DOTT. EDOARDO MARCO NAPOLI

EDUCATION

2014: Graduation in Biotechnology – University of Palermo, first class honour cum laude.

2003: Ph.D. in Organic Chemistry, Department of Chemistry, University of Catania (ITA)

1999: Qualification to chemical profession.

1999: Graduation in Chemistry – Catania University, first class honour.

WORK EXPERIENCE

2008: As part of the permanent staff join the group "Natural Products and Food Chemistry" of ICB-CNR Catania, (ITA).

2003 –2007: Regulatory Affairs Manager of Wyeth Catania Plant.

SCIENTIFIC ACTIVITY

Author of several communications in national and international symposia and conferences.

Author more than 60 peer-reviewed papers on international journals.

Reviewer for several international journals. His research interests include: analysis of complex matrices from natural sources, food chemistry,valorization of residual biomasses, drug discovery and essential oils

He is currently collaborating with research units in agronomy, pharmacology, toxicology, material science.

Editorial Boards

2020 - Chemistry & Biodiversity – Wyley Online Library - ISSN:1612-1880

Guest editing

Special issue di Antibiotics (ISSN 2079-6382; CODEN: ABSNC4), "Chemical Composition and Biological Activities of Essential Oils".

Special issue di Resources (ISSN 2079-9276), "Value-Added Compounds from Compost, Digestate and Agro-Industrial Waste".

The fields of scientific interest, with numerous national and international collaborations, are: chemistry of natural substances (analysis of complex matrices from natural sources and essential oils), valorisation of biomass, food chemistry, biotechnology and molecular biology. It pays particular attention to the enhancement in the pharmaceutical field of phytocomplexes and natural bioactive substances.

Bibliometric indexes (September 2021)

Google Scholar: 1218 citations, H index=20, Scopus: 940 citations, H index =19, Web of Science: 795 citations, H index= 17

SELECTION OF BEST PUBBLICATIONS

Lazzara S., Carrubba A., Napoli E., Culmone A., Cangemi A.C., Giovino A. Increased illumination levels enhance biosynthesis of aloenin A and aloin B in Aloe arborescens Mill., but lower their per-plant yield. Industrial crops and products, 2021, 164, 113379.

Granata G., Stracquadanio S., Leonardi M., Napoli E., Malandrino G., Cafiso V., Stefani S., Geraci C. Oregano and Thyme Essential Oils Encapsulated in Chitosan Nanoparticles as Effective Antimicrobial Agents against Foodborne Pathogens. Molecules, 2021, 26, 4055.

Bedini S., Farina P., Napoli E., Flamini G., Ascrizzi R., Verzera A., Conti B., Zappalà L. Bioactivity of different chemotypes of oregano essential oil against the blowfly Calliphora vomitoria vector of foodborne pathogens. Insects 2021, 12(1), 52; https://doi.org/10.3390/insects12010052.

Kapustová M., Granata G., Napoli E., Puškárová,A., Bučková M., Pangallo D., Geraci C. Nanoencapsulated essential oils with enhanced antifungal activity for potential application on agri-food, material and environmental fields. Antibiotics 2021, 10(1), 31; https://doi.org/10.3390/antibiotics10010031.

Capatina L., Todirascu-Ciornea E., Napoli E.M., Ruberto G., Hritcu L., Dumitru G. Thymus vulgaris essential oil protects Zebrafish against cognitive dysfunction by regulating cholinergic and antioxidants systems. Antioxidants, 2020, 9, 1083; https://doi.org/10.3390/antiox9111083.

R. Avola, G. Granata, C. Geraci, E. Napoli, A. C. Eleonora Graziano, V. Cardile. Oregano (Origanum vulgare L.) essential oil provides anti-inflammatory activity and facilitates wound healing in a human keratinocytes cell model. Food and Chemical Toxicology, 2020, 144, 111586.

G. Fascella, F. D'Angiolillo, G. Ruberto, E. Napoli. Agronomic performance, essential oils and hydrodistillation wastewaters of Lavandula angustifolia grown on biochar-based substrates. Industrial Crops and Products, 2020, 154, 112733.

T. Luca, E. Napoli, G. Privitera, N. Musso, G. Ruberto, S. Castorina. Antiproliferative effect and cell cycle alterations induced by Salvia officinalis essential oil and its three main components in human colon cancer cell lines. Chemistry & Biodiversity, 2020, 17, e2000309.

E. Napoli, L. Siracusa, G. Ruberto. New tricks for old guys: recent developments in the chemistry, biochemistry, applications and exploitation of selected species from the Lamiaceae family. Chemistry & Biodiversity, 2020, 17, e1900677.

I. Romano, G. Granata, A. Poli, I. Finore, E. Napoli, C. Geraci. Inhibition of bacterial growth on marble stone of 18th century by treatment of nanoencapsulated essential oils. International Biodeterioration & Biodegradation 2020, 148, 104909.

S. Lazzara, E. Napoli, A. Carrubba. Variability of hypericins and hyperforin in Hypericum species from the Sicilian flora. Chemistry and Biodiversity 2020, 17, e1900596.

S. Di Lodovico, E. Napoli, E. Di Campli, P. Di Fermo, D. Gentile, G. Ruberto, A. Nostro, E. Marini, L. Cellini, M. Di Giulio. Pistacia vera L. oleoresin and levofoxacin is a synergistic combination against resistant Helicobacter pylori strains. Scientific Reports, 2019, 9, 4646.

L. Siracusa, E. Napoli, T. Tuttolomondo, M. Licata, S. La Bella, M. C. Gennaro, C. Leto, M. Sarno, E. Sperlinga, G. Ruberto. A two years bio-agronomic and chemotaxonomic evaluation of wild Sicilian myrtle (Myrtus communis L.) berries and leaves. Chemistry & Biodiversity, 2019, 16(3),

E. Napoli, D. Gentile, G. Ruberto. GC–MS analysis of terpenes from Sicilian Pistacia vera L. oleoresin. A source of biologically active compounds. Biomedical chromatography, 2018, 2018;e4381.

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E. Napoli, L. Siracusa, G. Ruberto, A. Carrubba, S. Lazzara, A. Speciale, F. Cimino, A. Saija, M. Cristani. Phytochemical profiles, phototoxic and antioxidant properties of eleven Hypericum species - A comparative study. Phytochemistry, 2018, 152, 162-173.

J. C. Ramos Gonçalves, D. Andrade de Meneses, A. Pereira de Vasconcelos, C. Alves Piauilino, F. R. de Castro Almeida, E. M. Napoli, G. Ruberto, D. A. Machado de Araújo, Essential oil composition and antinociceptive activity of Thymus capitatus, Pharmaceutical Biology, 2017, Vol. 55 (1), 782-786.

S. Lazzara, M. Militello, A. Carrubba, E. Napoli, S. Saia. Arbuscular mycorrhizal fungi altered the hypericin, pseudohypericin, and hyperforin content in flowers of Hypericum perforatum grown under contrasting P availability in a highly organic substrate. Mycorrhiza, 2016, 27(4), 345-354.

A. Saija, A. Speciale, D. Trombetta, C. Leto, T. Tuttolomondo, S. La Bella, M. Licata, G. Virga, G. Buonsangue, M. C. Gennaro, E. Napoli, L. Siracusa, G. Ruberto. Phytochemical, ecological and antioxidant evaluation of wild Sicilian Thyme: Thymbra Capitata (L.) Cav. Chemistry & Biodiversity, 2016, 13, 1641-1655.

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T. Tuttolomondo, G. Dugo, G. Ruberto, C. Leto, E. M. Napoli, R. Rando, M. R. Fede, G. Virga, R. Leone, M. Licata, S. La Bella. Study of quantitative and qualitative variations in essential oils of sicilian oregano biotypes. Journal of essential oils research, 27, 4, 293-306, 2015.

T. Tuttolomondo, G. Dugo, G. Ruberto, C. Leto, E. M. Napoli, N. Cicero, T. Gervasi, G. Virga, R. Leone, M. Licata, S. La Bella. Study of quantitative and qualitative variations in essential oils of Sicilian Rosmarinus Officinalis L. Natural Product Research, 29, 20, 1928-1934, 2015.

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Schillaci D., Napoli E. M., Cusimano M.G., Vitale M., Ruberto G. Origanum vulgare subsp. hirtum Essential Oil Prevented Biofilm Formation and Showed Antibacterial Activity against Planktonic and Sessile Bacterial Cells. Journal of Food Protection, 76 (10), 1747-1752, 2013.

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