

INTERIM REPORT

FEBRUARY 2009

PROJECT TITLE: HOSTPLANTS AND EARLY STAGES OF LEPIDOPTERA IN THE KUMAON HIMALAYA

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INTRODUCTION:

The main aim of the project is to discover the larval host plants of as many butterflies and moths as possible in order to obtain enough data to understand why the population of moths differs according to elevation in Himalayan Oak forests.

Equipment/literature Obtained:

A Nikon P80 camera and available volumes of the Moths of Japan series have been purchased. The remaining parts of the series are being searched for in various fora. The Hostplants of Lepidoptera book should arrive soon along with the latest issue of the Moths of Borneo series.

Work done:

Numerous larvae were located in Maheshkhan and around the field station at Gaggar during June to October. Of these, roughly 30 Lepidoptera species emerged, of which around 20 were previously unreported foodplant records. Many larvae were parasitized by wasps and flies. Around 50 species of larvae are overwintering as pupae, so we will only know what they are when they emerge later this year. One species of larva has fed through the winter, necessitating trips to Gaggar even during the cold weather to bring leaves for the caterpillars to eat!

Visits to the Gaggar forest resulted in the discovery of previously unreported mimicry by a pupa. This finding will shortly be published in an international scientific journal.

In July 2008, I had the opportunity to visit Ladakh, a trans-Himalayan, cold desert region in Jammu and Kashmir state. The intention was to study the life history of certain hawkmoths. I used some of the contingency fund from the RSG project to travel a bit more around that area. This resulted in material for two upcoming publications in an international journal and the discovery of a new species of moth, which will be described shortly.

In January 2009, I was invited to identify moths in the National Forest Insect Collection in Dehra Dun, Uttarakhand. In the course of identifying moths, numerous records of larval host plants from all over India also emerged, since the moths had been bred but not identified. Some of these dated back to the 1930s. This data will be a valuable supplement to data being gathered under the present project.

A taxonomic review of a group of butterflies has been prepared and submitted. Some of these were obtained under the previous RSG project. The editor's comments are awaited.

Work on undescribed species of moths from the previous project is underway, but progress is slow since literature on some of these groups is scattered and unavailable. At least one species of moth new to Science has been discovered so far under the present project. This will be reported sooner than the others, since it has only one known relative in its genus!

Breeding work will re-commence in March or April, depending on the weather.