



A New Genus and a New Species of the *Scopariinae* Guinée, 1854 (Lepidoptera: Crambidae) from the Southern Arabian Peninsula

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Abstract: New taxonomic and faunistic results on the *Scopariinae* Guinée, 1854 (Lepidoptera: Crambidae) are presented on the basis of a sample of four specimens collected by the author in three research expeditions to the south-western province Dhofar of Oman in the years 2018 and 2019. The attribution of the material to the subfamily *Scopariinae* Guinée, 1854 was done on the basis of characteristic elements in the forewing pattern known as the scopariine wing pattern. Examination of the male and female genitalia revealed significant morphological differences between the specimens of the sample and the type species of all the other genera of the subfamily *Scopariinae* Guinée, 1854. These differential features are regarded as autapomorphies and result in the description of the new genus *Arabarpia* Seizmair, gen. nov. The genus is at present monotypical, with *Arabarpia albilinealis* Seizmair, sp.nov. being its type-species and its only known species. The genus shares synapomorphic features with two main clades of the *Scopariinae* Guinée, 1854, namely the structure of the corpus bursae in the female genitalia with the clade represented by the genus *Anarpia* Chapman, 1912 and shape and structure of the bulbus ejaculatorius with the genus *Hellenoscoparia* Nuss, 1999. The latter genus belongs to another main lineage characterized by a membranous corpus bursae. The phylogenetic placement of the new genus is thus valued as ambivalent. It is not possible to resolve the ambivalent placement on the basis of the feature spaces presently known. Furthermore, the presence of the subfamily *Scopariinae* Guinée, 1854 is reported as new to the entomofauna of the Arabian Peninsula.

Keywords: Pyraloidea, Crambidae, *Scopariinae*, New Genus, New Species, Arabian Peninsula

1. Introduction

The *Scopariinae* Guinée, 1854 are among the major sub-families of the *Crambidae* Latreille, 1810 with a world-wide distribution. The subfamily comprises 586 known species [1-3]. The *Scopariinae* Guinée, 1854 were found to form a sister group complex with the *Crambinae* Latreille, 1810 [4].

From this sister group the *Scopariinae* Guinée, 1854 are distinguished by the following characteristic elements in the forewing pattern: presence of an antemedial line paired with two stigmata, namely a proximal discoidal stigma and a cubital stigma, presence of a postmedial line with a curvature opened in proximal direction paired with a distal discoidal stigma, presence of an anteterminal line forming an X-shaped structure with the postmedial line. The combination of these elements is known as the “scopariine wing pattern” and

viewed as synapomorphic with regard to the *Crambidae* Latreille, 1810 [1, 5-7].

The basic scopariine wing pattern is subject to little variation with very few known exceptions only. Examples are the complete absence of the scopariine wing pattern, with the forewing unicolorous as is the case in the genus *Afrarpia* Maes, 2004 and in two species of the genus *Scoparia* Haworth, 1811 and the absence of the X-shaped structure formed by the postmedial and anteterminal lines, with the anteterminal area reduced to a broad unicolorous band as is the case in the genus *Anarpia* Chapman, 1912. The strength of contrasting of the stigmata and line elements with the ground is subject to interspecific variation [7, 8].

The genera of the subfamily are revised on a world-wide scale in Nuss [5]. Phylogenetic conclusions from this revision are drawn in Nuss [6]. The latter study contains a first

cladogram of the *Scopariinae* Guinée, 1854 with a catalogue of apomorphic and synapomorphic features of the clades. These genus groups together with the catalogue of apomorphies and synapomorphies could be substantiated in a recent further study based on molecular genetic methods [1]. In this study further revisions were done on genus level, with three genera synonymized with *Eudonia* Billberg, 1820 and two genera synonymized with *Scoparia* Haworth, 1811. These recent revisions result in 19 known genera.

Partial revisional synopses on species level have been done for the Palearctic zone by Nuss, by Alipamah and Gianti and by Alipanah [7-9], for the Oriental and Indo-Australian zones by Nuss and by Li [11, 12] and for the Neotropical zone by Munroe [13, 14].

For the Afrotropical zone, a first checklist of species has been given in Maes [10]. Since then one further species has been described by Derra [15]. This results in a total of four genera and 18 species recorded up to now for the Afrotropical zone [16].

For the Arabian Peninsula, no records of *Scopariinae* Guinée, 1854 have been known up to now [5, 16-18].

On the Arabian Peninsula, three zoogeographical zones intersect, namely the Palearctic, Oriental and Afrotropical zones [17, 19].

A sample of specimens (n=4) collected in the coastal mountain chain in Dhofar in the years 2018-2019 by the author is attributed to the *Scopariinae* Guinée, 1854 due to the presence of basic scopariine wing pattern elements and of synapomorphic feature states in the male and female genitalia.

Morphological analysis of the sample revealed differential features with regard to the type species of all the known genera of the subfamily. These features are thus regarded as apomorphic and result in the description of the new genus *Arabarpia* Seizmair, gen.nov. The genus is monotypical, comprising the only known species *Arabarpia albilinealis* Seizmair, sp.nov.

Furthermore, the presence of the *Scopariinae* Guinée, 1854 is reported as new to the entomofauna of the Arabian Peninsula.

2. Material and Methods

2.1. Sampling

The material presented in this paper was sampled by the author in three research expeditions to Dhofar, the south-western province of Oman in January 2018 and in February and November 2019. The collecting sites are situated on the southern slopes of the western parts of Jabal Al Qamar, a coastal mountain system ranging from the western surroundings of the province capital Salalah to the Yemen border (Figures 1-2). The specimens were captured at night by means of a light-trap equipped with a 20W tube of infra-blue light.

2.2. Macro-Preparation and Dissection

Macro-preparation was done on the specimens by spreading the wings and antennae. The prepared specimens were photographed with a SONY HX400V camera.

For examining the genitalia, dissection, preparation and slide-mounting techniques were applied on the specimens on the basis of the protocol described in Robinson [20]. The slides were photographed with a SONY DSC100V camera under a 40x zoom.

The forewing and hindwing venations were extracted by mounting the forewing in euparal. The resulting slide was photographed under a 20x zoom. The images were optimized by means of the software Ps Adobe Photoshop, Version 21.0.2.

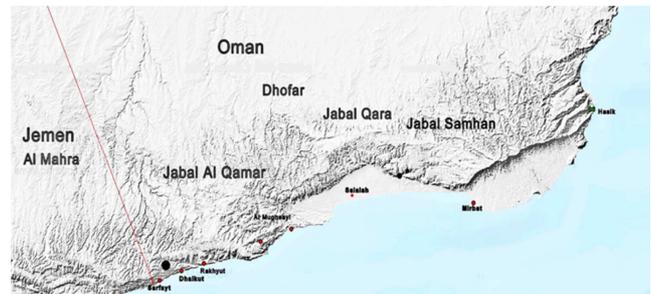


Figure 1. Type Locality in Oman, Dhofar, Jabal Al Qamar, near the Yemen border (black point).



Figure 2. Type Habitat in Oman, Dhofar, Jabal Al Qamar.

2.3. Morphometric Analyses

Morphometric analyses of wing patterns and genital-morphological structures were done on the images. Structural ratios were measured and calculated by means of the imaging software ZEISS AxioVision, Version 4.8.

2.4. Terminology and Abbreviations

The descriptions of the genitalia and tympanal organs are based on the terminology in Maes and in Nuss and Speidel [21-23]. The descriptions of the wing patterns and of the venations are based on the terminology in Nuss [5-7]. The feature states referred to in the descriptions are based on the feature spaces given in Léger, Landry, and Nuss and in Nuss [1, 6].

Abbreviations:

ZSM Zoological State Collection Munich, Germany.

3. Results

3.1. Descriptions of New Taxa

Arabarpia Seizmair, gen.nov. (Figures 3–9)

Type species: *Arabarpia albilinealis* Seizmair, sp.nov.

External features (Figures 3-6): Head: Clypeus present. Eyes compound, ocelli and chaetosemata present. Frons and vertex evenly rounded. Antennae filiform, flagellomeres of males cylindrical, of females slightly prismatic. Labial and maxillary palpus upright, ratio between the length of the labial palpus and the diameter of the eye 1 / 1, ratio between the length of the maxillary palpus and the length of the labial palpus 1 / 3. Number of spurs on fore-middle-hindlegs 2-0-4, as is typical of the Pyraloidea.

Forewing: Wing pattern with basic elements of the scopariine wing pattern: antemedial and postmedial lines and the proximal discoidal, distal discoidal and cubital stigmata present, yet with the anteterminal line missing. Anteterminal area reduced to a broad unicolorous band. Basal, medial and postmedial areas unicolorous (Figure 3). Terminal points of Sc, R1, R2 and R3 on the costal border equidistant, R4 ending on the termen closely below the apex, R5 ending in the distal fifth of the termen. Ratio between the distances of the bases of R5-M1 / M2-M3 1 / 1,8 (Figure 4). Frenulum single in the male, double in the female.

Hindwing: Basal and medial areas unicolorous, postmedial and anteterminal areas significantly darker. Discoidal cell open. M1-Sc+Rs connection in the first proximal fifth of the discoidal cell. Rs ending at the end of the first eighth of the termen below the apex. Ends of the M-veins on the termen equidistant. M2 and M3 relatively long stalked, the stalking point at the end of the first distal third of the hindwing. Ratio between the distances between the end points on the termen Cu1-Cu2 / Cu2-CuP 1 / 2,5 (Figure 5).



Figure 3. Basic forewing pattern of the genus *Arabarpia* Seizmair, gen.nov.

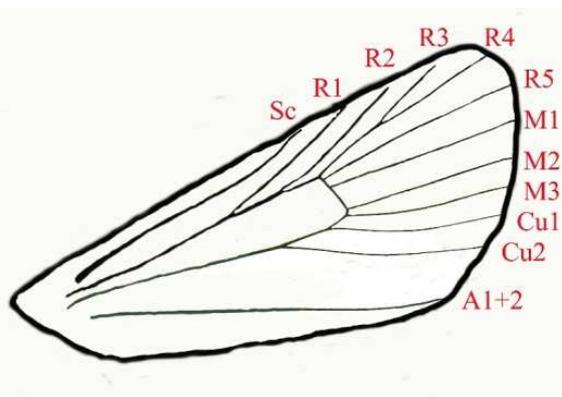


Figure 4. Forewing venation of the genus *Arabarpia*, Seizmair, gen.nov.

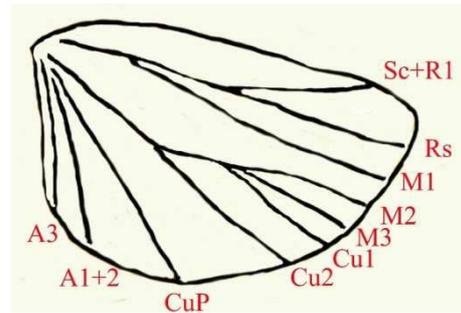


Figure 5. Hindwing venation of the genus *Arabarpia*, Seizmair, gen.nov.

Male genitalia (Figure 6): Uncus triangular, strongly sclerotized supero-laterally, dorsally with long setae, acute distally. Gnathos pointed upwards, strongly sclerotized, rounded distally, of constant width, finger-shaped, equal in length with the uncus. Base of the gnathos with a sclerotized diverticulum on the anterior border pointing in proximal direction.

Tegumen ventro-laterally with strongly sclerotized arms, dorso-laterally with a significant concavity. Valva without ventral projection, divided into dorsal and ventral halves by an elongate, straight sclerotization developing from the base and extending into the distal third, with a bifurcation at the distal end, one part of the bifurcation pointing in costal, the other part pointing in dorsal direction. Valva strongly tapering distally, with an elongate membranous apical area occupied with several long, strongly sclerotized setae supero-laterally. Proximal area of the valva with strongly sclerotized setae of variable length on the ventral and dorsal borders and in the interior. Sacculus acute, pointed proximally, with the proximal point slightly sclerotized.

Juxta plate-like, strongly broadened and elongate. Transtillum arms unconnected, strongly developed, with projections of ellipsoid shape on each side.

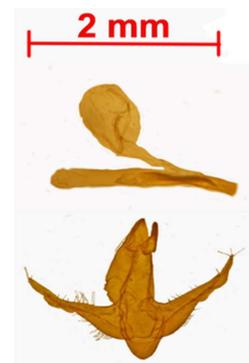


Figure 6. Holotype, male genitalia, *Arabarpia albilinealis* Seizmair, gen.nov., sp.nov., slide no. 20GP030.

Aedeagus with an arc-shaped cornutus extending from the distal portion into the ceacum. Ductus ejaculatorius opening distad from the middle of the phallus. Bulbus ejaculatorius with strong lateral sclerites forming a closed ovoid shaped vessel, furthermore with strongly developed, stroke-shaped sclerites in the interior.

Female genitalia (Figure 7): Papillae anales triangular,

strongly sclerotized in the interior and occupied with several tufts of long setae supero-laterally. Apophyses anteriores and apophyses posteriores equal in length, bare of any projections. Ratio between the length of the apophyses anteriores and the length of the papillae anales 1 / 0,69. VII tergite with several U-shaped sclerites antero-medially.

Ostium orbiform. Antrum with an extensive triangular-shaped prolongation, with the apex pointing downwards in proximal direction and with lateral sclerites and scales in the distal portion.

Ductus bursae with an elongate stroke-loke sclerite in the interior of its distal third paired with sclerotizations on the borders, colliculum relatively short, making up 12% of the total length of the ductus bursae, with strong lateral sclerotizations. Ductus seminalis inserted immediately at the proximal end of the colliculum.

Bursa copulatrix without appendix bursae, with a signum consisting of a strong, stroke-like sclerite strongly broadened at the end in the interior of the bursa with stroke-like lateral projections forming a 90°-angle and scobinate patches on both sides, which are slightly asymmetrical and separated from the rest of the corpus bursae by a broad, flange-like sclerotized ridge. The signum and the scobinate patches cover roundabout 80% of the wall of the bursa. The other membranous part is interspersed with numerous fine thorn-shaped sclerites of varying shape and size.



Figure 7. Paratype, female genitalia, *Arabarpia albilinealis* Seizmair, gen.nov., sp.nov., slide no. 20GP029.

Tympanal organs (Figure 8): Ratio between the maximum width and the maximum length of the ala tympani 1 / 1,8, costal borders of the ala tympani strongly concave near the pons tympani, concavity strongly sclerotized. Pons tympani of constant width. Tergo-sternal sclerite straight, of constant strength, rounded distally. Lobuli semi-circular. Bullae tympani reniform, as is typical of the *Scopariinae* Guinée, 1854, elongate, ratio between the maximum width and the maximum length 1 / 2. Sacci tympani elongate, triangular-shaped, ratio between the maximum width and the maximum length 1 / 1,5, borders strongly sclerotized. Venulae secundae well developed, running parallel to the body axis. Rami tympani absent. Puteoli tympani present, very small, u-shaped, slightly asymmetric.



Figure 8. Paratype, tympanal organs, *Arabarpia albilinealis*, Seizmair, gen.nov., sp.nov., slide no. 20GP029.

Differential diagnosis: The genus closest to the new genus is *Anarpia* Chapman, 1912. The female genitalia of these two genera share the absence of the appendix bursae, the elongate signum in the corpus bursae paired with strongly sclerotized scobinate patches on each side, the triangular-shaped papillae anales, the short colliculum of constant width with strong lateral sclerotizations and the prolongation of the antrum.

The new genus differs from the closely related *Anarpia* Chapman, 1912 in the following features, which make the genus unique also with regard to all the other known genera. These features are thus regarded as apomorphic.

In the female genitalia, the new genus differs from the other known genera in the arc-shaped sclerite in the interior of the ductus bursae proximal of the colliculum and the strongly sclerotized flange-like ridge delimiting the scobinate patches from the rest of the corpus bursae.

The male genitalia show the following apomorphic features: the sclerite dividing the valva into dorsal and ventral halves with a bifurcation at the distal end, the strongly tapering apical area of the valva with long, strongly sclerotized setae on the tip of the apex, the finger-shaped gnathos, the ellipsoid projections of the transtillum arms and the sclerites in the interior of the bulbus ejaculatorius.

Diversity and distribution: The new genus is monotypical. Its presently known distribution is restricted to the mountain systems in the province Dhofar of Oman.

Etymology: The prefix “Arab-“of the genus epitheton refers to the Arabian Peninsula, the suffix “-arpia” refers to the genus *Anarpia* Chapman, 1912, to which the new genus is closely related. The gender of the genus is feminine.

Arabarpia albilinealis Seizmair, sp. nov.

Material: Holotype: ♂, Oman, Dhofar, 20 km E Sarfait, Jebel Al Qamar, 960 m, 03-II-2019, leg. M. Seizmair, coll. ZSM, slide no. 20GP030. Paratypes: Oman, Dhofar, 20 km E Sarfait, Jebel Al Qamar, 960 m, 25-XI-2019, 1♀, slide no. 20GP029 leg. et coll. M. Seizmair, 04. II. 2019, 1♂, slide no. 20GP033, 20. I. 2018, 1♂, slide no. 20GP034, leg. et coll. M. Seizmair.

External features (Figure 9): Wingspan of the holotype: 23,1 mm, forewing length of the holotype: 11,6 mm. Wingspans of the paratypes: 20,9 – 21,8 mm, forewing lengths of the paratypes: 9,3 – 10,8 mm. Head: Scaling of the frons and the vertex constantly greyish-white. Dorsal scaling of the clypeus greyish white, ventral scaling black. Antennae

with black flagellum, flagellomeres and sensillae trichodeae scaled whitish-grey. Labial palpus of constant width in the segments 1 and 2, strongly tapering in segment 3, acute distally, elongate, 2,8 times as long as wide, basic scaling sporadically greyish interspersed with darkish-brown scales, tip of segment 3 with black scales. Scaling of the labial palpus greyish-white interspersed with darkish-brown scales on the lateral borders. Thorax: Dorsal basic scaling of the prothorax darkish-grey, laterally with two longitudinal black strokes, meso- and metathorax irregularly interspersed with darkish-brown scales, ventral scaling of the entire thorax ochre sporadically interspersed with whitish-grey scales. Tegula greenish interspersed with greyish-white scales. Legs with the dorsal scaling of the femur greyish to darkish-ochre, the dorsal scaling of the tibia darkish-brown to black interspersed with greyish scales, ventral scaling of the legs constantly greyish-white. Abdomen: Dorsal basic scaling greyish irregularly interspersed with darkish-green scales, lateral and ventral scaling greyish-white, with a clearly distinct triangular-shaped field of black scales laterally on the segments A2 and A3.



Figure 9. Holotype, male adult, *Arabarpia albilinealis* Seizmair, gen.nov., sp.nov., abdomen separated for dissection.

Forewing: Upper side: Ground scaling greenish, sporadically interspersed with darkish-grey scales. Antemedial and postmedial lines white, clearly distinct from the ground. Medial area with an additional white transversal line, running straight from the costal to the anal border. Each of the three transversal lines is bordered by rows of small black points on each side. Cubital stigma orbiform, proximal discoidal stigma ovoid, both bordered with greenish to darkish-grey scales, with the kernel greenish-fuscous. Distal discoidal stigma elongate, with a white jota-shaped kernel with greyish-fuscous border. Each of the three stigmata contrasts weakly with the ground. Anteterminal area with a broad band unicolorous with the ground and sporadically interspersed with fuscous fasciae apically and sub-apically. Termen white. Fringe darkish-fuscous in the proximal part, greyish-green in the distal part. Underside with the same pattern as the upper side, ground whitish-grey to whitish-green, cubital and proximal discoidal stigmata darkish-grey, weakly contrasted with the greyish ground, distal discoidal stigma reduced to an eight-shaped structure with a light-grey kernel, and greenish-grey border.

Hindwing: Upper side: Basal and medial areas scaled

greyish white interspersed with black scales along the anal, cubital and medial veins. Postmedial and anteterminal areas darkish-fuscous, termen darkish-brown to black, fringe as in the forewing. Underside like upper side.

Male genitalia (Figure 6): Uncus 1,4 times as long as wide. Gnathos equal in width with its base. Ventral border of the valva strongly concave at the base, then running straight up to another concavity subapically. Dorsal border with a short convexity at the base, then running straight. The apical area makes up 25% of the total length of the valva, its interior interspersed with small spine-like sclerites. Saccus triangular-shaped. Juxta trapezoid, ratio between height and width 1 / 1. Projections of the transtillum arms asymmetrical, the left one orbiform, the right one ovoid and double as long as wide. Saccus triangular-shaped, rounded proximally, double as wide as long. The sclerites in the interior of the bulbus ejaculatorius form an X-shaped structure. Ratio between width and length of the bulbus ejaculatorius 1 / 1,4, with the length equal with 40% of the total length of the aedeagus (caecum + distal portion). Ratio between the length of the ductus ejaculatorius and the length of the bulbus ejaculatorius 1 / 1,25.

Female genitalia (Figure 7): Papillae anales strongly broadened, as long as wide. Ductus bursae very slender, with its length equal with the maximum length of the corpus bursae. Corpus bursae elongate, asymmetric in shape, semi-ovoid.

Bionomics: The types were collected in the montane zone on the border of an escarpment interspersed with rocks (Figure 2). The type habitat is typical of the *Scopariinae* Guinée, 1854 [5, 21]. The life cycle and the premature stages are unknown.

Etymology: The species epitheton refers to one of the characteristic features of the forewing pattern, the white antemedial, medial and postmedial lines (lat.: albus = white, linea = line).

3.2. Discussion: Phylogenetic Placement of the New Genus

The *Scopariinae* Guinée, 1854 consist of two main groups of genera. This division is based on the structure of the corpus bursae [1, 5, 6]. The corpus bursae wall of the first group comprising *Scoparia* Haworth, 1811 + *Eudonia* Billberg, 1820+ *Sineudonia* Leraut, 1986 + *Gibeauxia* Leraut, 1988 + *Micraglossa* Warren, 1891 + *Touloetodes* Leraut, 1988 + *Witlesia* Chapman, 1911 is divided into one half of scobinate patches and another half covered with fine spines. The presence or absence of a streak-like signum is subject to inter-generic variation. This structure of the corpus bursae is hypothesized to be synapomorphic in Nuss [5, 6]. The synapomorphy of this feature is further substantiated by the computational results in Léger, Landry, and Nuss [1]. This main group contains a subgroup comprising *Scoparia* Haworth, 1811 + *Eudonia* Billberg, 1820 + *Sineudonia* Leraut, 1986 characterized by the presence of an appendix bursae. In all the other genera including the new genus the appendix bursae is absent.

The other main group of genera is subdivided into a

subgroup of genera with the corpus bursae membranous – *Hellenoscoparia* Nuss, 1999 + *Antiscopa* Munroe, 1964 + *Iranarpia* Leraut, 1982 + *Syrianarpia* Leraut, 1982 + *Hoenia* Leraut, 1986 + *Pagmanella* Leraut, 1985 and another subgroup with the corpus bursae consisting of an elongate signum with scobinate patches on each side comprising *Cosipara* Munroe, 1972 + *Anarpia* Chapman, 1912 + *Gesneria* Huebner [1825].

The new genus *Arabarpia* Seizmair, gen.nov. shares with the latter subgroup the signum with extensive scobinate patches on the corpus bursae wall. This feature is regarded as a synapomorphy in Nuss [6]. Yet, the new genus is distinguished from the other members of this group and all the other genera by the strongly sclerotized flange-like ridge bordering the scobinate patches and the sclerite in the ductus bursae proximad from the colliculum. In the male genitalia, a strong sclerite in the valva developing distad from the sacculus comparable to that of the new genus is shown by the neotropical genus *Cosipara* Munroe, 1972. Yet, the sclerite in the valva of the new genus differs from the sclerite in *Cosipara* Munroe, 1972 significantly in shape: In *Cosipara* Munroe, 1972 the sclerite shows a 90° curvature in the proximal fourth and is directed towards the dorsal border. In the new genus *Arabarpia* Seizmair, gen.nov. the sclerite in the valva is straight, directed towards the apical area and with a bifurcation in the distal fifth.

On the other hand, the new genus *Arabarpia* Seizmair, gen.nov. shares a synapomorphy with the genus *Hellenoscoparia* Nuss, 1999, to wit the large bulbus ejaculatorius with lateral sclerites forming an ovoid vessel. *Hellenoscoparia* Nuss, 1999 belongs to the subgroup of genera characterized by a membranous corpus bursae wall.

The placement of the new genus in the overall phylogenetic system of the *Scopariinae* Guinée, 1854 is thus to be valued as ambivalent. The new genus shares synapomorphic feature states with the group of genera characterized by a membranous corpus bursae wall and also with the group of genera characterized by a signum with scobinate patches on the corpus bursae wall. The ambivalent placement of the new genus should be regarded as on a par with the ambivalent placement of the genus *Afrosoparia* Nuss, 2003: Both *Afrosoparia* Nuss, 2003 and the new genus share the shape of the bulbus ejaculatorius with the genus *Hellenoscoparia* Nuss, 1999. On the other hand, the corpus bursae wall of *Afrosoparia* Nuss, 2003 is divided into a spinose and spatulate half with the appendix bursae present. The genus *Afrosoparia* Nuss, 2003 thus also shares features with the main lineage represented by *Scoparia* Haworth, 1811. It is not possible to resolve the ambivalent placements of the new genus and of *Afrosoparia* Nuss, 2003 by the morphological features known at present [6].

Furthermore, the phylogenetic relation of the new genus with the genus *Afrarpia* Maes, 2004 is in need of further clarification. *Afrarpia* Maes, 2004 is claimed to be closely related to *Anarpia* Chapman, 1912 [8]. Yet, the only synapomorphy presently known shared between *Anarpia* Chapman, 1912 and *Afrarpia* Maes, 2004 is the absence of the

appendix bursae. *Anarpia* Chapman, 1912 and the new genus are clearly differentiated from *Afrarpia* Maes, 2004 by a signum paired with scobinate patches on the corpus bursae wall. The corpus bursae wall of the genus *Afrarpia* Maes, 2004 is characterized by the absence of a signum. For a further understanding of the relations between *Afrarpia* Maes, 2004, the new genus and the *Anarpia* Chapman, 1912 group, study of the male genitalia of *Afrarpia* Maes, 2004 is needed. The male genitalia of *Afrarpia* Maes, 2004 are still unknown.

4. Conclusion

In this paper occurrences of the *Scopariinae* Guinée, 1854 are reported for the entomofauna of the Arabian Peninsula for the first time. The specimens are attributed to a new genus *Arabarpia* Seizmair, gen.nov. consisting of the only species *Arabarpia albilinealis* Seizmair, sp.nov. at present.

Further undescribed species are expected to be discovered in further field research in the coastal mountain systems of the Southern Arabian Peninsula ranging over the coastal line of Dhofar and Yemen and in the Asir mountain system in the extreme west of Yemen and south-western Saudi-Arabia. These mountain ranges are still unexplored for the *Scopariinae* Guinée, 1854.

The distributional status of the new genus is still in need of clarification. The *Scopariinae* Guinée tend to endemic diversification, i.e. splitting up into endemic genera, such as *Hellenoscoparia* Nuss, 1999, and endemic speciation [24]. Endemism to the coastal mountain range of Dhofar and Yemen as well as still unknown occurrences of the new genus on the African Continent are both thinkable with regard to the present state of knowledge.

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