

**REMARKS ON THE TYPE MATERIAL OF SOME
CERAMBYCIDAE FROM IRAN DESCRIBED BY M. PIC
(COLEOPTERA: CERAMBYCIDAE)**

Gianfranco Sama*

* Via Raffaello Sanzio 84, I-47023 Cesena, ITALY. E-mail: francosama@gmail.com

[Sama, G. 2010. Remarks on the type material of some Cerambycidae from Iran described by M. Pic (Coleoptera: Cerambycidae). *Munis Entomology & Zoology*, 6 (2): 663-672]

ABSTRACT: The type series of *Apatophysis (Angustephysis) richteri* Pic, 1956, *Osphranteria lata* Pic, 1956 (= *O. richteri* Heyrovský, 1959), *Purpuricenus schauffelei* Pic, 1956 and *Derolus mauritanicus iranensis* Pic, 1956 (= *Derolus mauritanicus iranensis* Lepesme & Breuning, 1958) (lectotype and paralectotypes designated) are examined and depicted. *Apatophysis richteri* is regarded as a synonym of *A. modica* Gahan, 1906.

KEY WORDS: Cerambycidae, Iran, *Apatophysis*, *Osphranteria*, *Purpuricenus*, *Derolus*, new synonymy, lectotype, paralectotypes.

During two expeditions to Iran (1954 and 1956) (Richter, 1956, 1961; Roselaar & Aliabadian, 2007) the German zoologist Willi Richter together with Friedrich Schäuffele collected, among others, some interesting beetles belonging to the family Cerambycidae. This material, preserved in the entomological collection of the Staatliches Museum für Naturkunde in Stuttgart (Germany) was entrusted for identification to Stephan Breuning, the well known specialist of Cerambycidae Lamiinae, who submitted a part of the Cerambycinae to Marcel Pic. This is proved by the sentence written by the French specialist M. Pic in a paper where he described five new taxa based on this material ("*Cette espèce [Apatophysys richteri n. sp.] et les longicornes suivants m'ont été communiqués par le Dr. Breuning. Les types sont au Musée de Stuttgart*") (Pic, 1956). However, the material was also studied, at least in part, by Breuning himself who, in collaboration with the French entomologist Pierre Lepesme, described a new species of *Derolus* Gahan, 1891 (Lepesme & Breuning, 1958). The Czech Cerambycid specialist Leo Heyrovský (Heyrovský, 1959) revised the previous identifications and described a new subspecies of the prionine beetle *Acanthophorus rugiceps* (Gahan, 1906) and a new species of *Osphranteria* Redtenbacher, 1850; both the new *Derolus* and the new *Osphranteria* are currently recognized as synonyms of taxa previously described by Pic. Finally, all specimens were studied and correctly identified by C. Holzschuh who, however, did not publish any remark on this proposal. Thanks to Dr. W. Schawaller I was able to study the Cerambycidae which will be discussed in the present paper. It should be noted that most of total length measurements of beetles given by Pic for the new taxa are wrong as well as those of antennal segments. This may be due to the age of Pic who, at that time, was 91 years old (he died in 1957).

***Apatophysis (Angustephysis) richteri* Pic, 1956**

(Fig. 1, 2, 10)

Apatophysis (Angustephysis) richteri Pic, 1956, *Echange*, 72, n° 543: 2. Type locality: Iran, Belouchistan: Kuh-I-Taftan Ostseite.

Apatophysis richteri: Danilevsky, 2006: 8.

Apatophysis (Angustephysis) richteri: Danilevsky, 2008: 36.

= *Apatophysis modica* Gahan, 1906 (**syn. n.**).

Original description

"Étroit et allongé, peu brillant, revêtu d'une pubescence fine et courte grisâtre, de coloration générale testacée avec l'avant-corps un peu roussâtre. Tête avec les yeux nettement olus large que le thorax, yeux grands et saillants, un peu écartés, celle-ci densément ponctué. Antennes grêles, bien plus longues que le corps, filiformes, à articles 3 et 4 longs, à peu près égaux, les suivants diversement plus longs. Thorax assez court et peu large, plus étroit en avant, nettement angulé de chaque côté près du milieu, inégal en dessus, plutôt densément ponctué. Elytres bien plus larges que le thorax, assez longs, atténué postérieurement, subarrondis à l'apex, très finement et densément ponctué. Pattes longues et grêles, tarsi compris. Long. 15 mill. Iran, Belouchistan (W. Richter). Se rapproche vaguement de *tonkinea* Pic par la structure de son thorax, mais avec une forme tout autre, très étroite et une coloration plus claire. Sans doute voisin de *modica* Gahan".
Espèce pouvant se classer dans un s.g. nouveau (Angustephyasis) caractérisé par sa forme étroite, sa tête tout à fait large par rapport au thorax qui est court et assez étroit et les tarsi tout à fait grêle".

Type material

The original description did not mention the type series which, however, was evidently based on a single specimen. The holotype is a male (Fig. 1, 2), 12 mm in length (not 15 mm as given by Pic), in good condition and corresponding to the description except the body length and the length ratio of 3rd and 4th antennal segments, which are not similar in length as written ("à peu près égaux"), but the 4th is evidently longer than 3rd. The specimen bears the following labels (Fig. 10): "Kuft i Taftan Ostseite / 2300–3000m, 10-12.VI.1954 / W. Richter leg." [blue, printed]; "Apatophysis / richteri n.sp." [whitish, handwritten by Pic]; "Holotypus" [recent, printed]; "Apatophysis modica / det. Dr. L. / Heyrovský" [white handwritten]; "Compared with ♂ type / Apatophysis / modica Gahan / ex coll. British Museum / det. C. Holzschuh 1987" [white, original, handwritten].

DISCUSSION

According to Danilevsky (2006), who evidently was unable to study the type specimen (he gave 15,7–15,8 as the body length of specimens examined by him and 15 mm for the original description), *A. richteri* is a distinct species similar to *A. farsicola* Sama, Fallahzadeh & Rapuzzi, 2005 and to *A. danczenkoi* Danilevsky, 2006. This is not correct: as already stated by Heyrovský and Holzschuh (see labels, Fig. 10), *A. richteri* is an obvious synonym of *A. modica* Gahan, 1906 (Fig. 3), which strongly differs from *A. farsicola* by head with much bigger eyes, pronotum distinctly longer than wide, elytra elongate (2,5 times longer than wide at its base), tarsi conspicuously elongate and slender (2nd segment of front tarsi 2,5 times longer than wide), antennae slender and much longer than body, surpassing elytral apices with 3,5 segments. In *A. farsicola* (Fig. 4) the body is much stouter and the appendages much shorter; it has pronotum transverse, elytra much shorter (about 1,5 times longer than wide at its base), tarsi very short (the 2nd segment of front tarsi is 1,4 times longer than wide), antennae slightly longer than body. The only character shared by these species is a brush of short setae clothing the internal side of tibiae (see Danilevsky, 2008, fig. 16k), which, however, is very distinct in *A. modica* but reduced and sometimes indistinct in *A. farsicola*.

Regarding the new subgenus *Angustephyasis*, introduced by Pic for the new species *A. richteri* (= *A. modica*), it has been regarded of doubtful value by Danilevsky (2006) ("I am not ready to accept the new subgenus because generally *A. richteri* is not far from *A. farsicola* and *A. danczenkoi* being a transition to *A. modica*"), but it was accepted by Danilevsky (2008) who included

in it, besides the Iranian species *A. farsicola* and *A. danczenkoi*, also *A. margiana* Semenov & Shchegoleva-Barovskaya, 1936 from Central Asia (Kazakhstan, Turkmenistan and Uzbekistan). The Russian specialist, in a key to the *Apatophysis* of Russia and adjacent regions (Danilevsky, 2008: 41) proposed to distinguish *Angustephysis* from *Apatophysis* s. str. by “*all tibiae with setae brushes along internal side – distinct structure of very short and dense; middle and hind tibiae more or less curved and dilated distally*”. The true value of this subgenus is rather doubtful and it is evidently not natural. The brush on tibiae (see Danilevsky, 2008: fig. 16, 16k) occurs in species (*A. farsicola* and *A. modica*) which are evidently unrelated to each other and, as written above, it is sometimes indistinct. The middle and hind tibiae are distinctly curved and dilated distally only in *A. margiana* (Danilevsky, 2008, fig. 16j), but certainly not curved and not dilated in *A. farsicola* and very slightly dilated in *A. modica*. Moreover, as written by Danilevsky (2008: 9) middle and tibiae are sometimes curved also in *A. sieversi* Ganglbauer, 1887, referred by him to *Apatophysis* s. str..

***Osphranteria lata* Pic, 1956**

(Fig. 5, 11)

Osphranteria lata Pic, 1956, Echange, 72, n° 543: 2. Type locality. Iran, Belouchistan: 36 km nördl. Iranshahr, Hang d. Kalang, 900m, leg. Richter & Schäuffele.

= *Osphranteria richteri* Heyrovský, 1959, Stuttg. Beitr. Naturk., 25: 4. Loc.typ.: Belutschistan, 36 km nördl. Iranshar, Hängen d. Kalang m. 900, synonymy in Podany, 1978.

Pic's Original description of *O. lata*

“*Un peu large, atténué à l'extrémité, légèrement brillant, à fine et courte pubescence grise, bleu, un peu verdâtre par places, membres noirs. Tête à museau assez court, à ponctuation ruguleuse forte et dense, yeux écartés; antennes filiformes, un peu plus longues que le corps, à 3e article très long. Thorax plus long que large, rétréci en avant et en arrière, à ponctuation granuleuse dense et forte, plus étroit que les élytres. Ecusson triangulaire. Elytres pas très longs, progressivement atténués postérieurement, subarrondis à l'apex, à ponctuation dense et très fine, sauf sur la base, où elle est plus forte, avec des traces de costules discales. Pattes longues, les antérieures plus courtes avec les cuisses un peu épaissies. Long. 25mill. Iran (Richter et Schäuffelé). – Diffère de *coerulescens* Redt. par la forme plus robuste et l'aspect moins terne*“.

Heyrovský's original description of *O. richteri*

“*Osphranteria richteri* n. sp. (*lata* Pic in litt.).

♀. Dunkel blaugrün mit violetten Schein, Fühler und Füsse schwarz. Oberseite des Körpers, besonders des Halsschildes, glänzend, sehr fein, dicht anliegend silberweiss behaart. Kopf dicht, stark runzelig, punktiert, Augenoben voneinander entfernt, die unteren Loben gross, kugelig, sehr fein facettiert. Wangen sehr kurz. Halsschild nach hinten stumpf abgerundet, hinter der mitte am breitesten, mit stumpfem Seitenhöcker, dann plötzlich verengt, hinter dem Vorder- und vor dem Hinterrand mässig eigenschnurt, an der Oberfläche gross, ziemlich dicht runzelig punktiert, die Zwischenräume in der Mitte breiter als die Punkte selbst, an der Basis und vor der Spitze querverrunzelt. Schildchen dreieckig, dicht und ziemlich gross punktiert, mit einer feinen Mittelfurche, Flügeldecken 3 ½ länger als an der Basis breit, da merklich breiter als der Halsschild an breiter Stelle, im Basalviertel dicht, gross runzelig, nach hinten allmählich viel feiter punktiert, an der Spitze einzeln abgerundet, sehr fein, dicht anliegend grau behaart, an der Spitze dicht, kurz, dunkel bewimpert, mit zwei sehr feinen Längslinien in der Mitte der Decke. Vorderbrust dicht runzelig, die übrige Unterseite sehr fein und dicht punktiert. Pygidium lang bewimpert. Fühler erreichen die Flügeldeckenspitze, ihr erstes Glied ist gross runzelig punktiert, glänzend und spärlich bewimpert, vom dritten Glied angefangen sind sie sehr fein und dicht grau anliegend behaart. Hinterschapel erreichen nicht die Spitze der Flügeldecken.

Länge 18mm, Breite 4mm. ♂ unbekannt.

1 Exemplar aus Iran: Belutschistan, 36 km nördlich von Iranshar, an den Hängen des Kalang in 900 m Höhe, 14.IV.1954 von W. Richter und Dr. Schäuuffele erbeutet. Holotyp in den Sammlungen des Staatlichen Museums für Naturkunde in Stuttgart. Zu Ehren des Herrn Willi Richter benannt“.

Type material

As usual, Pic's original description did not mention the type series which, however, was evidently based on a single specimen. The holotype is a male (Fig. 5), 19 mm in length (not 25 mm as given by Pic), in very good condition, but hind legs missing, labelled as follows (Fig. 11): "Iran, Belutschistan / 36 km nördl. Iranshar / Hang d. Kalang, 900m / 19.IV.1954 / Richter u. Schäuuffele [blue, printed] "Osphrantheria / lata n. sp." [whitish, handwritten by Pic]; "Osphrantheria / richteri m. / Typus ♀" / det. dr. L. / Heyrovský".

This specimen is, in fact, also the holotype of *Osphrantheria richteri* Heyrovský, 1959, who, maybe deceived by the relatively short antennae, regarded the holotype as a female.

Purpuricenus schauuffelei Pic, 1956

(Fig. 6, 7, 12, 13)

Purpuricenus schauuffelei Pic, 1956, Echange, 1956, Echange, 8 n° 543: 3. Type locality: Iran, Belutschistan, 36km nördl. Iranshar: Hang d. Kalang.

= *Purpuricenus zarudnianus* Semenov 1903, Rev. Russe Entom., 3: 358.

Original description

"Assez robuste, peu allongé, presque opaque, noir, tête en partie rouge postérieurement, thorax entièrement rouge, élytres rouges ayant une bande basale noire peu large et presque droite, postérieurement avec la partie apicalement largement noire et subarquée antérieurement. Tête plus étroite que le corps. Thorax peu long et assez large, très faiblement tuberculé, à ponctuation ruguleuse forte et dense. Elytres peu plus large que le thorax, assez courts, un peu élargis vers les épaules, à apex faiblement subtronqué, à ponctuation granuleuse peu forte et dense. Long. 15 mill. Iran. Voisin de *Haussknechti* White, en diffère par le thorax entièrement rouge, les dessins noirs des élytres différents, non prolongés sur la suture".

Type material

The Staatliches Museum für Naturkunde in Stuttgart sent to me 3 specimens: 2 males, 16,5 mm and 12 mm long respectively, and 1 female, 12 mm long. The original description did not mention the type series, but Pic gave a single body length (15 mm, a wrong size as usual in this paper) therefore it is clear that he studied only the bigger male specimen. The holotype is a male, 16,5 mm long, well preserved and recognizable, two last segments of the left antennae missing, labelled as follows (Fig. 12): "Iran, Belutschistan / 36km nördl. Iranshar / Hang d. Kalang, 900m / 19.IV.1954 / Richter u. Schäuuffele" [blue, printed] "*Purpuricenus / schauuffelei* n. sp." [whitish, handwritten by Pic]; "*Purpuricenus / zarudnianus / a. bicoloriceps* / Sem. / det. dr. L. / Heyrovský" [white, handwritten by Heyrovský]; " ? type" [red, handwritten by ?]. The second male bears the following labels (Fig. 13): "Iran, Belutschistan / sudöstl. Iranshar / Hamant Kuh / 12.III.1954 leg. / Richter u. Schäuuffele [blue, printed]; "*Purpuricenus / schauuffelei* / Pic / Paratyp / Breuning det." [handwritten by Breuning]; "*Purpuricenus / zarudnianus / a. bicoloriceps / Sem.*" [handwritten by Heyrovský]; "*Purpuricenus / zarudnianus / Sem. / C. Holzschuh det. 1983*" [handwritten by Holzschuh]; this specimen cannot obviously be regarded as paratype despite the Breuning's label. The female is labelled as follows: "S. O. Iran [Djiroft] Anbar

Abad / 21.-30.IV.1956 / W. Richter leg." [blue, printed]; "*Purpuricenus / zarudnianus* / Sem. ♀ / det. dr. L. / Heyrovský" [handwritten by Heyrovský].

***Derolus iranensis* Pic, 1956**

(Fig. 8, 9, 14, 15)

Derolus mauritanicus subspec. *iranensis* Pic, 1956, Echange, 8 n° 543: 3. Type locality: Iran: Granshar [= Iranshar].

= *Derolus mauritanicus* sbspec. *iranensis* var. *angustior* Pic, 1956, Echange, 8 n° 543: 3. Type locality: Iran: Makran (not available, infrasubspecific).

= *Derolus mauritanicus* ssp. *iranensis* Lepesme & Breuning, 1958, Proc. 10th Int. Congr. Entomol., 1 (1956): 179 (foot note). Type loc.: Iran, Makran, Sud-est de Nahu (Mus. Stuttgart) (synonymy in Holzschuh, 1993).

Derolus mauretanicus iranensis: Fuchs, 1967: 433.

Derolus iranensis Pic: Holzschuh, 1993, Fauna Saudi Arabia, 13 : 118.

Derolus zarudnyi Sem. et Plav. in litt.: Heyrovský, 1940: 846.

Pic's original description

"Allongé, assez étroit, brillant, revêtu d'une fine pubescence soyeuse grise, noir à transparence roussâtre sur la majeure partie du corps, membres roux. Tête avec les yeux un peu plus large que la partie antérieure du thorax, diversement granuleuse ou ponctuée, sillonnée entre les yeux; antennes pas plus longues que le corps, à 4^e article plus court que 3 et 5, les premiers étant un peu noduleux au sommet et les suivants un peu élargis et subangulés au sommet extérieurement. Thorax long, plus étroit en avant, sinué latéralement, faiblement, mais nettement incisé près de la base de chaque côté, inégal en dessus et orné de quelques plis raccourcis, sillonné transversalement en avant, en partie impressionné sur son milieu et sur les côtés, bien plus étroit que les élytres. Elytres assez longs, subparallèles, un peu atténués à l'extrémité, faiblement tronqués au sommet. Long. 20-21 mill. Iran, à Granshar (Richter et Schäuuffele). Un paratype dans ma collection. Distinct de *mauretanicus* Buq. par la forme plus allongée, le thorax plus étroit, la taille moindre.

La var. nouvelle *angustior* (ex unique de Makran) est très étroite, plus petite de taille, en ayant la tête sans sillon apparent et le prothorax à échancrure postérieure nulle. Long. 14 mill. "

Lepesme & Breuning's original description

"[...] Differt de la forme typique par le disque du pronotum plus faiblement ridé et la ponctuation élytrale très fine mais pourtant beaucoup plus distincte. Type d'Iran: Makran, Sud-est de Nahu, 1300 m., 29 et 26.III.54, leg. Richter et Schäuuffele au Musée de Stuttgart. Quatre paratypes de même provenance, ou de Belutschistan, Iranshahr, 800 m, 11-18-III-54, leg. Richter et Schäuuffele au Musée de Stuttgart et dans la coll. Lepesme "

It is uncertain how many specimens there were in total, but it is clear that at least three were examined by Pic: one must be a female ("*antennes pas plus longues que le corps*"), a second specimen (sex not stated) retained in his personal collection and a smaller one described as "*var. nouvelle angustior, ex. unique de Makran* "). Moreover, Pic gave three different (wrong) measures (20, 21 and 16 mm as body length).

I received the following six specimens, four males and two females, all in good condition, none of them bearing Pic's identification label and only one bearing the Breuning's label.

1♂: 18 mm long, "Iran Belutschistan / Iranshahr 800m. / 1.10.III.1954 / Richter & Schäuuffele (blue, printed); "*Derolus / mauritanicus / iranensis* Br. / et Lep. dr. L. Heyrovský det. [handwritten by Heyrovský]; "? type" (red, handwritten by ?) (Fig. 9, right, 15);

1 ♂: 15 mm long, left antennae glued to the head: "Iran Belutschistan / Iranshahr 800m. / 11.21.IV.1954 / Richter & Schäuuffele (blue, printed); "? type" (red, handwritten by ?];

1 ♂: 16 mm long, middle left leg and last three segments of left antenna missing: "Iran Belutschistan / Iranshahr 800m. / 11.21.IV.1954 / Richter & Schäuuffele (blue, printed); "? type" (red, handwritten by ?];

1 ♀: 17 mm long: "Iran Belutschistan / Iranshahr 800m. / 1.10.III.1954 / Richter & Schäuuffele ♂ (blue, printed); "? type" (red, handwritten by ?] (Fig. 8, left, 14);

1 ♀: 19 mm long: "Iran Makran / Südlöstlich Nahu, 1300m. / 19 u.26.III.1954 / Richter & Schäuuffele (blue, printed; "S. Breuning det. / *Derolus / mauritanicus / ssp. iranensis* / Pic (handwritten by Breuning) (Fig. 9, left);

1 ♂: 11 mm long: "Iran Makran / Südlöstlich Nahu, 1300m. / 19 u.26.III.1954 / Richter & Schäuuffele (blue, printed); "? type" [red, handwritten by ?]; this is the specimen described by Pic as var. *angustior* (Fig. 8, right).

Only the female from Iranshahr, 17 mm long (Fig. 8, A), can be regarded as eligible for designation as the lectotype of *Derolus mauritanicus* ssp. *iranensis* Pic and I have added a red label to that effect. The last male of the list above is the specimen described by Pic as *Derolus mauritanicus* ssp. *iranensis* var. *angustior*), obviously not available since infrasubspecific (fourth name). It can be regarded as the Paralectotype male of *D. m. iranensis* (Fig. 8, B). Lepesme & Breuning (1958) listed five specimens as the type series of their *Derolus mauritanicus iranensis*, among which they selected one specimen from "Makran, Sud-est de Nahu" as "type"; only the second female of the list (19 mm long, bearing the Breuning's label) (Fig. 9, A) can be regarded as the holotype of this taxon. The remaining three males together with one (sex not stated) belonging to the Lepesme's collection are the paratypes (Fig. 9, B). It should be noted that the collecting date ("29 et 26.III.54") is an evident mistake for "19 e 26.III.54".

ACKNOWLEDGEMENTS

I wish to thank Wolfgang Schawaller, Staatliches Museum für Naturkunde in Stuttgart (Germany) for the loan of the type material discussed in this paper and Geoff Hancock, The Hunterian (Zoology Museum) University of Glasgow, for the revision of the English text.

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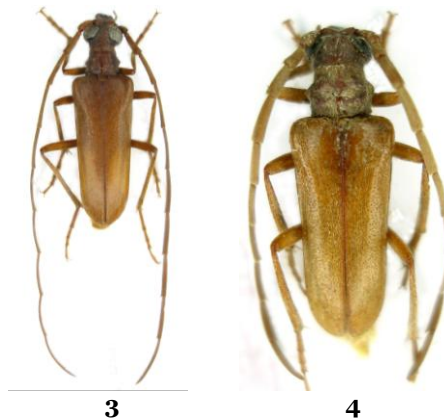
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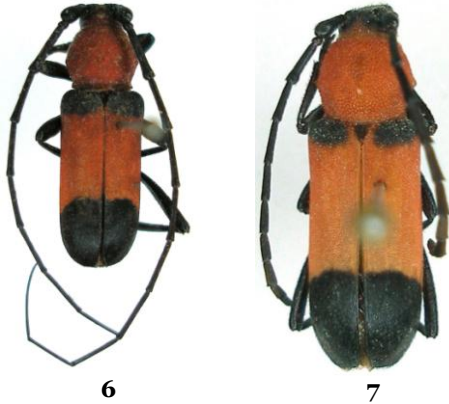
Figures 1, 2. *Apatophysis (Angustephysis) richteri* Pic, 1956. Holotype male, dorsal (1) and ventral view (2).



Figures 3, 4. *Apatophysis modica* Gahan 1906, male, Iran, Hormozgan: Beshagerd (3), *Apatophysis farsicola* Sama, Fallahzadeh & Rapuzzi, 2005. Holotype male (4).



Figure 5. *Osphranteria lata* Pic, 1956 and *O. richteri* Heyrovský, 1959. Holotype male.



Figures 6, 7. *Purpuricenus schauffelei* Pic, 1956. Holotype male (6), *Purpuricenus schauffelei* Pic, 1956. Female (7).

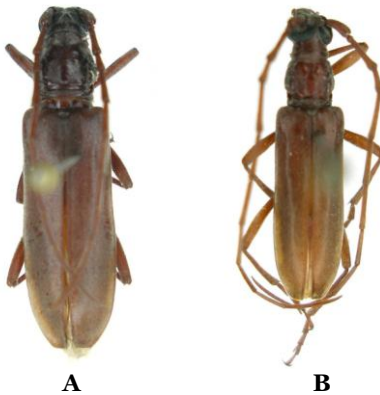
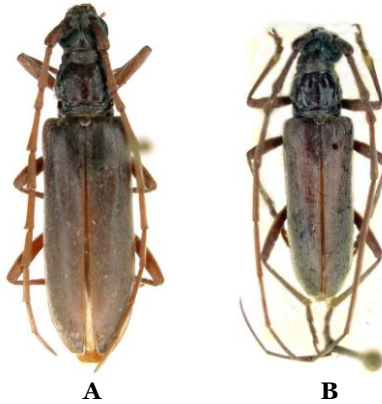
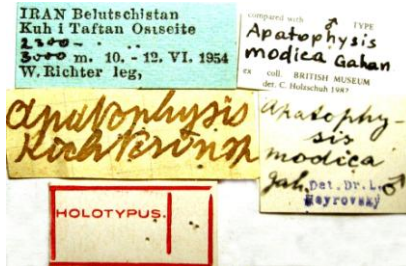


Fig. 8. *Derolus mauritanicus iranensis* Pic, 1956. Lectotype female (A), Paralectotype male (var. *angustior* Pic) (B).



Figures 9. *Derolus mauritanicus iranensis* Lepesme & Breuning, 1958 (= *D. mauritanicus iranensis* Pic, 1956). Lectotype female (A), Paralectotype male from Belutschistan / Iranshahr (B).



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Figures 10, 11. *Apatophysis (Angustophysis) modica* Gahan, 1906. Holotype. Original labels (10), *Osphranteria lata* Pic, 1956. Holotype. Original labels (11).



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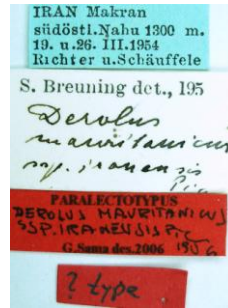


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Figures 12, 13. *Purpuricenus schauffelei* Pic, 1956 (= *P. zarudnianus* Semenov, 1903). Holotype. Original labels (12), *Purpuricenus schauffelei* Pic, 1956 (= *P. zarudnianus* Semenov, 1903). Male. Original labels (13).



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Figures 14, 15. *Derolus mauritanicus iranensis* Pic, 1956. Lectotype female. Original labels (14), *Derolus mauritanicus iranensis* Lepesme & Breuning, 1958. Paralectotype male. Original labels (15).