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Editorial

Dear Researchers and Readers

We have been experiencing a “New Normal” in the midst of the unprecedented misery brought about by covid-19 pandemic. As we learn to live in the new normal, there has also been a sense of complacency that has crept in amongst the people with the covid fatigue visible all around. However, till the vaccine is developed and immunity is assured, we cannot be relaxed and complacent about the dreadful virus that has taken innumerable lives across the globe apart from causing economy stress. As we learn more about the virus and expect the vaccine to be available sooner than later, we have learnt more or less to live with the coronavirus disease. In this stressful time when our educational institutions are literally locked for research activities as a measure of safety and precaution, laboratory bench work has not happened since the announcement of the lockdown. In spite of the prevailing situation, I am grateful to researchers who have submitted their manuscript to our journal for consideration of publication. I take this opportunity to express my gratitude to the reviewers for their valuable suggestions and my editorial team for being there whenever I needed their help and assistance.

This volume comes with the collection of articles of multidisciplinary nature with a mix of papers drawn from Life Sciences, Human & Environmental Sciences and Social Sciences.

The present volume begins with an article on “**Induced polyploidization in *Brassica fruticulosa* - a wild relative of Brassicas as potential source for mustard aphid**” by Arun Kumar and Prashant Yadav who illustrate through their research how polyploidy is an important source for acquiring new genetic recombination and creating genetic uniqueness in plants achieved through genetic manipulation associated with the obtainment of some increased enviable traits of the plants providing them greater adaptability to various biotic and abiotic stresses as compared to its diploids counterparts.

Pradnya Kakodkar in the article entitled “**Oral health promotion for the indigenous population in India**” discusses the oral health problems existing

among the indigenous population of India and highlights the different oral health promotion methods to address the disease burden. The study is presented through the adoption of seven different integration methods that have been discussed.

The article on “**Climate change adaptation in mountain community of Mustang district, Nepal**” by Prakash Upadhyay describes how the ethnic Loba people of Mustang are experiencing climate vulnerability in terms of adaptation in agropastoral livelihood. He elaborates on how they have adjusted their agropastoral living with what nature has provided and are coping to the changing climate with customary adaptive measures which includes traditional system of landholding, collective labour and irrigation management, seasonal migration, spiritual connectivity and out-migration for the collective survival of the community amidst the threats of becoming a climate refugee.

Sunita Gehlot and Praveen Gehlot in their article “**Socio-ethnomycological validation of Maru Khumbhi (*Phellorinia herculeana*) occurring in Indian Thar Desert**” brings forth the information on Indian Thar desert being a treasure of trove of maru khumbhi scientifically known as *Phellorinia herculeana* and the local rural peoples having the knowledge to utilize this mushroom as food and medicine. They emphasize on the point that the socio-ethnomycological knowledge pertaining to the mushroom is scarcely documented.

In their article “**Phytotoxic assessment of some monoterpenes and their formulation with leaf extract of *Chenopodium ambrosioides***”, Saroj Kumari Fagodia, Daizy Rani Batish and Harminder Pal Singh present the findings of the investigation on the phytotoxicity of eight monoterpenes belonging to two major groups, i.e. oxygenated monoterpenes (linalool, citronellol, citronellal, 1, 8-cineole) and monoterpene hydrocarbons (limonene, β -pinene, p-cymene, α -terpinene) and their formulation with *Chenopodium ambrosioides* leaf extract against *Cassia occidentalis* and concluded that some monoterpenes have great scope for the development of new weed control strategies and their further formulation improves efficacy of active compounds, reduced dose usage and save costs of application.

Lily Shylla, S.K. Barik and S.R. Joshi in their research work “**Impact assessment of heavy metal contamination on water quality of underground and open-cast**

coal mines” evaluate how mining of coal as one of the precious natural resources results in hazardous aftermath owing to the built up accumulation of heavy metals that are non-biodegradable and damage the environment. The study evaluates the impact of metal contamination on water from underground and open–cast mines by pollution indices approach in two different seasons.

In the article “ **Death rituals and afterlife: The Ao-Naga boatman of the dead in Temsula Ao’s poems and the Greek mythological character of Charon**” by Harpreet Kaur Vohra examines the Naga Ao belief of the boatman of the dead and ideas of the afterlife through the poems of Naga writer, Temsula Ao and compares it with the Greek boatman of the dead, Charon by analyzing how these beliefs intersect, and are these intersections larger commentaries on other death rituals and beliefs.

Melinda Nongbet Sohlang and Suktilang Majaw in the article “**Voltage dependent anion channel-mediated apoptosis: Its role in the pathogenesis of diabetic complications**” elucidate how excessive or insufficient apoptosis can lead to various diseases and highlight the case of diabetes enhanced cellular apoptosis associated with micro- and macro-vascular complications citing evidences which suggest the involvement of voltage-dependent anion channel (VDAC) towards increased apoptosis observed in diabetes.

I take this opportunity to thank the contributors for their submissions and the reviewers for their promptness in providing valuable comments. Suggestions and cooperation of the editorial members have always been a source of guidance and strength. I appeal to scholars to submit/continue submitting manuscript(s) for publication in future issues of The NEHU Journal.

Stay Safe
Prof. S.R. Joshi
Editor