


**Summer Field School [Online] on
 MOUNTAIN ECOSYSTEMS AND RESOURCE MANAGEMENT
 Ivano-Frankivsk Region, Ukraine :: 19-28 September, 2021**

DELEGATE PARTICIPANT'S PROFILE

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<p>Highest Education</p>	<p>Bachelor of Science (Hons) Agriculture</p>
<p>Personal Statement</p>	<p>Dear colleagues! I would like to say a few words in order to present myself as the delegate participant for the forthcoming Summer School on 'Mountain Ecosystems and Resource Management'. I am Masters degree scholar, Department of Soil Science and Agricultural Chemistry under the School of Natural Resource Management under Central Agricultural University. In 2018, I was awarded as the Bayer Scholar of the year. In 2019, I qualified for an international internship on Precision farming and new trends in Agriculture at the Iowa State University, Ames, Iowa, USA. In 2020, I graduated from College of Agriculture, Assam Agricultural University and obtained a degree of Bachelor of Science (Hons) in Agriculture.</p>
<p>Paper/Presentation Title (Review)</p>	<p><i>Soil Microbial Diversity and Soil Health in NE India</i></p>
<p>Keywords</p>	<p>Soil microbe; Diversity; Bacteria; Fungi; Actinomycetes; Soil health; North-East India</p>
<p>Abstract (100-300 words)</p>	<p>Soil microorganisms represent a crucial element in the reaction of changing climates on agriculture through their various nutrient cycles and the sequestration of soil carbon. Microorganisms in soil are important because they affect soil structure and fertility and can be classified as bacteria, actinomycetes, fungi, algae and protozoa. In North East India, wide variability in soil microbes have been reported.</p>

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	<p>In Assam, the highest microbial counts were recorded in the topsoil (0-10 cm) layer except during the summer season when the population was greater in the subsurface (10-20 cm) layer. <i>Aspergillus</i> and <i>Penicillium</i> were the abundant genera in all sites studied. Parameters viz. water holding capacity, soil moisture content, pH, organic C, total N and available P had correlated with the microbial colony forming units (CFU). Das <i>et al.</i> (2013) and Devi <i>et al.</i> (2005) from mixed-oak forest ecosystem of Manipur, reported that microbial biomass C and P showed a positive significant correlation with abiotic variables, i.e. soil moisture, soil temperature, rainfall, mean air temperature and relative humidity.</p> <p>Laxminarayan (2010) working with integrated farming system in Meghalaya reported Microbial biomass carbon (C) had a significant relationship with organic C, microbial biomass N, and biomass P, indicating that the living part of soil organic matter is involved in the transformation of nutrients into the labile pool and governs their availability to the plants.</p> <p>In Mizoram, in tropical and sub-tropical forest, the population of fungi and actinomycetes was related to rainfall. Singh <i>et al.</i> (2020) and Najjar <i>et al.</i> (2018) reported that the most abundant bacteria as isolated and identified were Gram-positive genus <i>Geobacillus</i> and <i>Anoxybacillus</i>. The genus <i>Geobacillus</i> has been reported for the first time in North-Eastern states of India.</p>
More Information (weblinks)	