

## Daniele De Luca



Born in Napoli (Italy) on 19/09/1988

Tel.: +39 081 5833298

e-mail: daniele.deluca@szn.it

Skype: danie.deluca

**Current Position:** <Post Doc>

### **Affiliation:**

Dept. Research Infrastructure for Marine Biological Resources, Stazione Zoologica Anton Dohrn, Napoli (Italy)

### **Education/Training/Experience**

<b>Institute and Location</b>	<b>Degree / Function</b>	<b>Year</b>	<b>Field of Study</b>
University of Naples Federico II, Italy	Bachelor's Degree	2006-2009	Zoology "Comparative analysis of two cyto-genotoxic techniques: comet assay and micronucleus test"
University of Naples Federico II, Italy	Master's Degree	2009- 2012	Systematic Botany "Genetic variability in relic populations of <i>Abies alba</i> Mill. and <i>Betula pendula</i> Roth in Campania"
University of Naples Federico II, Botanic Garden of Naples	Part-time job	2011-2012	Cataloguing of the seeds in the bank of the institute; improvement of drying protocols and conservation of seeds; management of tropical greenhouses
Stazione Zoologica Anton Dohrn	Post-lauream	2013-2014	Population genetic analyses in the common octopus
University of Naples Federico II, Dept. of Agriculture	Co.co.co	2015	Enhancement of genetic resources for zucchini genotypes traceability
University of Naples Federico II, Dept. of Biology	Scholarship	2016	Genetic characterization and conservation of traditional

			bean cultivars threatened with extinction in Cilento
Stazione Zoologica Anton Dohrn – The Open University	PhD	2016-2019	Phylogenetics and phylogeography in the planktonic diatom genus <i>Chaetoceros</i>
University Suor Orsola Benincasa, Dept. of Humanities	Scholarship	2020	Methodologies for the punctual assessment of hydrogeological risk in strongly anthropized areas and management tools for regional development strategies
University of Naples Federico II, Dept. of Biology	Post-Doc (assegno di ricerca)	2020-2022	Molecular systematics of Italian plants of the genera <i>Santolina</i> (Asteraceae) and <i>Armeria</i> (Plumbaginaceae)
Stazione Zoologica Anton Dohrn	Post-Doc (assegno di ricerca)	2023- current	-Omics technologies

## **Teaching activity**

### 2019 – ongoing

Culture della materia

“Elementi di Scienze Naturali” (BIO/01) – Titolare della Cattedra: Prof.ssa Paola Cennamo, Università Suor Orsola Benincasa, Naples

### Academic year 2022/2023

Course - University of Naples Suor Orsola Benincasa

Laboratorio Area Biologica (Biology laboratory) - 1 CFU – 6 hours

### Academic year 2021/2022

Course - University of Naples Suor Orsola Benincasa

Laboratorio Area Biologica (Biology laboratory) - 1 CFU – 6 hours

### 08/03/2022 – 30/09/2022

Teaching assistance - University of Naples Suor Orsola Benincasa

Elementi di Scienze Naturali (Fundamentals of Natural Sciences) – 44 hours

Supervision of two Master’s students in Biology.

## **Other activities**

Reviewer for 83 articles in 27 peer-reviewed journals

Member of the Reviewer Board of Diversity-MDPI and Agronomy-MDPI

Member of the Editorial Board of Frontiers in Marine Science and BMC Plant Biology

## **Publications**

(\*corresponding author)

Tiburtini, M., Bacchetta, G., Sarigu, M., Cambria, S., Caputo, P., De Luca, D., Domina, G., Turini, A., Peruzzi, L. (2023). Integrative Taxonomy of *Armeria* Taxa (Plumbaginaceae) Endemic to Sardinia and Corsica. *Plants*, 12, 2229.

De Luca, D., Del Guacchio, E., Cennamo, P., Paino, L., Caputo, P. (2023). Genotyping by-sequencing provides new genetic and taxonomic insights in the critical group of *Centaurea tenorei*. *Frontiers in Plant Science*, 14, 1130889.

De Luca, D.\*, Piredda, R., Trojsi, G., Cennamo, P. (2023). Close but different: metabarcoding analyses reveal different microbial communities in ancient Roman nymphaea. *International Biodeterioration & Biodegradation*, 181, 105619.

Montuori, E., Martinez, K. A., De Luca, D., Ianora, A., Lauritano, C. (2023). Transcriptome sequencing of the diatom *Asterionellopsis thurstonii* and in silico identification of enzymes potentially involved in the synthesis of bioactive molecules. *Marine Drugs*, 21(2), 126

Alaoui-Sosse, B., Ozaki, S., Barriquand, L., De Luca, D., Cennamo, P., Valot, B., Alaoui-Sosse, L., Bourgeade, P., Bousta, F., Aleya, L., Pfenner, S. (2023). Assessment of microbial communities colonizing the Azé prehistoric cave. *Journal of Cultural Heritage*, 59, 1-9.

Giacò, A., Varaldo, L., Casazza, G., De Luca, D., Caputo, P., Sarigu, M., Bacchetta, G., Sáez, L., Peruzzi, L. (2022). An integrative taxonomic study of *Santolina* (Asteraceae) from southern France and north-eastern Spain reveals new endemic taxa. *Journal of Systematics and Evolution*.  
<https://doi.org/10.1111/jse.12925>

Cennamo, P., De Luca, D. (2022). A metabarcoding approach for the study of biodeterioration of ancient wall paintings in an Italian cave. *Journal of Physics: Conference Series*, 2204, 012011. IOP Publishing.

Del Guacchio, E., Bureš, P., Iamónico, D., Carucci, F., De Luca, D., Zedek, F., Caputo, P. (2022). Towards a monophyletic classification of Cardueae: restoration of the genus *Lophiolepis* (= *Cirsium* pp) and new circumscription of *Epitrachys*. *Plant Biosystems—An International Journal Dealing with all Aspects of Plant Biology*, 1-72.

De Luca, D., Del Guacchio, E., Conti, F., Iamónico, D., Caputo, P. (2022). Relationships within *Mcneillia* Indicate a Complex Evolutionary History and Reveal a New Species of *Minuartiella* (Caryophyllaceae, Alsinoideae). *Plants*, 11(16), 2118.

Tiburtini, M., Astuti, G., Bartolucci, F., Casazza, G., Varaldo, L., De Luca, D., Bottiglieri, M.V., Bacchetta, G., Porceddu, M., Domina, G., Orsenigo, S., Peruzzi, L. (2022). Integrative Taxonomy of *Armeria arenaria* (Plumbaginaceae), with a Special Focus on the Putative Subspecies Endemic to the Apennines. *Biology*, 11(7), 1060.

Piredda, R., Sarno, D., De Luca, D., Kooistra, W. H. (2022). Biogeography of six species in the planktonic diatom genus *Bacteriastrum* (Bacillariophyta). *European Journal of Phycology*, 1-12.

De Giorgi, P., Giacò, A., Astuti, G., Minuto, L., Varaldo, L., De Luca, D., De Rosa, A., Bacchetta, G., Sarigu, M., Peruzzi, L. (2022). An Integrated Taxonomic Approach Points towards a Single-Species Hypothesis for *Santolina* (Asteraceae) in Corsica and Sardinia. *Biology*, 11(3), 356.

Vingiani, G. M., Leone, S., De Luca, D., Borra, M., Dobson, A. D., Ianora, A., De Luca, P., Lauritano, C. (2022). First identification and characterization of detoxifying plastic-degrading DBP hydrolases in the marine diatom *Cylindrotheca closterium*. *Science of The Total Environment*, 812, 152535.

De Luca, D., Caputo, P., Perfetto, T., Cennamo, P. (2021). Characterisation of environmental biofilms colonising wall paintings of the Fornelle Cave in the archaeological site of Cales. *International Journal of Environmental Research and Public Health*, 18(15), 8048.

De Luca, D., Piredda, R., Sarno, D., Kooistra, W.H.C.F. (2021). Resolving cryptic species complexes in marine protists: phylogenetic haplotype networks meet global DNA metabarcoding datasets. *The ISME Journal*, 15, 1931–1942. <https://doi.org/10.1038/s41396-021-00895-0>.

De Luca, D.\*, Kooistra, W.H.C.F., Sarno, D. Biffali, E., Piredda, R. (2021). Empirical evidence for concerted evolution in the 18S rDNA region of the planktonic diatom genus *Chaetoceros*. *Scientific Reports*, 11, 807.

Vingiani, G. M., Štālberga, D., De Luca, P., Ianora, A., De Luca, D., Lauritano, C. (2020). De novo Transcriptome of the Non-saxitoxin Producing *Alexandrium tamutum* Reveals New Insights on Harmful Dinoflagellates. *Marine Drugs*, 18(8), 386.

De Luca, D.\*, Lauritano, C. (2020). In Silico Identification of Type III PKS Chalcone and Stilbene Synthase Homologs in Marine Photosynthetic Organisms. *Biology*, 9(5), 110.

Riccio, G., De Luca, D., Lauritano, C. (2020). Monogalactosyldiacylglycerol and sulfolipid synthesis in microalgae. *Marine Drugs*, 18(5), 237.

De Luca, D.\*, Sarno, D., Piredda, R., Kooistra, W. H. C. F. (2019). A multigene phylogeny to infer the evolutionary history of Chaetocerotaceae (Bacillariophyta). *Molecular Phylogenetics and Evolution*, 140, 106575.

De Luca, D.\*, Kooistra, W. H. C. F., Sarno, D., Gaonkar, C. C., Piredda, R. (2019). Global distribution and diversity of *Chaetoceros* (Bacillariophyta, Mediophyceae): integration of classical and novel strategies. *PeerJ*, 7, e7410.

Lauritano, C., De Luca, D., Amoroso, M., Benfatto, S., Maestri, S., Racioppi, C., ... Ianora, A. (2019). New molecular insights on the response of the green alga *Tetraselmis suecica* to nitrogen starvation. *Scientific Reports*, 9(1), 3336.

De Luca, D.\*, Cennamo, P., Del Guacchio, E., Di Novella, R., Caputo, P. (2018). Conservation and genetic characterisation of common bean landraces from Cilento region (southern Italy): high differentiation in spite of low genetic diversity. *Genetica* 146: 29-44.

Lauritano, C., De Luca, D., Ferrarini, A., Avanzato, C., Minio, A., Esposito, F., Ianora, A. (2017). De novo transcriptome of the cosmopolitan dinoflagellate *Amphidinium carterae* to identify enzymes with biotechnological potential. *Sci Rep* 7:11701. doi: 10.1038/s41598-017-12092-1.

De Luca, D.\*, Menale, B., Caputo, P., and Cennamo, P. (2017). Population genetics analysis in a relic population of silver fir (*Abies alba* Mill.) in southern Italy: a comparison of microsatellite and reference data. *Plant Biosys* 151: 567-573.

De Luca, D.\*, Catanese, G., Procaccini, G., and Fiorito, G. (2016). *Octopus vulgaris* (Cuvier, 1797) in the Mediterranean Sea: genetic diversity and population structure. PLoS ONE 11(2): e0149496. doi:10.1371/journal.pone.0149496.

De Luca, D.\*, Catanese, G., Fiorito, G., and Procaccini, G. (2015). A new set of pure microsatellite loci in the common octopus *Octopus vulgaris* Cuvier, 1797 for multiplex PCR assay and their cross-amplification in *O. maya* Voss & Solís Ramírez, 1966. Conservation Genet Resour 7: 299-301.

De Luca, D.\*, Catanese, G., Procaccini, G., and Fiorito, G. (2014). An integration of historical records and genetic data to the assessment of global distribution and population structure in *Octopus vulgaris*. Front Ecol Evol 2: 55. doi: 10.3389/fevo.2014.00055.

#### **Non-ISI publications**

De Luca, D.\*, Paino, L., Del Guacchio, E. (2017). The genetic structure of silver birch (*Betula pendula* Roth) in Campania (southern Italy). Delpinoa, 58-59.

#### **Book chapters**

De Luca, D., Lauritano, C. (2022). Transcriptome Mining to Identify Genes of Interest: From Local Databases to Phylogenetic Inference. In: Verde, C., Giordano, D. (eds) Marine Genomics. Methods in Molecular Biology, vol 2498. Humana, New York, NY. [https://doi.org/10.1007/978-1-0716-2313-8\\_3](https://doi.org/10.1007/978-1-0716-2313-8_3)