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**Research Abstracts** 

## Growth and Lipids Production with Chlorela vulgaris, Scenedesmus sp. And Chlorococum humicola In 1L Bottles, Baffled and Non-Baffled Flasks

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**Abstract:** The growth and lipid production of *Chlorella vulgaris*, *Scenedesmus sp* and *Chlorococcum humicola* in 1L bottles, baffled and non-baffled flasks is presented here to determine the best culture system at laboratory scale. The highest optical densities were observed in baffled flasks in comparison with growth observed in bottles and no-baffled flasks, which were very similar, except in the case of *C. humicola* growths. Regarding the lipids production, it was noted that the highest production was achieved in *C. vulgaris*, followed by *Scenedesmus sp* and at the end by *C. humicola*. For the first and third cases, these productions were achieved in bottles (0.649 and 0.241 g lipid / L culture respectively). In the case of *Scenedesmus sp* best production was observed in non-baffled flasks (0.323 g lipid / L culture). We discuss the best growth achieved in baffled flasks in comparison with non-baffled flasks and bottles and we associate it with the increase in the levels of oxygenation and mixing.

Keywords: baffled flasks, lipids production, microalgae strains.

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