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CHECK-LIST OF THE ADRIATIC DECAPOD CRUSTACEA

KATALOG JADRANSKIH DEKAPODNIH RAKOVA

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The present check-list represents a general faunistic survey of the Adriatic decapod Crustacea. Basic data from numerous literature issues, concerning 210 species, recorded in the area since 1763, are compiled. For each species the valid name, synonyms (including authors reporting them), general and Adriatic distribution and remarks comprising data on habitat, depth, abundance and eventually commercial value and systematic problems are given.

INTRODUCTION

The investigations of the decapod Crustacea of the Adriatic Sea has a long tradition extending back as far as the XVI century, and many publications on the subject have appeared. The bibliography of the Adriatic decapods comprises about 180 publications in Latin, Italian, German, French, English, Croatian and Hungarian languages. Among the most important are those of Olivi (1792), Heller (1863), Nardo (1847, 1869), Stalio (1877), Graeffe (1902) and Pesta (1918), which make a very considerable contribution to knowledge not only to the decapod Crustacea in the Adriatic Sea and the Mediterranean but also in general. In addition to the strictly systematic works there are many others, especially those in the field of ecology, biogeography and fisheries, which contain important information on the presence, distribution and habitats of many species. Of special importance are numerous faunistic and biocoenological works of Vato va, Gamulin-Brida and Zavodnik.

The present check-list aims to give a general survey of the decapod species occurring in the Adriatic Sea and to provide the minimum basic information relevant to their distribution, habitat and abundance. In elaboration of the check-list I strictly followed the recommendations of the Coordinative Committee of the Flora and Fauna of the Adriatic Sea and it contains for each species the following information: valid name, synonyms, general geographic distribution, distribution in the Adriatic Sea and general

Eupagurus prideauxii: Heller, 1862a, 1863, 1864; Carus, 1885; Sucker, 1895; Car, 1901; Graeffe, 1902; Zimmermann, 1906; Brusina, 1907; Babić, 1911; Sendler, 1912.

Pagurus prideauxii: Nardo, 1869; Grube, 1864a, b; Stalio, 1877; Stossich, 1880;

Eupagurus prideauxi: Pesta, 1912a, 1913b, c (pro parte), 1918; Vatoa, 1928, 1932, 1935; Ninni, 1930; Gamulin-Brida, 1962, 1965, 1967, 1973, 1974; Riedl, 1963, 1970; Gamulin-Brida et al., 1968; Jukić, 1972; Marcuzzi, 1972.

Pagurus prideaux: Števíć, 1979a; Manning & Števíć, 1982.

General distribution: E. Atlantic from Norway to Guinea Bissau. Mediterranean.

Adriatic: Recorded from the entire area, in particular from the north-eastern part.

Remarks: This hermit crab occurs on detritic, muddy detritic and sandy gravel substrates at depths between 10 and 100 m, especially where *Ophiothrix quinquemaculata* is abundant. It inhabits shells of *Turbo*, *Murex*, *Natica*, *Fusus* and other gastropods. It is always associated with sea anemone *Adamsia paliata*. Locally frequent.

Pagurus sculptimanus Lucas, 1846

Eupagurus sculptimanus: Heller, 1862a, 1863, 1864; Carus, 1885; Pesta, 1912a, 1913c, 1918; Vatoa, 1928; Giordani Soika, 1948; Riedl, 1963, 1970.

Pagurus sculptimanus: Grube, 1864b; Stalio, 1877; Stossich, 1880; Števíć, 1969a, 1971; Zavodnik, 1971; Merker-Poček, 1973a

General distribution: E. Atlantic from the English Channel to Senegal. Mediterranean.

Adriatic: Reported from the entire area, in particular from the eastern side.

Remarks: A very rarely observed hermit crab occurring inshore in shallow waters between 6 and 60 m.

GALATHEIDAE Samouelle, 1819

Galathea Fabricius, 1793

Galathea bolivari Zariquiey Alvarez, 1950

Galathea bolivari: Karaman, 1962, Števíć, 1969a; Zavodnik et al. 1981; Manning & Števíć, 1982; Zavodnik D. & N. Zavodnik, 1982.

General distribution: Mediterranean.

Adriatic: Piran, Jurjevo, Split, Krk, Premuda and Susak.

Remarks: This species has not previously been separated from *G. intermedia* so it is uncertain which data from the literature refer to each species. It occurs on sedimentary substrates between 2 and 40 m. Probably scarce.

Galathea cenanrooi Zariquiey Alvarez, 1968

Galathea cenanrooi: Zavodnik et al. 1981; Manning & Števcíć, 1982.

General distribution: W. Mediterranean.

Adriatic: Found near Piran, Rovinj, Krk (Butinj) and Susak.

Remarks: In common with previous species, not previously separated from *G. intermedia*. It occurs on sedimentary bottoms covered with vegetation between 2 and 40 m. Locally fairly frequent.

Galathea dispersa Bate, 1859

Galathea dispersa: Kurian, 1956; Gamulin-Brida et al. 1968. Števcíć, 1969a, 1971; Županović, 1969; Merker-Poček, 1973a, Stjepčević & Parenzan, 1980.

General distribution. E. Atlantic from Norway to South Africa.

Indian Ocean: South Africa — Mozambique. Mediterranean.

Adriatic: Recorded on few localities throughout the entire area.

Remarks: Because this species has previously been confused with *G. nexa* it is impossible to know which recorded data belong to *G. nexa* and which to *G. dispersa*. It occurs on variety of sedimentary bottoms between 30 and 226 m. Fairly scarce.

Galathea intermedia Lilljeborg, 1851

? *Cancer scamparellus*: Chierighin (1818).

? *Galathea scamparellus*: Nardo, 1847.

? *Galathea scamparella*: Faber, 1883

Galathea intermedia: Pesta, 1914c, 1916, 1918; Vátova, 1928, 1932; Giordani Soika, 1946; Kurian, 1956; Karaman, 1962; Riedl, 1963, 1970; Gamulin-Brida, 1965; Zavodnik, 1967c, 1971; Gamulin-Brida et al., 1968, 1980; Orel & Mennea, 1969; Števcíć, 1969a, 1971, 1979; Karlovac, 1970; Karaman & Gamulin-Brida, 1970; Merker-Poček, 1973a, 1977; Valentinčič, 1975; Stjepčević & Parenzan, 1980; Manning & Števcíć, 1982; Avčin & Vrišer, 1983.

General distribution: E. Atlantic from Norway to South Africa. Indian Ocean from Natal to Mozambique. Mediterranean.

Adriatic: Recorded throughout the entire area.

Remarks: Occurs on various types of bottom (sedimentary, detritic, in concretions, in sea grass, and Bryozoa communities) from shallow water (cca 2 m) to about 45 m. Frequent.

Galathea nexa Embleton, 1834

Galathea nexa: Heller, 1862a, 1863; Stalio, 1877; Stossich, 1880; Carus, 1885; Adensamer, 1898; Graeffe, 1902; Pesta, 1912a, 1914, 1918; Sandler, 1912; Vatova, 1928; Kurian, 1956; Karaman, 1962; Riedl, 1963, 1970; Gamulin-Brida, 1965; Gamulin-Brida et al., 1968; Štević, 1969a, 1971; Karlovac, 1970; Karaman & Gamulin-Brida, 1970; Marcuzzi, 1972; Merker-Poček, 1973a, 1977; Stjepčević & Parenzan, 1980.

General distribution: E. Atlantic from Norway to the Canary Islands. Mediterranean.

Adriatic: Recorded throughout the entire area.

Remarks: Occurs on sediment bottom, chiefly sandy one, from 10 to 100 m. Very rare.

Galathea squamifera Leach, 1814

Galathea squamifera: Grube, 1861; Heller, 1862a, 1863; Lorenz, 1863; Stalio, 1877; Stossich, 1880; Carus, 1855; Car, 1901; Graeffe, 1902; Zimmermann, 1906; Pesta, 1912a, 1913c, 1914c, 1918; Sandler, 1912; Santucci, 1922; Vatova, 1928, 1932; Ninni, 1930; Giordani Soika, 1948; Riedl, 1963, 1970; Gamulin-Brida, 1965; Štević, 1969a, 1971; Karlovac, 1970; Karaman & Gamulin-Brida, 1970; Zavodnik, 1971; Marcuzzi, 1972; Merker-Poček, 1973a; Valentinčić, 1975; Stjepčević & Parenzan, 1980; Zavodnik et al., 1981; Manning & Štević, 1982; Radić, 1982.

Galathea fabricii: Brusina, 1907.

General distribution: E. Atlantic to the Cape Verd Islands. Mediterranean.

Adriatic: Reported from many localities throughout the entire area in particular from north-eastern and eastern sides.

Remarks: This squat lobster lives on various types of bottom (sand, rock, sea weeds, Bryozoa) at depths between 2 and 45 m. Locally frequent.

Galathea strigosa (Linnaeus, 1761)

Cancer strigosus: Olivi, 1792; Chierighin, (1818).

Strigosus: Tilesius, 1796.

Astacus strigosus: Martens, 1824, 1938.

Galathea strigosa: Nardo, 1847; Heller, 1862, 1863; Lorenz, 1863; Grube, 1864a, b; Stalio, 1877; Stossich, 1880; Marchesetti, 1882; Faber, 1883; Carus, 1885; Sucker, 1895; Graeffe, 1902; Zimmermann, 1906; Brusina, 1907; Paolucci, 1909; Pesta, 1912a, 1914c, 1918; Sandler, 1912; Vatova, 1928, 1932; Ninni, 1930; Giordani Soika, 1946 (erron. *G. stringosa*); Kurian, 1956; Riedl, 1963, 1970; Gamulin-Brida, 1965; Štević, 1969a, 1971; Karlovac, 1970; Jukić, 1972; Marcuzzi, 1972; Merker-Poček, 1973a; Valentinčić, 1975; Zavodnik, et al. 1981; Manning & Štević, 1982; Radić, 1982.

General distribution: E. Atlantic from Norway (North Cape) to Morocco. Indian Ocean (Red Sea). Mediterranean.

Adriatic: It is mostly recorded along the eastern coastal line, but there are few records from the western one.

Remarks: *Galathea strigosa* occurs on a variety of bottoms (soft mud, muddy sand, sand, rock and on bottoms covered by sea weeds and sea grass) between 15 and 180 m. Not uncommon.

Munida Leach, 1820

Munida intermedia A. Milne Edwards & Bouvier, 1899

Munida intermedia: Froglija, 1972a; Števdčić, 1972.

Munida bamffica: Pesta, 1918 (pro parte?).

General distribution: E. Atlantic from Morocco to Senegal. Mediterranean.

Adriatic: Recorded only in the middle portion of the central part of the area.

Remarks: *Munida intermedia* is found in the »*Nephrops norvegicus* — *Thenaea muricata*« community at a depth of about 220 m.

Munida rugosa (Fabricius, 1775)

Cancer scampoides: Chierighin, (1818).

Galathea rugosa: Nardo, 1847; Faber, 1883.

Munida rugosa: Heller, 1862a, 1863; Lorenz, 1863; Grube, 1864a; Stalio, 1877; Stossich, 1880; Marchesetti, 1882 (erron.: *Numida* r.); Carus, 1885; Graeffe, 1902; Ninni, 1930; Števdčić, 1969a; Froglija, 1972a; Merker-Poček, 1973a.

Munida bamffica: Adensamer, 1898 (pro parte); Brusina, 1907; Leidenfrost, 1909; Pesta, 1912a, 1918; Vátova, 1928, 1932; Giordani Soika, 1946; Zei, 1949; Kurian, 1956; Riedl, 1963, 1970; Karlovac, 1970; Jardas, 1972a; Marcuzzi, 1972.

Munida bamffia: Gamulin-Brida, 1962, 1965, 1967, 1973, 1974; Županović, 1969; Crnković, 1970; Jardas, 1979.

Munida bamfia: Županović & Grubišić, 1958.

General distribution: E. Atlantic from Norway to Morocco. Mediterranean.

Adriatic: Recorded only from the middle and southern parts of the area. Its occurrence in northern part of the North Adriatic is doubtful and needs confirmation.

Remarks: A very common offshore species occurring on sedimentary bottoms (fine mud, detritus, sandy mud) in particular in the »*Nephrops norvegicus* — *Thenaea muricata*« community, ranging from 50 to 265 m. Edible, but not used for food in the area.

Munida tenuimana G. O. Sars, 1872

Munida bamffica (pro parte): Adensamer, 1898.

Munida tenuimana: Pesta, 1916, 1918; Riedl, 1963, 1970.

Munida perarmata: Števdčić, 1969a; Merker-Poček, 1973a.

General distribution: E. Atlantic from the Bay of Biscay to Portugal. W. Mediterranean.

Adriatic: Found only in the southern deep sea basin.

Remarks: A very rarely reported deep sea species which ecology and distribution in the area are insufficiently known.

PORCELLANIDAE Haworth, 1825

Pisidia Leach, 1820

Pisidia bluteli (Risso, 1816)

Astacus bluteli: v. Martens. 1824, 1838.

Pisidia bluteli: Holthuis, 1961; Stevčić, 1969a; Pastore & Vaccarella, 1977; Stjepčević & Parenzan, 1980; Zavodnik & al. 1981; Manning & Stevčić, 1982.

General distribution: Mediterranean.

Adriatic: Found on a few localities: Piran, Rovinj, Jadranovo, Boka Kotorska, Bari.

Remarks: *Pisidia bluteli*: lives in shallow water on hard bottom. It has previously been confused with other species of the genus *Pisidia* and therefore its distribution and ecology in the area are poorly known. Probably not rare.

Pisidia longicornis (Linnaeus, 1767)

Cancer longicornis: Wulfen, 1791.

? *Cancer exos* (♂) + *Cancer mutus* (♀): Chierighin, (1818).

Astacus longicornis: v. Martens, 1824, 1938.

? *Porcellana exos* (♂) + *Porcellana longicornis* (♀): Nardo, 1847.

Porcellana longicornis: Heller, 1862, 1863; Lorenz, 1863; Grube, 1863a, b; Stalio, 1877; Stossich, 1880; Faber, 1883; Carus, 1885; Graeffe, 1902; Zimmermann, 1906; Brusina, 1907; Paolucci, 1909; Pesta, 1912a, 1818; Santucci, 1922; Vatova, 1928, 1932, 1949; Ninni, 1930; Zalokar, 1942; Giordani Soika, 1946, 1948; Kurian, 1956; Gamulin-Brida, 1962, 1967; Riedl, 1963, 1970; Zavodnik, 1967a, 1969; Karlovac, 1970; Karaman & Gamulin-Brida, 1970; Valentinčič, 1975; Radić, 1982.

? *Porcellana esox* (♂) + *Porcellana longicornis* (♀): Nardo, 1869.

Pisidia longicornis: Stevčić, 1969a, 1971; Zavodnik, 1971, Merker-Poček, 1793a; Pastore & Vaccarella, 1977.

General distribution: E. Atlantic from Norway to Angola. Mediterranean.

Adriatic: Listed from many localities throughout the entire area.

Remarks: Since all three Adriatic species of the genus *Pisidia* have previously been identified as *Porcellana longicornis* it is impossible to know which of the data refer indeed to this species. Moreover the limits between