

Eco-Friendly Cultivation

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Abstract : Agriculture is the main source of food for human consumption and feeding the world huge population, the pressure of food supply is increasing day by day. Undoubtedly, quality strain, improved plantation, farming technology, synthetic fertilizer, readily available irrigation, insecticides and harvesting technology are the main factors those to meet up the huge demand of food consumption all over the world. However, depended on this limited resources and excess amount of consuming lands, water, fertilizers leads to the end of the resources and severe climate effects has been left for our future generation. Agriculture is the most responsible to global warming, emitting more greenhouse gases than all other vehicles largely from nitrous oxide released by from fertilized fields, and carbon dioxide from the cutting of rain forests to grow crops . Farming is the thirstiest user of our precious water supplies and a major polluter, as runoff from fertilizers disrupts fragile lakes, rivers, and coastal ecosystems across the globe which accelerates the loss of biodiversity, crucial habitat and a major driver of wildlife extinction. It is needless to say that we have to more concern on how we can save the nutrients of the soil, storage of the water and avoid excessive depends on synthetic fertilizer and insecticides. In this case, eco- friendly cultivation could be a potential alternative solution to minimize effects of agriculture in our environment. The objective of this review paper is about organic cultivation following in particular biotechnological process focused on bio-fertilizer and bio-pesticides. Intense practice of chemical pesticides, insecticides has severe effect on both in human life and biodiversity. This cultivation process introduces farmer an alternative way which is nonhazardous, cost effective and ecofriendly. Organic fertilizer such as tea residue, ashes might be the best alternative to synthetic fertilizer those play important role in increasing soil nutrient and fertility. Ashes contain different essential and non-essential mineral contents that are required for plant growth. Organic pesticide such as neem spray is beneficial for crop as it is toxic for pest and insects. Recycled and composted crop wastes and animal manures, crop rotation, green manures and legumes etc. are suitable for soil fertility which is free from hazardous chemicals practice. Finally water hyacinth and algae are potential source of nutrients even alternative to soil for cultivation along with storage of water for continuous supply. Inorganic practice of agriculture, consuming fruits and vegetables becomes a threat for both human life and eco-system and synthetic fertilizer and pesticides are responsible for it. Farmers that practice eco-friendly farming have to implement steps to protect the environment, particularly by severely limiting the use of pesticides and avoiding the use of synthetic chemical fertilizers, which are necessary for organic systems to experience reduced environmental harm and health risk.

Keywords : organic farming, biopesticides, organic nutrients, water storage, global warming

Conference Title : ICAACS 2023 : International Conference on Agriculture, Agronomy and Crop Sciences

Conference Location : London, United Kingdom

Conference Dates : August 17-18, 2023