

## Experiment #1. How do phosphates impact bacteria and algae?

Components:

- 50% Green algae culture: *e.gracilis*
- 50% Cyanobacteria: *chlamydomonas*
- 20mg Potassium nitrate (KNO<sub>3</sub>)
- 0g, 3mg, 7mg, 50mg, 500mg disodium hydrogen phosphate (Na<sub>2</sub>HPO<sub>4</sub>)
- 1l spring water: Volvic water

Experiment for 1 liter base solution

1. prepare 5 different media for you cultures: add Potassium nitrate and disodium hydrogen phosphate into water
2. Autoclave. Cool it down
3. Add Green algae culture and Cyanobacteria cultures. keep 3 weeks, inspect with a microscope every couple of days. Take pictures and compare your results, eg count the numbers of your cultures per cubic centimetre

For more information, see

[https://www.researchgate.net/publication/277327137 Effect of Nitrogen on Growth and Lipid Content of Chlorella pyrenoidosa](https://www.researchgate.net/publication/277327137_Effect_of_Nitrogen_on_Growth_and_Lipid_Content_of_Chlorella_pyrenoidosa)