

Literature list about the MELiSSA Project and connected research (1988-2020) followed by seminal proceedings of 1987-1988

Legend of paper (or book chapters) topics/MELiSSA compartments:

LSS : Life Support Systems

SP: Space flight experiments and related studies (biocontamination, confined or extreme environments, space simulations (radiation, microgravity, low shear))

Mo: modelling

C1: MELiSSA first compartment (thermophilic, anaerobic, waste degradation)

C2: MELiSSA second compartment (anaerobic photosynthetic)

C3: MELiSSA third compartment (nitrifying)

C4a : MELiSSA fourth compartment (microbial food production (spirulines (*Limnospira indica* ex:*Arthrospira*)))

C4b: MELiSSA fourth compartment (plant food production)

C5: Consumers compartment

MPP: MELiSSA Pilot Plant.

Year	Authors	Topic/MELiSSA Compartment	Title	Journal	Volume	Pages
2020	Poughon L, Laroche C, Creuly C, Dussap CG, Paille C, Lasseur C, Monsieur P, Heylen W, Coninx I, Mastroleo F, Leys N	C4a	<i>Limnospira indica</i> PCC8005 growth in photobioreactor: model and simulation of the ISS and ground experiments	Life Sciences in Space Research In press		

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C4a : MELiSSA fourth compartment (microbial food production (as among others: cyanobacteria: *Limnospira indica*

PCC8005 /*Arthrospira* sp.PCC8005) (The taxonomic discussion is still ongoing (August 2019): making use of pangenomic taxonomy signatures for a large set of publicly available cyanobacterial genomes, strain PCC 8005 was allocated as the type strain to a new species named *Arthrospira nitrilium* (Walter et al, 2017), opening up a fresh discourse on *Arthrospira* taxonomy. Recently, mass produced *Arthrospira* have been placed into a new genus, *Limnospira*, mainly based on 16S rRNA phylogenetic analysis but also taking into account morphological and ecological data (Nowicka-Krawczyk et al., 2019), further fueling the complex debate among cyanobacterial taxonomists on the true and final position of the *Arthrospira* genus and its current member species).

C4b: MELiSSA fourth compartment (plant food production)

C5: Consumers compartment

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