



Hydropic Production; An Alternative to Soil Production

Rustam Ijaz ^{1*} and Muhammad Adnan²

¹*Institute of Animal and Dairy Sciences, Faculty of Animal Husbandry, University of Agriculture Faisalabad, Pakistan*

²*Department of Agronomy, College of Agriculture, University of Sargodha, Pakistan*

***Corresponding Author:** Rustam Ijaz, Institute of Animal and Dairy Sciences, Faculty of Animal Husbandry, University of Agriculture Faisalabad, Pakistan (Rustamijaz0@gmail.com).

Soil provides base for crop production. So, it is an important component and it is a non-renewable source that is being deteriorated and degraded day after day. Moreover, natural as well as anthropogenic activities deteriorate soil quality and thus degrade it for agricultural use. Agriculture sector is directly linked with soil while most of the agriculture land is degraded. This alternative approach "hydroponic" is a technique that offers a significant degree of control of the elemental root environment for growing plants without soil. The process has a fascinating history of growth and use dating back to the mid-18th century, although the growth of plants in water rich in nutrients may have dated back to the early history of humanity. Using the solution culture technique, the determination of the essential elements needed by plants was found. Typically, the hydroponic device consists of shelf structures on which material or plastic trays are stacked. A coating of seed is scattered over the base of the trays after soaking overnight. The seeds are kept moist, but not saturated, during the growing cycle. Moisture and sometimes nutrients are supplied to them, usually through drip or spray irrigation. Drainage is facilitated by holes in the trays and the waste water is stored in a tank. Due to the shrinking land size and growing population, hydroponics is gaining importance. Moreover, hydroponic use less amount of water to grow as compared to soil. In addition to this hydroponically grown crops have less warning of environmental problems than soil and it also avoid rainfall risks. The nutrients used in hydroponic system can come from many sources such as fish excrement, duck manure and artificial nutrient solution. So, more research is needed to improve quality production under hydroponic system where availability of good quality soil is a major problem.

Received: February 27, 2021

Published: March 26, 2021

© All rights are reserved by **Rustam Ijaz and Muhammad Adnan.**

Assets from publication with us

- Prompt Acknowledgement after receiving the article
- Thorough Double blinded peer review
- Rapid Publication
- Issue of Publication Certificate
- High visibility of your Published work

Website: www.actascientific.com/

Submit Article: www.actascientific.com/submission.php

Email us: editor@actascientific.com

Contact us: +91 9182824667