

Aegina citrea Eschscholtz, 1829

Aegina citrea Eschscholtz 1829: 113–115, Taf. 11, figure 4a–c.

Aegina citrea. – Bigelow 1909: plate 1, figure 5; plate 14, figure 5.

Aegina citrea. – Ranson 1936: plate II, figure 22.

Aegina citrea. – Russell 1953: plate XXVIII, figure 1.

Aegina citrea? – Vanucci 1957: 81–82.

Aegina citrea. – Segura-Puertes 1984: plate 13, figure 1.

Aegina citrea? – Bleeker & van der Spoel 1988: 245, figure 43.

Aegina citrea. – Bleeker & van der Spoel 1988: 245, figure 44.

Aegina citrea. – Pagès et al. 1992: 37, figure 42.

?*Aegina citrea*. – Toyokawa et al. 1998: 67, figure 4B.

Aegina citrea. – Lindsay & Hunt 2005: table 3.

Aegina citrea. – Gasca et al. 2007: figure 3A.

Aegina sp. – Kitamura 1997: 17–18, figure 9.

Aegina citrea. – Kitamura et al. 2012: 299, figure 24.12.

Aegina citrea. – Kawabata et al. 2013: 489, figure 1b.

Aegina citrea. – Minemizu et al. 2015: 148.

Not *Aegina citrea*. – Maas 1905: plate XI, figure 72.

Not *Aegina citrea*. – Arai & Voss 1980: 139, figure 71.

Not *Aegina citrea*. – Mills & Miller 1984: figure 1.

Not *Aegina citrea*. – van der Spoel & Bleeker 1988: 179–180, figure 34. (= *P. pentanema*?)

Not *Aegina citrea*. – Kitamura 1997: 18. (= *P. pentanema*)

Not *Aegina citrea*. – Collins 2002: 420, table 1, figures 1–3. (GenBank AF358058: 18S)

Not *Aegina citrea*. – Waggoner & Collins 2004: 56, table 2, figure 2. (GenBank AF358058: 18S)

Not *Aegina citrea*. – Park 2006: 174–176, figure 6. (= *P. pentanema*)

Not *Aegina citrea*. – Collins et al. 2006a: 114, figures 2–4, 6, appendix 1. (GenBank AF358058: 18S, AY920789: 28S)

Not *Aegina citrea*. – Collins et al. 2006b: figure 2. (GenBank AF358058: 18S, AY920789: 28S)

Not *Aegina citrea*. – Suzuki et al. 2006: 347, figure 3. (GenBank AF358058: 18S)

Not *Aegina citrea*. – Gasca et al. 2007: figure 2.

Not *Aegina citrea*. – Cartwright et al. 2008: 1665, table 1, figures 1, 2. (GenBank AF358058: 18S, AY920789: 28S, EU293997: 16S)

Not *Aegina citrea*. – Collins et al. 2008: 1676, table 1, figures 4–8. (GenBank AF358058: 18S, AY920789: 28S, EU293997: 16S)

Not *Aegina citrea*. – Leclère et al. 2009: 16, figures 1-3, appendix 1. (GenBank AF358058: 18S, AY920789: 28S)

Aegina rosea Eschscholtz, 1829

Aegina rosea Eschscholtz 1829: 115, Taf. 10, figure 3a–b.

Aegina rosea. – Minemizu et al. 2015: 148.

Not *Aegina rosea*. – Uchida 1928: 91–92, figure 8. (= *P. pentanema*)

Not *Aegina rosea*. – Naumov 1960: 569–570, figure 462, plate XXX 8.

Not *Aegina rosea*. – Collins et al. 2008: 1674, figure 1K; 1676, table 1. (= *P. rhodina*)

Not *Aegina rosea*. – Miyake & Lindsay 2013: 101. (= *P. rhodina*)

Aeginona brunnea (Vanhöffen, 1908)

Aegina brunnea Vanhöffen, 1908

***Solmundaegina nematophora* sp. nov.**

Aegina citrea. – Mackie & Mackie 1963: 79.

Aegina citrea? – Singla 1975: 397–401, figures 5–8.

Aegina citrea. – Arai & Voss 1980: 139, figure 71.

Aegina citrea. – Mills & Miller 1984: 218, figure 1.

Aegina citrea. – Carré et al. 1989: 728–729, plate III figures 14–19.

Aegina citrea. – Collins 2002: 420, table 1, figures 1-3. (GenBank AF358058: 18S)

Aegina citrea. – Waggoner & Collins 2004: 56, table 2, figure 2. (GenBank AF358058: 18S)

Aegina citrea. – Collins et al. 2006a: 114, figures 2-4, 6, appendix 1. (GenBank AF358058: 18S, AY920789: 28S)

Aegina citrea. – Collins et al. 2006b: figure 2. (GenBank AF358058: 18S, AY920789: 28S)

Aegina citrea. – Suzuki et al. 2006: 347, figure 3. (GenBank AF358058: 18S)

Aegina citrea. – Gasca et al. 2007: figure 2.

Aegina citrea. – Cartwright et al. 2008: 1665, table 1, figures 1, 2. (GenBank AF358058: 18S, AY920789: 28S, EU293997: 16S)

Aegina citrea. – Collins et al. 2008: 1676, table 1, figures 4-8. (GenBank AF358058: 18S, AY920789: 28S, EU293997: 16S)
Aegina citrea. – Leclère et al. 2009: 16, figures 1-3, appendix 1. (GenBank AF358058: 18S, AY920789: 28S)
Aegina aff. *citrea*. – Luo et al. 2014: 134–135, figure 3o.
Aegina sp. – Minemizu et al. 2015: 149.

References

- Arai MN, Brinckmann-Voss A. 1980. Hydromedusae of British Columbia and Puget Sound. Canadian Bulletin of Fisheries and Aquatic Science 204:1–192.
- Bigelow HB. 1909. Reports on the scientific results of the expedition to the eastern tropical Pacific, in charge of Alexander Agassiz, by the U.S. Fish Commission steamer "Albatross", from October, 1904, to March, 1905. XVI. The Medusae. Memoirs of the Museum of Comparative Zoology 37:1–243.
- Bleeker J, van der Spoel S. 1988. Medusae of the Amsterdam mid North Atlantic plankton expeditions (1980-1983) with a description of two new species. Bijdragen tot de Dierkunde 58(2):227–58.
- Carré D, Carré C, Mills CE. 1989. Novel cnidocysts of narcomedusae and a medusivorous ctenophore, and confirmation of kleptocnidism. Tissue and Cell 21(5):723–34.
- Cartwright P, Evans NM, Dunn CW, Marques AC, Miglietta MP, Schuchert P, Collins AG. 2008. Phylogenetics of Hydroidolina (Hydrozoa: Cnidaria). Journal of the Marine Biological Association of the United Kingdom 88:1663–72. doi:10.1017/S0025315408002257
- Collins AG. 2002. Phylogeny of Medusozoa and the evolution of cnidarian life cycles. Journal of Evolutionary Biology 15:418–32.
- Collins AG, Schuchert P, Marques AC, Jankowski T, Medina M, Schierwater B. 2006a. Medusozoan phylogeny and character evolution clarified by new large and small subunit rDNA data and an assessment of the utility of phylogenetic mixture models. Systematic Biology 55:97–115. doi:10.1080/10635150500433615

Collins AG, Bentlage B, Matsumoto GI, Haddock SHD, Osborn K, Schierwater B. 2006b. Solution to the phylogenetic enigma of *Tetraplatia*, a worm-shaped cnidarian. *Biology Letters* 2:120–24.

Collins AG, Bentlage B, Lindner A, Lindsay D, Haddock SHD, Jarms G, et al. 2008. Phylogenetics of Trachylina (Cnidaria: Hydrozoa) with new insights on the evolution of some problematical taxa. *Journal of the Marine Association of the United Kingdom* 88:1673–85.

Eschscholtz F. 1829. System der Acalephen. Eine ausführliche Beschreibung aller Medusenartigen Strahlthiere. Ferdinand Dümmler, Berlin. 190 pages.

Gasca R, Suárez-Morales E, Haddock SHD. 2007. Symbiotic associations between crustaceans and gelatinous zooplankton in deep and surface waters off California. *Marine Biology* 151:233–42.

Kawabata T, Lindsay DJ, Kitamura M, Konishi S, Nishikawa J, Nishida S, et al. 2013. Evaluation of the bioactivities of water-soluble extracts from twelve deep-sea jellyfish species. *Fisheries Science* 79(3):487–94.

Kitamura M. 1997. Taxonomic Study and Seasonal Occurrence of Jellyfish in Sagami Bay. MSc Thesis, Tokyo University of Fisheries. 87 pages.

Kitamura M, Miyake H, Lindsay DJ. 2012. Cnidaria in: Fujikura K, Okutani T, Maruyama T, editors. *Deep-sea Life: Biological Observations using Research Submersibles*, 2nd edition. Kanagawa: Tokai University Press, p 295–320.

Leclère L, Schuchert P, Cruaud C, Couloux A, Manueal M. 2009. Molecular phylogenetics of Thecata (Hydrozoa, Cnidaria) reveals long-term maintenance of life history traits despite high frequency of recent character changes. *Systematic Biology* 58:509–26.

[doi:10.1093/sysbio/syp044](https://doi.org/10.1093/sysbio/syp044)

Lindsay DJ, Hunt JC. 2005. Biodiversity in midwater cnidarians and ctenophores: submersible-based results from deep-water bays in the Japan Sea and North-western Pacific. *Journal of the Marine Biological Association of the United Kingdom* 85(3):503–17.

- Luo JY, Grassian B, Tang D, Irisson J-O, Greer AT, Guigand CM, et al. 2014. Environmental drivers of the fine-scale distribution of a gelatinous zooplankton community across a mesoscale front. *Marine Ecology Progress Series* 510:129–49.
- Maas O. 1905. Die Craspedoten Medusen der Siboga-Expedition. *Siboga-Expeditie* 10: 1–84.
- Mackie GO, Mackie GV. 1963. Systematic and biological notes on living Hydromedusae from Puget Sound. *Contributions to zoology. National Museum of Canada, Bulletin* 199:63–84.
- Mills CE, Miller RL. 1984. Ingestion of a medusa (*Aegina citrea*) by the nematocyst-containing ctenophore *Haeckelia rubra* (formerly *Euchlora rubra*): phylogenetic implications. *Marine Biology* 78:215–21.
- Minemizu R, Kubota S, Hirano Y, Lindsay DJ. 2015. *A Photographic Guide to the Jellyfishes of Japan*. Tokyo: Heibonsha. 360 pages.
- Miyake H, Lindsay DJ. 2013. *New Jellyfish Guidebook. The Fascinating Ecology of 100 Species*. Tokyo: Seibundo Shinkosha. 128 pages.
- Naumov DV. 1960. Gidroidi i gidromedusy morskikh, solonovatovodnykh i presnovodnykh basseinov SSSR. Opredeleteli po faune SSSR, Izdavaemye Zoologicheskim Institutom Akademii Nauk SSSR 70:1–626.
- Pagès F, Gili J-M, Bouillon J. 1992. Medusae (Hydrozoa, Scyphozoa, Cubozoa) of the Benguela Current (southeastern Atlantic). *Scientia Marina* 56(1):1–64.
- Park JH. 2006. New records of some hydromedusae (Cnidaria: Hydrozoa) in Korea. *Korean Journal of Systematic Zoology* 22(2):169–77.
- Ranson G. 1936. *Méduses Provenant des Campagnes du Prince Albert 1er de Monaco. Résultats des Campagnes Scientifiques Accomplies sur son Yacht par Albert 1er Prince Souverain de Monaco*, 92. Imprimerie de Monaco. 245 pages.
- Russell FS. 1953. *The Medusae of the British Isles Vol. I: Anthomedusae, Leptomedusae, Limnomedusae, Trachymedusae, and Narcomedusae*. New York: Cambridge University Press. 530 pages.

Segura-Puertes L. 1984. Morphology, systematics and zoogeography of medusae (Cnidaria: Hydrozoa and Scyphozoa) from the eastern tropical Pacific. *Anales del Instituto de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de México, Publicación Especial* 8:1–320.

Singla CL. 1975. Statocysts of hydromedusae. *Cell and Tissue Research* 158:391–407.
[doi:10.1007/BF00223835](https://doi.org/10.1007/BF00223835)

Suzuki N, Murakami K, Takeyama H, Chow S. 2006. Molecular attempt to identify prey organisms of lobster phyllosoma larvae. *Fisheries Science* 72:342–49.
[doi:10.1111/j.1444-2906.2006.01155.x](https://doi.org/10.1111/j.1444-2906.2006.01155.x)

Toyokawa M, Toda T, Kikuchi T, Nishida S. 1998. Cnidarians and ctenophores observed from the manned submersible *Shinkai 2000* in the midwater of Sagami Bay, Pacific coast of Japan. *Plankton Biology and Ecology* 45:61–74.

Uchida T. 1928. Studies on Japanese Hydromedusae. 2. Trachomedusae and Narcomedusae. *Japanese Journal of Zoology* 2(1):73–97.

van der Spoel S, Bleeker J. 1988. Medusae from the Banda Sea and Aru Sea plankton, collected during the Snellius II Expeditions, 1984–1985. *Indo-Malayan Zoology* 5:161–202.

Vanhöffen E. 1908. Die Narcomedusen. *Wissenschaftliche Ergebnisse der Deutschen Tiefsee-Expedition auf dem Dampfer "Valdivia" 1898-1899*. 19:41–74.

Vannucci M. 1957. On Brazilian hydromedusae and their distribution in relation to different water masses. *Boletim do Instituto Oceanográfico* 8:23–109.
[doi:10.1590/S0373-55241957000100002](https://doi.org/10.1590/S0373-55241957000100002)

Waggoner B, Collins AG. 2004. *Reductio ad absurdum*: testing the evolutionary relationships of Ediacarian and Paleozoic problematic fossils using molecular divergence dates. *Journal of Paleontology* 78(1):51–61. [doi:10.1666/0022-3360\(2004\)078<0051:RAATTE>2.0.CO;2](https://doi.org/10.1666/0022-3360(2004)078<0051:RAATTE>2.0.CO;2)

Extended synonymy list for the species investigated in

Lindsay et al. (in press) " The perils of online biogeographic databases: A case study with the “monospecific” genus *Aegina* (Cnidaria, Hydrozoa, Narcomedusae)"