

EFFECT OF *Chlorella* sp. AND COMBINATIONS OF SELECTED NUTRIENT SOURCES ON GROWTH AND YIELD OF ONION (*Allium cepa* L.)

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Introduction

The worldwide increase in human population leads to an increase in the demand for food, which must be supplied by increasing crop production. One of the best options to increase crop production is integrated nutrient management, which incorporates the utilization of different sources of plant nutrients. Compost is an organic component of an integrated nutrient supply system, which enhances soil health, improves macro and micronutrient availability, and increases crop productivity [1]. Biofertilizers are also a key component in integrated nutrient management. *Chlorella* is a green alga rich in macro and micronutrients [2], however, a huge amount of water and nutrients are essential for cultivating *Chlorella*. The effluent produced in the dairy industry contains a high amount of nutrients and therefore could be used as a growth medium for the cultivation of *Chlorella*. In this context, this study was conducted to check the potential of cultivating *Chlorella* sp. in dairy industry wastewater and to find the potential effect of different nutrient sources (inorganic, compost, and *Chlorella*) and their combinations on the growth and yield of onion (*Allium cepa* L.).