Clarification of cheese whey for microalgae cultivation

PLOS One

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1 Works for me

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EXTERNAL LINK

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THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

Pereira MIB, Chagas BME, Sassi R, Medeiros GF, Aguiar EM, Borba LHF, Silva EPE, Neto JCA, Rangel AHN (2019) Mixotrophic cultivation of *Spirulina platensis* in dairy wastewater: Effects on the production of biomass, biochemical composition and antioxidant capacity. PLoS ONE 14(10): e0224294. doi: 10.1371/journal.pone.0224294

1 Collect the cheese whey from dairy industry as a by-product of cheese production and put it in clean and dry bottles.

2 If the cheese whey is not be clarified after collect, it should be frozen in a freezer at -20 °C.

3 For clarification, defrost the cheese whey in a refrigerator at 5 ° C.

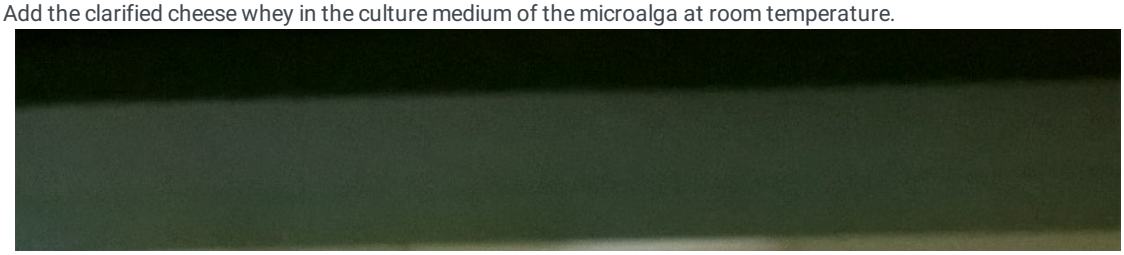
4 Then sterilize the cheese whey by autoclaving at 121 °C for 15 minutes.

5 Filter the cheese whey using 20 µm sieve.

6 Then centrifuge the filtered material using a centrifuge at 1500 rpm for 15 minutes for the removal of the precipitated material.

7 Place the supernatant in a container and autoclave at 1500 rpm for 15 minutes again before use.

8 Add the clarified cheese whey in the culture medium of the microalga at room temperature.



Clarified cheese whey