## INTERNATIONAL MOUNTAIN CONFERENCE

SEPTEMBER 11 - 15 2022

#IMC22

>> SYNTHESIZE MOUNTAINS OF KNOWLEDGE <<

## **Submitted Abstract**

ID IMC22-FSAbstr- 277

First Author First Name Last Name	Vp Uniyal
Submitting Author First Name Last Name	Vp Uniyal
Correspondence	uniyalvp@gmail.com
Co-Authors >> E-Mails will be not listed	Chauhan, Mona
Organisations	Wildlife Institute of India, India
Country	India
Region	Asia
Title	Conservation Of Agrobiodiversity And Ecosystem Services Through Insect Pollinators In Indian Trans Himalaya Region.
Keywords	Conservation, Ecosystem Services, Trans Himalaya, Pollinators
Туре	List Of Focus Session
Focus Session ID	74



## INTERNATIONAL MOUNTAIN CONFERENCE

SEPTEMBER 11 - 15 2022

>> SYNTHESIZE MOUNTAINS OF KNOWLEDGE <<

## **Abstract**

Trans Himalayan ecosystems provide a variety of benefits to people, including provisioning, regulating, cultural and supporting services. These services are interconnected and interlinked to each other which consists of conservation of biodiversity, the use of natural resources and environmental protection but the deterioration of ecosystem services due to anthropogenic activities is becoming a big issue in the region. In this context, the carrying capacity of forests vis-à-vis agricultural intensification/ diversification needs to be understood. While considering intricate linkages of forests with agriculture and horticulture in the region, among others, the role of forests in providing pollination services needs to be considered on priority. This need is evident, as over 90% of flowering plants are pollinated by animals and the majority of crop plants are pollinated by insects; bee-pollinated crops alone contribute about 30% of human food, and reduction in the population of native pollinators, due to habitat loss of insects will result into insufficient pollination and crop productivity. The trans-Himalayan region was targeted for the intensive study of pollinators and the conservation practices of these little creatures with the help of stakeholder workshops adopting the city science approach in different areas of Ladakh. A simple questionnaire was prepared to know the awareness about the ecosystem services and type of farming system they are approaching. A total of 52 species of pollinators were recorded from the Ladakh region which consists of 34 species of Hymenoptera, 9 species of Lepidoptera and 9 species of Diptera. Among the pollinators, Bombus lucorum and Bombus tunicatus were most abundant than any other pollinators and help in the pollination of the maximum crops of the area. Pollinators and host plant interaction was also documented during the study. The community prefer organic practices which could be the reason for the diversification of pollinators. Hence, it is provided that necessary management practices should be adopted to enhance and protect the mountain agrobiodiversity, forest ecosystem and ecosystem services. A new concept of value addition to ecosystem services and payment for ecosystem services should be encouraged for their sustainable use.