

# A review of *Peucoglyphus* BERNHAUER (Coleoptera: Staphylinidae: Staphylininae)

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## Abstract

The genus *Peucoglyphus* BERNHAUER, 1926 (Coleoptera: Staphylinidae: Staphylininae) is reviewed, including comparative notes for closely related genera. The types species of the genus, *Peucoglyphus corporaali* BERNHAUER, 1926, is redescribed. Three species are described as new: *P. balkei* (Indonesia: West Papua), *P. celebensis* (Indonesia: Sulawesi) and *P. solomonicus* (Solomon Islands).

**Key words:** Coleoptera, Staphylinidae, Staphylininae, Staphylinini, Philonthina, new species, taxonomy, zoogeography.

## Introduction

The genus *Peucoglyphus* BERNHAUER, 1926 was based on a single specimen from Buru (Indonesia). The characters used by Bernhauer to define the genus are rather obscure and, except for the pronotal features, rather unimportant. The discovery of three additional species provides a good opportunity to redefine this genus.

### Abbreviations:

BMNH The Natural History Museum, London (R. Booth)  
FMC Field Museum of Natural History, Chicago (M. Thayer)  
NMW Naturhistorisches Museum Wien

### *Peucoglyphus* BERNHAUER, 1926

*Peucoglyphus* BERNHAUER 1926: 317 (type species: *P. corporaali* BERNHAUER, 1926)

**DIAGNOSIS:** Head generally large, almost as broad as or broader than pronotum (Figs. 1–3); with temporal carina formed by confluent punctural grooves; mandibles long, falciform, medial margin of left mandible with truncate molar, that of right mandible with shortly bicuspid molar; palpi almost as in *Hesperus*, but not as strictly rod-like and somewhat shorter than in New Guinean *Hesperus*, particularly last segment of maxillary palpi not rod-like, more fusiform; labrum with semi-membranous extension confined to medial third or half of each lobe; antennae tomentose from segment 5; gular sutures fused for entire length; pronotum short, sides to variable extent sinuately concave in front of posterior angles; without dorsal rows of punctures, but with a few large punctures close to anterior angle, forming a short row along visible anterior edge; superior lateral line bent ventrad slightly in front of midlength, when viewed from above reappearing some distance mediad from anterior angles to form anterior margin; anterior angles markedly pronounced, distinctly projecting beyond level of deflexed lateral line; furcasternum very short, about 1/3 as long as basisternum or less; mesoventrite very broad, mesocoxae thus widely separated; metaventrite voluminous, posterior margin markedly above level of sternite III, sometimes with carina-like or even tooth-like modifications in posterolateral angles (Fig. 4);

aedeagus with paramere either reduced or completely fused with median lobe (difficult to judge by conventional viewing methods).

*Peucoglyphus* shares several characters with *Leucitus* FAUVEL, 1878, *Actinus* FAUVEL, 1878 and *Mysolius* FAUVEL, 1878, particularly the antennal character of the not tomentated segment 4 (exception: *L. argyreus* FAUVEL, 1878), the very short furcasternum, broad mesoventrite and to some extent also the shape of the pronotum including the course of the superior lateral line. It differs from all these genera by the laterally reduced semi-membranous portion of the labrum (extensive and well developed in the other genera), the asymmetrical mandibular dentation (Figs. 5–6) in the shape of a conspicuous truncate (left) to almost bicuspid (right) molar, which is inconspicuous, single pointed or very flatly truncate, virtually symmetrical in the other genera (Figs. 7–9), and the more fusiform last segment of the maxillary palpi.

### *Peucoglyphus corporaali* BERNHAUER, 1926

*Peucoglyphus corporaali* BERNHAUER 1926: 318

**Holotype** ♂: “L.J. TOXOPEUS, Buru, Station 4, 29-31 Jan. '22 \ *Peucoglyphus corporaali* Brh., Typus unic. \ Chicago NHMus M.Bernhauer collection” (FMC).

**DESCRIPTION:** 16.6 mm long (8.9 mm, abdomen excluded). – **Habitus:** Fig. 1. Head and pronotum metallic violaceous dorsally, ventral face of head and pronotal hypomera black; elytra brilliant metallic blue with green iridescence; semi-transparent extensions of anterior angles of head reddish brown; mandibles dark reddish with entire medial margin narrowly blackish; labrum dark reddish brown, medially broadly dark brown to black brown; antennae with segments 1–4 bright reddish, segment 5 black with dark reddish brown base, segments 6–10 black, segment 11 reddish brown; palpi reddish yellow; fore legs bright reddish with black tibial spines, ground pubescence pale brown; mid leg with reddish femur, trochanter and coxa, tibia and basal three tarsomeres black, two distal tarsomeres dark reddish brown; hind leg entirely black, last tarsomere dark brown; abdomen black.

Head huge, 1.34 times as wide as long, markedly wider than pronotum, widest at about half length of tempora; eyes very small, tempora convexly widened behind eyes, 1.66 times as long as eyes, with distinct temporal carina, confined dorsally by punctural groove of temporal seta; nuchal ridge and nuchal constriction obsolete medially; between temporal setae with an additional pair of large setiferous punctures close to base of head; rest of disc with one supraorbital puncture (missing on left side) and a pair of interocular punctures, each situated very close to antero-median margin of eye; entire dorsal surface of head polished, but with very scanty, hardly discernible micropunctuation; mandibles falciform, very long, medial margin between molar and apex distinctly tuberculate/crenulate; transparent semi-membranous portion of labrum exceedingly short, confined to very small portion medially; labrum distinctly angulate laterally; antennae with segment 4 slightly oblong, segment 5 about as long as wide, remaining segments gradually decreasing in length, segments 7–10 distinctly transverse, slightly asymmetrical; pronotum about 1.2 times as wide as long, widest slightly in front of midlength, where superior lateral line is bent ventrad; sides narrowed toward base in wide concave arc; lateral thirds of base convex, middle third more or less straight; forward projecting anterior angles very sharp, even forming short ridge; dorsal surface polished, micropunctuation much finer than on head (visible only at magnifications of more than 50 × in combination with good lighting); scutellum with dense, almost fossulate punctuation; elytra with strong and sharp longitudinal carina between shoulder and hind angle, dividing elytra into dorsal and lateral face, at midlength slightly sinuately bent mediad; dorsal face moderately densely, coarsely punctate, punctuation becoming less dense toward posterior margin, punctures separated by about 2–4 puncture diameters or even more, lateral face between elytral carina and lateral margin more

densely, even slightly asperately punctate; punctures bearing short decumbent pubescence; abdomen generally sparingly punctate; first three visible tergites (III–V) with two basal lines, elevated area between basal lines impunctate, remaining portion impunctate medially with sparse but rather strong punctation laterally; tergite VI with faint rudiments of a second basal line, also with sparse punctation medio-basally; tergites VII and VIII sparingly but more or less uniformly punctate. Male sternite IX: Fig. 14.

Aedeagus: Fig. 10.

Female unknown.

DISTRIBUTION: This species is at present known only from the type locality, Buru Island in eastern Indonesia (Maluku).

### *Peucoglyphus solomonicus* sp.n.

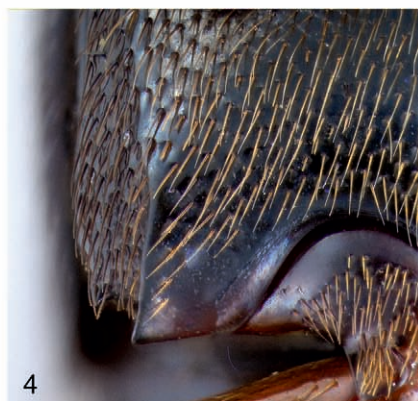
**Holotype** ♂: “SOLOMON IS., New Georgia, Arundel, 1.Viii.1935, R.A. Lever, per H. Robertson \ [illegible] \ Pres by Com Inst Ent B.M. 1967-3” (BMNH).

REMARK: The holotype lacks the antennae except for the basal two segments, the left meso- and metatarsi and the segments 3–5 of the right metatarsus.

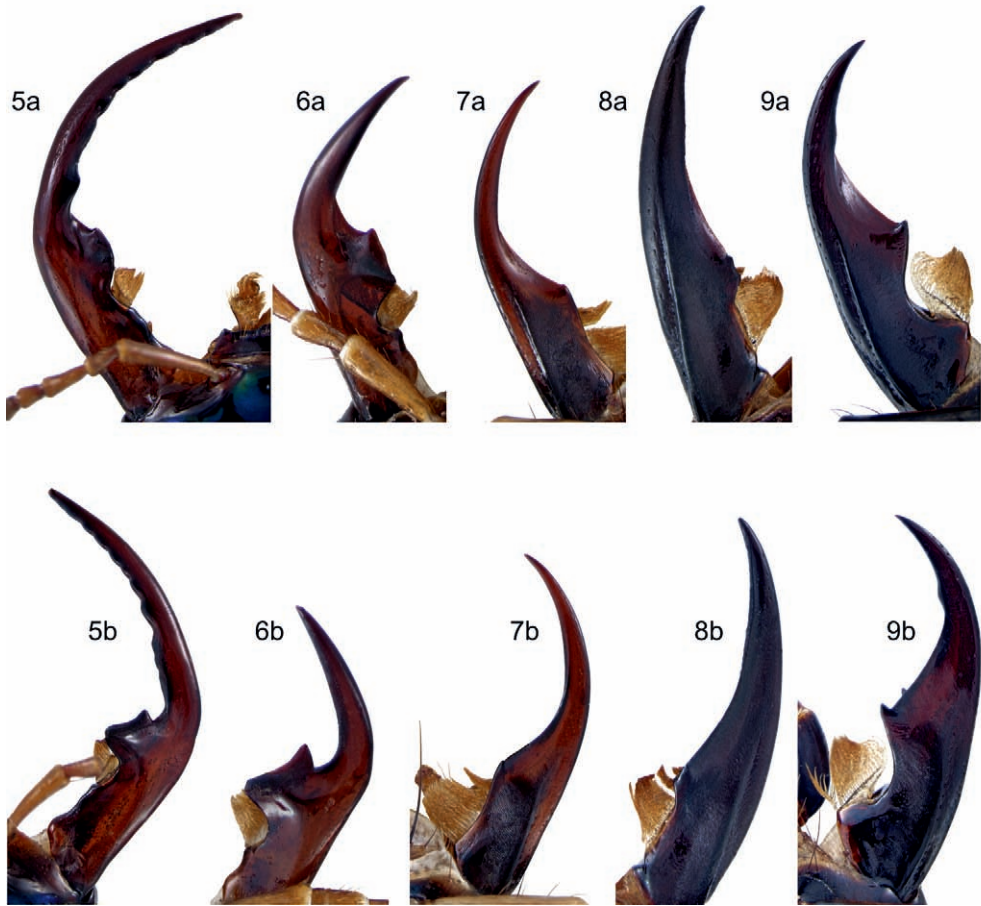
DESCRIPTION: 15.5 mm long (7.5 mm, abdomen excluded). – Habitus: Fig. 2. Black, very shiny, head and pronotum dark metallic violaceous, antero-lateral extensions of head reddish, elytra and scutellum brilliant metallic blue, in places with indistinct greenish hue; mandibles and palpi dark reddish brown to dark brown, tips of palpi reddish yellow; legs black.

Head huge, 1.38 times as wide as long, wider than pronotum, tempora 1.4 times as long as eyes, eyes posteriorly shifted dorsad, surface of head polished but with dense, almost uniform micropunctation, with an arcuate row of 4–5 large setiferous punctures extending from infraorbital area onto tempora, grooves confluent, posterior margins of grooves forming short carina, visible also in dorsal view as a sharp edge on tempora; posterior half of head otherwise without macrosetae and respective punctures except for a pair of occipital punctures situated at about level of temporal carina, each puncture situated about half way between temporal carina and midline; all but two basal segments of antennae missing; pronotum very short, about as long as head, 1.23 times as wide as long, widest at about midlength, anterior angles distinctly protruding anteriad, sides inconspicuously sinuate in front of base, base indistinctly convex in middle; close to each anterior angle with two setiferous punctures, dorsal surface with micropunctation about as dense as on head but markedly finer; elytra very coarsely and rather densely punctate, punctures separated by one to (rarely) two puncture diameters; each elytron laterally with sharp sinuate carina; scutellum coarsely and densely punctate; metaventre without any conspicuous structures posterolaterally; first visible abdominal tergite (III) finely and sparsely punctate, punctation confined to lateral portions, on the following tergites punctation becoming gradually denser and coarser with impunctate median portion becoming gradually smaller, tergites VII and VIII entirely punctate; first three visible tergites (III–V) with two basal lines, elevated area between basal lines almost impunctate but with a small number of setiferous punctures between midline and lateral margin, fourth visible tergite (VI) with slightly crenulated rudiment of second basal line in middle; male sternite VIII with moderately deep but rather broad medio-apical emargination and narrow semi-membranous extension along emargination, apical margin lined with dense row of long stout black setae except in emargination; metacoxae markedly extending beyond posterior margin of metaventre, metatrochanter normal.

Aedeagus (Fig. 11) in lateral view markedly different from that of *P. corporaali*, almost straight and with a much larger subapical tooth.



Figs. 1–3: Habitus of 1) *Peucoglyphus corporaali*; 2) *P. solomonicus*; 3) *P. balkei*.  
Fig. 4: *Peucoglyphus balkei*, metaventricle.



Figs. 5–9: Mandibles of 5) *Peucoglyphus corporaali*; 6) *P. balkei*; 7) *Leucitus argyreus*; 8) *Actinus imperialis*; 9) *Mysolius aurichalceus*. Left mandible (a), right mandible (b). Not to scale.

Female unknown.

**DIAGNOSIS:** This species closely resembles *P. corporaali*, but differs in the much stronger micropunctuation on head, the slightly larger eyes, the sharp and almost straight nuchal ridge and a well developed, although narrow, nuchal constriction.

**DISTRIBUTION:** This species is at present known only from the type locality.

**ETYMOLOGY:** This species is named after the group of islands where it originates from.

***Peucoglyphus celebensis* sp.n.**

**Holotype** ♀: “Malaise trap \ G. Mogogonipa, summit, 1008m. \ INDONESIA, SULAWESI UTARA, Dumoga Bone N.P., August 1985 \ R.Ent.Soc.Lond., PROJECT WALLACE, B.M. 1985-10” (BMNH).

DESCRIPTION: 11.3 mm long (6.3 mm, abdomen excluded). – Black, very shiny, head and pronotum bright metallic violaceous, elytra brilliant metallic blue, antennae with basal two segments bright reddish, segment 3 reddish brown with slightly darker apex, remaining segments very dark reddish brown to black brown, last segment blackish with cream colored semi-membranous sensory area in distal third; mandibles dark reddish brown with blackish medial and lateral edges; palpi bright reddish brown; legs black, pro- and mesofemora bright reddish.

Head rounded quadrangular, 1.34 times as wide as long; eyes large, 1.08 times as long as tempora, the latter with distinct temporal carina, furrow in front of carina bearing two large setiferous punctures, tempora between eye and carina convex; pair of occipital punctures situated about two puncture diameters from convex nuchal ridge; with two large setiferous punctures at medial margin of eye, one in anterior third (interocular puncture) and one at posterior margin of eye; dorsal surface of head with rather dense micropunctuation composed of more conspicuous and also exceedingly fine punctures; antennae with segment 4 about as long as wide, remaining segments gradually decreasing in length but increasing in width, segment 10 distinctly transverse; pronotum 1.13 times as wide as long, slightly wider than head (1.07:1), widest at about midlength, toward base slightly concavely narrowed, hind angles rather well marked, base shortly straight in middle, broadly convex toward hind angles; anterior angles rounded, markedly produced anteriorly beyond level of medial anterior margin; each side with one very large setiferous puncture near anterior angle, situated about three puncture diameters from it; surface with exceedingly fine, moderately dense micropunctuation; elytra moderately densely, rather coarsely punctate, punctures separated by 2–3 puncture diameters, a rather broad area along posterior margin impunctate, entire surface of elytra with very inconspicuous micropunctuation between setiferous punctures; scutellum densely and coarsely punctate; abdomen with first three visible tergites (III–V) with two basal lines, elevated area between basal lines virtually impunctate, except for a very few, often single, punctures more laterally; remaining parts of tergites rather sparingly, moderately strongly punctate, medial portion on first four visible tergites (III–VI) largely impunctate, but with a few finer punctures extending toward middle along base on visible tergites IV–VI, tergites VII and VIII more uniformly punctate.

Male unknown.

DIAGNOSIS: For separation from *P. balkei* see below.

DISTRIBUTION: This species is at present known only from the type locality.

ETYMOLOGY: This species is named after the place of its origin, the island of Sulawesi (formerly “Celebes”).

### *Peucoglyphus balkei* sp.n.

**Holotype** ♂: “IRIAN JAYA: Nabire dist., road Nabire-Illaga, km 54, 750 m, IV.1998, leg. Balke” (NMW).

**Paratypes** (2 ♂♂): Same data as holotype (NMW).

DESCRIPTION: 12.0–12.7 mm long (5.6–6.1 mm, abdomen excluded). – Habitus: Fig. 3. Black, very shiny, head with clypeus, along medial margins of eyes and tempora variably broadly but indistinctly dark metallic green to olivaceous; pronotum with a slight, dark violaceous hue; elytra bright metallic blue; palpi, antennae and legs entirely bright reddish, mandibles reddish brown with molar and apico-medial edge blackish.

Head quadrangular, 1.33–1.34 times as wide as long, eyes large, 1.33–1.46 times as long as tempora, latter with distinct temporal carina, situated almost exactly at well marked hind angle of head, furrow in front of carina dorsally and ventrally confined by large temporal and suborbital seta, respectively; each side with large interocular puncture at level of anterior margin of eye,

distant from eye by about two puncture diameters, and one at posterior margin of eye, distinctly shifted laterad from medial margin; in addition, with a pair of large occipital punctures in front of posterior margin of head; dorsal surface with very fine and scattered micropunctuation; antennae with segment 4 inconspicuously oblong, remaining segments gradually decreasing in length but increasing in width, segments 7–10 distinctly transverse, antennae thus appearing slightly clubbed; pronotum distinctly transverse, 1.20–1.22 times as wide as long, widest at about midlength, slightly wider than head (1.05:1), superior lateral line bent ventrad slightly in front of midlength, each side with one very large setiferous puncture near anterior angle, situated about two puncture diameters from anterior margin and three puncture diameters from lateral margin; surface with exceedingly fine, moderately dense micropunctuation; elytra rather densely and coarsely punctate, punctures separated by 1–2 puncture diameters, surface of elytra without any discernible micropunctuation; scutellum with variably dense, almost fossulate punctuation; abdomen with first three visible tergites (III–V) with two basal lines, elevated area between basal lines virtually impunctate, except for a very few punctures along second basal line tergite V; punctuation on remaining parts of tergites similar to that of *P. celebensis*; male sternite VIII (Fig. 13).

Aedeagus (Fig. 12) very similar to that of *P. corporaali*, but base of median lobe wider dorso-ventrally (lateral view) and with slightly differently shaped apical hook.

Female unknown.

DIAGNOSIS: This species differs from the similar *P. celebensis* in the entirely reddish legs, the almost black head and pronotum, and in the much larger eyes.

DISTRIBUTION: This species is at present known only from the type locality.

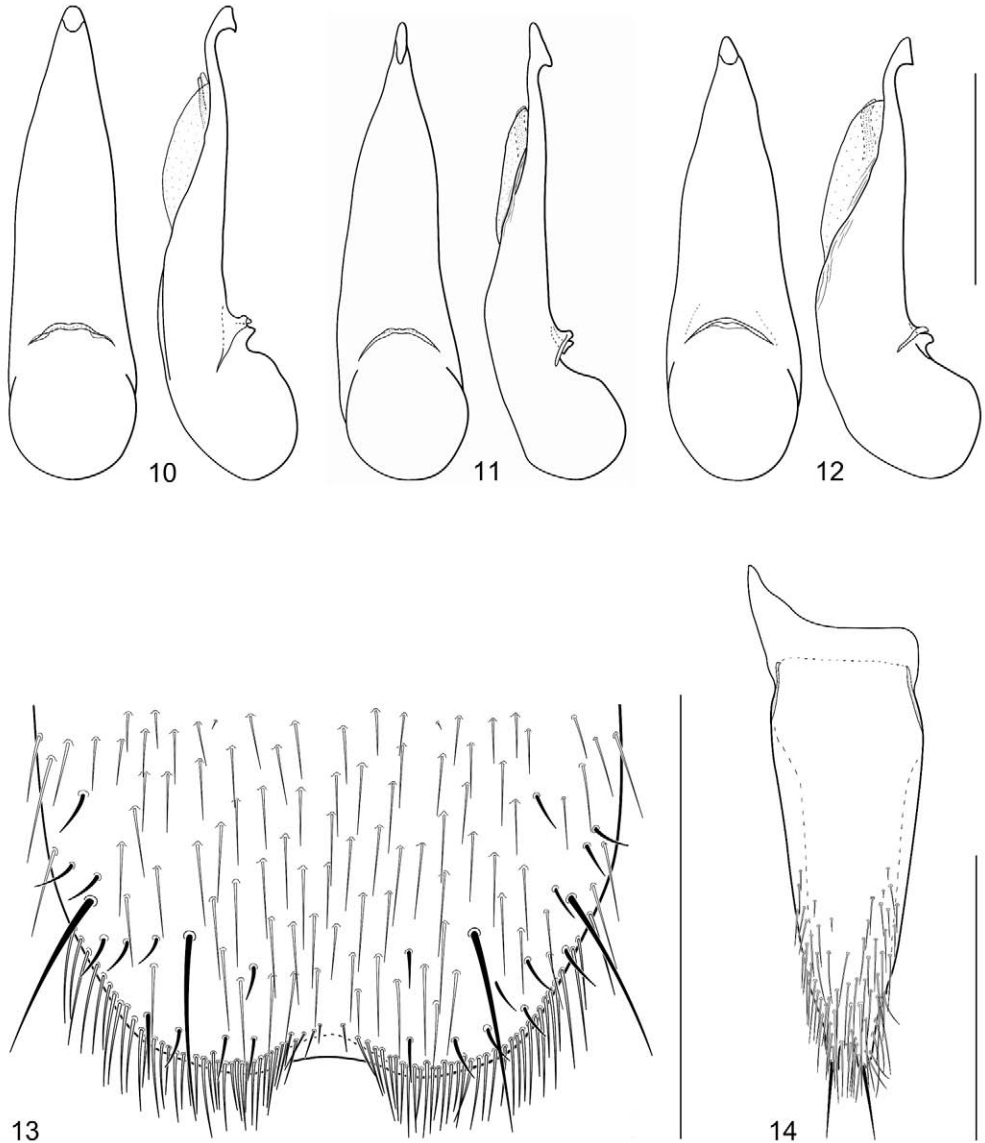
ETYMOLOGY: This species is named in honour of my friend and fellow conspirator, Michael Balke, a major contributor to the knowledge of the Wallacean beetle fauna, and especially of water beetles.

### Key to species of *Peucoglyphus*

- |   |   |                    |
|---|---|--------------------|
| 1 | Eyes small, markedly shorter than tempora .....   | 2                  |
| – | Eyes large, slightly to distinctly longer than tempora .....  | 3                  |
| 2 | Fore legs and mesofemora reddish; nuchal ridge convex, rather fine, almost obsolete in middle, nuchal constriction indistinct ..... | <i>corporaali</i>  |
| – | Legs entirely black; nuchal ridge almost straight, sharp throughout its entire length, nuchal constriction distinct .....           | <i>solomonicus</i> |
| 3 | Legs entirely bright reddish .....  | <i>balkei</i>      |
| – | Legs black, pro- and mesofemora bright reddish .....  | <i>celebensis</i>  |

### Zusammenfassung

Die Gattung *Peucoglyphus* BERNHAUER, 1926 wird kurz mit nah verwandten Gattungen verglichen. Die Typusart der Gattung (*Peucoglyphus corporaali* BERNHAUER, 1926) wird redeskribiert sowie drei Arten neu beschrieben: *Peucoglyphus balkei* (Indonesien: West Papua), *P. celebensis* (Indonesien: Sulawesi) und *P. solomonicus* (Salomonen). Die Aedeagi aller durch Männchen vertretenen Arten sowie einige morphologische Details werden abgebildet. Die Vorderkörper aller Arten werden in Farbfotos dargestellt.



Figs. 10–14: 10–12) Aedeagus of 10) *Peucoglyphus corporaali*; 11) *P. solomonicus*; 12) *P. balkei*. 13) male sternite VIII of *P. balkei*; 14) male sternite IX of *P. corporaali*. Scale bar: 1 mm.

### Reference

BERNHAEUER, M. 1926: Fauna Buruana Staphylinidae. Zur Staphylinidenfauna der Molukken. – *Treubia* 7 (3): 311–327.

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Autor(en)/Author(s): Schillhammer Harald

Artikel/Article: [A review of Peucoglyphus BERNHAUER \(Coleoptera: Staphylinidae: Staphylininae\). 125-132](#)