

**[Supplementary Materials]**

**Table S1.** Information on distribution of *Montipora millepora* within the Asian North-Pacific.

| Country     | Reference              | Citation   |
|-------------|------------------------|--|
| Japan       | DeVantier et al., 2008 | DeVantier, L.; Hodgson, G.; Huang, D.; Johan, O.; Licuanan, A.; Obura, D.; Sheppard, C.; Syahrir, M.; Turak, E. <i>Montipora millepora</i> . <i>The IUCN Red List of Threatened Species</i> <b>2008</b> . doi:10.2305/IUCN.UK.2008.RLTS.T133015A3545567.en |
| Cambodia    | <i>Id.</i>             | <i>Id.</i>   |
| China       | <i>Id.</i>             | <i>Id.</i>   |
| Malaysia    | <i>Id.</i>             | <i>Id.</i>   |
| Taiwan      | <i>Id.</i>             | <i>Id.</i>   |
| Philippines | <i>Id.</i>             | <i>Id.</i>   |
| Singapore   | <i>Id.</i>             | <i>Id.</i>   |
| Thailand    | <i>Id.</i>             | <i>Id.</i>   |
| Vietnam     | <i>Id.</i>             | <i>Id.</i>   |
| Hong Kong   | Chan et al. 2005       | Chan A.L.K.; Chan K.K.; Choi C.L.S.; McCorry D.; Lee M.W.; Ang P.J. Field guide to hard corals of Hong Kong. Agriculture, Fisheries and Conservation Department, Government of Hong Kong SAR. <b>2005</b> .  |

\* *Id.* is Latin for Idem, which means “same”.

**Table S2.** Information on distribution of *Dendronephthya gigantea* within the Asian North-Pacific.

| Longitude<br>[deg min sec] | Latitude<br>[deg min sec] | Locality          | Country | Reference             | Citation   |
|----------------------------|---------------------------|-------------------|---------|-----------------------|--|
| 126°34'03" E               | 33°13'39" N               | Seogwipo,<br>Jeju | Korea   | Jeon et al,<br>2019   | Jeon, Y.; Park, S.G.; Lee, N.; Weber, J.A.; Kim, H.-S.; Hwang, S.-J.; Woo, S.; Kim, H.-M.; Bhak, Y.; Jeon, S.; et al. The Draft Genome of an Octocoral, <i>Dendronephthya gigantea</i> . <i>Genome Biology and Evolution</i> <b>2019</b> , <i>11</i> , 949–953, doi:10.1093/gbe/evz043 |
| 126° 34'E                  | 33° 13'N                  | Seogwipo,<br>Jeju | Korea   | Choi and<br>Kim, 2008 | Choi, Y.-W.; Kim, J.H. Mortality and Growth of the Soft Coral, <i>Dendronephthya gigantea</i> in Jejudo Island, Korea. <i>Journal of the Korean Society of Oceanography</i> <b>2008</b> , <i>13</i> , 342–347  |
| None given                 | None given                | Munseom,<br>Jeju  | Korea   | Choi and<br>Kim, 2008 | Choi, Y.-W.; Kim, J.H. Mortality and Growth of the Soft Coral, <i>Dendronephthya gigantea</i> in Jejudo Island, Korea. <i>Journal of the Korean Society of Oceanography</i> <b>2008</b> , <i>13</i> , 342–347  |
| None given                 | None given                | Munseom,<br>Jeju  | Korea   | Ko et al., 2008       | Ko, J.-C.; Koo, J.-H.; Yang, M.-H. Characteristics of Ocean Environmental Factors and Community Structure of Macrobenthos around Munseom, Jeju Island, Korea. <i>The Korean Journal of Malacology</i> <b>2008</b> , <i>24</i> , 215–228  |

|               |                |                      |       |                       |   |
|---------------|----------------|----------------------|-------|-----------------------|---|
| 126°33'00" E  | 33°22'00" N    | Munseom, Jeju        | Korea | Hwang and Song, 2007  | Hwang, S.-J.; Song, J.-I. Reproductive Biology and Larval Development of the Temperate Soft Coral <i>Dendronephthya gigantea</i> (Alcyonacea: Nephtheidae). <i>Mar Biol</i> <b>2007</b> , 152, 273–284, doi:10.1007/s00227-007-0679-z   |
| None given    | None given     | Munseom, Jeju        | Korea | Park et al., 2010     | Park, E.; Kim, B.; Won, Y.-J. The Complete Mitochondrial Genome of <i>Dendronephthya gigantea</i> (Anthozoa: Octocorallia: Nephtheidae). <i>Korean J. Syst. Zool.</i> <b>2010</b> , 26, 197–201   |
| None given    | None given     | Munseom, Jeju        | Korea | Kang et al., 2005     | Kang, D.-H.; Song, J.-I.; Choi, K.-S. Image Analysis of Typhoon Impacts on Soft Coral Community at Munseom in Jeju, Korea. <i>Ocean and Polar Research</i> <b>2005</b> , 27, 25–34  |
| 126°41'9.57"E | 33°33'14.69" N | Bukchonseo-gil, Jeju | Korea | Fernando et al., 2017 | Fernando, I.P.S.; Sanjeewa, K.K.A.; Kim, H.-S.; Wang, L.; Lee, W.W.; Jeon, Y.-J. Apoptotic and Antiproliferative Properties of 3 $\beta$ -Hydroxy- $\Delta$ 5-Steroidal Congeners from a Partially Purified Column Fraction of <i>Dendronephthya gigantea</i> against HL-60 and MCF-7 Cancer Cells: Anticancer Activity of Steroids from <i>Dendronephthya gigantea</i> . <i>J Appl Toxicol</i> <b>2018</b> , 38, 527–536, doi:10.1002/jat.3559 |

|            |            |             |       |                          |   |
|------------|------------|-------------|-------|--------------------------|---|
| None given | None given | Jeju waters | Korea | Han et al., 2005         | Han, A.-R.; Song, J.-I.; Jang, D.S.; Min, H.-Y.; Lee, S.K.; Seo, E.-K. Cytotoxic Constituents of the Octocoral <i>Dendronephthya gigantea</i> . <i>Arch Pharm Res</i> <b>2005</b> , 28, 290–293   |
| None given | None given | Jeju waters | Korea | Lee, 2017                | Lee, S.-H. Developmental Toxicity and Anti-Inflammatory Effect of the Soft Coral <i>Dendronephthya gigantea</i> Collected from Jeju Island in Zebrafish Model. <i>Fish Aquatic Sci</i> <b>2017</b> , 20, 32, doi:10.1186/s41240-017-0077-5  |
| None given | None given | Jeju waters | Korea | Jayawardena et al., 2022 | Jayawardena, T.U.; Fernando, I.P.S.; Nagahawatta, D.P.; Wang, L.; Yang, H.-W.; Oh, J.-Y.; Sanjeewa, K.K.A.; Jeon, Y. Sonication-Assisted Water Extract of <i>Dendronephthya gigantea</i> Exhibits Anti-Fine Dust Effects; Attenuation of MAPK Phosphorylation in Macrophages. <i>J. Natn. Sci. Foundation Sri Lanka</i> <b>2022</b> , 50, 151, doi:10.4038/jnsfsr.v50i1.10279 |
| None given | None given | Jeju waters | Korea | Wang et al., 2016        | Wang, L.; Oh, J.Y.; Fernando, I.P.S.; Sanjeewa, K.K.A.; Kim, E.-A.; Lee, W.; Jeon, Y.-J. Soft Corals Collected from Jeju Island; a Potential Source of Anti-Inflammatory Phytochemicals. <i>J. Chitin Chitosan</i> <b>2016</b> , 21, 247–254, doi:10.17642/jcc.21.4.4   |

|            |            |                          |       |                        |  |
|------------|------------|--------------------------|-------|------------------------|--|
| None given | None given | Jeju waters              | Korea | Sanjeewa et al., 2018  | Sanjeewa, K.K.A.; Park, Y.; Fernando, I.P.S.; Ann, Y.-S.; Ko, C.-I.; Wang, L.; Jeon, Y.-J.; Lee, W. Soft Corals Collected from Jeju Island Inhibits the $\alpha$ -MSH-Induced Melanogenesis in B16F10 Cells through Activation of ERK. <i>Fisheries and Aquatic Sciences</i> <b>2018</b> , 21, 21, doi:10.1186/s41240-018-0097-9 |
| None given | None given | South Jeju               | Korea | Song and Lee., 2000    | Song, J.; Lee, Y. Systematic Relationships among Species of the Genus <i>Dendronephthya</i> (Alcyonacea; Octocorallia; Anthozoa) Based on Rapid Analysis. <i>Korean Journal of Biological Sciences</i> <b>2000</b> , 4, 1–7, doi:10.1080/12265071.2000.9647517   |
| None given | None given | Geo-Je Island, South Sea | Korea | Shin et al., 2012      | Shin, K.; Chin, J.; Hahn, D.; Lee, J.; Hwang, H.; Won, D.H.; Ham, J.; Choi, H.; Kang, E.; Kim, H.; et al. Sterols from a Soft Coral, <i>Dendronephthya gigantea</i> as Farnesoid X-Activated Receptor Antagonists. <i>Steroids</i> <b>2012</b> , 77, 355–359, doi:10.1016/j.steroids.2011.12.027                                 |
| None given | None given | Izu Peninsula            | Japan | Ermolenko et al., 2020 | Ermolenko, E.V.; Imbs, A.B.; Glorizova, T.A.; Poroikov, V.V.; Sikorskaya, T.V.; Dembitsky, V.M. Chemical Diversity of Soft Coral Steroids and Their Pharmacological Activities. <i>Marine Drugs</i> <b>2020</b> , 18, 613, doi:10.3390/md18120613  |

|            |            |                                  |               |                        |   |
|------------|------------|----------------------------------|---------------|------------------------|---|
| None given | None given | Sagami Bay                       | Japan         | Utinomi, 1962          | Utinomi, H. Preliminary List of Octocorals of Sagami Bay Deposited in the Biological Laboratory of the Imperial Household. <i>Kyoto University Research Information Repository</i> <b>1962</b> , 10, 105–108  |
| None given | None given | Tokushima Prefecture             | Japan         | Yoshikawa et al., 2000 | Yoshikawa, K.; Kanekuni, S.; Hanahusa, M.; Arihara, S.; Ohta, T. Polyhydroxylated Sterols from the Octocoral <i>Dendronephthya gigantea</i> . <i>J. Nat. Prod.</i> <b>2000</b> , 63, 670–672, doi:10.1021/np990512v   |
| None given | None given | Ryukyu Archipelago               | Japan         | Imahara et al., 2018   | Imahara, Y.; Yamamoto, H.; Takaoka, H.; Nonaka, M. First Records of Four Soft Coral Species from Japan, with a List of Soft Corals Previously Found from the Shallow Waters of the Ryukyu Archipelago, Japan, and an Overview on the Systematics of the Genera <i>Siphonogorgia</i> and <i>Chironephthya</i> . <i>Fauna Ryukyuana</i> <b>2018</b> , 38, 1–30. |
| None given | None given | Cape D'Aquilar, Hong Kong Island | Hong Kong SAR | Clark, 1997            | Clark, T.H. The distribution of ahermatypic corals at Cape d'Aguilar, Hong Kong <b>1997</b> . In: The marine flora and fauna of Hong Kong and southern China IV, 4, 219   |

|            |            |                          |               |                       |  |
|------------|------------|--------------------------|---------------|-----------------------|--|
| None given | None given | Hong Kong waters         | Hong Kong SAR | Verrill, 1864         | Verrill A.E. List of the Polyps and Corals Sent by the Museum of Comparative Zoology to Other Institutions in Exchange. <i>Bull. Mus. comp. Zool.</i> <b>1864</b> , 1, 29–60, <a href="https://www.biodiversitylibrary.org/page/6587563">https://www.biodiversitylibrary.org/page/6587563</a>                          |
| None given | None given | Meishan, Hainan Province | China         | Wu et al., 2018       | Wu, J.; Xi, Y.; Huang, L.; Li, G.; Mao, Q.; Fang, C.; Shan, T.; Jiang, W.; Zhao, M.; He, W.; et al. A Steroid-Type Antioxidant Targeting the Keap1/Nrf2/ARE Signaling Pathway from the Soft Coral <i>Dendronephthya gigantea</i> . <i>J. Nat. Prod.</i> <b>2018</b> , 81, 2567–2575, doi:10.1021/acs.jnatprod.8b00728. |
| None given | None given | Sanya, Hainan Province   | China         | Guoqiang et al., 2004 | Li G.; Deng Z.; Guan H.; Guo D.; Lin W. Polyhydroxy Sterols from Soft Coral <i>Dendronephthya gigantea</i> from The South China Sea. <i>Zhongguo hai Yang yao wu (Chinese Journal of Marine Drugs)</i> <b>2004</b> , 23, 1, 1–5  |
| None given | None given | Green Island             | Taiwan        | Duh et al., 2004      | Duh, C.-Y.; El-Gamal, A.A.H.; Song, P.-Y.; Wang, S.-K.; Dai, C.-F. Steroids and Sesquiterpenoids from the Soft Corals <i>Dendronephthya gigantea</i> and <i>Lemnalia cervicorni</i> . <i>J. Nat. Prod.</i> <b>2004</b> , 67, 1650–1653, doi:10.1021/np030550l  |