

UDC 581.526.323(262.5-751.2)

**FLORISTIC FINDS  
IN THE COASTAL MARINE WATER AREA  
OF THE NATURE RESERVE “CAPE MARTYAN” (CRIMEA, BLACK SEA)**

© 2023 **S. Ye. Sadogurskiy, T. V. Belich, and S. A. Sadogurskaya**

Nikitsky Botanical Gardens – National Scientific Center of RAS, Yalta, Russian Federation

E-mail: [ssadogurskij@yandex.ru](mailto:ssadogurskij@yandex.ru)

Received by the Editor 27.07.2023; after reviewing 02.08.2023;  
accepted for publication 04.08.2023; published online 21.09.2023.

Based on the samples of 2020 and 2023, three new species of marine macroalgae are indicated for the flora of the territorial-aquatic nature reserve “Cape Martyan,” located on the Southern Coast of Crimea (SCC): *Punctaria latifolia* Grev., *Compsothamnion gracillimum* De Toni, and *Dasya hutchinsiae* Harv. (the last one is recorded for the Black Sea hydrobotanical area “SCC” for the first time). The list of macrophytes of the reserve now includes 163 species, or 37% of the total number of taxa known for the Black Sea. The obtained results expand the understanding of the level of natural phytodiversity of the reserve, hydrobotanical area, and the region as a whole.

**Keywords:** macrophytobenthos, floristic finds, nature reserve “Cape Martyan”, Black Sea

The specially protected natural area (hereinafter SPNA) “Cape Martyan” is located on the Southern Coast of Crimea (SCC), which is washed by waters of the Black Sea hydrobotanical area (hereinafter HBA) “SCC” [Kalugina-Gutnik, 1975]. Since its creation (since 1973, as a state reserve; now, in the status of a natural park), hydrobotanical monitoring is carried out there. Its aim is to clarify understanding of the composition and structure of macrophytobenthos of the territorial-aquatic SPNA in connection with the optimization of environmental management within the boundaries of protected and recreational areas on the SCC.

Macrophytobenthos was sampled along two profiles in the depth range (h) of 0–8 m at a distance (l) of up to 200 m from the coast, off Cape Martyan (26.02.2020; 44°30′20.3″N, 34°14′40.4″E) and off Cape Montedor (22.06.2023; 44°30′14.7″N, 34°13′59.0″E), during solo dives in accordance to the generally accepted hydrobotanical technique [Kalugina-Gutnik, 1975]. Nomenclature, taxonomy, and general distribution of macrophytes are given according to [AlgaeBase, 2020]; ecological and floristic characteristics, according to [Kalugina-Gutnik, 1975]. In the samples, regionally rare macroalgal species were revealed that were not previously noted for the flora of the nature reserve.

*Punctaria latifolia* Greville, 1830 (Ectocarpales Bessey, 1907, Acinetosporaceae G. Hamel ex J. Feldmann, 1937). In the sublittoral zone near Cape Martyan; h = 3 m; l = 60...70 m. Epiphytic on thalli of *Cystoseira* s. l. representatives. Seasonal winter, wide-boreal, oligosaprobic, marine. General distribution: the Atlantic Ocean coast, including subpolar regions and islands; seas of the Mediterranean

and the Baltic Sea; the northern and southern Pacific Ocean. Off the coast of Crimea, it is recorded relatively rarely (7 localities in HBA No. 3, 6–8) in small abundance [Evstigneeva, Tankovskaya, 2010, 2015, 2018; Evstigneeva et al., 2015; Kostenko et al., 2004; Mironova, Pankeeva, 2021].

*Compsothamnion gracillimum* De Toni, 1903 (Ceramiales Nägeli, 1847, Wrangeliaceae J. Agardh, 1851). In the sublittoral zone near Cape Martyan; h = 8 m; l = 200 m. Epiphytic on leaves of *Zostera noltei* Hornemann, 1832. Annual, low-boreal, mesosaprobic, brackish-marine. General distribution: the Atlantic Ocean coast from Scandinavia to Morocco, including islands; seas of the Mediterranean and the Baltic Sea. Off the coast of Crimea, it is rare (3 localities in HBA No. 6–7) and is noted in small abundance [Kalugina-Gutnik, 1975; Kostenko et al., 2004].

*Dasya hutchinsiae* Harvey, 1833 (Ceramiales Nägeli, 1847, Delesseriaceae Bory, 1828). In the sublittoral zone near Cape Montedor; h = 4.5 m; l = 30 m. Epiphytic on thalli of *Cladostephus hirsutus* (Linnaeus) Boudouresque & M. Perret-Boudouresque ex Heesch et al., 2020 and *Cystoseira* s. l. Seasonal summer, low-boreal, oligosaprobic, marine. General distribution: the Atlantic Ocean coast, including islands; seas of the Mediterranean. Off the coast of Crimea, it is rare (3 localities in HBA No. 3, 6–7) and registered in small abundance [Evstigneeva, Tankovskaya, 2010; Kalugina-Gutnik, 1975]. For the HBA “SCC,” the species is indicated for the first time.

As a result, the flora of marine macrophytes of the SPNA “Cape Martyan” now includes 163 species, which is about 37% of the total number known for the Black Sea [Minicheva et al., 2014]. Obtained data expand the understanding of the level of natural phytodiversity of the SPNA, HBA “SCC,” and the region in general.

*This work was carried out within the framework of NBG–NSC state research assignment No. 1023042800079-0-1.6.11;1.5.8.*

## REFERENCES

1. Evstigneeva I. K., Grintsov V. A., Lisitskaja E. V., Makarov M. V., Tankovskaya I. N. Biodiversity of macrophytes communities Kasachia Bay. *Byulleten' Moskovskogo obshchestva ispytatelei prirody. Otdel biologicheskii*, 2015, vol. 120, iss. 6, pp. 51–64. (in Russ.)
2. Evstigneeva I. K., Tankovskaya I. N. Macrophytobenthos and macrophytoperiphyton of reserve “Swan Islands” (Black Sea, Ukraine). *Algologia*, 2010, vol. 20, no. 2, pp. 176–191. (in Russ.)
3. Evstigneeva I. K., Tankovskaya I. N. Algocenoses of artificial and natural substrates in coastal zone of Feodosiya Bay (Black Sea). In: *100 Years of the T. I. Vyazemsky Karadag Scientific Station : issue of scientific papers / A. V. Gaevskaya, A. L. Morozova* (Eds). Simferopol : N.Orianda, 2015, pp. 493–506. (in Russ.)
4. Evstigneeva I. K., Tankovskaya I. N. Macrophytobenthos of the Batiliman seashore region (Black Sea, “Cape Ajja” reserve). *Vestnik Tverskogo gosudarstvennogo universiteta. Seriya: Biologiya i ekologiya*, 2018, no. 4, pp. 100–117. (in Russ.). <https://doi.org/10.26456/vtbio31>
5. Kalugina-Gutnik A. A. *Fitobentos Chernomorya*. Kyiv : Naukova dumka, 1975, 248 p. (in Russ.). <https://repository.marine-research.ru/handle/299011/5645>
6. Kostenko N. S., Evstigneeva I. K., Dikii E. A. In: *Karadag. Hidrobiologicheskie issledovaniya : sbornik nauchnykh trudov, posvyashchennyi 90-letiyu Karadagskoi nauchnoi stantsii imeni T. I. Vyazemskogo i 25-letiyu Karadagskogo prirodnogo zapovednika NAN Ukrainy / A. L. Morozova, V. F. Gnyubkin* (Eds). Simferopol : SONAT, 2004, pp. 275–307. (in Russ.)
7. Mironova N. V., Pankeeva T. V. Spatial-temporal changes of macrophytobenthos in the coastal zone of the reserve “Karan'sky” (Sevastopol city,

- Black Sea). *Povolzhskii ekologicheskii zhurnal*, 2021, no. 1, pp. 47–63. (in Russ.). <https://doi.org/10.35885/1684-7318-2021-1-47-63>
8. *AlgaeBase*. World-wide electronic publication, National University of Ireland, Galway / M. D. Guiry, G. M. Guiry (Eds) : [site], 2020. URL: <http://www.algaebase.org> [accessed: 26.07.2023].
9. Minicheva G., Afanasyev D., Kurakin A. *Black Sea Monitoring Guidelines. Macrophytobenthos*. [S. l. : s. n.], 2014, 92 p. URL: [https://emblasproject.org/wp-content/uploads/2013/12/Manual\\_macrophytes\\_EMBLAS\\_ann.pdf](https://emblasproject.org/wp-content/uploads/2013/12/Manual_macrophytes_EMBLAS_ann.pdf) [accessed: 26.07.2023].

**ФЛОРИСТИЧЕСКИЕ НАХОДКИ  
В ПРИБРЕЖНОЙ АКВАТОРИИ ЗАПОВЕДНИКА «МЫС МАРТЬЯН»  
(КРЫМ, ЧЁРНОЕ МОРЕ)**

**С. Е. Садогурский, Т. В. Белич, С. А. Садогурская**

ФГБУН «Никитский ботанический сад — Национальный научный центр РАН»,  
Ялта, Российская Федерация  
E-mail: [ssadogurskij@yandex.ru](mailto:ssadogurskij@yandex.ru)

Для флоры территориально-аквального заповедника «Мыс Мартьян», расположенного на Южном берегу Крыма (ЮБК), по материалам 2020 и 2023 гг. указаны три новых вида морских макрородослей: *Punctaria latifolia* Grev., *Compsothamnion gracillimum* De Toni и *Dasya hutchinsiae* Harv. (последний — впервые для гидрботанического района Чёрного моря «ЮБК»). Список макрофитов заповедника теперь включает 163 вида, или около 37 % общего количества, известного для Чёрного моря. Полученные результаты расширяют представления об уровне природного фиторазнообразия заповедника, гидрботанического района и региона в целом.

**Ключевые слова:** макрофитобентос, флористические находки, заповедник «Мыс Мартьян», Чёрное море