

# On a small collection of Swedish Lepidoptera, kept at the National Museum of Natural History, Sofia

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**Abstract:** The paper presents an inventory of 28 species of butterflies and moths collected in the northernmost part of Sweden during 1931–1932. The collection is of certain historical value and is kept at the National Museum of Natural History at the Bulgarian Academy of Sciences, Sofia.

**Keywords:** butterfly, Lepidoptera, Luleå, moth, Sweden

## Introduction

The National Museum of Natural History at the Bulgarian Academy of Sciences in Sofia is known as a depository of numerous and very important materials of butterflies and moths from the Balkan Peninsula, especially from Bulgaria. The old museum holdings are also rich in material from other regions, mainly with South American, African, Asian and European origin. Other than the Balkans, the European material is represented primarily by Lepidoptera collected in the countries of Central Europe. Isolated small collections, like a particular one from northernmost part of Scandinavia, also exist. The latter is dated from the first half of the last century. All specimens have been collected by Rudolf Rangnow during 1931–1932 near the town of Luleå, Norrbotten, Sweden.

## Results

The collection consists of 63 specimens, associated with 28 species. Families are arranged according to van Niekerken et al. (2011). Sequence and nomenclature of family Noctuidae follow Fibiger et al. (2010) with incorporated subsequent changes from recent taxonomic revisions. Each entry includes the taxon's name; the name on the label, if different from

the previous one, enclosed in square brackets “[ ]”; date and specimens, as well as notes on subsequent publications and illustrations. If a text of a label is quoted each line of the label's text is separated by a vertical line “|”.

### Hesperiidae

- *Pyrgus centaureae* (Rambur, [1839]): 15.VI.1931 – 1 ♂; 19.VI.1931 – 1 ♀.

### Lycaenidae

- *Plebeius (Vacciniina) optilete* (Knoch, 1781): VI.1931 – 2 ♂♂.

### Nymphalidae

- *Oeneis norna norna* (Thunberg, 1791) (Fig. 1): 15.VI.1932 – 1 ♂; VI.1932 – 1 ♀.
- *Erebia ligea* (Linnaeus, 1758): VI.1931 – 1 ♂, 1 ♀.
- *Erebia embla embla* (Thunberg, 1791) [*Erebia diesa* [sic]]: VI.1931 – 1 ♂, 1 ♀.
- *Erebia disa disa* (Thunberg, 1791): 15.VI.1932 – 1 ♂ [*Erebia embla* Thnbg]; 16.VI.1932 – 1 ♀ [*Erebia diesa* [sic]].
- *Aglais urticae urticae* (Linnaeus, 1758): VI.1931 – 1 ♂, 1 ♀.
- *Boloria (Clossiana) euphrosyne euphrosyne* (Linnaeus, 1758): 15.VI.1932 – 1 ♀; 16.VI.1932 – 1 ♀.



Fig. 1. *Oeneis norna norna* (Thunberg, 1791), male [above], female [below].



Fig. 2. *Boloria (Clossiana) frigga frigga* (Thunberg, 1791), male [above], female [below].

- *Boloria (Clossiana) selene selene* ([Denis & Schiffermüller], 1775): 9.VI.1931 – 1 ♂; 16.VI.1932 – 1 ♀.
- *Boloria (Clossiana) frigga frigga* (Thunberg, 1791) (Fig. 2): VI.1932 – 2 ♂♂, 2 ♀♀.
- *Boloria (Boloria) aquilonaris* (Stichel, 1908) [*Argynnис pales v. lappona* [sic] Stgr.]: VI.1932 – 2 ♂♂; 15.VI.1932 – 1 ♀; 16.VI.1932 – 1 ♂.

#### Geometridae

- *Xanthorhoe abrasaria* (Herrich-Schäffer, [1855]) [*Larentia abrasaria* H.S.]: VI.1931 – 1 ♂, 1 ♀.



Fig. 3. Holotype of *Pheosia ferdinandi* Rangnow, 1934, a taxon identical with *Pheosia gnoma* (Fabricius, [1777]).



Fig. 4. *Syngrapha diasema* (Boisduval, 1829), male.



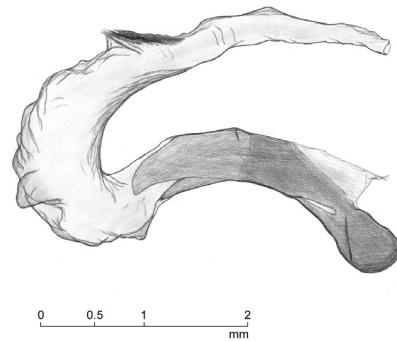
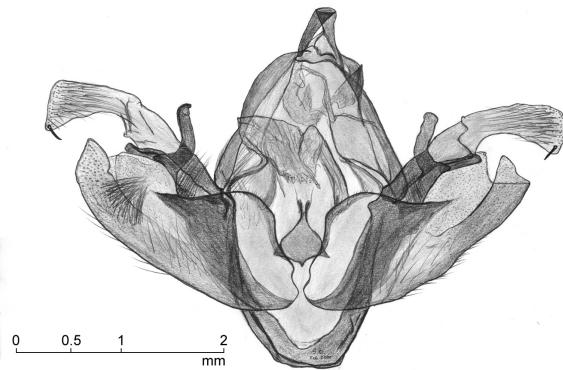
Fig. 5. *Hilia iris* (Zetterstedt, 1839), female.

- *Heterothera serraria* (Lienig, 1846) [*Larentia serraria* Z.]: VI.1931 – 1 ♂, 1 ♀.
- Notodontidae**
- *Pheosia gnoma* (Fabricius, [1777]) – 1 ♂ (Fig. 3) with labels: (1) handwritten (on red paper) “*Pheosia ferdinandi* | nov. sp. | Rudolf Rangnow”; (2)

handwritten (on white paper) [by Dr Ivan Buresch] “Описана в [Described in] Internat. | Entomol. Zeitschrift | Guben, Jahrg. 27, p. 554 | Guben 1934.”; (3) printed (on white paper) “♂”; (4) printed (on white paper) “*Pheosia gnoma* | (FABRICIUS, 1766) | male | S. Beshkov det. Feb. 2000”. The taxon has been described by Rangnow (1934: 555). It is identical with the species *Pheosia gnoma* (Fabricius, [1777]) (Schintlmeister, 1989: 91). The specimen represents a holotype (by monotypy) (ICZN, 1999: 73 a II) and is also illustrated in the original publication (Rangnow, 1934: 555).

#### Noctuidae

- *Autographa macrogamma* (Eversmann, 1842) [*Plusia macro-gamma* Ev.]: VI.1931 – 1 ♀; VI.1932 – 1 ♀. Published as *Phytometra macrogamma* Ev. *nigroviolacea* f. nov. (Rangnow, 1935: 22); *Phytometra macrogamma* Ev. *interrupta* f. nov. (Rangnow, 1935: 22); illustrated as *Phytometra macrogamma nigroviolacea* Rngn. (Rangnow, 1935: 21; Pl. 4: Fig. 6); *Phytometra macrogamma interrupta* Rngn. (Rangnow, 1935: 21; Pl. 4: Fig. 7).
- *Syngrapha parilis* (Hübner, [1809]) [*Plusia parilis* Hb.]: VI.1932 – 1 ♂; VI.1931 – ♀.
- *Syngrapha diasema* (Boisduval, 1829) (Fig. 4) [*Plusia diasema* B.]: VI.1932 – 1 ♂; VI.1932 – 1 ♀.
- *Syngrapha interrogationis* (Linnaeus, 1758) [*Plusia interrogationis* L.]: 9.VI.1931 – 2 ♀♀. Published as *Syngrapha interrogationis* L. *magnifica* f. nov. (Rangnow, 1935: 22). Illustrated as *Syngrapha interrogationis magnifica* Rngn. (Rangnow, 1935: 21; Pl. 4: Fig. 9).
- *Sympistis funebris* (Hübner, [1809]) [*Anarta funebris* Hb.]: VI.1931 – 1 ♂, 1 ♀ (*funesta* Paykull, 1793 is a homonym of *funesta* Esper, [1786]). Published as *Sympistis funesta* Payk. *nigrofasciata* f. nov. (Rangnow, 1935: 21). Illustrated as *Sympistis funesta nigrofasciata* Rngn. (Rangnow, 1935: 21; Pl. 4: Figures 1–2 [1 – ♂, 2 – ♀]).
- *Sympistis heliophila* (Paykull, 1793) [*Anarta melaleuca* Thnbg.] (homonym: *Noctua melaleuca* Thunberg, 1791, nec Vieweg, 1790): VI.1931 – 1 ♂, 1 ♀. Published as *Sympistis melaleuca* Thnbg. *trimacula* f. nov. (Rangnow, 1935: 22); *Sympistis melaleuca* Thnbg. *leucofasciata* f. nov. (Rangnow, 1935: 22); *Sympistis melaleuca* Thnbg. *nigricata* f. nov. (Rangnow, 1935: 22). Illustrated as *Sympistis melaleuca trimacula* Rngn. (Rangnow, 1935:



Figs 6–7. *Polia lamuta* (Herz, 1903), male genitalia with everted vesica.

- 21; Pl. 4: Fig. 3); *Sympistis melaleuca leucofasciata* Rngn. (Rangnow, 1935: 21; Pl. 4: Fig. 4); *Sympistis melaleuca nigricata* Rngn. (Rangnow, 1935: 21; Pl. 4: Fig. 5).
- *Hillia iris* (Zetterstedt, 1839) (Fig. 5): VI.1931 – 2 ♂♂, 2 ♀♀. Although all the labels clearly say “Juni”, the month given here is most probably erroneous. The imago flies from the end of July to the end of August (Bengt Å. Bengtsson, pers. comm.).
- *Hadula melanopa melanopa* (Thunberg, 1791) [*Anarta melanopa* Thnbg.]: VI.1931 – 1 ♂, 1 ♀.
- *Coranarta cordigera cordigera* (Thunberg, 1788) [*Anarta cordigera* Thnbg.]: VI.1931 – 2 ♂♂.
- *Polia lamuta* (Herz, 1903) (Figs 6–7): 15.VI.1932 – 1 ♂, 1 ♀.
- *Lasionycta secedens* (Walker, 1858) [*Anarta bohemanni* (junior subjective synonym)]: VI.1931 – 1 ♂, 1 ♀. Published as *Polia bohemanni* Stgr. *unicolor* f. nov. (Rangnow, 1935: 233); *Polia bohemanni* Stgr. *nigrofasciata*, f. nov. (Rangnow,

- 1935: 233). Illustrated as *Polia bohemanni* Stgr. *unicolor* Rngn. (Rangnow, 1935: 224; Pl. 3: Fig. 32a); *Polia bohemanni* Stgr. *nigrofasciata* Rngn. (Rangnow, 1935: 224; Pl. 3: Fig. 32b).
- *Xestia tecta* (Hübner, [1808]) [*Agrotis tecta* Hb.]: 9.VI.1931 – 1 ♂; 15.VI.1932 – 3 ♂♂.
  - *Xestia speciosa arctica* (Zetterstedt, 1839) [*Agrotis speciosa* Hb.]: 15.VI.1932 – 2 ♀♀. Published as *Aplectoides speciosa arctica* ab. nov. *diffusa* (Rangnow, 1935: 233). Illustrated as *Aplectoides speciosa* Hbn. *arctica diffusa* Rngn. (Rangnow, 1935: 224; Pl. 3: Fig. 31).
  - *Xestia alpicola alpicola* (Zetterstedt, [1839]) [*Agrotis hyperborea* Zett. (junior subjective synonym)]: VI.1931 – 1 ♂; VI.1932 – 1 ♂.

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