlje), Trpanj, Šolta, Brač, Hvar, Vis, Lastovo, Korčula, Dubrovnik, Boka Kotorska bay, Trašte cove, Budva.

Abundance: very common in land areas, especially in bays and coves with brackish water (Rogoznica bay, Kaštela bay, Boka Kotorska bay, Lim channel), rather scarce on islands.

#### *Lipophrys pholis* (Linnaeus, 1758)

*Blennius pholis*: Nardo, 1827; Martens, 1838; Steindachner, 1868, 1876; Faber, 1883; Carus, 1893; Kolombatović, 1894; Langhoffer, 1904; Šoljan, 1948, 1963, 1965; Segatin, 1968; Bath, 1973, 1979a.

*Pholis laevis*: Botteri - Bellotti - Danilo, 1854 (Brusina, 1892).

*Lipophrys pholis*: Bath, 1977.

Habitat: shallow waters of rocky coasts, often in rock-pools, sometimes between algae.

Adriatic distribution: certainly not occurring in the Adriatic Sea.

#### *Lipophrys trigloides* (Valenciennes, 1836)

*Blennius trigloides*: Botteri - Bellotti - Danilo, 1854 (Brusina, 1892); Perugia, 1881; Kolombatović, 1882a, 1882b, 1886, 1888, 1892a; Faber, 1883; Kosić, 1889, 1903; Carus, 1893; Kišpatić, 1893; Griffini, 1903; Lorini, 1903; Ninni, 1912; Šoljan, 1948, 1963, 1965, 1975; Zei, 1963; Pavletić, 1965; Bini, 1968; Zei & Abel, 1970; Bath, 1973, 1979a; Tortonese, 1975; Zander & Jelinek, 1976; Obre-

nović & Števcíć, 1977; Goldschmid et al., 1980; Abel, 1983; Jardas, 1985.

*Paralipophrys trigloides*: Bath, 1977; Goldschmid et al., 1980.

*Lipophrys trigloides*: Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: steep rocky mediolittoral biotopes especially along the coasts exposed to high waves, not deeper than 0,3 m; preferring crevices and shaded niches in walls and dense algae cover.

Adriatic distribution: Venice, Rovinj, Kornati islands, Split, Orebić, Trpanj, Brač, Šolta, Vis, Biševo, Sveti Andrija, Palagruža, Hvar, Lastovo, Sušac, Korčula, Dubrovnik, Lokrum, Trašte cove.

Abundance: northern Adriatic: abundant, middle Adriatic: common in island area, in particular along the coasts of outward islands.

#### *Parablennius* Ribeiro, 1915

##### *Parablennius gattorugine* (Brünnich, 1768)

*Blennius gattorugine*: Brünnich, 1768; Nardo, 1827; Martens, 1838; Botteri - Heckel - Lanza, 1845 (Brusina, 1892); Boglić - Botteri, 1849 (Brusina, 1874); Botteri - Bellotti - Danilo, 1854 (Brusina, 1892); Heller, 1864; Steindachner, 1868, 1876; Stossich, 1879; Kolombatović, 1881, 1882b, 1886, 1888, 1892a; Perugia, 1881; Faber, 1883; Pregl, 1883; Kosić, 1889, 1903; Carus, 1893; Kišpatić, 1893; Sucker, 1895; Griffini, 1903; Lorini, 1903; Langhoffer, 1904; Zimmerman, 1906; Ninni, 1912; Vátova, 1928; Šoljan, 1948, 1963, 1965, 1975; Poljakov et al., 1954; Zei, 1963; Pavletić, 1965; Grubišić, 1967, 1982; Bini, 1968; Segatin, 1968; Zei & Abel, 1970; Marcuzzi, 1972; Bath, 1973, 1979a; Štirn & Valentinčić, 1975; Tortonese, 1975; Zander & Jelinek, 1976; Obrenović & Števcíć, 1977; Goldschmid et al., 1980; Abel, 1983; Jardas, 1985.

*Parablennius gattorugine*: Bath, 1977; Goldschmid et al., 1980; Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: inhabits crevices and holes in steep infralittoral biotopes from 1-32 m, also between rare Phaeophyta vegetation or boulders on flat bottoms, young specimens occur in upper infralittoral zone between dense algae cover.

Adriatic distribution: Venice, Trieste, Piran, Savudrija, Rovinj, Zadar channel, Kornati islands, Biograd, Šibenik, Split, Brač, Šolta, Hvar, Vis, Biševo, Palagruža, Lastovo, Sušac, Korčula, Boka Kotorska bay, Trašte cove.

Abundance: very abundant throughout the entire area.

*Parablennius incognitus* (Bath, 1968)

*Blennius incognitus*: Bath, 1968b, 1973, 1979a; Šoljan, 1975; Zander & Jelinek, 1976; Goldschmid et al., 1980; Goldschmid & Kotrschal, 1981; Goldschmid, 1982; Abel, 1983; Jardas, 1985.

*Blennius ponticus*: Šoljan, 1975; Obrenović & Štević, 1977.

*Blennius ponticus incognitus*: Tortonese, 1975.

*Pictiblennius incognitus*: Bath, 1977; Goldschmid et al., 1980.

*Parablennius incognitus*: Zander, 1986; Bauchot, 1987; Pallaro, 1987a.

Habitat: between dense phytal settlements in shallow rocky upper infralittoral areas, especially on walls at a depth of 0,5-1 m.

Adriatic distribution: Muggia, Rovinj, Medulin, Zadar, Kornati islands, Šibenik, Split, Makarska, Podaca (near Kardeljevo), Trpanj, Orebić, Brač, Šolta, Drvenik, Hvar, Korčula, Vis, Biševo, Palagruža, Sušac, Lastovo, Dubrovnik, Lokrum, Boka Kotorska bay, Trašte cove, Budva.

Abundance: very abundant throughout the entire area.

*Parablennius rouxi* (Cocco, 1833)

*Blennius rouxi*: Steindachner, 1868, 1876; Stossich, 1879; Kolombatović, 1881, 1882a, 1882b, 1886, 1888, 1892a; Perugia, 1881; Faber, 1883; Steindachner & Kolombatović, 1883; Kišpatić, 1893; Griffini, 1903; Lorini, 1903;

Langhoffer, 1904; Ninni, 1912; Šoljan, 1948, 1963, 1965, 1975; Zei, 1963; Pavletić, 1965; Bini, 1968; Segatin, 1968; Zei & Abel, 1970; Bath, 1973, 1979a; Štirn & Valentinčić, 1975; Tortonese, 1975; Zander & Jelinek, 1976; Obrenović & Števcíć, 1977; Goldschmid et al., 1980; Radić, 1982; Abel, 1983; Jardas, 1985.

*Parablennius rouxi*: Bath, 1977; Goldschmid et al., 1980; Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: from shallow mediolittoral zone to beyond influence of water movements, at depths down to 42 m; on light steep rocks or pebbles without or with rare algae cover (shallow biotopes) and on secondary hard bottoms of coralligenous origin (deep infralittoral biotopes).

Adriatic distribution: Venice, Savudrija, Rovinj, Medulin (Ceja island), Zadar channel, Kornati islands, Biograd, Šibenik, Split, Makarska, Orebić, Brač, Šolta, Hvar, Korčula, Vis, Lastovo, Sušac, Palagruža, Dubrovnik, Lokrum, Boka Kotorska bay, Trašte cove.

Abundance: northern Adriatic: scarce but seems to have increased and invaded shallower waters; middle Adriatic: very common, in particular in island area.

*Parablennius sanguinolentus* (Pallas, 1814)

*Blennius palmicornis*: Botteri - Heckel - Lanza, 1845 (Brusina, 1892); Boglić - Botteri, 1849 (Brusina, 1874); Botteri - Bellotti - Danilo, 1854 (Brusina, 1892); Heller, 1864; Stossich, 1879; Faber, 1883; Pregl, 1883; Kosić, 1889, 1903; Langhoffer, 1904.

*Blennius sanguinolentus*: Steindachner, 1868, 1876; Kolombatović, 1881, 1882b, 1884, 1886, 1888, 1892a; Perugia, 1881; Graeffe, 1888; Carus, 1893; Kišpatić, 1893; Sucker, 1895; Griffini, 1903; Lorini, 1903; Ninni, 1912; Šoljan, 1948, 1963, 1965, 1975; Poljakov et al., 1954; Zei, 1963; Pavletić, 1965; Grubišić, 1967; Bini, 1968; Segatin, 1968; Zei & Abel, 1970; Bath, 1973, 1979a; Tortonese, 1975; Zander & Jelinek, 1976; Obrenović & Števcíć, 1977; Goldschmid et al., 1980; Taborisky & Limberger, 1980; Radić, 1982; Abel, 1983; Onofri, 1983; Jardas, 1985.

*Pictiblennius sanguinolentus*: Bath, 1977; Goldschmid et al., 1980.

*Parablennius sanguinolentus*: Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: between pebbles on flat infralittoral bottoms with dense phythal cover in places or at margin of steep, dense filamentous algae covered rocks exposed to sunlight, at depths of 0,5-3 m.

Adriatic distribution: Rimini, Venice, Trieste, Muggia, Poreč, Rovinj, Karlobag, Zadar, Kornati islands, Biograd, Šibenik, Split, Podaca (near Kardeljevo), Trpanj, Orebić, Brač, Hvar, Šolta, Vis, Lastovo, Korčula, Dubrovnik, Lokrum, Boka Kotorska bay, Trašte cove, Budva.

Abundance: very abundant throughout the entire area.

*Parablennius tentacularis* (Brünnich, 1768)

*Blennius tentacularis*: Botteri - Heckel - Lanza, 1845 (Brusina, 1892); Boglić - Botteri, 1849 (Brusina, 1874); Botteri - Bellotti - Danilo, 1854 (Brusina, 1892); Heller, 1864, Steindachner, 1868, 1876; Stossich, 1879; Kolombatović, 1881, 1882b, 1884, 1886, 1888, 1892; Perugia, 1881; Faber, 1883; Pregl, 1883; Graeffe, 1888; Kosić, 1889, 1903; Carus, 1893; Kišpatić, 1893; Sucker, 1895; Griffini, 1903; Lorini, 1903; Langhoffer, 1904; Ninni, 1912; Vatova, 1928; Šoljan, 1948, 1963, 1965, 1975; Poljakov et al., 1954; Zei, 1963; Pavletić, 1965; Bini, 1968; Segatin, 1968; Zei & Abel, 1970; Marcuzzi, 1972; Bath, 1973, 1979a; Tortonese, 1975; Obrenović & Stevčić, 1977; Goldschmid et al., 1980; Stjepčević & Parenzan, 1980; Radić, 1982; Abel, 1983; Jardas, 1985.

*Parablennius tentacularis*: Bath, 1977; Goldschmid et al., 1980, Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: sand infralittoral bottoms with boulders and light vegetation, sometimes on rocky substratum at 1-30 m.

Adriatic distribution: Venice, Trieste, Rovinj, Medulin, Zadar channel, Kornati islands, Biograd, Tijesno, Šibenik, Split, Makarska, Trpanj, Brač, Šolta, Drvenik, Hvar, Vis, Lastovo, Korčula, small islands near Korčula (Badija, Vrnjak, Planjak, Majsan), Mljet, Dubrovnik, Lokrum, Boka Kotorska bay, Trašte cove.

Abundance: northern Adriatic and middle Adriatic: very common.

*Parablennius zvonimiri* (Kolombatović, 1892)

*Blennius zvonimiri*: Kolombatović, 1892a, 1892b; Carus, 1893; Kišpatić, 1893; Lorini, 1903; Šoljan, 1948, 1963, 1965, 1975; Zei, 1963; Pavletić, 1965; Bini, 1968; Segatin, 1968; Zei & Abel, 1970; Bath, 1973, 1979a; Tortonese, 1975; Zander & Jelinek, 1976; Obrenović & Stevčić, 1977; Goldschmid, 1982; Radić, 1982; Abel, 1983; Jardas, 1985.

*Pictiblennius zvonimiri*: Bath, 1977.

*Parablennius zvonimiri*: Zander, 1986; Bauchot, 1987; Palaoro, 1987a.

Habitat: dimny lit infralittoral biotopes of vertical and overhanging rocks or caves, at 0-8 m depth range.

Adriatic distribution: Venice, Rovinj, Medulin (Ceja island), Biograd, Kornati islands, everywhere on middle Adriatic area, especially on islands: Biograd, Split, Makarska, Trpanj, Orebić, Brač, Šolta, Hvar, Drvenik, Vis, Lastovo, Sušac, Korčula and neighbouring small islands (Badija, Vrnik, Planjak, Majsan), Dubrovnik, Trašte cove.

Abundance: northern Adriatic and middle Adriatic: abundant.

## II. CLINIDAE

*Clinitrachus* Swainson, 1839

*Clinitrachus argentatus* (Risso, 1810)

*Clinus argentatus*: Botteri - Heckel - Lanza, 1845 (Brusina, 1892); Carrara, 1846; Steindachner, 1868, 1876; Sucker, 1895.

*Clinus variabilis*: Botteri - Bellotti - Danilo, 1854 (Brusina, 1892).

*Cristiceps argentatus*: Stossich, 1879; Perugia, 1881; Kolombatović, 1882b, 1886, 1888, 1894; Faber, 1883; Carus, 1893; Sucker, 1895; Griffini, 1903; Lorini, 1903; Ninni, 1912; Šoljan, 1948, 1963, 1965, 1975; Poljakov et al., 1954; Zei, 1963; Bini, 1968; Zei & Abel, 1970; Abel, 1983.

*Clinitrachus argentatus*: Wheeler, 1973, 1979; Tortonese, 1975; Jardas, 1985; Wirtz & Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: shallow upper infralittoral bottoms between dense algal growth: frequently at depths less than 1 m.

Adriatic distribution: Venice, Trieste, Šolta, Hvar, Korčula.

Abundance: northern Adriatic: rather abundant but not numerous in the middle Adriatic area.

### III. TRIPTERYGIIDAE

*Tripterygion* Risso, 1826

*Tripterygion delaisi xanthosoma* Cadenat & Blanche, 1971

*Tripterygion xanthosoma*: Wheeler, 1973, 1979; Tortonese, 1975; Zander & Jelinek, 1976; Abel, 1983; Jardas, 1985.

*Tripterygion delaisi xanthosoma*: Zander, 1986; Bauchot, 1987.

*Tripterygion delaisi*: Pallaoro, 1987a.

Habitat: bottom — living, on rocky shaded areas, usually from 3-40 m, preferably between 6-12 m; under overhanging rocks, entrances of caves and other biotopes with reduced light.

Adriatic distribution: Rovinj (islands Katarina, Banjole, Figarola, Crveni and promontory Montauro), island Dugi otok, Split, island Lastovo.

Abundance: rather rare throughout the entire area but seems to have increased.

*Tripterygion melanurus minor* Guichenot, 1845

*Tripterygium minor*: Kolombatović, 1892a, 1894; Ninni, 1912; Šoljan, 1948, 1963, 1965; Zei, 1963; Zei & Abel, 1970; Radić, 1982.

*Tripterygion minor*: Abel, 1955, 1960; Bini, 1968; Wheeler, 1973, 1979; Šoljan, 1975; Tortonese, 1975.

*Tripterygion melanurus minor*: Zander & Jelinek, 1976; Abel, 1983; Jardas, 1985; Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: in caves, semicaves, under overhanging rocks and other more dimny lit biotopes, at depths of 1-10 m; clinging to walls or ceiling of caves.

Adriatic distribution: Rovinj (Banjole island), Kornati island, Split, Makarska, Brač, Šolta, Hvar, Vis, Lastovo, Sušac, Korčula, Dubrovnik, Trašte cove.

Abundance: rather common throughout the entire area.

*Tripterygion tripteronotus* (Risso, 1810)

*Tripterygion nasus*: Botteri - Heckel - Lanza, 1845 (Brusina, 1892); Carrara, 1846; Boglić - Botteri, 1849 (Brusina, 1874); Botteri - Bellotti - Danilo, 1854 (Brusina, 1892); Stossich, 1879; Kolombatović, 1881; Pavletić, 1965.

*Tripterygium nasus*: Steindachner, 1868, 1876; Kolombatović, 1882b, 1886, 1888, 1892a; Perugia, 1881; Faber, 1883; Carus, 1893; Sucker, 1895; Griffini, 1903; Lorini, 1903; Langhoffer, 1904; Ninni, 1912; Šoljan, 1948, 1963, 1965; Zei, 1963; Pavletić, 1965; Zei & Abel, 1970; Radić, 1982.

*Tripterygion tripteronotus*: Poljakov et al., 1954; Abel, 1955, 1960; Bini, 1968; Wheeler, 1973, 1979; Šoljan, 1975; Stirn & Valentinčić, 1975; Tortonese, 1975; Zander & Jelinek, 1976; Abel, 1983; Jardas, 1985; Zander, 1986; Bauchot, 1987; Pallaoro, 1987a.

Habitat: bottom living on shallow rocky areas with dense phytal cover down to 6 m, preferably between 0-3 m; in light exposed and shadowy biotopes.

Adriatic distribution: Trieste, Savudrija, Rovinj, Kornati islands, Biograd, Šibenik, Split, Makarska, Brač, Šolta, Hvar, Vis, Biševo, Lastovo, Korčula, Boka Kotorska bay, Trašte cove, Budva.

Abundance: very abundant throughout the entire area.



## Discussion

From the check-list it can be seen that in the Adriatic area 20 Blennioidea species (16 Blenniidae, 3 Tripterygiidae and 1 Clinidae) have been established with certainty. In the older literature species *Lipophrys pholis* is reported from the Adriatic Sea, but more recent investigations by a greater number of researchers have established their occurrence as exclusively western Mediterranean. It is, therefore, difficult to know which species was erroneously identified as *L. pholis*, although *Lipophrys trigloides* is suspected. The occurrence of *Lipophrys basiliscus* in the Adriatic Sea is questionable because the only findings of this species originate from the second part of XIX century, and, although *L. basiliscus* was recorded from the Aegean Sea and Taranto bay, the possibility of its occurrence in the southern Adriatic area, which is almost completely unexplored, needs confirmation.

One of the greatest problems in clarifying taxonomic problems in the Blennioidea was the validity of the species *Parablennius incognitus*, which was contested for a long time (e. g. S a r d o u, 1975). Fortunately, B a t h (1968b) resolved this problem after reexamination of Black Sea specimens. His statement was supported by studies of G o l d s c h m i d (1982) and accepted by the majority of contemporaneous investigators. Now, it is clear that it is valid species with the zoological name »*incognitus*«, and not »*ponticus*«, retained.

It should be mentioned that some authors have questioned the validity of the fresh water species *Lipophrys fluviatilis*. S a s s e (1974), however, established its validity, and, therefore, it was included in the check-list despite the fact that it does not occur directly in the sea, but in rivers and lakes in connection with the Adriatic Sea.

There is considerable disagreement concerning the classification of the Blenniidae family. Older authors and some contemporaneous ones have considered that all Adriatic blenniid species belong to only one genus *Blennius*. Other more current authors, as can be seen from the above list, generally recognize a greater number of genera. Recently, B a t h (1977) proposed a great number of genera, but Z a n d e r (1978) challenged this revision and proposed a new scheme with reduced number of genera. We accept, as a compromise, the classification of B a u c h o t (1987). However, since the occurrence and distribution of Blennioidea species in the Adriatic Sea is the main objective of this work the taxonomic system used is not of essential importance for this check-list.

The considerable number of authors who have cited Blennioidea species indicates that this taxon has been intensively investigated for a long time. The frequency with which it was men-

tioned in the literature shows two peaks. First, at the end of the last century, and second, during the last 10-15 years. It is noteworthy that the majority of data originate from the northern Adriatic, in particular from the western Istrian coast and from the middle Adriatic area (Kornati islands and middle Dalmatia) and, secondly, from the Dubrovnik area and Boka Kotorska bay. Other areas, especially the southern Adriatic, the Italian coast (except the Gulf of Venice and Trieste area) and the northern Adriatic island region remain poorly investigated or completely unknown.

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