

***Tinagma armeniacum* Gaedike, sp. n. and a list of Douglasiidae of the Caucasus region (Lepidoptera: Douglasiidae)**

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Abstract

Tinagma armeniacum Gaedike, sp. n. is described from Armenia. New country records are presented for *Tinagma anchusellum griseellum* Budashkin, 2003, *Tinagma columbella* (Staudinger, 1880) and *Tinagma ocnerostomella* (Stainton, 1850). Nine species are now known from the Caucasus region.

KEY WORDS: Lepidoptera, Douglasiidae, new species, Caucasus.

Tinagma armeniacum Gaedike, sp. n. y una lista de Douglasiidae de la región del Cáucaso
(Lepidoptera: Douglasiidae)

Resumen

Tinagma armeniacum Gaedike, sp. n. se describe de Armenia. Para algunos países, se presentan nuevos registros para *Tinagma anchusellum griseellum* Budashkin, 2003, *Tinagma columbella* (Staudinger, 1880) y *Tinagma ocnerostomella* (Stainton, 1850). Ahora se conocen nueve especies de la región del Cáucaso.

PALABRAS CLAVE: Lepidoptera, Douglasiidae, nueva especie, Cáucaso.

Introduction

The kindness of my colleagues O. Karsholt, H. Roweck and N. Savenkov enabled me to study interesting material from Armenia, collected last year. As a result, it was possible to detect a new species together with some new country records. The description of this new species is presented below, together with a list of the hitherto known members of the family in the Caucasus region.

In the entire Palaearctic region 22 species of this family are now known, which is, according to REGIER *et al.* (2014) a member of an unassigned superfamily between Gracillarioidea and Hyblaeoidea.

Larvae of Douglasiidae are feeders in leaves or reproductive parts of their host plants (Boraginaceae, Hydrophyllaceae, Rosaceae, Lamiaceae).

Adults can be collected at light and some species have been observed flying at dusk, in the morning and during the daytime.

Abbreviations used

coll.	Roweck	Hartmut Roweck, Kiel, Germany
LT		Locus typicus

NMW	Naturhistorisches Museum, Vienna, Austria
NRM	Naturhistoriska Riksmuseet, Stockholm, Sweden
RG	Reinhard Gaedike, Bonn, Germany
SDEI	Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany
SMNK	Staatliches Museum für Naturkunde, Karlsruhe, Germany
ZMHB	Museum für Naturkunde, Leibniz-Institut für Evolutions- und Biodiversitätsforschung, Berlin, Germany
ZMUC	Zoological Museum, Copenhagen, Denmark

Results

Tinagma perdicella Zeller, 1839

Tinagma perdicella Zeller, 1839. *Isis, Jena*, [32](III): 204

LT: Am Spitzberge, SWITZERLAND

Material examined: CAUCASUS region ["Kaukasus", leg. Haberhauer (ZMHB)] (GAEDIKE, 1974).

Tinagma matutinellum Zeller, 1872

Tinagma perdicellum var. *matutinellum* Zeller, 1872. *Stettin. ent. Ztg.*, 33(4-6): 117

LT: Zürich, SWITZERLAND

Material examined: RUSSIA, Dagestan; Kabardino-Balkaria (BUDASHKIN, 2003).

Remark: The recent taxonomic status as a valid species was established by BUDASHKIN (2003).

Tinagma anchusellum anchusellum (Benander, 1936)

Douglasia anchusella Benander, 1936. *Opus. Ent.*, 1: 51, fig. 1E

LT: Öland, SWEDEN

Material examined: AZERBAIJAN, ARMENIA, Hosrov Reserve (BUDASHKIN, 2003: 92).

Tinagma anchusellum griseellum Budashkin, 2003

Tinagma anchusellum griseellum Budashkin, 2003. *Proc. Zool. Mus. Nac. Univers. Tar. Chevc.*, 1: 93, fig. 15

LT: Jagry, Nakhichevan ASSR, AZERBAIJAN

Material examined: AZERBAIJAN (BUDASHKIN, 2003); IRAN, Derbend, 25km N of Tehran, 2000 m, 15 ♂, 7-15-VI-1963; 28-30-V-1963; leg. F. Kasy & E. Vartian (NMW; SDEI): **New to the country and first record beside type series.**

The other records from Iran (Keredj (NRM) and NW-Iran, 30 km S of Rizayeh (SMNK)) need checking, but they seem to also belong to this subspecies.

Tinagma armeniacum Gaedike, sp. n. (Figs 1-2)

Material examined: Holotype ♂, ARMENIA, prov. Ararat, Urtsadzor, Caucasus Wildlife reserve, Eco Lodge, 1250 m, 39°56'58"N 44°53'14"E, 22-30-V-2019, O. Karsholt, H. Roweck & N. Savenkov leg. Genitalia slide 9927RG (ZMUC). Paratypes: 1 ♂, with the same collection data, Genitalia slide 9928RG (SDEI); Vedi Urtsadzor, CWR Eco Lodge, 1250 m, 1 ♂, 20-30-V-2019, [leg.] H. Roweck & N. Savenkov. Genitalia slide 9780RG (coll. Roweck).

Description: Wingspan 10-11mm; head dark grey, scales with white tips; labial palpus whitish colored, apical segment on outside somewhat darker; antenna dark grey, underside lighter, thorax, tegulae and forewing with same coloration as the head; forewing on dorsum at beginning of fringe

with white wedge-shaped patch, reaching cell; hindwing grey. One paratype (fig. 2) with lighter grey coloration.

Genitalia male (Fig. 3): Tegumen band-shaped, without separate uncus; anellus basally square, apically with two long thin processes; vinculum in the middle somewhat broader than laterally; valva more or less square, at ventral edge folded, costal arm short, ending rounded, on inside bristled and with minute thorns, apical edge below costal arm concave, basal edge more or less straight, phallus more than twice as long as valva, slightly curved, basal quarter edged, with minute sclerotization on inside.

Genitalia female: Unknown.

Diagnosis: Superficially similar to *T. anchusella* (Benander, 1936), but the coloration is clearly darker, and the white patch larger. In the genitalia the shape of valva is different: costal arm in *armeniacum* short, while *anchusella* with longer and narrower costal arm.

Biology: Unknown.

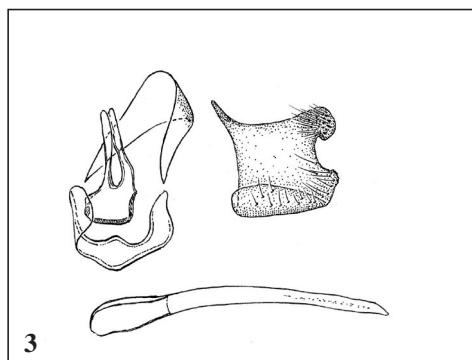
Etymology: The species is named after the country of the type locality.



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Figs. 1-3.— 1. *Tinagma armeniacum* Gaedike, sp. n., ♂ holotype. 2. *Tinagma armeniacum* Gaedike, sp. n., ♂ paratype. 3. *Tinagma armeniacum* Gaedike, sp. n., ♂, andropigio.

Tinagma caucasicum Gaedike, 2018

Tinagma caucasicum Gaedike, 2018. *SHILAP Revta. lepid.*, **46**(118): 68, figs 5, 10

LT: Kabardino-Balkarskij zap. [National Park], Elbrus, RUSSIA

Material examined: RUSSIA, Kabardino-Balkarskij zap. [National Park], 35 km SE mt. Elbrus, alp. mead. 2500 m, 1 ♂, 15-VII-1990, J. Jalava, leg.; idem but 1 ♂, 10-VII-1990.

Tinagma columbella (Staudinger, 1880)

Douglasia columbella Staudinger, 1880. *Horae Soc. ent. Ross.*, **15**(1879): 383

LT: Kerasdere, TURKEY

Material examined: ARMENIA, Vedi Urtsadzor, CWR Eco Lodge, 1250 m, 1 ♀, 20-30-V-2019, leg. H. Roweck & N. Savenkov (coll. Roweck). **New to the country**.

Tinagma zagulajevi Budashkin, 2003

Tinagma zagulajevi Budashkin, 2003. *Proc. Zool. Mus. Nac. Univers. Tar. Chevc.*, **1**: 94, fig. 16

LT: Avadhara, ABKHAZIA

Material examined: ABKHAZIA (BUDASHKIN, 2003).

Tinagma ocnerostomella (Stainton, 1850)

Gracilaria ocnerostomella Stainton, 1850. *Proc. ent. Soc. Lond.*, **1**: 6

LT: Mickleham, Surrey, GREAT BRITAIN

Material examined: ARMENIA, Vedi Urtsadzor, CWR Eco Lodge, 1250 m, 1 ♂, 20-30-V-2019, leg. H. Roweck & N. Savenkov (coll. Roweck); same location, but 2 ♀♀, 22-30-V-2019, leg. O. Karsholt, H. Roweck & N. Savenkov (ZMUC). **New to the country**.

Klimeschia transversella (Zeller, 1839)

Tinagma transversella Zeller, 1839. *Isis, Jena*, [32] (III): 204

LT: Glogau, POLAND

Material examined: RUSSIA, Dagestan; ARMENIA (BUDASHKIN, 2003); ARMENIA, Vedi Urtsadzor, CWR Eco Lodge, 1250 m, 1 ♂, 20-30-V-2019, leg. H. Roweck & N. Savenkov (coll. Roweck); same collection data, 4 ♂♂, 1 ♀, but leg. O. Karsholt, H. Roweck & N. Savenkov (ZMUC).

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