THE INFLUENCE OF POTASSIUM HUMATE ON *Stevia rebaudiana*

Prakash.P¹, RajaKumari.P¹, Aishwarya V², Thanuja Polani ³, Archana Priya Venugopal" and Thirumurugan.A³

Department of Biotechnology, Sathyabama University. Chennai. India¹²\³
Department of Biotechnology, P.R.Engineering College, Thanjavur, India³
Email: kpprakashttech@gmail.com. Mobile: +91 9840522688

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The current work on “*Influence of Potassium Humate on Stevia Rebaudiana*” is considered to be an economically important study in the present scenario. The main objective of this work is, to cultivate Stevia, employing a wide variety of concentrations of Potassium Humate, ranging from 1% to 10%. Within a period of three months, the weight of the leaves was determined. In addition, chlorophylls and steviosides were also identified. However, the data analysis reported, that both the maximum growth rate as well as the nutrient content of *Stevia* was reordered by 7% of Potassium Humate treated plant.

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**Key words:** Potassium Humate, chlorophylls and steviosides

**INTRODUCTION**

*Stevia Rebaudiana* (Bertoni) is a perennial herb (Family: Daisy), acknowledged as a non-caloric natural sugar. Apparently, mainly due to the presence of the stevioside contents present in the leaves of Stevia, enhances the leaf of the medicinal plant to contain a massive calorific sweetener. Moreover, it is essential to understand that, Stevioside is a glycoside and the main characteristic is the huge increase in the sweetening power, ranging from 100-400 times higher than sucrose (Gujral, 2004; Duke, 1993). Consequently, Stevia has been cited for its ability to aid against several conditions which includes the following: Candida, high blood pressure, weight loss, tooth decay and gingivitis, digestive ailments, nicotine and alcohol cravings, acne and other skin ailments, sweetener for the growing diabetic population as well as for medicinal and household purposes. In addition, under the environmental conditions, temperature plays a major role, wherein, Stevia grows at a temperature between 35 and 45 degree Celsius (ANGRAU). Accordingly, India is considered to be the best location site to cultivate Stevia in comparison to the other countries. The major disadvantage of the cultivation of this medicinal plant on a large scale basis is impossible mainly due to the lack of knowledge. However, the demand for the cultivation of Stevia around the world is increasing day by day, since it accomplishes as a major substitute of sugar mainly for diabetic and obese patients (Das, 2010). Henceforth, the cultivation on a larger scale basis with lowest investment and high yield is certainly required. A method of Stevia cultivation with lowest investment using with potassium Humate is executed. Two major acids involved in Potassium Humate are: Humic Acid and Fulvic Acid. Humic acid is an organic molecule that is formed by the breakdown of organic matter, which can be observed mainly in coal, soil, peat and dystrophies lakes. Recently Gutierrez-Miceli et al (2007) developed liquid formulation using vermicompost leachate having high concentration of humic acid which enhanced the growth of sorghum (Miguel Abud-Archila et al 2007). Prakash et al (2010) reported that *Trichoderma viridi* has the ability to convert lignite into humic acid. The main characteristic of a Humic substance is to supply nutrients to growing plants, makes soil fertile and productive and increasing water holding cap germination. In addition, Humic acid also reduces the other fertilizer requirements, increases aeration of the soil, increase the protein and mineral contents of most crops.

**MATERIALS AND METHODOLOGY**

The seedlings of *Stevia rebaudiana* purchased from local garden were planted in 30 cm Diameter pot. Consequently,
plants were alcohol. The mixed solution was allowed to boil with.

and 2010) reported that humic acid on.

dditive each set of described that Potassium Humate influences the growth of sorghum plants. Further, he had described that Potassium Humate influences the growth rate of Spirulina plantensis and Pleurotus florida (2011).

Therefore, the reports reveals that Potassium Humate enhances the medicinal plant Stevia Rebaudiana, and an essential note to consider is, to optimize the plant when cultivated on a large scale base. Accordingly, an accurate of 7% of the Potassium Humate is considerable.

CONCLUSION
Potassium Humate influences the yield and nutrient value of Stevia. The report confesses that 7% of Potassium Humate is an accurate value for the Stevia growth and nutrient content, when referred to the pot study culture. The results may vary when the cultivation is tested on a larger scale, where optimization is necessary.

REFERENCES:
4. Gu and K. Vishnu Tejaswini 2007; Formulation of a liquid fertilizer for sorghum (Sorghum bicolor (L.) Moench) using vermicompost leachate (Worm tea)as liquid fertilizer for Maize (zea Maize.) forage Production.

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<tr>
<th>No</th>
<th>Concentration of PH (%)</th>
<th>Dry Leaves Weight (g)</th>
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<th>Steviosides %</th>
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