

Editorial Note for Advanced Technologies used in Agricultural Sciences

Anusha Pothireddygari

Department of Genetic engineering, KL University, India ADVANCED TECHNOLOGIES

Gis Based Agriculture

The intent purpose of GIS software is to estimate and forecast the crop modeling for yield production. GIS can inspect the soil data and could possibly estimate where to farm the crops and how to maintain soil nutrition. GIS in agriculture assists farmer to perform increased profit and reduced costs by enabling better management of land resources. GIS systems are used to predict and solve the crop issues. Farmers can find easy way to access the information their crop condition and could move fields to preferable or favorable geographic locations. GIS recognizes how to irrigate based on local water resources and weather patterns. They are different types of GIS mapping which are useful for agriculture: Soil type mapping, Crop coverage, Rivers / distributaries mapping, Land use mapping, Contour mapping, Irrigation system mapping, and Meteorological mapping [1].

Satellite-Derived Data

Conducting real time field monitoring to detect and evaluate the threats with a satellite data in decades never been easy. With the help of sensors we can analyze imagery in various spectra allowing for the application of numerous spectral indices are:

- 1. Normalized Difference Vegetation Index (NDVI)
- 2. Canopy Chlorophyll Content Index (CCCI)
- 3. Normalized Difference RedEdge (NDRE)
- 4. Modified Soil-Adjusted Vegetation Index (MSAVI)

Drone and Other Aerial Imagery

Intervention of Drones gives opportunity to analyse and define the crop biomass, Plant height, Location of weeds, Water saturation points with high precision. Drones are helpful in maintaining battle against insects which spoil the crop field. The drones are useful in applying insecticides on the infected areas while reducing the direct exposure to heavy chemical poisoning. Despite the fact that drones are easy to use and capable of collecting large amounts of data within short time frames [1].

Online Data - The Key to Precision Farming

To simplify field observation, EOS has designed Crop Monitoring – a digital Platform that employs satellite monitoring in order to speed up a farmer's decision-making so that he does not miss a crucial point of field treatment [1]. Here are some of the features available in the platform:

Crop Monitoring allows the use of the Normalized Difference Vegetation Index (NDVI) for tracking crop health

Another important feature of Crop Monitoring is a Scouting app

Weather analytics

The strongest benefit of Crop Monitoring is the fact that it is based on satellite imagery

There are several modern techniques in agriculture farming like Indoor Vertical Farming, Farm Automation, Livestock Farming Technology, Modern Greenhouses, Precision Agriculture, Block chain, Artificial Intelligence, etc., which enables for the sustainable agriculture production [2,3].

REFERENCE

EOS: Earth Observing System, listening to the pulse of the planet. 2019. New Agriculture Technology in Modern Farming.

Laurie Bedord. Successful farming, 7 AG TECH ADVANCEMENTS FROM 2018

*Correspondence to: Anusha Pothireddygari, Department of Genetic engineering, KL University, India, Tel: +91 9100720699; Email:anushareddy1148@gmail.com

Received date: July 01, 2020; Accepted date: July 20, 2020; Published date: July 27, 2020

Copyright: ©2020 Anusha P. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Citation: Anusha P (2020) Editorial Note for Advanced Technologies used in Agricultural Sciences. J AgriSci Food Res 11: 281. doi: 10.35248/2593-9173.20.11.002