PASIPHILA PALPATA (WALKER, 1862) (LEPIDOPTERA: GEOMETRIDAE: LARENTIINAE) FEEDS ON FLOWERS OF *RHODODENDRON ARBOREUM* IN THE LARVAL STAGE

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Pasiphila palpata (Walker, 1862) is a widespread Geometrid moth, recorded from northern India, southern India, Sri Lanka (Hampson, 1895), to western China, Taiwan, Java and Borneo (Holloway, 1997). Holloway (1997) noted in the generic account of *Pasiphila* Meyrick, 1883 that the larvae of European species feed on the flower of shrubs in Rosaceae and Ericaceae in Britain and Japan, where Theaceae are also involved, with a record of *Pasiphyla viridescens* (Warren, 1895) feeding on *Rhododendron* (Ericaceae) in New Guinea.

On January 1, 2024, the second author noted that *Rhododendron arboreum* was flowering near Gagar, Nainital district, Uttarakhand at around 2200 m elevation. On January 3, 2024, both authors visited the flowering trees and collected some flowers for analysis. Some of the flowers contained greenish larvae which were bred (Figures 1-7).

The 3 larvae discovered fed on the petals of *Rhododendron* flowers, with only one stamen of one floret being presumably eaten by them, since that floret did not contain the usual number of stamens when examined.

The larvae were of different sizes when found and pupated on 14.i.2024 x 2 and 16.i.2024 x 1.

The pupae were initially green (Figure 8) but later turned brownish. The pupae were not attached to any surface and presumably the larvae would burrow under the soil to pupate. Three moths emerged around 14.ii.2024 (exact date of emergence was not recorded because it was not expected that they would emerge so soon in the cold weather) (Figure 9).

Specimens figured in Figure 9 are deposited in the collection of the Butterfly Research Centre, Bhimtal, Uttarakhand.

Remarks: The moth has been recorded from Dharamsala (1457 m), the Nilgiris and Sri Lanka (Hampson, 1895) which are known localities for *R. arboreum*. Similarly, it has been reported in Nepal from Godavari (1600 m) and Basantapur (2200 m), also with *R. arboreum* trees (Yazaki, 1995). The present record is also

from *Rhododendron* flowers. Although the larval hostplant of *P. palpata* was not reported earlier, it seems likely that it is restricted to habitats with *R. arboreum* in India, Nepal and Sri Lanka.

In the Himalaya, *R. arboreum* grows at altitudes where winter snow is a regular phenomenon; however, there is no snow in southern India and Sri Lanka, although the tree grows on the highest mountains in those areas.

It was reported by Yazaki (1995) as on the wing in March and April in Nepal, which coincides with the flowering of *R. arboreum*. The present record was from a remarkably early flowering tree of *R. arboreum*. Three flowers were collected, and three larvae were found, one in each flower, but only one floret of each flower was infected. Therefore, infestation is relatively high. It is not known if there are later generations of the moth during the year, but it seems unlikely, since *R. arboreum* only flowers from December to June in the Himalaya (Osmaston, 1927).

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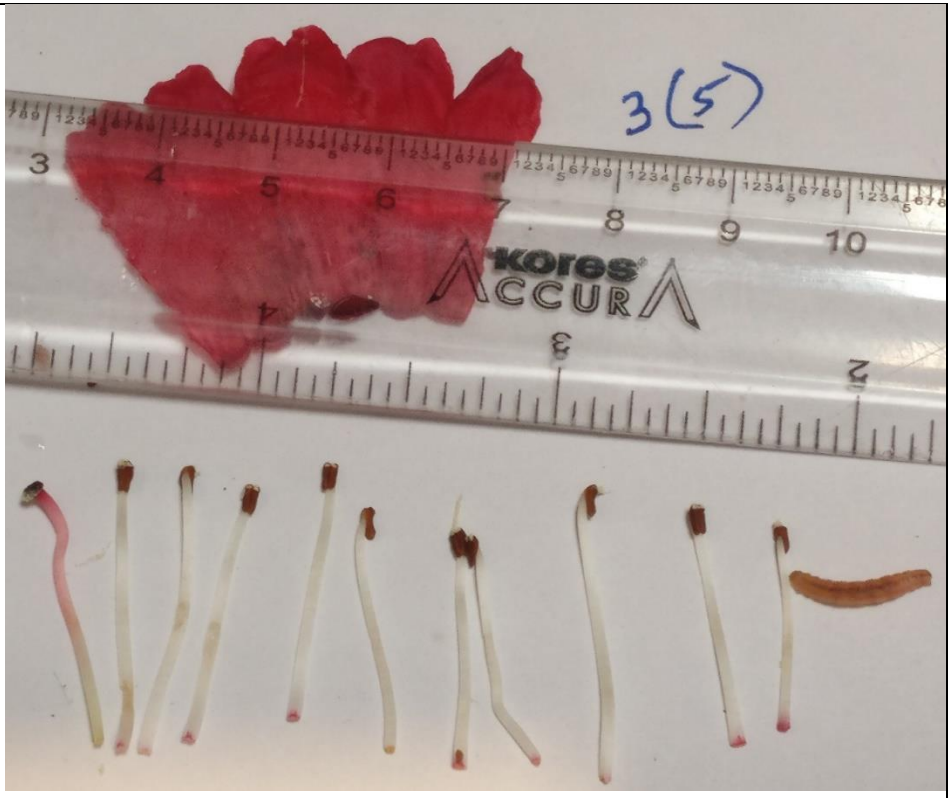

Fig 1: *Rhododendron arboreum* flower, with larva on extreme right.

Figure 2 & 3. Dorsal and lateral view of mature larva 1

Figure 4 & 5. Dorsal and lateral view of larva 2

Figure 6 & 7. Dorsal and ventral view of larva 3.

Figure 8. Pupa.

Figure 9. Adult *P. palpata* that emerged from the larvae