

Research on the noBiovolP

▼ 209, Woronichinia sp

- <https://www.sciencedirect.com/science/article/pii/S0025326X17306598>
 - identifies Woronichinia sp as 2.1 - 3.3 um aerosol
- <https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1756-1051.1992.tb01830.x>
 - on page 521, there is a table with the cell size of many species in the genus Woronichinia. Maybe I could take the average of all of them for the Woronichinia sp.
- <https://epic.awi.de/id/eprint/30141/1/bsep106.pdf>
 - On page 41, the "Woronichinia spp." is given a calculated volume of 6.3 um³ per cell
 - I will take this value

▼ 214, Snowella sp

- <https://www.frontiersin.org/articles/10.3389/fmicb.2017.00923/full>
 - "Cells were oval to spherical"
 - Approximation based on picture: 2 um diameter
- <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1529-8817.2006.00179.x>
 - Measurement of the cells, done by the authors of the papers: mean cell diameter 2.5 um
 - spherical

▼ 388, Komvophoron sp

- <https://www.degruyter.com/document/doi/10.2478/s11756-009-0214-4/html> 2010
 - "All Komvophoron species have more or less spherical or barrel shaped cells"
 - Barrel shaped 4-5 um diameter x 3-6 um
- <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1529-8817.2006.00284.x>, 2006

- width 2.1 +- 0.3, length 0.9 +0.3 μm
- <http://lajar.cl/index.php/rlajar/article/view/vol44-issue4-fulltext-4>
 - p.692: The filaments of Komvophoron sp. consisted of small cells (1.29 μm by 2.26 μm)
- <https://www.tandfonline.com/doi/pdf/10.1080/02705060.2007.9664828?needAccess=true> =
<https://www.tandfonline.com/doi/abs/10.1080/02705060.2007.9664828> 2007
 - Barrel shape
 - p.681: 2-4 μm in length, 2 μm in diameter
 - I take this one, and assume barrel \sim cylinder \rightarrow cell volume for length 3 μm and diameter 2 μm = 9.4 μm^3
- ▼ 395, Planktolyngbya sp
 - <https://epic.awi.de/id/eprint/30141/1/bsep106.pdf>
 - P.42: No biovolume for P. sp, but there is one for P. spp. it's 314 μm^3
- ▼ 397, Limnothrix planctonica
 - <https://epic.awi.de/id/eprint/30141/1/bsep106.pdf>
 - This one has calculated the biovolume of a bunch of cyanobacteria
 - P.41: For L. planctonica: 491 μm^3
- ▼ 2812, Chlamydocapsa sp
 - <https://epic.awi.de/id/eprint/30141/1/bsep106.pdf>
 - No Biovolume for C. sp
 - But there is one for C. ampla, =282 μm^3
 - <https://www.sciencedirect.com/science/article/pii/S0380133093712162>
 - In this one, there is a biovolume for Chlamydocapsa sp.
 - It's =971 CU $\mu\text{M}/\text{mL}$
 - So, from what I found on an Internet, this unit means "micro mol Copper per millilitre"
 - <https://www.unitslab.com/node/3> This online calculator says 1 cu μm = 1 μm^3

- ... But at the same time, the cu μm on the converter could just mean cubic micrometer (μm^3)
- <https://www.ccap.ac.uk/catalogue/strain-9-2>
 - This is a shop to buy phytoplankton, but on the picture for *Chlamydocapsa* sp. the cells have a diameter of $\sim 15\mu\text{m}$
- https://www.algaebase.org/search/genus/detail/?genus_id=43406
 - “Vegetative cells 5-25 x 7-20 μm , oval to spherical”
 - Calculated by me:
 - smallest volume: 5 x 7 $\mu\text{m} \rightarrow 91 \mu\text{m}^3$
 - Biggest volume: 25 x 20 $\mu\text{m} \rightarrow 6545 \mu\text{m}^3$
 - Volume with median axis lengths: 15 x 13.5 $\mu\text{m} \rightarrow 1227 \mu\text{m}^3$
- I'll take the 1227 μm^3 value from the last source