Effect of indole-3-acetic acid in Microalgal growth for biodiesel production

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Plants make many kinds of phytohormone. These hormones are important for there growth. Higher plants, microalgae and even bacteria that live symbiotically with plants produce phytohormone. There are lots of phytohormones for example Auxin, Gibberellin and Cytokinin and effects of these phytohormones are variety.
Indole-3-acetic acid(IAA) is one of the phytohormone that belongs to Auxin and easily find in higer plants. This hormone helps cell division and cell elongation that results for plant growth and development. Some articles show that IAA also affects to microalgal growth.
In this study, we induced IAA to three microalgae, *Chlorella vulgaris*, C*hlamydomonas reinhardtii* and *Neochloris oleoabundans*, that are used for biodiesel production. We investigated cell number, dry cell weight, chlorophyll, total lipids and fatty acid.