of nominate *B. exilis* and the nearest known colony of *B. e. yucateca*, which is probably a real distributional gap as the intervening area is too mesic in character.

B. exilis yucateca is most likely restricted to the north coast of Yucatán, another enclave of arid to semi-arid conditions. The new subspecies seems to be most closely related to B. e. isophthalma (known from the Bahamas, Cuba, Hispaniola and Jamaica). In many ways B. e. isophthalma is intermediate between B. e. exilis and B. e. yucateca.

Godman & Salvin mention some specimens of *exilis* from Venezuela, and this record is repeated by Draudt (1921, *in* Seitz, Grossschmett. Erde 5: 820). There are two specimens in the Carnegie Museum that may possibly be from Venezuela. They come from the Holland Collection, and Holland obtained them from Staudinger. They bear no locality data, but the same style of labelling occurs on some other material of probable Venezuelan origin. In any event these two specimens seem to represent a new subspecies, nearer to *B. e. yucateca* than to either *B. e. exilis* or *B. e. isophthalma*.

AN INTERESTING NEW SPECIES OF THE NEW WORLD GNORIMOSCHEMINI (GELECHIIDAE) FROM THE LESSER ANTILLES

DALIBOR F. POVOLNÝ

Department of Zoology, College of Agriculture, Brno, Czechoslovakia

Several years ago, I had the opportunity of studying interesting material of the tribe Gnorimoschemini in the Naturhistorisches Museum in Vienna. Among their series of this difficult gelechiid group I discovered a small form which I could not identify. After later study of numerous American species (Povolný, 1967) and a detailed consideration of this specimen I decided to describe this moth as a new species belonging to the genus *Keiferia* Busck, 1939.

Keiferia rusposoria Povolný, new species

In general appearance this is a small brownish moth, having the forewings dusted with minute darkish scales, forming an indistinct pattern.

Labial palpus not too slender, lacking scales on second segment, its outer surface markedly grey spotted, inner surface nearly uniform pale cream, third segment pale with two (one basal and one subterminal) rings of dark grey scales. Frons bright,

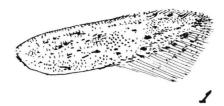


Fig. 1. Pattern of the forewing of Keiferia rusposoria Povolný.

patagia brownish. Antennal segments brown with distinct dark rings. Forewing (fig. 1) superficially with ground colour brown; under low magnification individual scales light to brown, mixed with single scales having dark brown to black tips; irregular groups of these dark scales forming an indistinct pattern of dark dots disseminated irregularly over wing; marginal dots around apex more distinct (these dots characteristic of the tribe). Hindwing medium-grey with fine fringe scales; costal margin near base with a group of long, brightly coloured bristles, nearly half as long as costa. Underside of coxae and femora pale cream, nearly uniform, with only isolated dark scales. Tibiae and tarsi markedly bright and dark spotted to ringed.

Length of forewing, 3.8 mm.

Male genitalia (fig. 2) characteristic of the genus *Keiferia* with the heavy thorn-like process on uncus, which is seldom found elsewhere in members of the Gnorimoschemini. Other structures of the male genitalia, especially the sacculus and its processes, also demonstrate the close relationship between the new species and *Keiferia lycopersicella* (Walsingham).

Holotype male: West Indies, Grenada, Balthazar (Windward side), (H. H. Smith) Walsingham Collection, 1910–427 65173. Deposited in Naturhistorisches Museum in Vienna.

Keiferia rusposoria may be best distinguished from the two other members of the genus, K. lycopersicella and the very similar K. elmorei (Keifer) by differences in the male genitalia (figs. 2, 3). The thorn-like process of the uncus is heavier in the new species than in K. lycopersicella, being only a little shorter than the tips of valvae. In K. rusposoria the valvae are straight, not S-shaped. The paired processes of the sacculus are present, but the medial pair is tiny with its branches separated by a shallow indentation, whereas the other pair of saccular processes is very long and slender. The saccus is substantially shorter than that of K. lycopersicella, being comparatively thick with the tip rounded. The aedeagus is also visibly different from that of K. lycopersicella, being shorter without the characteristic inflation of the caecum aedeagi, and moderately curved.

As for the taxonomic position of *K. rusposoria*, it appears clear that the species is congeneric with *K. lycopersicella* but represents a second distinctive morphotype of the genus. From the polyphagous species *K. lycopersicella*, Keifer (1936) distinguished a slightly different species,

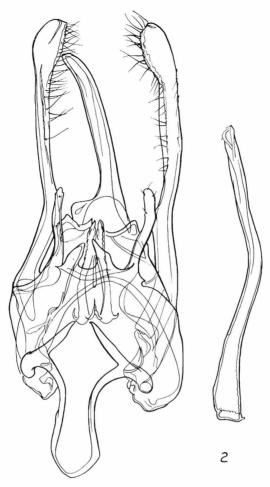


Fig. 2. Male genitalia of *Keiferia rusposoria* Povolný, Holotype, Balthazar, Grenada, West Indies.

Keiferia elmorei. The separation of this sibling from K. lycopersicella is based on its specialization to indigenous Solanum species in California.

Keiferia rusposoria was collected on Grenada, Lesser Antilles, and thus might represent a species originating by long-standing geographic isolation. The native distribution of *K. lycopersicella*, which is referred to as the "tomato pinworm," is not known; as the species has been secondarily introduced as a pest to many parts of Central and South America, and the West Indies, where it perhaps originally did not occur.

The discovery of K. rusposoria is therefore of high interest, as it is a

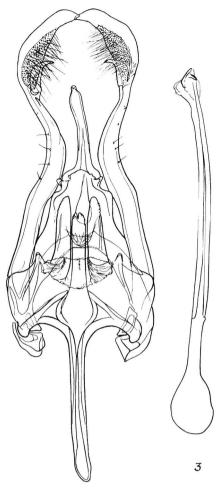


Fig. 3. Male genitalia of *Keiferia lycopersicella* (Walsingham, 1897), Lectotype (British Museum (Natural History) London) St. Croix, Dan. West Indies.

very distinct species of a genus, which appeared to be monomorphic so far.

According to Jerry A. Powell, University of California, Berkeley, to whom I feel greatly obliged for his cooperation in revision of the manuscript, H. H. Smith collected important material of "microlepidoptera" for the British Museum (Natural History) in various parts of the New World before and after the turn of the century. The windward side of the small island Grenada in the Lesser Antilles is the east-facing side.

The specimen might have been sent by Walsingham to Rebel from London to Vienna, because Rebel was dealing also with the former collective genus "Lita auct.," to which this species belonged.

LITERATURE CITED

Keifer, H. H., 1936. California Microlepidoptera. X. Mo. Bull. Calif. Dept. Agric., 25: 349–359.

Povolný, D., 1967. Genitalia of some Nearctic and Neotropic members of the tribe Gnorimoschemini (Lep., Gel.). Acta ent. Mus. Nat. Pragae, 37: 51–126.

A NEW *PERISAMA* (NYMPHALIDAE: CALLICORINI) FROM BOLIVIA

JOHN H. MASTERS¹
Box 7511, St. Paul, Minnesota

During 1962–63, Franz Steinbach, of Cochabamba, Bolivia, consigned to me 395 specimens of *Perisama* Doubleday (including *Orophila* Staudinger) collected near Alto Palmar, Chapare Province, Bolivia. The "*Perisama comnena*" in this group were particularly interesting because they apparently included two distinct phenotypes; one characterized by the normal large red basal patch on the ventral surface of the forewing, the other without it. This is the type of variation that is normally associated with geographical subspecies; however, both forms were sympatric at Alto Palmar. An examination of the male genitalia demonstrated that the two "forms" were in reality distinct species and, after a canvass of the literature, I am of the opinion that the second species is heretofore unnamed.

Perisama rusea Masters, new species

MALE: Upperside of both wings deep-black ground; iridescent green rays extending outwardly from base of forewing, along base of discal cell and vein 2V, until they almost meet a diagonal iridescent green band, 2 to 3 mm wide, which crosses the wing from costal margin, at end of cell to inner margin at tornus; one (occasionally two) iridescent green spot(s) in subapical area, near costal margin. Hindwing with an iridescent green band, 2mm wide, extending through limbal area parallel to outer margin.

Underside of forewing with dull black ground color except for a golden apex; base of wing with a small golden patch, confined primarily to cell and not over 8 mm long, having a tint of red at its outer margin; from this golden patch, a blue-green streak extends along costal margin of cell to a white triangular patch at end of cell which in turn precedes three small blue spots, in cells M2, M3 and Cu1, which form

¹ Research Associate, Section of Insects and Spiders, Carnegie Museum, Pittsburgh.