

## A new species of *Nasusina* Pearsall from Colorado (Lepidoptera: Geometridae: Eupitheciini)

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### Abstract

*Nasusina vallis*, new species, is described from Mesa Co., Colorado and compared with its apparent closest relative *Nasusina inferior* Hulst. The adults and male and female genitalia of both species are illustrated, along with pertinent head and leg structures.

**Key words:** *Nasusina vallis*, *Nasusina inferior*, Colorado, Eupitheciini, Geometridae, taxonomy

### Introduction

Moth collecting in John Brown Canyon, Mesa Co., Colorado by UV-fluorescent-light traps during the night of 23 May 2003 yielded a series of 56 specimens of a *Nasusina* species not familiar to the author. Subsequent dissection of individuals of both sexes and comparison of genitalic preparations with the illustrations in McDunnough (1949) indicated that the moths were an undescribed species. To confirm this conclusion, examples of the two species, *N. inferior* (Hulst) and *N. vaporata* (Pearsall), that have male genitalia features closest to the new moth, were obtained from a colleague, Ron Leuschner, in California. In size, habitus, and genitalic characters, *N. vaporata* was found to be quite different from the new species. Although there are some superficial similarities to *N. inferior* in terms of size and maculation, genitalic characters of the new species immediately separate it. The biology of the new species is unknown. A general description of *N. inferior* is provided for comparison purposes prior to the diagnosis and description of *N. vallis*.

The diameter of the aedoeagus in males of the genus *Nasusina* is extremely small in comparison to that in most of the species in the associated genera *Eupithecia* Curtis and *Prorella* Barnes and McDunnough, which precludes insertion of the usual 33 gauge or