

Table S2 - Occurrence (in percentage) of each phylum in the overall analysis of microbiome studies as well as the number of different genera detected in each of those phyla.

Phylum	Hosts (%)	Number of Genera
Proteobacteria	53	305
Cyanobacteria	52	31
Bacteroidetes	34	109
Actinobacteria	33	95
Planctomycetes	24	8
Chloroflexi	20	5
Thaumarchaeota	20	2
Arthropoda	17	12
Acidobacteria	17	6
Firmicutes	14	120
Nitrospirae	12	3
Ascomycota	10	33
Verrucomicrobia	10	22
Spirochaetes	8	4
Ochrophyta	7	10
Fusobacteria	6	5
Apicomplexa	6	3
Tenericutes	5	8
Euryarchaeota	5	12
Rhodophyta	5	4
Chlamydiae	5	5
Chlorophyta	4	2
Deinococcus-Thermus	4	3
Crenarchaeota	4	0
Lentisphaerae	4	2
Porifera	3	6
Synergistetes	3	3
Fibrobacteres	3	0
Chlorobi	3	2

Deferribacteres	3	2
Thermotogae	2	1
Armatimonadetes	2	0
Nematoda	2	1
Gemmatimonadetes	2	0
Elusimicrobia	2	0
Calditrichaeota	2	1
Annelida	1	2
Thermodesulfobacteria	1	1
Platyhelminthes	1	1
Nitrospinae	1	1
Cnidaria	1	5
Aquificae	1	0
Zygomycota	1	3
Tracheophyta	1	1
Phixviricota	1	1
Dictyoglomi	1	0
Ciliophora	1	1
Choanozoa	1	1
Cercozoa	1	1
Basidiomycota	1	2