

Research article

# Type specimens of Zygaenidae in the National Museum of Natural History, Sofia (Lepidoptera)

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**Abstract:** This paper comprises an annotated list of the type material of Zygaenidae kept in the National Museum of Natural History at the Bulgarian Academy of Sciences in Sofia. The collection contains types of five nominal species group taxa, described by B. Alberti, A. Drenowski and O. Holik.

**Keywords:** Bulgaria, holotype, nomenclature, paratype, Turkey

## Introduction

The National Museum of Natural History at the Bulgarian Academy of Sciences, Sofia (NMNHS) is well known as a depository of important collections of Balkan Lepidoptera, with some taxa represented by types. Currently, the collection of Lepidoptera is housed in a modern Entomology Depot. The list presented here follows ICZN recommendation (1999: 72F.4) and continues the series of catalogues on types of the rich museum holdings.

## Material and methods

The collection of Zygaenidae at NMNHS contains type material of five nominal species group taxa (18 specimens), described by Burchard Alberti, Alexander Drenowski and Otto Holik.

The species group taxa names are arranged in alphabetical order. Each entry includes the name, followed by the original combination quoted from the original publication, type locality, type specimens as specified with their labels and comments about the original description, type material and current taxonomic

status of the taxon involved. Each line in the label's text is separated by a vertical line “|”.

## Results and discussion

*antitaurica* Holik, 1942

“*Zygaena carniolica* var. *antitaurica* m. var. nov.” (Holik, 1942: 255). Type locality: Turkey: “Antitaurus in einer Höhe von 3300 m” (Holik, 1942: 255).

Holotype ♂ (Fig. 1) with labels: (1) handwritten (on white paper with double black frame) “Antitaurus | Hochalpin | 3300m. 1912”; (2) handwritten (on white paper with double black frame) “Zyg. carniolica | var. antitaurica | Hol | Ed. W. Siehe, Mersina.”; (3) handwritten (on white paper) “det. Holik | 1940.”; (3) printed (on red paper with handwritten inscriptions, here italicised) “TYPE | *carniolica* | *antitaurica* | *nova*”; (4) printed (on white paper) “NMNHS-INV-T-0344”.

Paratypes 3 ♂♂ with labels: [1] printed (on white paper) “NMNHS-INV-T-0343”; [2] printed (on white paper) “NMNHS-INV-T-01183”; [3] printed (on white paper) “NMNHS-INV-T-01184”; paratypes 1 and 2

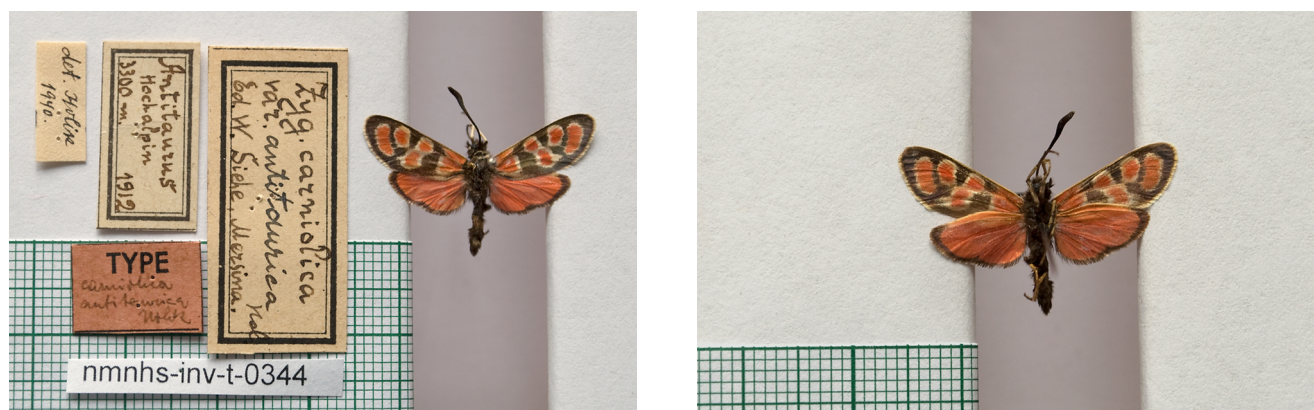


Fig. 1 “*Zygaena carniolica* var. *antitaurica*”, holotype ♂ (left: upperside, right: underside).

with additional, handwritten (on white paper) “det. Holik | 1940.”; all the paratypes with additional: (1) handwritten (on white paper with double black frame) “Antitaurus | Hochalpin | 3300m. 1912”; (2) handwritten (on white paper with double black frame) “Zyg. carniolica | var. antitaurica | Holik | Ed. W. Siehe, Mersina.”; (3) printed (on red paper with handwritten inscriptions, here italicised) “COTYPE | *carniolica* | *antitaurica* | nova”.

The original type series consisted of 4 ♂♂ “Type und Cotypen” (Holik, 1942: 256). Currently treated as a valid subspecies of *Zygaena carniolica* (Scopoli, 1763) (Hofmann & Tremewan, 1996: 114).

#### *drenowskii* Alberti, 1939

“*Procris drenowskii* nov. spec.” (Alberti, 1939: 43). Type locality: “Graecia orient. Mont. Athos, Chalcidice” (Alberti, 1939: 46).

Paratypes 3 ♂♂, 2 ♀♀ with labels: [1 ♂, genitalia and abdomen in a micro vial filled with glycerol] (1) printed (on white paper with handwritten inscriptions in Cyrillic, here italicised and transliterated) “Strandja pl 28 V-1-VI | *Vurgari* | D. Iltschew 1923”; (2) handwritten (on white paper) “26”; (3) handwritten (on red paper) “Bulgarien | Strandja pl.”, on the back “B. Alberti | 1937”; (4) handwritten (on red paper) “Cotype | ♂”, on the back “*Procris drenowskii*”; (5) printed (on white paper) “NMNHS-INV-T-0313”; (6) printed (on white paper) “*Adscita statices drenowskii* | (Alberti, 1939) ♂ | det. A. Nahirnić-Beshkova | 22.02.2021”; [2 ♂] (1) printed (on white paper) “Rhodopy Belovo | A. et J. Milde”; (2) handwritten (on white paper) “20”; (3) handwritten (on red paper) “Cotype | ♂ | Rhodope”, on the back “*Procris drenowskii* | ♂ | B. Alberti | 1937”; (4) printed (on white paper) “NMNHS-INV-T-0316”; [3 ♂, genitalia mounted on microscopic slide labelled “*Procris drenowskii* | (Insecta, Lepi- | doptera). *Procris* No. Bu. 7”] (1) printed (on white paper with handwrit-

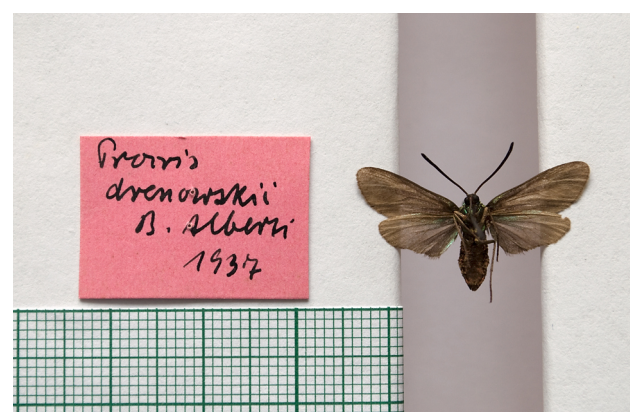


Fig. 2 “*Procris drenowskii*”, paratype ♀ (left: upperside, right: underside).



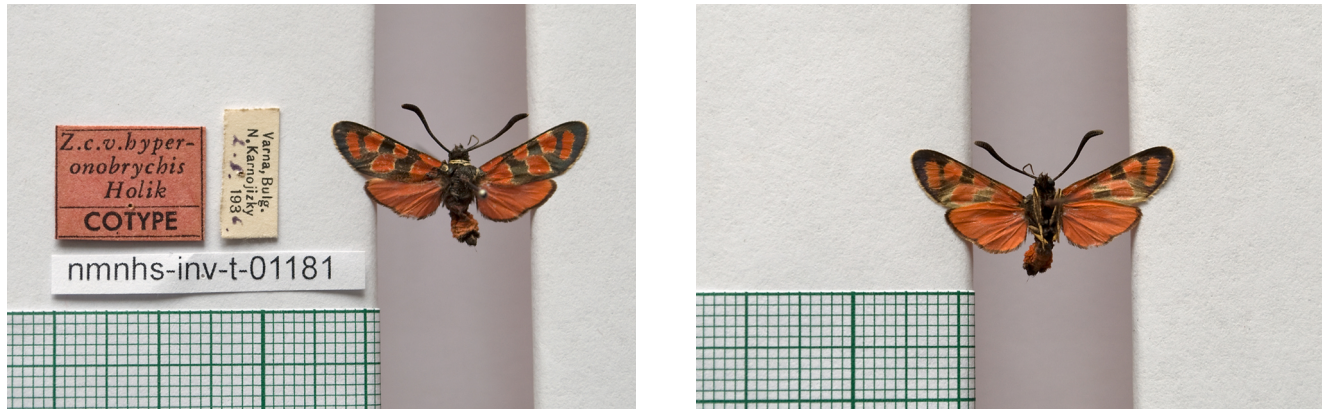


Fig. 3 “*Zygaena carniolica* var. *hyperonobrychis*”, paratype ♂ (left: upperside, right: underside).

ten inscriptions, here italicised) “Pirin - Pl. 1600 m. | Bnderitza [sic] 11-14.VII. | Dr Iw.Buresch. 915.”; (2) handwritten (on white paper) “22”; (3) handwritten (on red paper) “Cotype | ♂ | Pirin pl.”, on the back “Procris | drenowskii | B. Alberti | 1937”; (4) handwritten (on white paper) “Genital- | Präp. | No. Bu. 7”; (5) printed (on white paper) “NMNHS-INV-T-0317”; [4 ♀] (1) printed (on white paper with handwritten inscriptions, here italicised and transliterated) “Centr, Rodopy | Foten 22VI 924 | D. Ilitchew *Selcha*”; (2) handwritten (on white paper) “24”; (3) handwritten (on red paper) “Cotype | ♀ | Rhodope”, on the back “Procris | drenowskii | B. Alberti | 1937”; (4) printed (on white paper) “NMNHS-INV-T-0314”; [5 ♀] (Fig. 2) (1) printed (on white paper with handwritten inscriptions, here italicised) “Germanski m. 2.2. | Lozen-Planina VII | Dr.I.Buresch 1914.”; (2) handwritten (on white paper) “23”; (3) handwritten (on white paper) “J. statices L. | ♀ . 4414”; (4) handwritten (on red paper) “Cotype | ♀ | Bulgarien”, on the back “Procris | drenowskii | B. Alberti | 1937”; (5) printed (on white paper) “NMNHS-INV-T-0315”.

The original type series consisted of a holotype and numerous paratypes from Greece, Bulgaria, Turkey, Syria, North Macedonia (Alberti, 1939: 46). Currently treated as a different subspecies, *Adscita statices drenowskii* (Alberti, 1939) (Daniel et al., 1951: 18).

#### *hyperonobrychis* Holik, 1939

“*Zyg.[aena]* (*Argumenia* [sic] Hb.) *carniolica* Scop. var. *hyperonobrychis* m., (var. nov.)” (Holik, 1939: 200). Type locality: Bulgaria: “Varna” (Holik, 1939: 200).

Paratypes 4 ♂♂, 2 ♀♀ with labels: [1 ♂] (Fig. 3) printed (on white paper) “NMNHS-INV-T-01181”; [2 ♂] (1) handwritten (on white paper) “Varna. | 2.VIII.34. | Karnojizky”; (2) printed (on white paper) “NMNHS-INV-T-0338”; [3 ♂] (1) handwritten (on white paper) “Varna. | 2.VIII.1931 | Karnojizky.”; (2) printed (on white paper) “NMNHS-INV-T-0339”; [4 ♂] (1) printed (on white paper with handwritten inscriptions, here italicised) “Varna, Bulg. | N. Karnojizky | 23. 7. 1934.”; (2) printed (on white paper) “NMNHS-INV-T-0340”; [5 ♀] printed (on white paper) “NMNHS-INV-T-0337”; [6 ♀] printed (on white paper) “NMNHS-INV-T-01182”; paratypes 1, 5, 6 with additional, printed (on white paper with handwritten inscriptions, here italicised) “Varna, Bulg. | N. Karnojizky | 2. 8. 1936”; all the paratypes with additional, printed (on red paper with black frame) “Z. c. v. hyperonobrychis | Holik | [line] | COTYPE”.

The number of specimens in the original type series has never been mentioned (Holik, 1939: 200). Currently treated as a junior subjective synonym of *Zygaena carniolica wiedemannii* Ménétries, 1839 (Hofmann & Tremewan, 1996: 113).

#### *rebeli* Drenowski, 1928

“*Zygaena purpuralis* (Brünn.) n. var. *rebeli*” (Drenowski, 1928: 211). Type locality: Bulgaria: [Central Rhodopes (higher parts, near Manastirska Mahala and Shiroka Laka Villages and Chepelare Town), at an altitude 1400–1700 m] (Drenowski, 1928: 211).

Paralectotype ♂ (Fig. 4) with labels: (1) printed (on white paper with handwritten inscriptions, here italicised) “Rhodopegebirge | 1923.VII | Al. K.



Fig. 4 “*Zygaena purpuralis* var. *rebeli*”, paralectotype ♂ (left: upperside, right: underside).

Drenowski”, on the back handwritten, in Cyrillic, here transliterated “Nad s. Manastir | 18.VII— 1550 m”; (2) handwritten (on white paper with black frame) “*Zygaena purpuralis* Brün | var. *Drenowskii* Brün”; (3) red paper, blank; (4) printed (on white paper) “NMNHS-INV-T-0336”.

The number of specimens in the original type series has not been stated (Drenowski, 1928: 211–213). The lectotype has been designated by Naumann (1982: 379). Currently treated as a junior subjective synonym of *Zygaena purpuralis lathyri* Boisduval, [1828] (Hofmann & Tremewan, 1996: 74).

#### *tonzanica* Holik, 1939

“*Zyg.[aena]* (*Argumenia* [sic] Hb.) *carniolica* Scop. var. *tonzanica* m. (var. nov.)” (Holik, 1939: 194). Type locality: Bulgaria: “Slivno [Sliven]” (Holik, 1939: 194).

Paratypes 2 ♂♂ with labels: [1] (Fig. 5) (1) printed (on white paper with handwritten inscriptions, here italicised) “Sliven | 12.VI.1912 | P.Tschorbadjiew”; (2) handwritten (on white paper, in Cyrillic, here transliterated) “Cherk kor. | 12.VI.12”; (3) handwritten (on green paper, crossed) “*Z. carniolica* Z. | var *amasina* | Stgr.”; (4) printed (on red paper with black frame) “*Z. carniolica* | v. *tonzanica* | Holik | [line] | COTYPE”; (5) printed (on white paper) “NMNHS-INV-T-0341”; [2] (1) printed (on white paper with handwritten inscriptions, here italicised) “Sliven | 24.VIII.1913 | P.Tschorbadjiew”; (2) handwritten (on white paper with black frame) “Slivno | Ablanovo | 24. VIII.913”; (3) printed (on red paper with black frame) “*Z. carniolica* | v. *tonzanica* | Holik | [line] | COTYPE”; (5) printed (on white paper) “NMNHS-INV-T-0342”.

The number of specimens in the original type series has never been mentioned (Holik, 1939: 194). Currently treated as a junior subjective synonym of *Zy-*

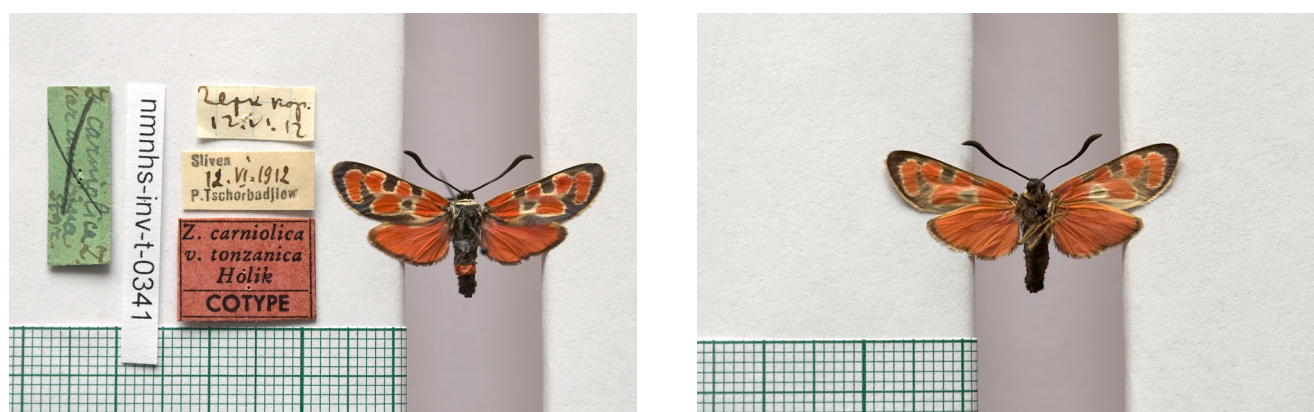


Fig. 5 “*Zygaena carniolica* var. *tonzanica*”, paratype ♂ (left: upperside, right: underside).

*gaena carniolica wiedemannii* Ménétries, 1839 (Hofmann & Tremewan, 1996: 113).

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