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Autotrophs Survive on Earth with Solar Energy Photon

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Received: February 24, 2020; **Published:** March 16, 2020

Abstract

Autotrophs prepare their own food with synthesis in their own cell. Unicellular to multicellular green plants prepare food with solar power photon^{+}. Animal kingdom consumes food from outer source. Nutrition with atmospheric Carbon-dioxide and water molecule present in soil absorbs through root helps photosynthesis to prepare glucose ($C_6H_{12}O_6$) in leaf. Chlorophyll presents in leaf and photon from solar energy act as catalyst to activate photosynthesis by emitting one electron. Charged electron splits H2O and form H^+ and OH^-.

Keywords: *Autotrophs; Photon; Catalyst; Chlorophyll; Electron*

Introduction

Chemical reaction needs catalyst to start. Solar energy falls on green plants and stored water molecule splits to supply charged hydrogen and hydroxyl for further chemical reaction. Two charged hydrogen ion forms H_2 molecule and binds with another compound i.e. NADP (Nicotinamide adenine dinucleotide phosphate). $NADPH_2$ enters through cell wall and ready for more reaction within cytoplasm. CO_2 enters through stomatal opening and react to form compound molecule $C_6H_{12}O_6$ (monosaccharide) and O_2 as byproduct and it release through stomata to add oxygen in air. All aquatic phytoplankton use dissolved CO_2 and add dissolved O_2 in surrounding media. 0.1 µm diameter phytoplankton to large trees are autotrophs. Through chloroplastid and sunlight they prepare their own food.

Materials and Methods

Herb, shrubs and trees give O_2 by preparing their own food everyday.

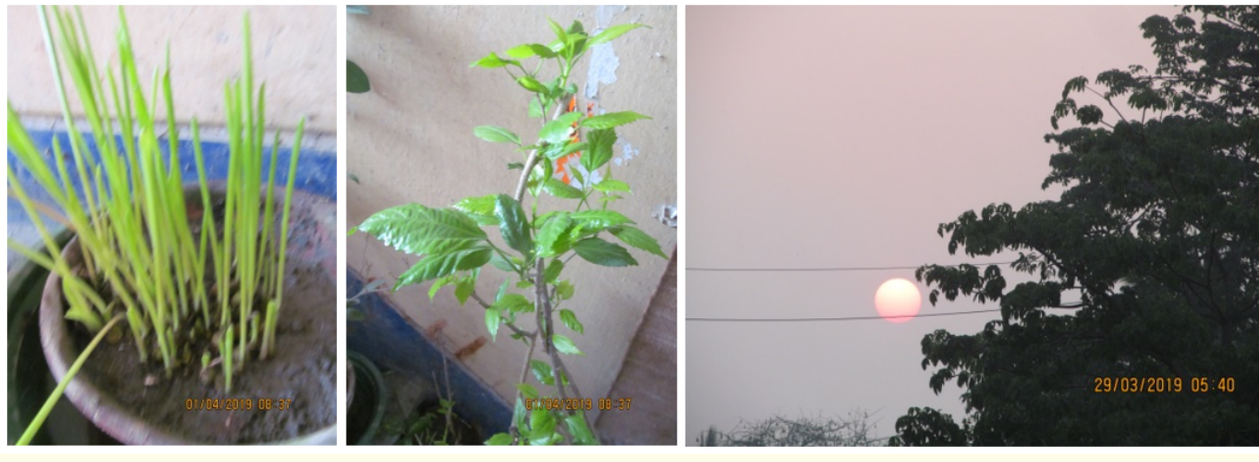

Figure 1: *Green plants are autotrophs.*

Nutrition helps to grow a plant. Autotrophs produces their own food within their cell. Different tissues helps to conduct food from one part to another part. Vascular bundle (Phloem) stores food and circulate within system. Anabolic metabolism through photosynthesis helps plant to grow, divide cells and attain maturity (www.nationalgeogrphic.org). Surrounding atmosphere beside your house will purify air if you keep potted garden plants. More oxygen in air improves breathing.

Result

Green plants absorbs CO_2 from air to prepare food with in chloroplastid. Regular watering in potted plants helps for nutrion.

$6CO_2 + 12\ H_2O$ ...Solar energy..... $C_6H_{12}O_6 + 6O_2\uparrow + 6H_2O$

Chlorophyll

Glucose molecule helps for metabolism i.e Respiration, growth, repair and maturation.

Discussion

Flowering plants will give you more pleasure by spreading aroma in air and it attracts bees and butterflies to beautify surrounding. Need attention to grow in season and care through out life span. Regular watering will help to grow plants and give O_2 in air [1-5].

Conclusion

Climate need improvement for healthy living. Human habitation will improve with more plantation. Carbon absorption by plants is an important factor to change environment.

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Volume 6 Issue 4 April 2020