Curriculum Vitae of Daffonchio Daniele Giuseppe

Photo

Education

Degree in Agricultural Science and Technology, University of Milan

Professional experiences

Associate Professor of 'Biotechnology of Microbial Systems' at the Faculty of Agriculture of the University of Milan since 2009, and from 2002 to 2009 of 'Microbial Biotechnology for Agriculture Food and the Environment (from 2002 to 2009). Professor of 'Industrial Microbiology at the University of Urbino (1998). researcher at the Faculty of Agriculture of the University of Milan (from 1995 to 2001).

Research fields

The primary research interest of Prof. Daniele Daffonchio deals with microbial interactions in complex ecosystems for understanding the contribute of microorganisms to ecosystem functioning and for biotechnological exploitation. A multidisciplinary approach for the research is based on a well established platform of molecular microbial ecology. Current research is focused on:

- Microbial ecology of terrestrial and marine extreme ecosystems.
- Ecology and biotechnology of insect-microbe interactions
- Response of microbial communities to bioremediation and birestoration.
- Basic principles in microbial ecology.
- Interaction between microorganisms and transgenic plants.
- Diversity and biotechnological exploitation of plant growth microbial promoters.

Most significant publications

1. Van der Wielen P.W.J.J., Bolhuis H., Borin S., Daffonchio D., et al. 2005. The enigma of prokaryotic life in deep hypersaline anoxic basins. Science, 307:121-123.

2. Daffonchio D., et al.. 2006. Stratified prokaryote network in the oxic-anoxic transition of a deep sea halocline. Nature, 440:203-207.

3. Favia G., et al., Daffonchio D. 2007. Bacteria of the genus Asaia stably associate with Anopheles stephensi, an Asian malarial mosquito vector. Proceedings of National Academy of Science of the USA, 104:9047-9051.

4. Wittebolle L., Marzorati M, Clement L., Balloi A., Daffonchio D., Heylen K., De Vos P., Verstraete W., Boon N. 2009. Initial community evenness favours functionality under selective stress. Nature 458:623-626.

5. Borin S., Brusetti L., Mapelli F., D'Auria G., Brusa T., Marzorati M., Rizzi A., Yakimov M., Marty D., De Lange G.J., Van der Wielen P., Bolhuis H., McGenity T.J., Polymenakou P.N., Malinverno E., Giuliano L., Corselli C., Daffonchio D. 2009. Sulfur cycling and methanogenesis primarily drive microbial colonization of the highly sulfidic Urania deep hypersaline basin. Proceedings of the National Academy of Science of the USA, 106:9151-9156.

Web page

http://users.unimi.it/DDLab/