

Lista lucrărilor publicate

Candidat: CS I dr. Cristian COMAN

A. Articole în reviste indexate Clarivate Analytics (publicații ISI)

1. Remizovschi, A., Carpa, R., Forray, F.L., Chiriac, C., Roba, C.-A., Beldean-Galea, S., Andrei, A.-S., Szekeres, E., Baricz, A., Lupan, I., Knut, R., **Coman, C.** 2020. Mud volcanoes and the presence of PAHs. *Scientific Reports*, 10:1253.
2. Baricz, A., Chiriac, C.M., Andrei, A.-Ș., Bulzu, P.-A., Levei, E.A., Cadar, O., Battes, K.P., Cîmpean, M., Șenilă, M., Cristea, A., Muntean, V., Alexe, M., **Coman, C.**, Szekeres, E.K., Sicora, C.I., Ionescu, A., Blain, D., O'Neill, W.K., Edwards, J., Hallsworth, J.E., Banciu, H.L. 2020. Spatio-temporal insights into microbiology of the freshwater-to-hypersaline, oxic-hypoxic-euxinic waters of Ursu Lake. *Environmental Microbiology*, DOI:10.1111/1462-2920.14909.
3. Dragoș, N., Chiriac, C., Porav, S., Szöke-Nagy, T., **Coman, C.**, Török, L., Hegedűs, A. 2019. *Desmodesmus tropicus* (Chlorophyta) in the Danube Delta – reassessing the phylogeny of the series *Maximi*. *European Journal of Phycology*, DOI: 10.1080/09670262.2018.1558286
4. Baricz, A., Teban, A., Chiriac, C., Szekeres, E., Farkas, A., Nica, M., Dascălu, A., Opreșan, C., Lavin, P., **Coman, C.** 2018. Investigating the potential use of an Antarctic variant of *Janthinobacterium lividum* for tackling antimicrobial resistance in a One Health approach. *Scientific Reports*, 8:15272.
5. Chiriac, C., Baricz, A., **Coman, C.** 2018. Draft genome sequence of *Janthinobacterium* sp. strain ROICE36, a putative secondary metabolite-synthesizing bacterium isolated from Antarctic snow. *Genome announcements*, 6 (15):e01553-17.
6. Szoke-Nagy, T., Porav, A.S., **Coman, C.**, Cozar, B.I., Dina, N.E., Tripon, C. 2018. Characterization of the action of antibiotics and essential oils against bacteria by surface-enhanced raman spectroscopy and scanning electron microscopy. *Analytical Letters*, DOI: 10.1080/00032719.2018.1430150.
7. Szekeres, E., Chiriac, C.M., Baricz, A., Szoke-Nagy, T., Lung, I., Soran, M.-L., Rudi, K., Dragos, N., **Coman, C.** 2018. Investigating antibiotics, antibiotic resistance genes, and microbial contaminants in groundwater in relation to the proximity of urban areas. *Environmental Pollution*, 236:734-744.
8. Chiriac, C., Szekeres, E., Rudi, K., Baricz, A., Hegedus, A., Dragoș, N., **Coman, C.** 2017. Differences in temperature and water chemistry shape distinct diversity patterns in thermophilic microbial communities. *Applied and Environmental Microbiology*, 83(21): e01363-17.
9. Chiriac, C., Baricz, A., Szekeres, E., Rudi, K., Dragoș, N., **Coman, C.**, 2018. Microbial composition and diversity patterns in deep hyperthermal aquifers from the Western Plain of Romania. *Microbial Ecology*, 75(1):38-51.
10. Andrei, A.-Ș., Baricz, A., Robeson, M.S., Păușan, M.R., Tămaș, T., Chiriac, C., Szekeres, E., Barbu-Tudoran, L., Levei, E.A., **Coman, C.**, Podar, M. Banciu, H.L., 2017. Hypersaline sapropels act as hotspots for microbial dark matter. *Nature Scientific Reports*, 7: 6150.

11. Szekeres, E., Baricz, A., Chiriac, C.M., Farkas, A., Opris, O., Soran, M.-L., Andrei, A.-S., Rudi, K., Balcázar, J.L., Dragos, N., **Coman, C.**, 2017. Abundance of antibiotics, antibiotic resistance genes and bacterial community composition in wastewater effluents from different Romanian hospitals. *Environmental Pollution*, 225:304-315.
12. Dina, N., Zhou, H., Colniță, A., Leopold, N., Nagy-Szoke, T., **Coman, C.**, Haisch, C., 2017. Rapid single-cell detection and identification of pathogens by using surface-enhanced Raman spectroscopy. *Analyst*, 142:1782-1789.
13. Farkas, A., Crăciunaș, C., Chiriac, C., Szekeres, E., **Coman, C.**, Butiuc-Keul, A., 2016. Exploring the role of coliform bacteria in class 1 integron carriage and biofilm formation during drinking water treatment. *Microbial Ecology*, 72(4):773-782.
14. Opriș, O., Soran, M.-L., Lung, I., Trușcă, M.R.C., Szoke-Nagy, T., **Coman, C.**, 2016. The optimization of the antibiotics extraction from wastewaters and manure using Box–Behnken experimental design. *International Journal of Environmental Science and Technology*, 14(3):473-480.
15. Soran, M.-L., Lung, I., Opriș, O., Floare-Avram, V., **Coman, C.**, 2016. Determination of Antibiotics in Surface Water by Solid-Phase Extraction and High-Performance Liquid Chromatography with Diode Array and Mass Spectrometry Detection. *Analytical Letters*, 50 (7):1209-1218.
16. Hegedús, A., Mocan, A., Barbu-Tudoran, L., **Coman, C.**, Dragoș, N. 2016. Molecular phylogeny of *Botryococcus braunii* strains (race A)—An integrative approach. *Algal Research*, 19:189-197.
17. **Coman, C.**, Chiriac, C.M., Robeson, M., Ionescu, C., Dragoș, N., Barbu-Tudoran, L., Andrei, Ș.A., Banciu, H.L., Sicora, C., Podar, M., 2015. Structure, mineralogy, and microbial diversity of geothermal spring microbialites associated with a deep oil drilling in Romania. *Frontiers in Microbiology*, 6:253.
18. Andrei A.S., Robeson, M., Baricz, A., **Coman, C.**, Muntean, V., Ionescu, A., Etiope, G., Alexe, M., Sicora, C., Podar, M., Banciu, H.L., 2015. Contrasting taxonomic and physiological stratification of microbial communities from two hypersaline meromictic lakes. *The ISME Journal*, DOI:10.1038/ismej.2015.60.
19. Baricz, A., **Coman, C.**, Andrei, A.S., Muntean, V., Keresztes, Z.G., Păusan, M., Alexe, M., Banciu, H.L., 2014. Spatial and temporal distribution of archaeal diversity in meromictic, hypersaline Ocnei Lake (Transylvanian Basin, Romania). *Extremophiles*, 18:399-413.
20. Hegedus, A., Mocan, A., Barbu-Tudoran, L., **Coman, C.**, Drugă, B., Sicora, C., Dragoș, N., 2014. Morphological, biochemical, and phylogenetic assessments of eight *Botryococcus terribilis* strains collected from freshwaters of Transylvania. *Journal of Applied Phycology*, 27(2): 865-878.
21. **Coman, C.**, Drugă, B., Hegedus, A., Sicora, C., Dragoș, N., 2013. Archaeal and bacterial diversity in two hot spring microbial mats from a geothermal region in Romania. *Extremophiles*, 17:523-534.
22. Drugă, B., Welker, M., Sesărman, A., Hegedus, A., **Coman, C.**, Sicora, C., Dragoș, N., 2013. Molecular characterization of microcystin-producing cyanobacteria from Romanian fresh waters. *European Journal of Phycology*, 48(3):287-294.

23. **Coman, C.**, Bica, A., Drugă, B., Barbu-Tudoran, L., Dragoș N., 2011. Methodological constraints in the molecular biodiversity study of a thermomineral spring cyanobacterial mat: a case study. *Antonie van Leeuwenhoek*, 99:271-281.

B. Articole publicate în reviste indexate în baze de date internaționale

1. Török, L., Ciorca, A.M., Szekeres, E., **Coman, C.**, Török, Z. 2017. Drinking water quality assessment in the Danube Delta Biosphere Reserve. *Studia Univ. Babeș-Bolyai, Biologia*, 62(2):61-73.
2. Țugui, C.G., Vlădăreanu, I., Baricz, A., **Coman, C.**, 2015. Detection of beta-lactamase resistance genes in a hospital chlorinated wastewater treatment system. *Studia Univ. Babeș-Bolyai, Biologia*, 60(2):33-38.
3. Szekeres, E., Dragoș, N., Porav, S., Baricz, A., Chiriac, C. M., Szöke-Nagy, T., **Coman, C.** 2015. Evaluation of bio-resources: Monitoring *Arthrospira* growth in supplemented brackish water. *Studia Univ. Babeș-Bolyai, Biologia*, 60(2):45-48.
4. Chiriac, C. M., Barbu-Tudoran, L., Baricz, A., Szekeres, E., Szöke-Nagy, T., Dragoș, N., **Coman, C.** 2015. Bacterial diversity in a microbial mat colonizing a man-made geothermal spring from Romania, *Studia Univ. Babeș-Bolyai, Biologia*, 60(1): 5-22.
5. Szöke-Nagy, T., Hegedüs, A., Baricz, A., Chiriac, C. M., Szekeres, E., **Coman, C.**, Dragoș, N., 2015, Identification, isolation and bioinformatic analysis of squalene synthase-like cDNA fragments in *Botryococcus terribilis* AICB 870 strain, *Studia Univ. Babeș-Bolyai, Biologia*, 60(1):23-37.
6. Mitulețu, M., Bercea, V., **Coman, C.**, Drugă, B., Sicora, C., 2013. Induction of photosynthetic state transitions in the cyanobacterium *Microcystis aeruginosa* AICB 702. *Annals RSCB*, XVIII:56-66.
7. Mitulețu, M., Drugă, B., Hegedüs, A., **Coman, C.**, Dragoș, N., 2013. Phylogenetic analysis of *Microcystis* strains (Cyanobacteria) based on the 16S-23S ITS and cpcBA-IGS markers, *Annals RSCB*, XVIII:22-31.
8. **Coman, C.**, Bercea, V., Sicora, C. 2012. The study of PS II photochemical activity in *Synechococcus* sp. PCC 7002 under different light intensities. *Annals RSCB*, XVII:53-60.
9. Bica, A., Barbu-Tudoran, L., Drugă, B., **Coman, C.**, Nicoară, A., Szöke-Nagy, T., Dragoș, N., 2012. *Desmodesmus communis* (Chlorophyta) from Romanian freshwaters: coenobial morphology and molecular taxonomy based on the ITS2 of new isolates, *Annals RSCB*, XVII:16-28.
10. Bercea, V., **Coman, C.**, Sicora, C., Dragoș, N., 2011. The photochemical PS II activity in cyanobacterial strains belonging to the nostocales group in anaerobiosis conditions. *Stud. Univ. Babeș-Bolyai, Biologia*, 56:13-25.
11. Dragoș, N., Bercea, V., Bica, A., Drugă B., Nicoară, A., **Coman, C.**, 2010. Astaxanthin production from a new strain of *Haematococcus pluvialis* grown in batch culture, *Annals RSCB*, XV:353-361.
12. Dragoș, N., Mocan, A., Sălăjean, C., Nicoară, A., Bica, A., Drugă, B., **Coman, C.**, Bercea, V., 2010. The effects of temperature on growth and lipid fatty acids composition in cyanobacterium *Synechocystis* sp. strain AICB 51. *Stud. Univ. Babeș-Bolyai, Biologia*, LV:51-59.
13. Drugă B., Bica Adriana, **Coman C.**, Nicoară Ana, Dragoș N., 2009. New Primer Combination for Sequencing the Cyanobacterial 16S rRNA Gene, *Analele SRBC*, XIV:33-38.

14. Bercea, V., **Coman, C.**, 2008. The photochemical activity of PS II and PS I photosystems in green alga *Mougeotia sp.* in the presence of ascorbate and hydrogen peroxide in *state 2* transition. Stud.Univ. Babeş-Bolyai, Biologia, LIII:75-89
15. Bica, A., Andrei, C., Drugă, B., **Coman, C.**, Nicoara, A., Dragoş, N., 2008. Filogenia algei verzi *Botryococcus braunii* Kützing pe baza secvenţelor ADNr 18S și 16S. Analele SNBC, XII:282-291
16. Bica, A., **Coman, C.**, Drugă, B., - Dragoş, N., 2008. Predicția exprimării genei *ftsZ* la cianobacterii pe baza preferențiatății de utilizare a codonilor, Analele SNBC, XII:209-217.
17. **Coman, C.**, Drugă, B., Bica, A., Nicoară, A., Dragoş, N., 2008. A molecular approach to diversity estimation of cyanobacteria from Marghita and Roşiori thermomineral drillings (Bihor county). Stud. Univ. Babeş-Bolyai, Biologia, LIII:71-80.
18. **Coman, C.**, Drugă, B., Bica, A., Nicoară, A., Dragoş, N., 2008. Diversitatea moleculară a cianobacteriilor asociate forajului termomineral de la Marghita (jud. Bihor), Analele SNBC, XII:272-281.
19. Drugă, B., Sofronie, I., Văsar, I., **Coman, C.**, Bica, A., Nicoara, A., Dragoş, N., 2008. The molecular diversity of cyanobacterial mats associated with thermal springs, Stud. Univ. Babeş-Bolyai, Biologia, LIII:59-69.
20. Drugă, B., Bica, A., **Coman, C.**, Nicoara, A., Bercea, V., Dragoş, N., 2008. Markeri moleculari în filogenia și taxonomia tulpinilor cianobacteriene din genul *Microcystis*. Analele SNBC, XII:263-271.

Cărți și capitole de carte

1. **Coman, C.** (Ed.), 2016. Ghid metodologic de monitorizare a antibioticelor și a rezistenței la antibiotice în mediul înconjurător/Methodological guide for monitoring antibiotics and antibiotic resistance in the environment. Accent, ISBN 978-606-561-165-8, pp. 1-366.
2. **Coman, C.**, Soran, M.-L., Farkas, A., 2016. Prelevarea probelor de mediu pentru investigarea reziduurilor de antibiotice, a diversității microbiene și a rezistenței la antibiotice/Environmental sampling for investigations of antibiotic residues, microbial diversity and antibiotic resistance. În: Coman, C. (Ed.), 2016. *Ghid metodologic de monitorizare a antibioticelor și a rezistenței la antibiotice în mediul înconjurător/Methodological guide for monitoring antibiotics and antibiotic resistance in the environment*. Accent, ISBN 978-606-561-165-8, pp. 25-41/201-214.
3. **Coman, C.**, Drugă, B., Bica, A., Barbu-Tudoran, L., Dragoş N., 2012. A microbial mat developed around a man-made geothermal spring from Romania: structure and cyanobacterial composition. In: Noffke, N., Chafetz, H., (eds.), *Microbial mats in siliciclastic depositional systems through time*, SEPM Special Publication No. 101, SEPM (Society for Sedimentary Geology), ISBN 978-1-56576-314-2, pp. 47–53.(ISI Proc.).

Brevete

1. **Coman, C.**, Drugă, B., Hegedus, A., Mitulețu, M., Sicora, C., 2013. Tulpină de *Anabaenopsis sp.* și metodă îmbunătățită de producere a hidrogenului dizolvat prin cultivarea acesteia. Patent no. 130066/30.08.2018.

Data,

Semnătura,