

Revision of the tribe Nolini of Africa and the Western Palaearctic Region (Lepidoptera, Noctuoidea, Noctuidae, Nolinae) Supplement 1

by

Hermann H. HACKER

Abstract

This supplementary paper on the 'Revision of the tribe Nolini of Africa and the Western Palaearctic Region (Lepidoptera, Noctuoidea, Noctuidae, Nolinae) by HACKER, SCHREIER & GOATER (2012) embraces all subsequent new additions and outstanding taxonomic and faunistic information to the original monograph:

1. Descriptions of 25 species and 1 subspecies new to science:

- Nola (Mecothrix) ansorgei* spec. nov.
- Nola (Angensteinia) chionoleuca* spec. nov.
- Nola (Mecothrix) calochromata* spec. nov.
- Nola (Mecothrix) phoenicosa* spec. nov.
- Nola (Mecothrix) rubicastanea* spec. nov.
- Nolidia chalybdea* spec. nov.
- Nolidia heteroxantha* spec. nov.
- Nolidia elachistonana* spec. nov.
- Nolidia peregrina* subspec. nov.
- Evonima littoralis madagassialis* subspec. nov.
- Meganola knysna* spec. nov.
- Meganola phaeopolia* spec. nov.
- Meganola pyrroleucalis* spec. nov.
- Meganola megistosoma* spec. nov.
- Meganola odontigera* spec. nov.
- Meganola psammoxantha* spec. nov.
- Meganola stadiensis* spec. nov.
- Meganola poliogramma* spec. nov.
- Meganola angolalis* spec. nov.
- Meganola asperiaris* spec. nov.
- Meganola mbala* spec. nov.
- Meganola hemiargyra* spec. nov.
- Meganola pernivosa* spec. nov.
- Meganola arcygramma* spec. nov.
- Meganola staudei* spec. nov.
- Vandamia kettlewelli* spec. nov.

2. Synonymisation of *Meganola peksi* HACKER, 2012 with *M. kaduna* HACKER, 2012

3. Notes, additions, taxonomic or biogeographical new details of 19 *Nola* LEACH, [1815], 5 *Nolidia* van SON, 1933, 2 *Evonima* WALKER, 1865, 45 *Meganola* DYAR, 1898, 2 *Vandamia* van SON, 1933 and 1 *Barasa* WALKER, 1862 species.

Key words: Revision, Nolidae, Nolini, Africa, Madagascar, Western Palaearctic Region, taxonomic and faunistic revision, distribution, bionomics, figures of species and genitalia, descriptions of species.

Address of the author:

Hermann H. HACKER, Kilianstraße 10, 96231 Bad Staffelstein, Germany

E-mail address: hermann-heinrich.hacker@t-online.de

Introduction

The Nolini (Lepidoptera, Noctuidae *sensu lato*, Noliniinae, Nolini) of Africa, Madagascar and the Western Palaearctic Region were reviewed by HACKER, SCHREIER & GOATER (2012). Their status and relationships were discussed in diagnoses of each genus, subgenus and species. The treatment covered 427 species distributed over 8 genera. For each species type specimen, type series and all available specimens, distributed over numerous museums and private collections, had been checked. A diagnosis and the geographical range were given, and where known, habitat preference and biology.

All species were presented with their full name and references to the original description, fully referenced synonyms; special emphasis was given to the descriptions of genitalic features. For each species colour photos of adults, figures of male and female genitalia, and in many cases distribution maps were provided.

The comprehensive Revision included descriptions of 2 genera, 2 subgenera, 253 species and 14 subspecies.

It was clear from the outset that such a large and hitherto more or less neglected tribe could not be completely elaborated. Already during the course of the treatment of the genera and species a larger number of species were omitted because of lack of material, usually the male sex or material in sufficiently good condition. Although a huge amount of material has been checked so far, other still unknown species are surely present in other museums, private collections or amongst newly collected material, mainly from the African rain forests.

The present contribution provides supplements and additions to the list, following the chronological order of the Revision and using the same kind of approach, including the introductory predefinitions noted in the chapters "Materials and Methods" and "General classification of the African Nolini".

Acknowledgements

I am sincerely indebted to the following gentlemen for all the kind help, advice, information, and for loan of material for study and illustration: Leif AARVIK (Oslo, Norway); Ugo DALL'ASTA (MRAC); Michael FIBIGER † (Sorø, Denmark); Axel HAUSMANN (ZSM); Martin HONEY (BMNH); Ole KARSHOLT and Niels Peder KRISTENSEN (ZMUK), Martin LÖDL (NHMW), Wolfram MEY (NHMU); Joël MINET (MNH); Wolfgang NÄSSIG (SNG, Frankfurt); Aidan SALDAITIS (Vilnius, Lithuania); Wolfgang SPEIDEL (Olching, Germany/MW), Hermann S. STAUDE (Magaliesburg, RSA), Thomas WITT (München, Germany/MW), Alberto ZILLI (BMNH).

I am again sincerely grateful to Barry GOATER who provided useful critical comments and corrected the English language.

Abbreviations

BMNH	British Museum (Natural History), London
CM	Carnegie Museum of Natural History, Pittsburgh
MNHN	Museum National d'Histoire Naturelle, Paris
MRAC	Musee Royal de l'Afrique Centrale, Tervuren
MW	Museum Witt, München
NHMU	Naturhistorisches Museum der Humboldt-Universität, Berlin
NHMW	Naturhistorisches Museum, Wien
NRM	Naturhistoriska Riksmuseet, Stockholm
TMP	Transvaal Museum, Pretoria
ZMUK	Zoological Museum of the University, Copenhagen
ZSM	Zoologische Staatssammlung, München
BOLD	Barcode of Life Data Systems
CCDB	Canadian Centre for DNA Barcoding
RCA	Central African Republic
RSA	Republic of South Africa
UAE	United Arab Emirates

The *N. chlamitulalis* species-group

p. 41

Nola (Nola) infantula KITT, 1926

Nola chlamitulalis infantula KITT, 1926, Verh. K. K. Zoolog.-Botan. Ges. Wien **74-75**: [180]. L. t.: [France] Corse, Col de Vergio

Material checked

France 1 ♀, paralectotype, "Corse, Col de Vergio, vii 1925" (A) (ex coll. BU-BAÇEK; MW);

Note

One paralectotype specimen, deposited in MW, is figured here.



p. 48

Nola (Nola) duercki (ZERNY, 1935)

Celama Dürcki ZERNY, 1935, Mém. Soc. Sci. Nat. Maroc **42**: 95, pl. 1, fig. 32. L. t.: Morocco, Hoher Atlas, Iminene-Tal, Areg-Amsakrou

Material checked

Morocco 1 ♂, lectotype, "Mauretania central, Atlas major, Areg-Amsakrou, Iminen-Tal, 2000m, 22.vi.1933 (leg. H. DÜRCK)" (B) (MW);

Note

The lectotype specimen, deposited in MW, is figured here.



p. 49

Nola (Nola) holsatica SAUBER, 1916

Nola centonalis var. *holsatica* SAUBER, 1916, Internationale Entomologische Zeitschrift, Guben **10**: 97. L. t.: [Germany] Holstein = *Nola centonalis contrarialis* HEYDEMANN, 1934, Internationale Entomologische Zeitschrift, Guben **27**: 420, pl. 1, fig. 20. L. t.: [Germany] Schleswig-Holstein, Amrum

Material checked

Germany 1 ♂, 1 ♀, cotypes of *Nola centonalis contrarialis* HEYDEMANN, 1934, "Schleswig-Holstein, Amrum, 5./6.vii.[19]30 (leg. HEYDEMANN)" (C, D) (MW);

Note

The two syntype specimens of *Nola centonalis contrarialis* HEYDEMANN, 1934, deposited in MW, are figured here.

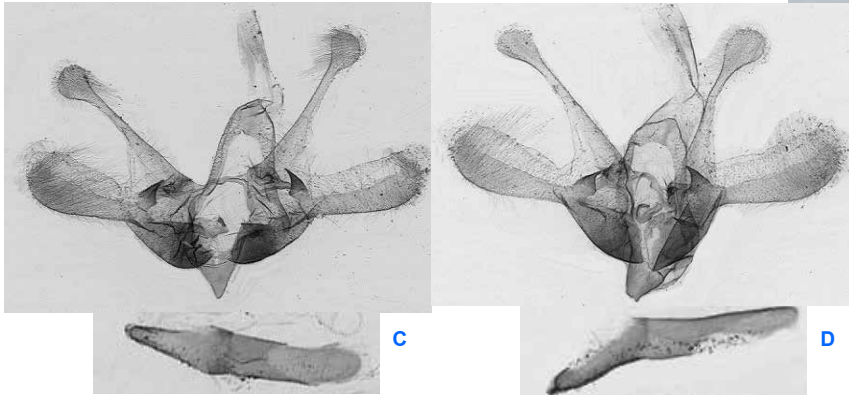


Nola (Nola) karelica tigranula* PÜNGELER, 1902Nola tigranula* PÜNGELER, 1902, Dt. Ent. Z. Iris **15**: 141, pl. 6, fig. 9. L. t.: [Turkey] Kasikoporan; [Armenia] Kulp**Material checked**

Turkey 1 ♀, "Prov. Erzurum, 20 km E of Cat, 39°40'N, 41°07'E, 14.vii.1989 (gen.prep. G. M. LASZLO LG N325) (leg. P. GYULAI & M. HREBLAY)" (A) (MW); 2 ♂♂, "Prov. Kars, 7-10 km SE Sarikamis, 2000m, 20.-24.vii.1990 (gen.prep. H. HACKER 21714♂ (C), 21713♂ (D)) (leg. H. v.d. BRINK & W. de PRINS)" (B) (ZMUK); 1 ♂, "Prov. Erzurum, Palandöken Dagları, 2300m 2 km SW of Tasilgüney, 7.viii.1988 (leg. P. GYULAI, M. HREBLAY, G. & L. RONKAY)" (HNHM);

Distribution

The subspecies *tigranula* occurs in the Caucasian area, far from the northern area of nominate *N. karelica* Tengström, 1869 (cf. Hacker et al, 2012: distribution map 9.). In NE Turkey and probably also elsewhere it seems to more widespread than was indicated by the rather few previous records given in the Revision.

***Nola (Nola) acutula* PÜNGELER, 1902***Nola acutula* PÜNGELER, 1902, Dt. Ent. Z. Iris **15**: 159, pl. 6, fig. 8. L. t.: [China] [Xinjiang] Aksu= *Nola gmasiensis* ZOLOTUHIN, 1994, Zoologicheskii Zhurnal **73** (10): 62-71. L. t.: Uzbekistan, Chatkal Reserve, 1250m, 60 km ESE Tashkent**Material checked**

Uzbekistan 2 ♀♀, paratypes of *Nola gmasiensis* ZOLOTUHIN, 1994, "Chatkal Reserve, 1250m, 60 km ESE Tashkent, 29.v.1992, 31.v.1992 (gen.prep. H. HACKER 20339♀, 20340♀) (leg. V. ZOLOTUHIN)" (E, F) (MW);

Distribution

Turkestanian element, known from W China and the adjacent areas of Tadjikistan, Uzbekistan, Turkemistan.



***Nola (Nola) politzari* HACKER, 2012**

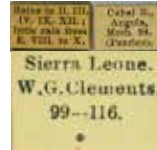
Nola politzari HACKER, 2012, *Esperiana* 17: 75, figs A-C, adults, figs D-F, male and female genitalia. L. t.: Burkina Faso, Folonzo am Fluss, Comoe

Material checked

- Sierra Leone 1 ♀, "Sierra Leone (leg. W. G. CLEMENTS)" (A) (BMNH);
 [Malawi] 1 ♂, "Ft. Johnston, ii-iii [18]96 (gen.prep. H. HACKER 19915♂ (C) (leg. P. RENDALL)" (ex ROTHSCHILD Bequest, BMNH);
 Nigeria 1 ♂, "S. Nigeria, Ilesha (leg. Capt. HUMPHREY)" (ex ROTHSCHILD Bequest, BMNH);
 Angola 1 ♀, "Cubal R., iii [18]99 (leg. PENRICE)" (A) (BMNH);

Distribution

Until now, only known from Burkina Faso, but it is much more widespread in the adjacent West African countries including Nigeria and Sierra Leone, even from Angola and Malawi in Central Africa.

***Nola (Nola) kihonda* HACKER, 2012**

Nola kihonda HACKER, 2012, *Esperiana* 17: 77, figs A, B, adults, fig. C, female genitalia. L. t.: Tanzania, Morogoro District & Town, Kihonda, 500m

Material checked

- [Malawi] 2 ♂♂, "Nyassaland, Below Chivomo, 2.viii.[18]99 (gen.prep. H. HACKER 19913♂, 19911♂ (F)) (leg. E. M. de JERSEY)" (D, E) (BMNH);

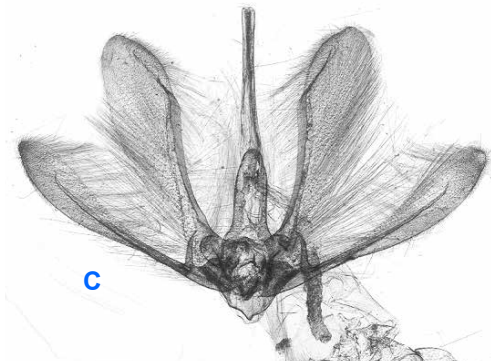
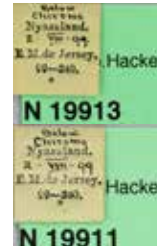
Male Genitalia

The male genitalia of *N. (N.) kihonda* have not been described previously

Similar to those of the closely related congeners *N. politzari*, *N. jarzabekae* and *N. afrotaeniata*. Harpe thin and slender; aedeagus without any cornutus.

Distribution

Known at present from Tanzania and Malawi.



Nola (Nola) ansorgei spec. nov.

Type material

Holotype: ♂, "N. Angola, N'Dalla Tando, 2.700 feet, 28.xi.1908 (gen.prep. H. HACKER 19880 ♂ (D)) (leg. W. S. ANSORGE)" (A) (BMNH);

Paratypes: 2 ♂♂, "[Angola], Cubal R., iii, iv [18]99 (gen.prep. H. HACKER 19897 ♂, 19898 ♂ (E, F)) (leg. PENRICE)" (B, C) (ex ROTHSCHILD Bequest, BMNH);

Locus typicus: N. Angola, N'Dalla Tando, 2.700 feet.

Derivatio nominis: The species is named after William John ANSORGE (1850-1913) who was a British traveller and zoologist. Born in Bengal, he travelled extensively in Africa. There are dozens of African birds, fishes and also butterflies and moths named after him.

Diagnosis and description

Wingspan of the holotype and also both paratype specimens 12.0 mm. Antennae of male and labial palps of the holotype undiscernable because of mould formation.

Antennae of male of the paratypes fasciculate; labial palps short, porrect. Coloration and pattern similar to those of many congeners of the *N. squalida* species group, but most like those of the preceding *N. politzari* and *N. kihonda*. Compared with them, all parts of *N. ansorgei* spec. nov. appear overlaid with sooty-black and suffused, including the hindwings which are greyish instead of pure white. Discal spot clearly, postmedian fascia slightly discernable. Crosslines as in the closest congeners, but paler whitish on a dark background instead of black on a whitish background. Post- and antemedian fasciae rather straight, median field broad and partly dark mocha-brown to nearly black. Underside of the wings like that of the upperside, but unmarked.

Male genitalia

Similar to those of *N. politzari* and *N. kihonda*, distinguished as follows:

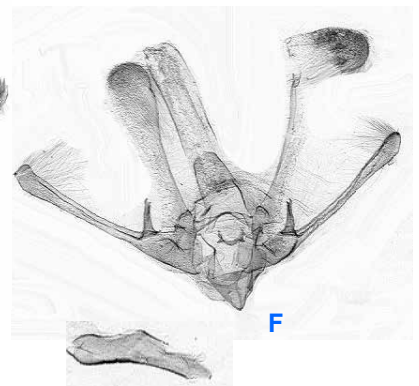
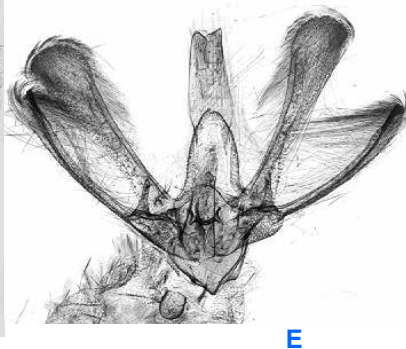
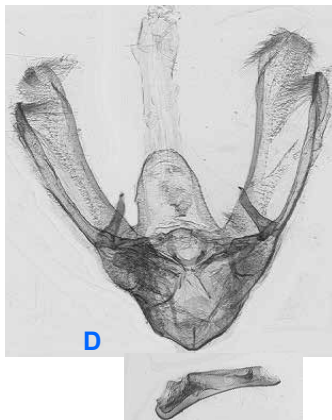
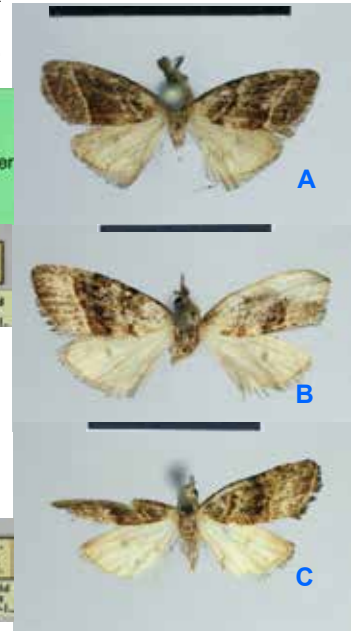
- both sections of the bilobed valva markedly shorter;
- clasper-harpe complex more strongly developed and more heavily sclerotised;
- aedeagus rather wide with one strong, thorn-shaped cornutus.

Female genitalia

Unknown.

Distribution

So far only known from the two localities in Angola listed above.



p. 91

The *N. meridionalis* species-group

Nola (Nola) sarniensis (van SON, 1933)

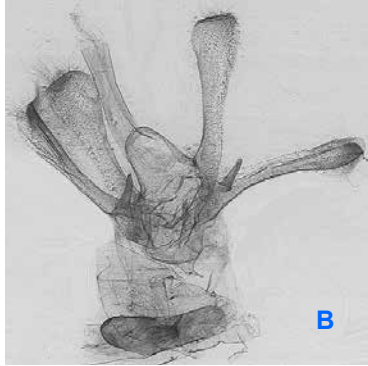
Celama sarniensis van SON, 1933, Ann. Transvaal Mus. 15: 106, pl. 8, fig. 4. L. t.: RSA, Natal, Sarnia

Material checked

RSA 1 ♂, "KwaZulu-Natal, Entumeni Nature Reserve, Foz5 Scarp forest/grassland, 683m, 28°53'10.9" S, 31°22'38.3" E (gen.prep. H. HACKER 23239♂ (B)) (leg. H. S. STAUDE)" (A) (ZSM);

Notes

External appearance and male genitalia are in accordance with the characters given in the original description. Endemic species of the South African woodland and savanna region.



p. 92

Nola (Nola) lugubris HACKER, 2012

Nola lugubris HACKER, 2012, Esperiana 17: 92, fig. A, adult, figsB, male genitalia. L. t.: Uganda, Eastern Region, Mt. Elgon, Umg. Bukwo

Material checked

Ethiopia 2 ♂♂, "Oromia, 6 km ESE Jimma, 1850m, 30.x.2010, 07°39'34" N, 36°53'20" E (gen.prep. H. HACKER 21192♂ (E), 21193♂ (F)) (leg. J. DE FREINA, H. HACKER, H. PEKS & H.-P. SCHREIER)" (C, D) (coll. H. HACKER, ZSM);

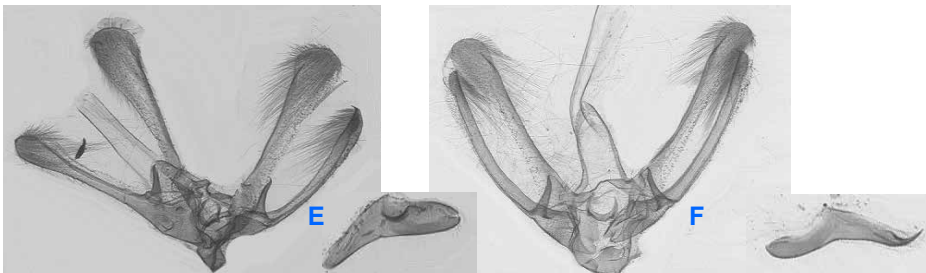
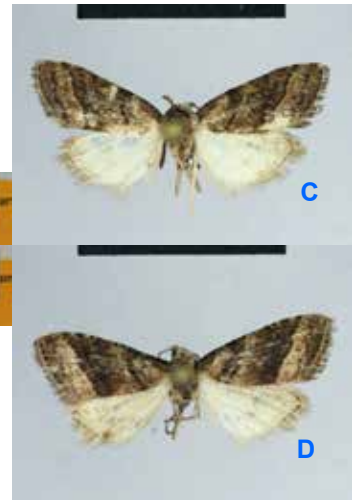
Notes

N. lugubris is the East African sister species of the South African *N. sarniensis*, very similar in habitus, but different in the characters of the male genitalia:

- both parts of the divided valva longer and more slender;
- aedeagus shorter and broader;
- cornutus of the vesica thorn-shaped, curved and with sharp peak.

Notes

Known from Uganda and Ethiopia.



p. 97

***Nola (Nola) imitata knudlarseni* HACKER, 2012**

Nola imitata knudlarseni HACKER, 2012, Esperiana 17: 97, figs A-D, adults, figs E-H, male and female genitalia. L. t.: Tanzania, Tanga, Usambara Mountains, Mkuzu, 14 km N Lushoto, 1650m

Material checked

Saudi Arabia 1 ♀, "SW Saudi Arabia, nr Ahba, 2200m, 27.iii.1998 (gen.prep. H. HACKER 21628♀ (B)) (leg. A. LEGRAIN)" (A) (coll. F. AULOMBARD);

Distribution

New record for the Fauna of the Arabian Peninsula. *N. imitata* (van SON, 1933) ranges from South to East Africa (cf. HACKER et al., 2012, distribution map 14).



p. 106

***Nola (Nola) derrae* HACKER, 2012**

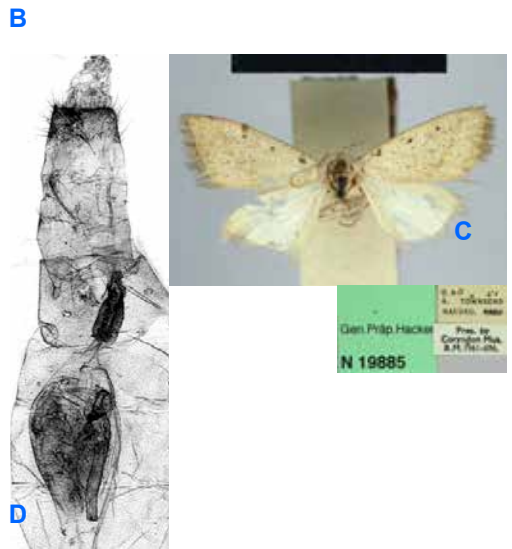
Nola derrae HACKER, 2012, Esperiana 17: 106, figs A-C, adults, figs D-F, male and female genitalia. L. t.: Yemen, Prov. Ibb, Wadi Merhab, village Jalajil, 1600m

Material checked

Kenya 2 ♀♀, "Nakuru, 9.xii.[19]51, 15.ix.[19]50 (gen. prep. H. HACKER 19885♀ (D)) (leg. A. TOWNSEND)" (C) (BMNH);

Distribution

So far recorded from Yemen and Ethiopia.



p. 135

The *N. hoppei* species-group

***Nola (Nola) aulombardiella* HACKER, 2012**

Nola aulombardiella HACKER, 2012, Esperiana 17: 135, fig. A, adult, figs B, female genitalia. L. t.: Yemen, Prov. Sana'a, Naquil Manakhah, 1730m

Material checked

Yemen 1 ♂, "Prov. Sana'a, 15°05'N, 43°43'E, Naqil Manakhah, 1730m, 27.ii.2000 (leg. F. AULOMBARD, M. FIBIGER, H. HACKER & H.-P. SCHREIER)" (E) (ex coll. H. HACKER, ZSM); 1 ♂, 1 ♀, "Prov. Al Hudaydah, Jabal Burra, 25 km SE Bajil, 550m, 29.ii.-1.iii.2000 (leg. F. AULOMBARD, M. FIBIGER, H. HACKER & H.-P. SCHREIER)" (F) (ex coll. M. FIBIGER, ZMUK); 1 ♀, "Prov. Sana'a, 15°04'N 43°39'E, 60 km SW Sana'a, Makaban, Naqil Manakhah (west side), 1900m, 2.xi.1996 (leg. A. BISCHOF, H. HACKER & H.-P. SCHREIER)" (coll. H.-P. SCHREIER);

Note

So far only known from the single type specimen.

