

Image key to the Corimaliini (Brentidae: Nanophyinae)

by

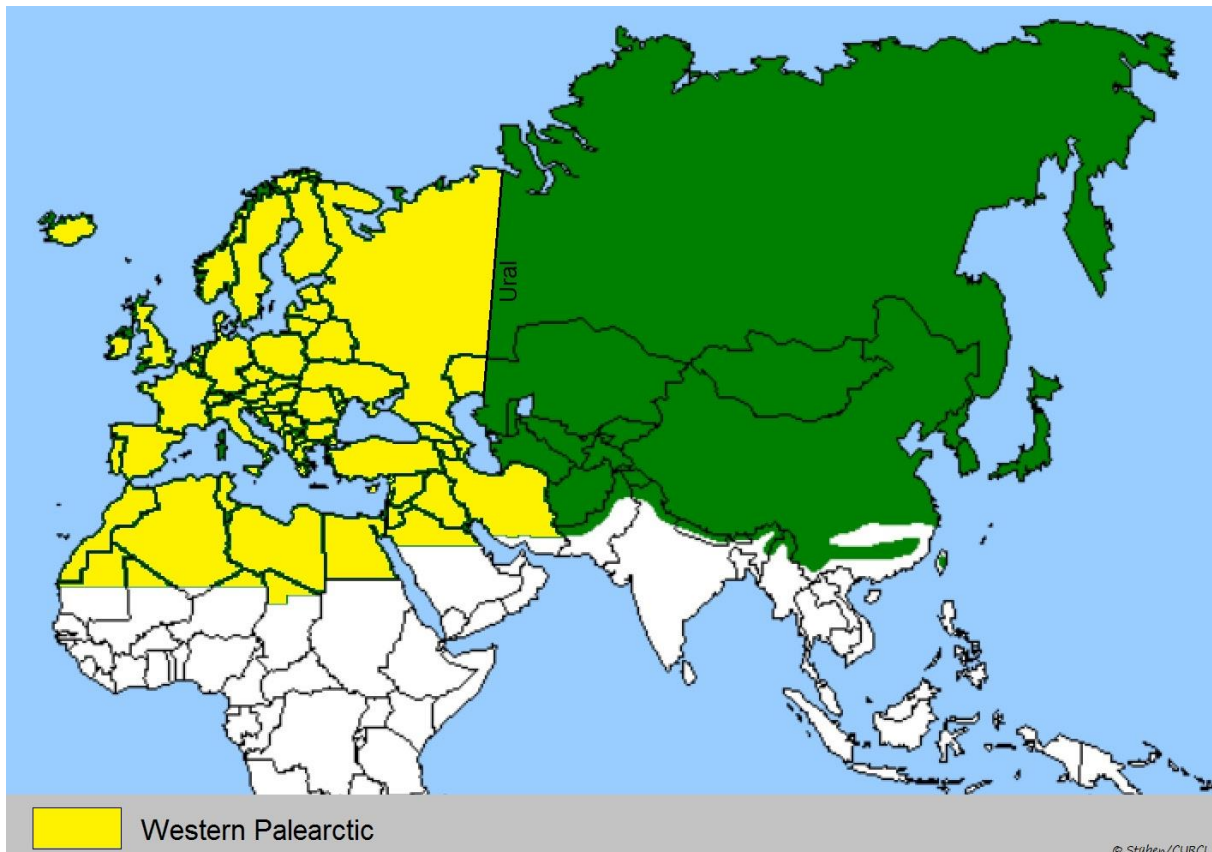
Peter E. Stüben & Karel Schön

Status: 1.1.2024

Corresponding author: Dr. Peter Stüben, E-Mail: P.Stueben@t-online.de

Preliminary note

1. Western Palaearctic species (up to the Urals, see figure) are highlighted in **bold**; species originating from the Eastern Palaearctic or South Africa are marked in light grey and in *semi-bold*.



2. We were unable to study or loan type material for some very rare species, therefore the key is still in progress. The 11 (5 Western Palaearctic) (sub-)species that are still unknown to us are:

Nine *Corimalia*-Taxa

convexipennis Pic, 1925 (Nanophyes) A: Iraq

maculiceps Pic, 1929 (Nanophyes) E: Hungary)

obscurithorax Pic, 1897 (Nanophyes) N: Egypt

rufosuturalis Pic, 1938: 11 (Nanophyes) E: " Macedonia"

exsanguis kaszabi Zherikhin, 1976 A: Mongolia

gurjevae Zherikhin, 1972 A: Mongolia

pilosella Voss, 1960 A: Afghanistan

lukjanovitshi Zherikhin, 1991 A: Turkmenistan, Uzbekistan / included in the key

pantherina Zherikhin, 1991 A: Turkmenistan / included in the key

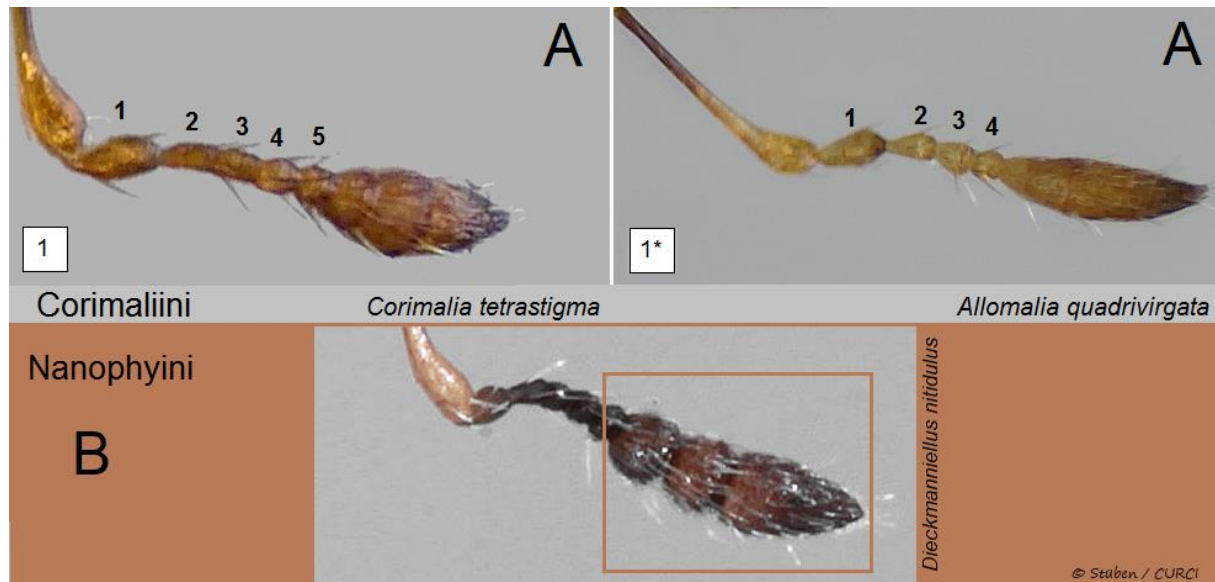
One *Titanomalia*-Taxon

valida Formánek & Melichar, 1916 (Nanophyes) A: Tajikistan / included in the key

One *Hypophyes*-Taxon

exiguus bulganensis Zherikhin, 1976 (*Corimalia*) A: Mongolia

3. Some lectotype designations are presented: *Corimalia aliena* (Faust, 1890), *Nanophyes / Corimalia chinensis* (Faust, 1890), *Nanophyes / Corimalia fausti* (Reitter, 1890), *Nanophyes / Corimalia mongolica* (Faust, 1890), *Nanophyes / Corimalia exsanguis* Voss, 1960 / *Allomalialia gemmaria* (Faust, 1887), *Nanophyes*.



- A.** The antennae with oval club, the segments separated only by sutures.
B The antennal club with segments, these clearly separated from each other. (Coming soon in this key, part B).

A

Key to the Corimaliini: *Corimalia*, *Allomalialia*, *Hypophyes* and *Titanomalialia*

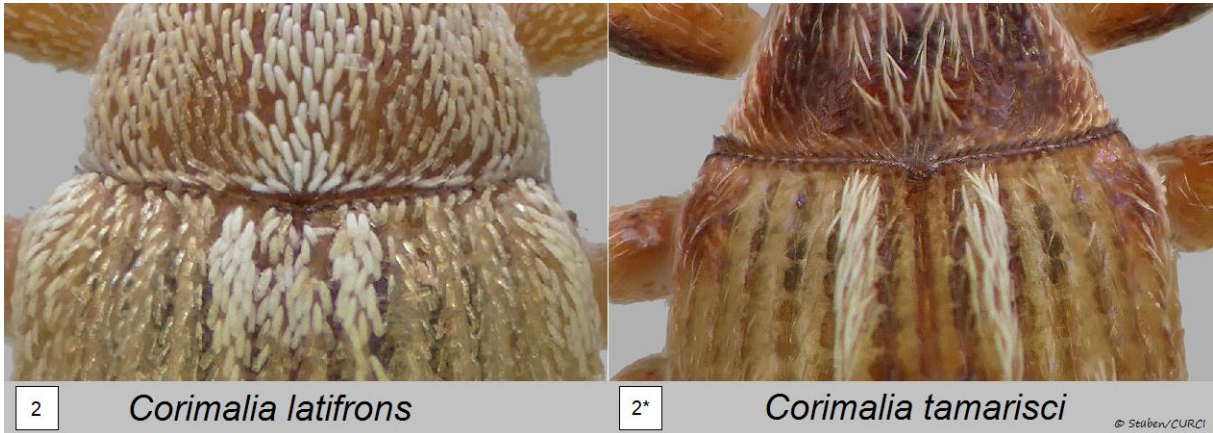
Note. Knowledge of the male genital is indispensable for this key and is easy to obtain, as Corimaliini can usually be tapped off *Tamarix* flowers, for example, in large numbers.

L.t.: Locus typicus.

- 1** Antennal flagellum with 5 antennomeres (includes *Corimalia fausti* with a 6th pseudo-antennomere, which probably belongs to the 4- segmented antennal club, termed 'pseudotetramerous' by Wanat (2001). ***Corimalia des Gozis* 2**
- 1*** Antennal flagellum with 4 antennomeres (in some species with a 5th pseudo-antennomere which, however, is somewhat separated from the 4-segmented antennal club). **33**

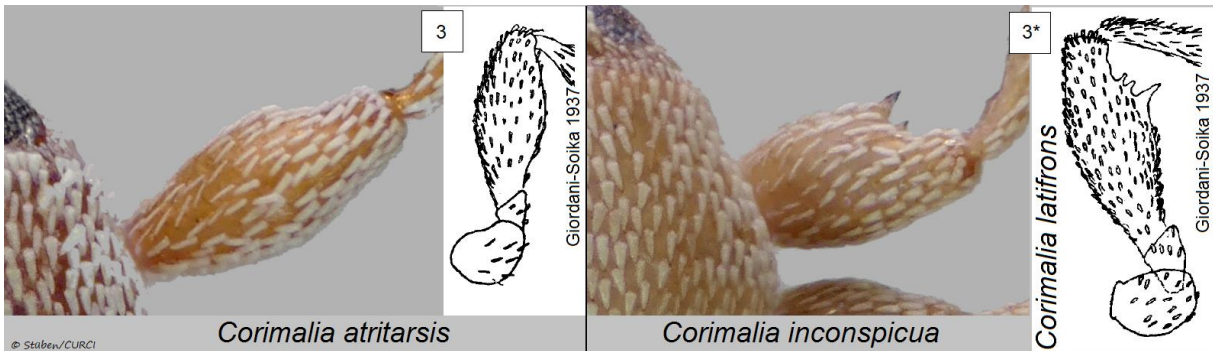
Genus: *Corimalia*

Antennal flagellum with 5 antennomeres



- 2** Elytra and pronotum always with distinctly broader, wedge-shaped or long-oval scales at most 3.5x longer than broad, especially in the vicinity of the scutellum (hereafter called "elytral (more or less square) base spot"), in addition to the prevailing cover of slightly longer scales. **3**
- 2*** Elytra and pronotum with exclusively long, filiform scales; if white, elytral basal stripes are present on the 2nd interval, then the long, filiform, rarely parallel-sided scales (or bristles) may be somewhat broader, but are at least 6x longer than broad. **6**

Short-bristled species



- 3** Femoral teeth absent. **4**
- 3*** Femoral teeth present. **5**



4 *Corimalia atritarsis*
(Oman)

0.5mm



4* *Corimalia letourneuxi*
(Sinai)

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- 4 Aedeagus (ventral): Median lobe strongly constricted (bottle-necked), abruptly narrowed in front of apex. Length: 1.1 - 1.5 mm. L.t.: Egypt. Distribution: **N:** AG EG **A:** SI **AFR.**
..... *Corimalia atritarsis* (Pic, 1925)
- 4* Aedeagus (ventral): Apex of median lobe parallel-sided, without anterior constriction. Length: 1.2 - 1.5 mm. L.t.: Egypt. Distribution: **N:** EG.
..... *Corimalia letourneuxi* (Pic, 1919)

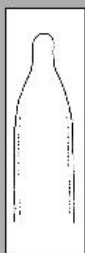


5



Corimalia latifrons

5*



Giordani-Soika, 1937

Corimalia inconspicua

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- 5 Fore femora with 3 denticles; rostrum nearly straight, longer than head and pronotum together; median lobe of aedeagus broadly rounded; clearly larger species: 1.6 -2.0 mm. L.T.: Egypt: Isma'ilia / Saqqarak. Distribution: **N:** AG EG LB TU **A:** IS JO SI.
..... *Corimalia latifrons* (Pic, 1897)
- 5* Fore femora with 2 fine denticles; rostrum more curved, shorter than head and pronotum together; median lobus of aedeagus strongly constricted far in front of apex; smaller species: <1.5mm. L.T. Algeria: Biskra. Distribution: **N:** AG.

..... *Corimalia inconspicua* (H. Brisout de Barneville, 1869)

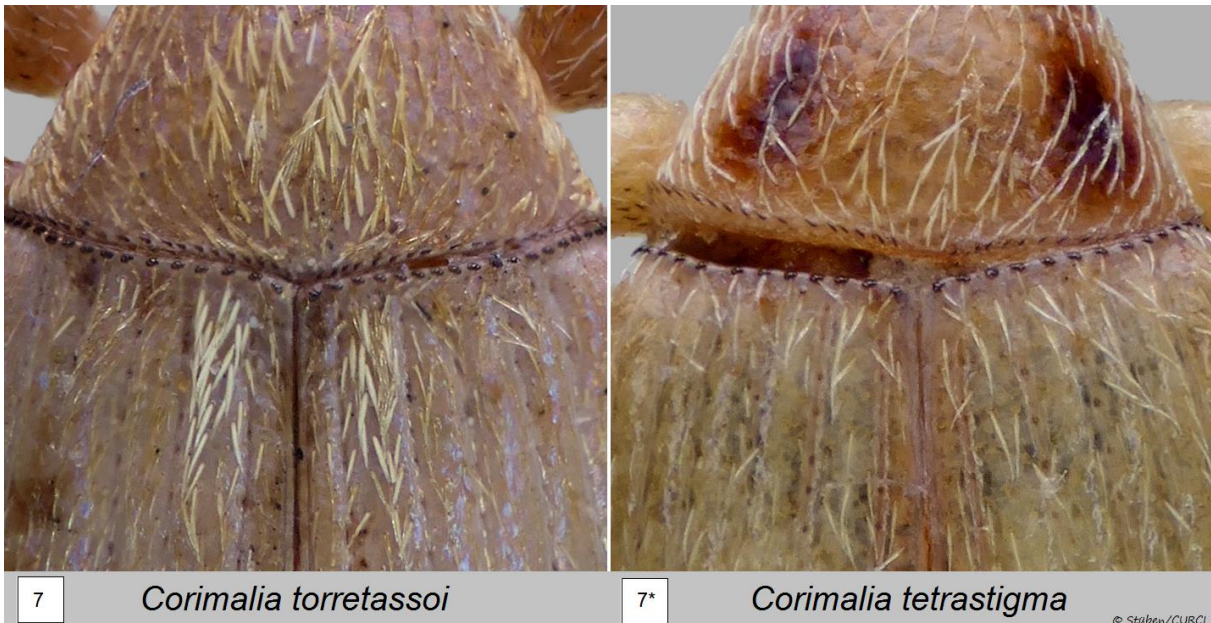
Long-haired species

C. tamarisci group

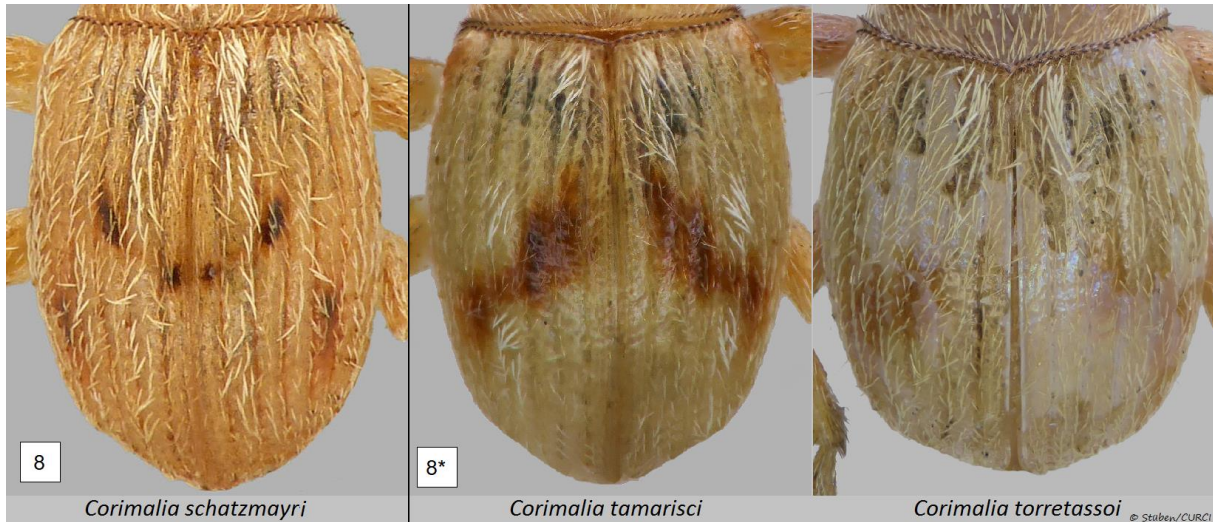


- 6 Aedeagus (ventral) conspicuously **asymmetrical**.7
- 6* Aedeagus (ventral) **symmetrical** (sometimes the outermost tip slightly twisted). 12

Aedeagus asymmetrical



- 7 Elytral vestiture generally fine and sparse, but denser, brighter and occasionally broader in the middle of the pronotum and of the elytral base on the 2nd intervals. 8
- 7* Pronotum and elytra exclusively with uniform vestiture of hair-like scales, not compacted in front of the elytral base on the 2nd intervals or along the median line of the pronotum. 10

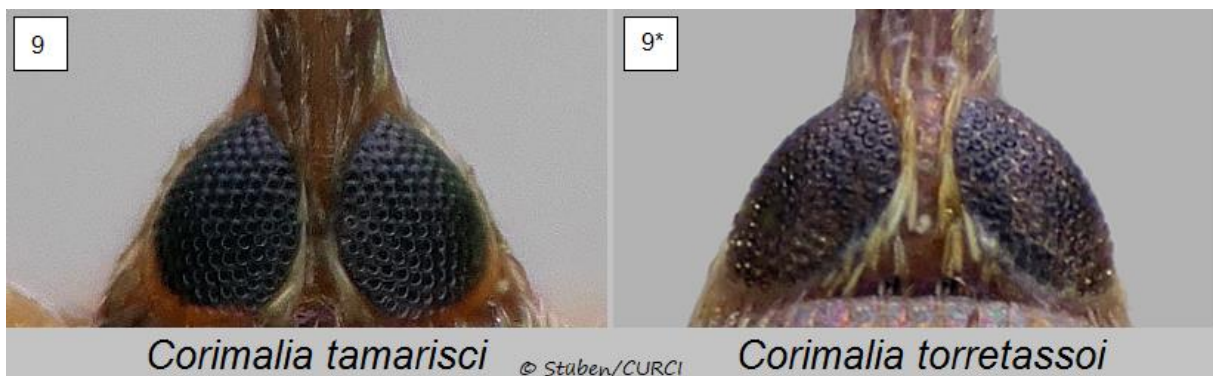


- 8** Elytra with a brown-black, U-shaped (partly resolved into dots) fascia in the middle. [Easily confused by habitus - but not by aedeagus - with *C. lunulata* (see guide digit 31 below). Both species occur in the Canary Islands, albeit on different islands; for other differential characters, see: Stüben 2022]. Length: 1.2 - 1.7 mm. L.t. Palestine: Jericho. Distribution: **N**: AG CI (Fuerteventura) MO TU **A**: IS JO.

..... ***Corimalia schatzmayri* (Giordani-Soika, 1937)**

- 8*** Elytral fascia absent or with a different pattern.

..... **9**



- 9** Elytra uniformly long-ovally rounded and more contrastingly patterned (almost always with a brown, oblique band, Fig. 8*, left); eyes appear larger when viewed from above, almost completely visible. Length: 1.9 - 2.3 mm. L.t.: habitat in Gallia meridionali, Lusitania. Distribution: **E**: FR IT MA PT SP **N**: AG LB MO TU.

..... ***Corimalia tamarisci* (Gyllenhal, 1838)**

- 9*** Elytra broader and stouter, duller pale yellow (rarely with faintly indicated brown spots, Fig. 8*, right); eyes not fully visible from above, more lateral. Length: 1.8 - 2.0 mm. L.t. Palestine: Jericho. Distribution: **A**: IS.

..... ***Corimalia torretassoi* Giordani-Soika, 1937**

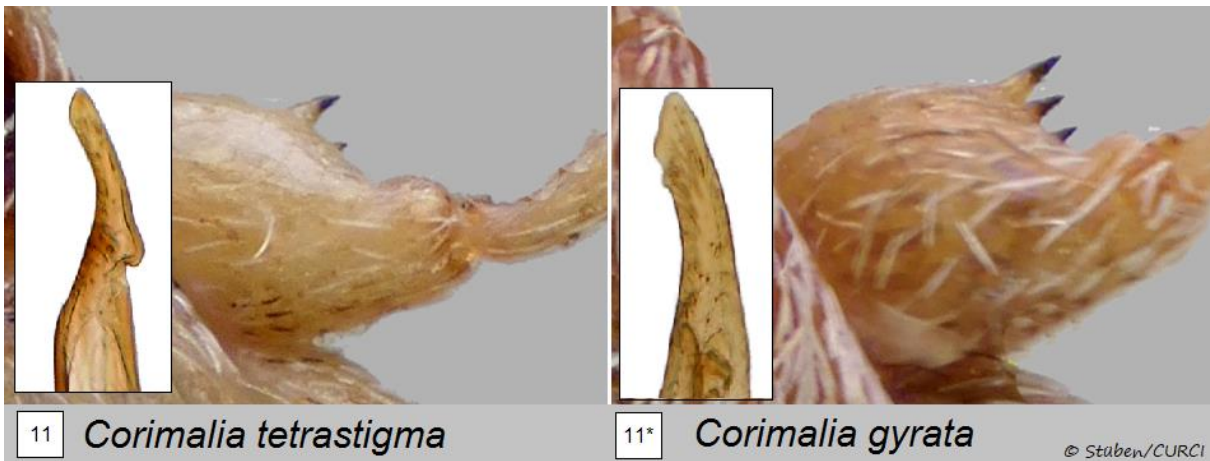


10 The very large, round, protruding eyes occupy almost half of the side of the head; always with a blackish-brown, broad long stripe (lateral view) on the two outermost elytra intervals in the same dark color as the mesothorax. (Aedeagus very similar to that of *A. armeniaca* with 4 antennal segments). Length: 1.4 - 1.9 mm. L.t.: Namibia: Svakop River. Distribution: **AFR**: Namibia.

..... *Corimalia damarensis* Marshall, 1927

10* The small, flat eyes do not protrude from the head; the outermost elytra intervals are without a distinctive longitudinal stripe or at most show indications of a shorter, mostly light brown, longitudinal spot.

..... **11**



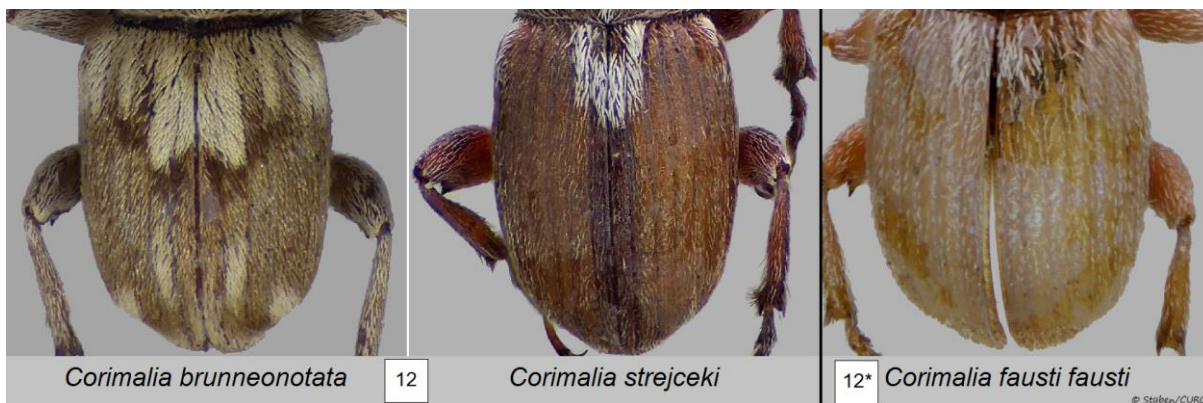
11 Fore femora with one large tooth and another tiny tooth; rostrum in both sexes shorter than head and pronotum together; elytra flat; median lobe of aedeagus (ventral) with hooked tip. Length: 1.4 - 1.6 mm. L.t.: France: Narbonne. Distribution: **E**: FR IT PT SP **N**: AG TU **AFR**.

..... *Corimalia tetrastigma* (Aubé, 1863)

11* Fore femora with 3 denticles (rarely with only 2 larger denticles); rostrum in both sexes longer than head and pronotum together; elytra more rounded, almost spherical; median lobe of aedeagus (ventral) with thickened tip. Length: 1.4 - 1.8 mm. L.t.: Algeria: Sahara central (Ahaggar). Distribution: **N**: AG EG **AFR**.

..... *Corimalia gyrata* (Peyerimhoff, 1929)

Aedeagus symmetrical



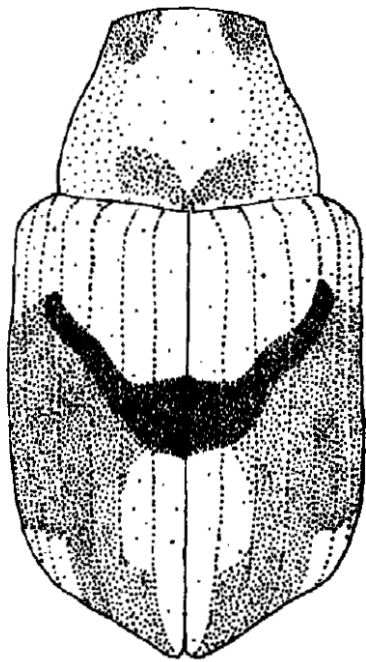
- 12 Elytra predominantly brown to dark brown, almost completely covered with a dense vestiture of hair-like scales; predominantly large species: > 2.5 mm. This also includes the species *C. lukjanovitshi* Zherichin 1991 and *C. pantherina* Zherichin 1991 from Central Asia. 13
- 12* Elytral integument predominantly pale yellow or tan, clearly evident between the much more widely-spaced hairs. 17
- 13 Elytra unicoloured (dark) brown except for the white basal spot and the darkened suture stripe (see Fig. 12, right). 14
- 13* Elytra patterned white, dark brown and brown-beige (reminiscent at first sight of the elytra patterns of the Nanophyini; see Figure 12, left). 15



- 14 Mucrones at the end of the meso- and meta-tibiae of males larger; median lobe of aedeagus (ventral) wider and with a narrow, laterally compressed tip. Length: 2.92-3.25 mm. L.t.: Russia: Teberda, 1500 m. Distribution: **A: ST** (Caucasus, Russia).
..... ***Corimalia strejceki* (Schön & Skuhrovec, 2016)**
- 14* Mucrones at the end of the meso- and meta-tibiae of males smaller; median lobe of aedeagus (ventral) narrower with a simply rounded, narrow tip. Length: 2.77-3.02 mm. L.t.: "Mongolia". Distribution: **A: ES KZ MG WS** (Central Asia).
Nanophyes alienus Faust, 1990: **Designation of a lectotype** by P. Stüben (2023): 1 ♀, „Mongolia, Hammarstr.[öm]“, coll Senckenberg, Museum of Zoology (Dresden). See also the images of the lectotype (habitus) with the original labels in this catalogue.

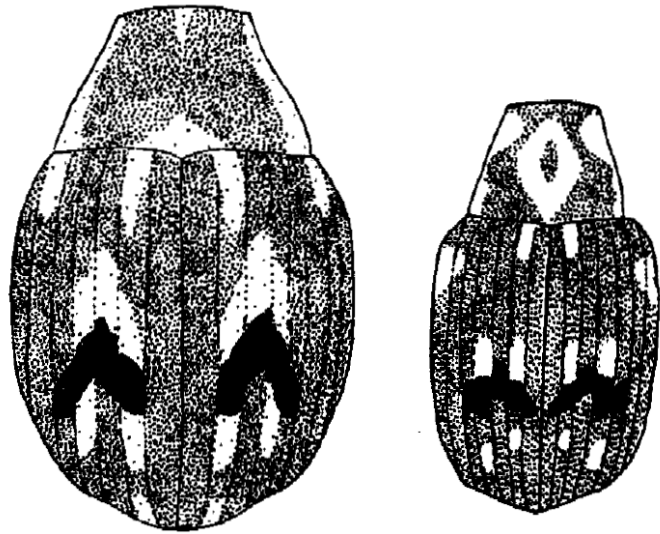
..... *Corimalia aliena* (Faust, 1890)

15



Corimalia brunneonotata

15*



C. lukjanovitshi

C. pantherina

Zherichin, 1991

- 15** Smaller species (<3 mm); the dark elytral band **W**-shaped and clearly separated from the pale scale spots in front of it; L.t.: "Mésopotamie, bords de l'Euphrate".
Distribution: **A:** IQ QA SY.

..... *Corimalia brunneonotata* (Pic, 1913)

- 15*** Larger species from Central Asia (>3.5 mm); the dark elytra band **M**-shaped, the area before it mostly dark.

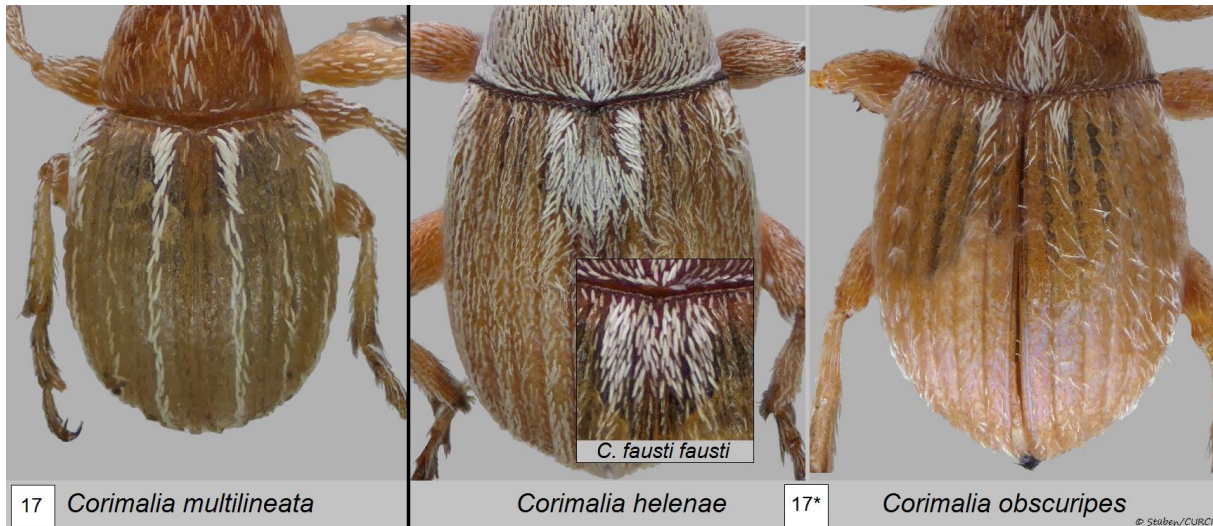
..... **16**

- 16** Elytra broader, with convex sides (see Figure 15*, left); vestiture consisting of dense scales almost obscuring the ground colour; rostrum more curved in profile; length: 4.2 - 4.6 mm. L.T.: Turkmenistan: Kyzylkum. Distribution: **A:** TM UZ.

..... *Corimalia lukjanovitshi* Zherichin, 1991

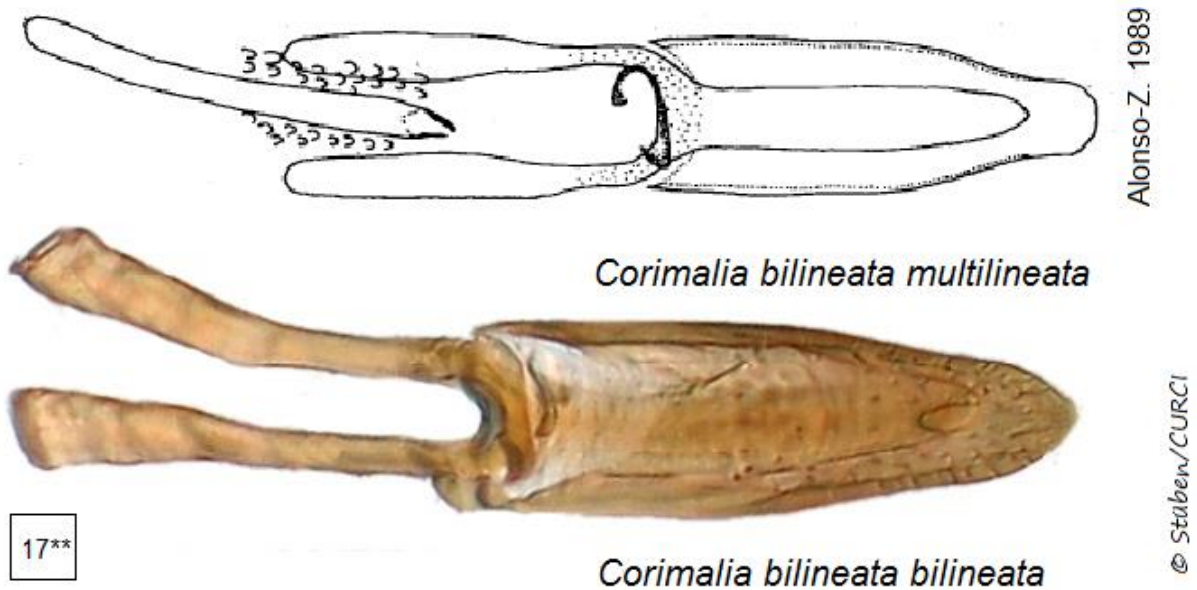
- 16*** Elytra narrower, with subparallel sides (see Figure 15*, right); vestiture consisting of a few fine hairs which do not obscure the ground colour except for the pale spots; rostrum only weakly curved in profile. Length: 3.6 - 3.7 mm. L.T. Turkmenistan, Krasnovodsk district: Distribution: **A:** TM.

..... *Corimalia pantherina* Zherichin, 1991



17.1 With stripes of thicker setae on interstriae 2, 4, 6 and on humeri, giving the elytra a striped appearance (see Fig. 17). Median lobe of aedeagus more broadly rounded towards apex (see Fig. 17**); length: 1.1 mm. L.t.: Central Sahara: Mouydir: Tahount-Arak; Hoggar: In-Aurdjel. Distribution: **N:** AG EG **A:** GG SY TR **AFR.**

..... **Corimalia bilineata multilineata (Peyerimhoff, 1930)**

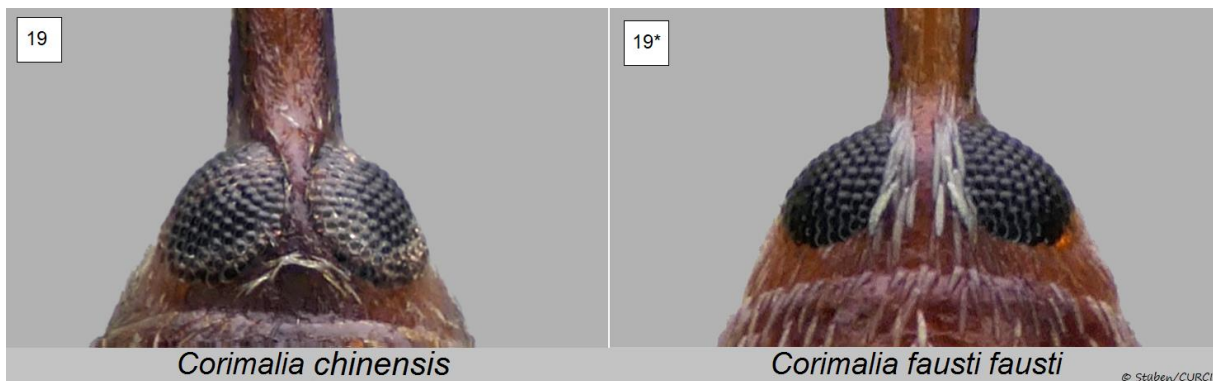


17.2 The nominotypic taxon *Corimalia bilineata* (Tournier, 1868) must obviously be distinguished from this subspecies. Peyerimhoff (1930) quotes Pic, who remarks that the syntypes of Tournier in the Muséum national d'histoire naturelle (Paris) are in a very bad condition and recourse to them is no longer possible. In his original description, however, Tournier describes his new species *C. bilineata* as follows: "Élytres avec les angles huméraux et le second interstrie couverts d'une pubescence blanche tranchant sur le fond, ce qui produit, vu de dessus et sur chaque élytre, l'effet d'une petite tache humérale et d'une ligne longitudinale blanche. ... Thorax orné de chaque côté d'une ligne longitudinale blanche par pubescence." The first author received a small series of this subspecies from Lutz Behne at the Senckenberg, Deutsches entomologisches Institut (Müncheberg), to which this description by Tournier could fit very well. Even though these specimens from Syria (Deir-ez-Zor) are not from the locus typicus in Algeria (Sétif), they show more densely packed setae only on the 2nd elytra interval, the humeri and the sides of the pronotum, as well as a somewhat differently shaped aedeagus with a more pointed median lobe (ventral view) than in the subspecies *C. bilineata multilineata* (see Fig. 17**); length: 1.2 mm. L.t. Algeria: Sétif; distribution: **E:** ST **N:** AG EG SY.

..... **Corimalia bilineata bilineata (Tournier, 1868)**

- 17* Elytra without such a prominent stripe pattern. 18
- 18 With an often rectangular elytral base spot of broader, white, more dense scales (see Fig. 17*, left), often continuing to the middle of the pronotum (in *C. pruinosa* these scales are less dense, but broad and short, never filiform). 19
- 18* Elytral base spot absent, at most with a few long filiform (spindle-like) hair-like scales that are more dense on the second interval near the base of the elytra and on the basal midline of the pronotum (see Fig. 17*, right). 23

With an elytral (more or less square) base spot
,*C. fausti* group'



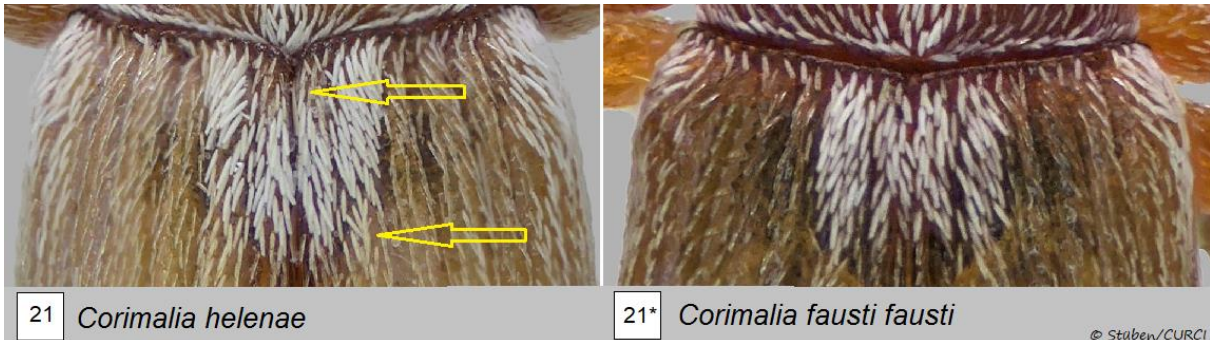
- 19 Distance between eyes narrow, max. $\frac{1}{4}$ of the width of the rostrum; antennal club dark brown to black, clearly separated in colour from the lighter antennomeres. 20
- 19* Distance between eyes distinctly wider, at least half the width of the rostrum; antennal culb yellow or yellow-red. 21



- 20 Larger species: 2.8 mm. Scales on pronotum and elytra much longer, hair-like and more widely spaced; around eyes with few bristles; aedeagus (lateral view) with a curved tip. L.t.: China, Gansu. **A:** GAN.
Nanophyes (Corimalia) chinensis Faust, 1890: **Designation of a lectotype** by P. Stüben (2023): 1 ♂ „chinensis Faust“ (handwriting), small golden label, coll. Museum of Zoology (Dresden, here also 1 further paralectotype, female). See also the images of the lectotype (habitus & aedeagus) and paralectotype with the original labels in this catalogue. *Corimalia chinensis* (Faust, 1890)

20* Smaller species: 1.2 mm. Scales on pronotum and elytra broader, at most half as long and much more densely packed (especially on elytral basal spot); eyes with a conspicuous ring of broad, white, and closely spaced scales; aedeagus (lateral view) without a curved tip. L.t.: Uzbekistan, Margilan. Distribution: **A:** UZ.

..... *Corimalia pruinosa* (Faust, 1885)



21 *Corimalia helenae*

21* *Corimalia fausti fausti*

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21 Elytral base spot less densely scaled immediately behind the scutellum, **rounded posteriorly**, followed by a broad, dark brown suture stripe; the trapezoidal pronotum much more densely scaled overall. The prominent, parallel-sided scales distinctly longer. Length: 1.9 - 2.65 mm. L.t. Dagestan: Kochubei. Distribution: **E:** ST **A:** AB AR IN IQ KI KZ MG SY TD TM UZ.

..... *Corimalia helenae* Korotyaev & Zherichin, 1996

21* Elytral base spot rectangular and evenly scaled (also immediately behind the scutellum); suture stripes more weakly developed; the pronotum, slightly rounded at the base, clearly less densely scaled. The spindle-shaped, white scales shorter.

..... **22**

22 Smaller subspecies: 1.5 - 2.0 mm; rostrum smooth-glossy, not keeled. L.t.: Azerbaijan: Ordubad (Araxes valley). Distribution: **E:** BU GR CY ST **A:** AB TR.

Nanophyes faust Reitter, 1890: **Designation of a lectotype** by P. Stüben (2023): 1 ♂ „Caucasus, Araxesthal, Leder. Reitter“, coll Senckenberg, German Entomological Institute / Col. 17847 (Müncheberg, here also 6 further paralectotypes). See also the images of the lectotype (habitus & aedeagus) with the original labels in this catalogue.

..... *Corimalia fausti fausti* (Reitter, 1890)

22* Larger subspecies: 2.0 - 2.2 mm. Rostrum less shiny, keeled up to the antennal insertions and more strongly punctate. Flagellum with a 6th false segment, not connected to the club. Length: 2 - 2.2 mm. L.T.: Mongolia: 30 km SE Altai. Distribution: **A:** MG.

..... *Corimalia fausti orientalis* Zherichin, 1972

Elytral base spot absent
,*C. pallida* group‘



23 *Corimalia martini*

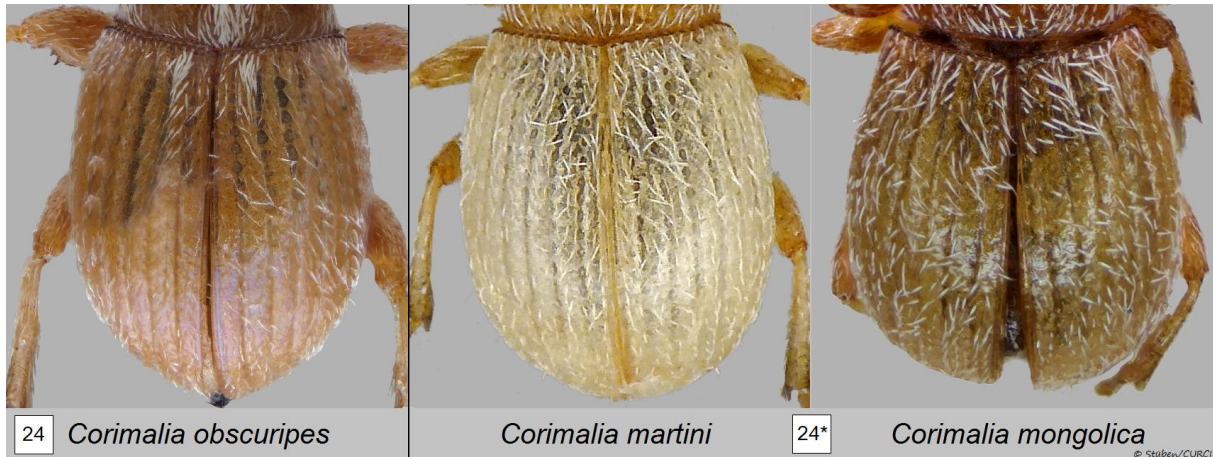
Corimalia lunulata

23* *Corimalia pallida*

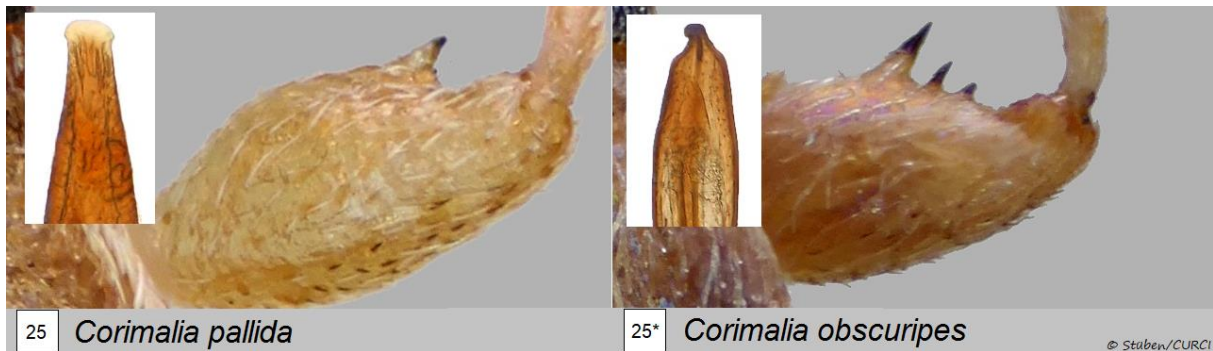
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- 23 Elytra unicoloured, without a prominent elytral mark. (As the central, punctate elytral mark is also occasionally absent in *C. pallida*, this species is also considered here). 24
- 23* Elytra bicoloured, with dotted, spotted, sutured and/or banded markings. (Always use several specimens from one locality for this assessment). 27

Elytra unicoloured



- 24 Elytra slender, elliptical; rostrum distinctly longer, in males as long as head and pronotum, in females distinctly longer than head and pronotum together; clearly larger species: >1.8 mm. 25
- 24* Elytra altogether broader, stockier or box-shaped; rostrum much shorter, not reaching the length of head and pronotum together; smaller (tiny) species: <1.4 mm. 26



- 25 Fore femora with 1 denticle: Aedeagus (ventral) broadened towards tip. Length: 1.8 - 2.25 mm. L.t. Portugal. Distribution: **E:** CR FR GR IT MA PT SP **N:** AG EG LB TU **A:** IS LE SY.

..... ***Corimalia pallida* (Olivier, 1807)**

- 25* Fore femora with 3 denticles; aedeagus (ventral) with narrowly tapering tip. Length: 1.9 - 2.1 mm. L.t. Iraq. Distribution: **A:** IQ ?TD.

Note. V.V. Zherikhin and B. A. Korotyayev described a new species of *Corimalia* from Tajikistan in 2023: *Corimalia tadzhika* [Holotype (♂): Surkhku, Mt. Range, Nurekskoe Reservoir, 30 km upstream of Nurek City, on *Tamarix smyrnensis* Bunge, at spring, 12.V.1983] and first stated that it was closely related to *C. fausti* (Reitter) and belonged to what they called the „*C. fausti* group“, which in their opinion differed from other *Corimaliini* species by a very small mucro on the tip of the posterior tibiae of males. However, *C. fausti* is characterised above all by an almost square and white scutellar spot, a completely differently shaped aedeagus with notched tegminal plate and, in both sexes, a distinctly shorter and broader rostrum (about in comparison with *C. tadzhika*), which is shorter than the head and pronotum combined (see images of the lecto- and paralectotypes of *C. fausti fausti* in this catalogue). In fact, *Corimalia tadzhika* described by them,

if it is indeed to be a new taxon, seems to be very closely related to *Corimalia obscuripes* (Pic, 1913), which is supported by the extremely bottle-necked curved tip of a symmetrical aedeagus. The extreme and sudden tapering of the tip of the median lobus is indeed unique among the Corimaliini (see also Korotyaev 1996, Figs 5-7). This latter species was described from Iraq (Mesopotamia), and - also like the species from Tajikistan, whose fore femora have several denticles, too - does not seem to have a continuous, white-scaled, square scutellar spot. Whether the new species with its basal, white rows of scales on the 2nd elytral interval actually belongs to or is closely related to *Corimalia obscuripes* (and here to the *C. pallida* group!) cannot be answered conclusively at this point. It is also not clear whether this species from Iraq has also long hairs on the inside of the hind tibia of the males like the new (and some other Corimaliini) species. This would first require knowledge of the lecto- and paralectotypes from the Pic collection of the Muséum national d'histoire naturelle (Paris), which is currently inaccessible to us (neither cooperation nor lending), as well as molecular surveys, which of course should no longer be missing in a modern first description of morphologically very similar or nearly cryptic species.

Iraq ***Corimalia obscuripes* (Pic, 1913)**

Tajikistan ***Corimalia tadhika* Zherikhin & Korotyaev, 2023**

26 Body pale yellow (Fig. 24*, left); somewhat larger species (1.1 - 1.4mm); aedeagus (ventral) broadly rounded towards apex. Length: 1.1 - 1.6 mm. L.t.: Distribution: **E:** SP **N:** AG CI (Fuerteventura) EG MO TU **A:** IS YE AFR.

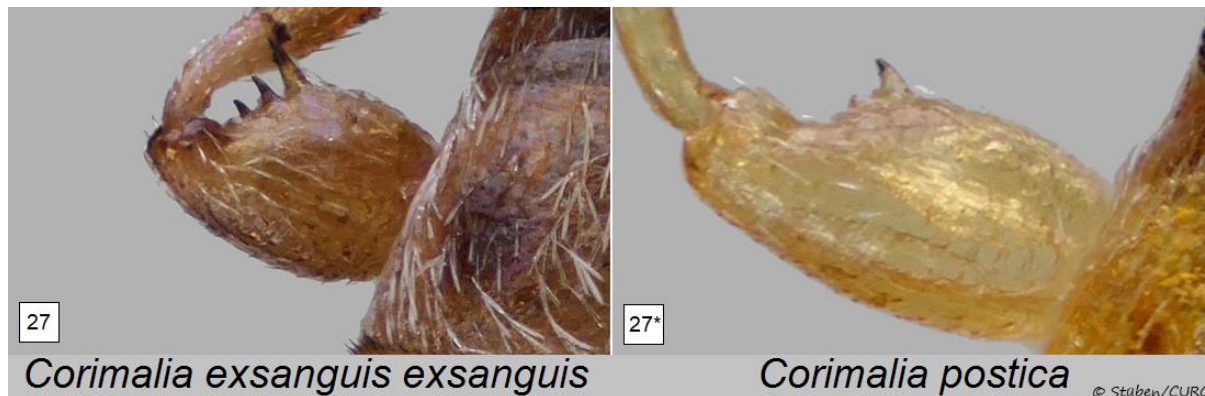
..... ***Corimalia martini* (H. Brisout de Barneville, 1883)**

26* Body yellow-red (Fig. 24*, right), pronotum darker; smaller species (< 1.1 mm); aedeagus (ventral) with flattened, broad apex (with concave sides in front of apex); even smaller species: 0.8 - 1.15 mm. L.t. Central Mongolia: Etsine River. Distribution: **A:** MG.

Nanophyes mongolicus Faust, 1890: **Designation of a lectotype** by P. Stüben (2023): 1 ♂ „Mongol.“ / „Nanoph. mongolicus m.“, coll Senckenberg, German Entomological Institute / Col. 17854 (Müncheberg, here also 2 further paralectotypes). See also the images of the lectotype (habitus & aedeagus) with the original labels in this catalogue.

..... *Corimalia mongolica* (Faust, 1890)

Elytra bi-coloured



Corimalia exsanguis exsanguis

Corimalia postica

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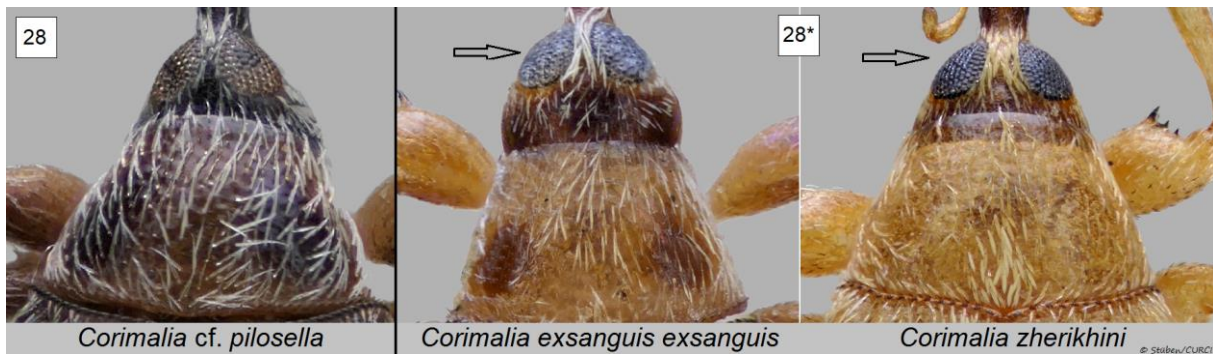
27 Fore femora with 3, usually very strong teeth.

..... **28**

27* Fore femora with only 1, much smaller, tooth and sometimes with another tiny denticle.

..... **30**

Fore femora with 3 teeth



[28 Body darker overall, pronotum, humeri, head and rostrum, as well as antennae, conspicuously dark brown; elytra strongly rounded, hardly longer than broad.
Distribution: Mongolia: Bayankhongor Province.

..... *Corimalia cf. pilosella* Voss, 1960]

28* Body pale yellow, pronotum, rostrum and antennae clearly yellow-brown; elytra slender, more elongated.

..... **29**

29 Smaller species: 1.2-1.8 mm; distance between eyes at most $\frac{1}{4}$ of the width of the rostrum (see Fig. 28*, left). (The first author was able to study lecto- and paralectotypes from the SDEI (Müncheberg) and the Senckenberg, Museum of Zoology (Dresden). This investigation revealed no 6th flagellar antennomere in this species, as claimed by Voss (1960). This 6th pseudoflagellar segment is the 4th, somewhat separated, segment of the club. His subgenus *Pseudocorimalia* is thus probably invalid). L.t. Afghanistan: Kandahar. Distribution: **A:** TM AF IN.

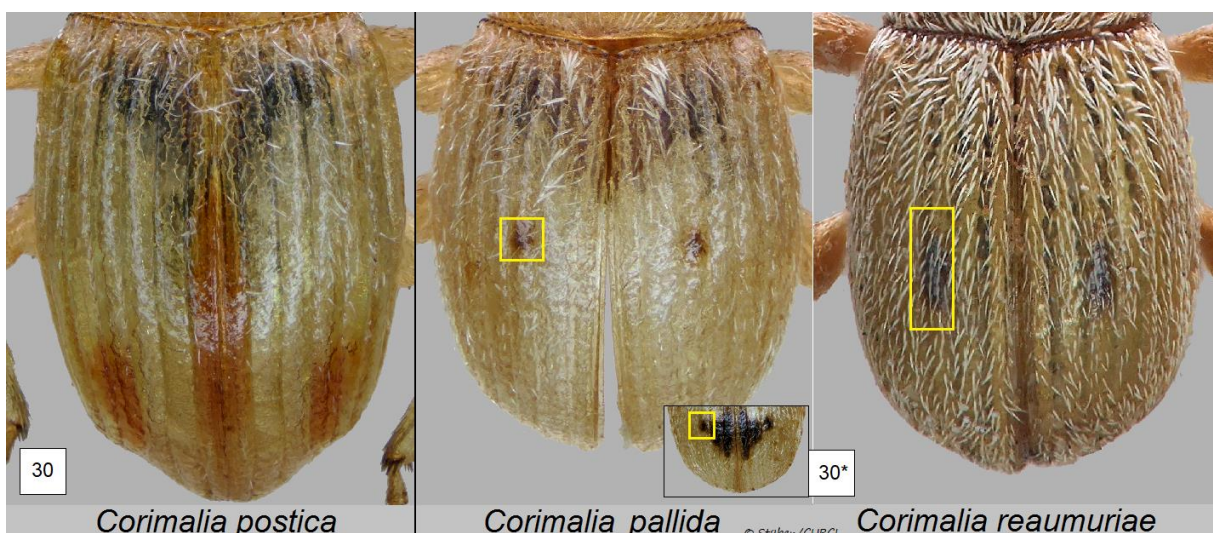
Corimalia exsanguis Voss, 1960: **Designation of a lectotype** by P. Stüben (2023): 1 ♂, „S. Afghan. 1953, J. Klapperich“ / Kandahar 950 m, 13.II.“, coll Senckenberg, Museum of Zoology (Dresden). 1 ♂, 1 ♀, paralectotypes, same locality (label), coll Senckenberg, Museum of Zoology (Dresden). 1 ♀, paralectotype, same locality (label), coll. Senckenberg, German Entomological Institute / Col. 17472 (Müncheberg). See also the images of the lectotype (habitus & aedeagus) with the original labels in this catalogue.

..... *Corimalia exsanguis exsanguis* Voss, 1960

29* Larger species: 1.6 - 2.0 mm; greater distance between eyes: at least half the width of the rostrum (see Fig. 28*, right). The extremely strong spines of the femora and in males the long pubescence on the inner sides of the hind tibiae are very noticeable features.
L.t. Turkey: Ankara.

..... ***Corimalia zherikhini* Schön in litt.**

Fore femora with (1-2) smaller teeth



30 Elytra with a broad, dark, orange or reddish-brown (partial) longitudinal stripe on the suture and the first interval; frequently with an additional orange longitudinal stripe on the 3rd and 4th interval of the elytral descent. Length: 1.4 - 2.4 mm. Lt: Southern France. Distribution: **E:** FR IT SP **N:** AG EG TU.

..... ***Corimalia postica* (Gyllenhal, 1838)**

30* Elytra without a darkened, broad stripe on the suture **and** the first interval (occasionally, however, with an indistinct narrow and darker stripe which is confined to the suture).

..... **31**

31 Endemic species on Gran Canaria (Canary Islands). Length: 1.3 - 1.6 mm. L.t. Gran Canaria. Distribution: **N:** CI (Gran Canaria).

..... ***Corimalia lunulata* (Wollaston, 1863)**

31* Species from the Mediterranean and Asia. (Here rarely with the hint of a narrow longitudinal stripe, which is, however, restricted to the suture).

..... **32**

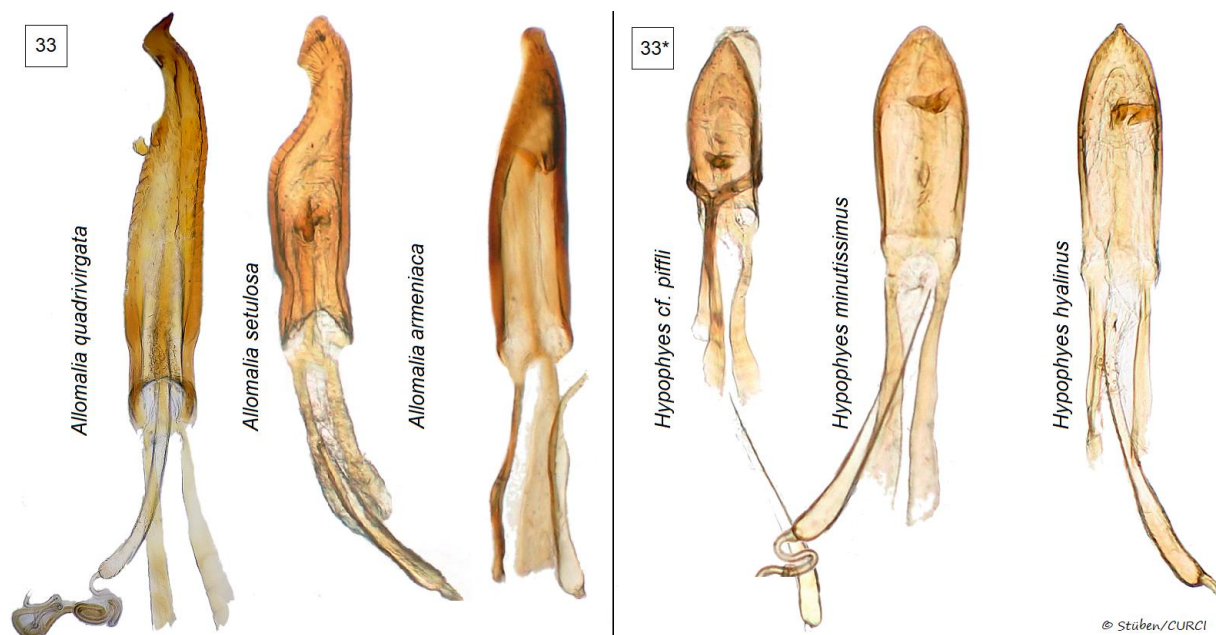
32 Elytra short-oval, paler, yellow; more sparsely set with fine hair-like scales; 3rd elytral interval often with a small brown-black spot in the middle (but there may be a completely different elytra pattern here (see Fig. 30* left, below) or no markings at all, see LZ 25 above). A species on *Tamarix* spp. Length: 1.8 - 2.25 mm. L.t.: Portugal. Distribution: **E:** CR FR GR IT MA PT SP **N:** AG EG LB TU **A:** IS LE SY.

..... ***Corimalia pallida* (Olivier, 1807)**

32* Elytra more elongate, darker, yellow-brown, more densely covered with long hair-like scales; 3rd elytra interval with an elongate brown-black spot in the middle (see Fig. 30* right). This species is said to live on *Reaumuria soongorica* (Pall.) Maxim. Length: 1.7-2.5 mm. L.t. Kyrgyzstan: Lake Issyk-Kul. Distribution: **A:** ES KI MG

..... ***Corimalia reaumuriae* (Zherikhin, 1984)**

Antennal flagellum with 4 antennomeres



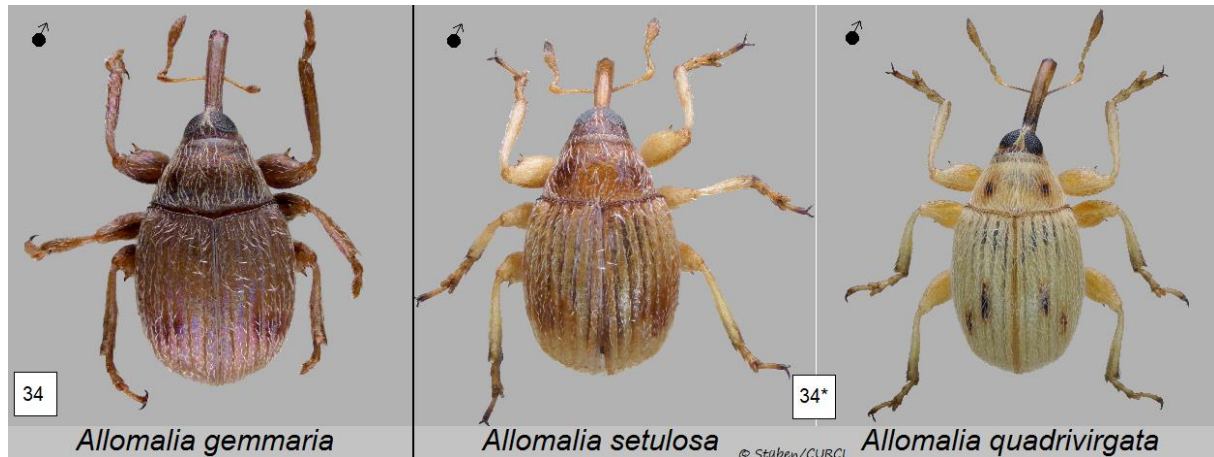
33 Median lobe of the aedeagus elongated, asymmetrical. [Not so easy for the authors to comprehend: ‚Basal margin of the elytra with distinct crenulations.‘]

***Allomalía Alonso-Zarazaga* 34**

33* Median lobe of aedeagus shorter, symmetrical. [Crenulations on the basal margin of the elytra indistinct: This feature, included by Alonso-Zarazaga, 1989, is not clear as the teeth are fused with, and the same colour as, the basal edge.]

***Titanomalia* Alonso-Zarazaga / *Hypophyes* Reitter 38**

Genus: *Allomalia*



34 Brown to dark brown species. (Very similar to *Allomalia setulosa* - also in the male genitalia! - and perhaps only a subspecies or merely a colour variant of the species already described by Tournier in 1868). Length: 1.3 - 1.7 mm. L.T.: Syria, distribution: **A:** SY YE, OM, IQ.

Nanophyes (Corimalia) gemmarius Faust, 1887: 210): **Designation of a lectotype** by P. Stüben (2023): 1 ♀ „Syria, Dohrn“, coll Senckenberg, Museum of Zoology (Dresden, here also 4 further paralectotypes). See also the image of the lectotype (habitus) with the original labels in this catalogue.

..... ***Allomalia* (?*setulosa*) *gemmaria* (Faust, 1887)**

34* Yellow to yellow-red species.

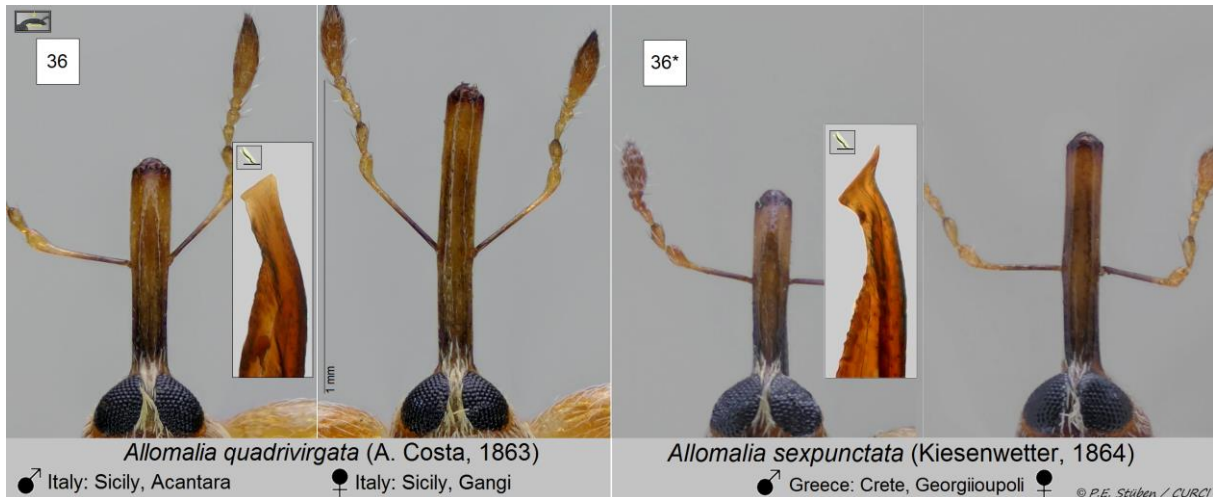
..... **35**

35 Larger species: 1.8 - 2.2 mm; if the elytra are spotted (which should always be the case in a series with several specimens), then staggered on the 2nd (in the middle) and 4th intervals (behind the middle) with long, narrow, dark brown markings (elytra thus in total with 4 long, line-like spots; see Fig. 34*, right)

..... **36**

35* Smaller species: 1.1 - 1.6 mm; if markings are present, then only behind the middle **at the same level** on the 2nd and 4th (sometimes as a continuous spot, see Fig. 34*, left) or only on the 4th interval as a broad bar.

..... **38**

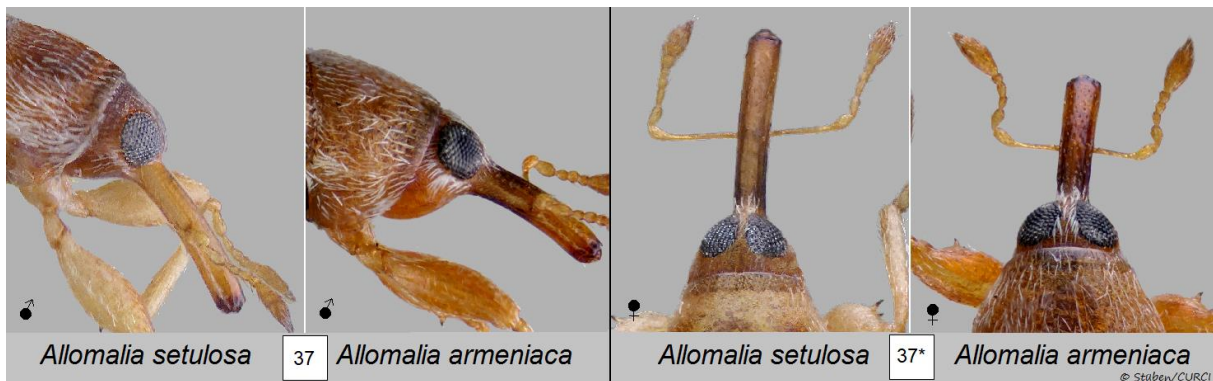


- 36** Rostrum of males at least 6x longer than wide between the antennal insertions, that of females even >8x longer than wide. Apex of aedeagus flatly "cut-off" (the entire median lobus wider, shorter). Length: 1.8 - 2.1 mm. L.t.: Italy, Calabria. Distribution: **E**: BU CR FR GR (Korfu) HU IT SP (Balearics) UK **N**: AG EG LB MO TU **A**: AB CY GG IS KZ SA SY UZ#.

..... **Allomalium quadrivirgata (A. Costa, 1863)**

- 36*** Rostrum of males at most **5.1x** longer than wide between the antennal insertions, that of females only **6x** longer than wide. Apex of aedeagus arrow-like elongated (the entire median lobus narrower, longer). Length: 1.8 – 2.2 mm. L.t.: Greece: Crete. Distribution: GR (mainland, Aegean)

..... **Allomalium sexpunctata (Kiesenwetter, 1864) resyn.**



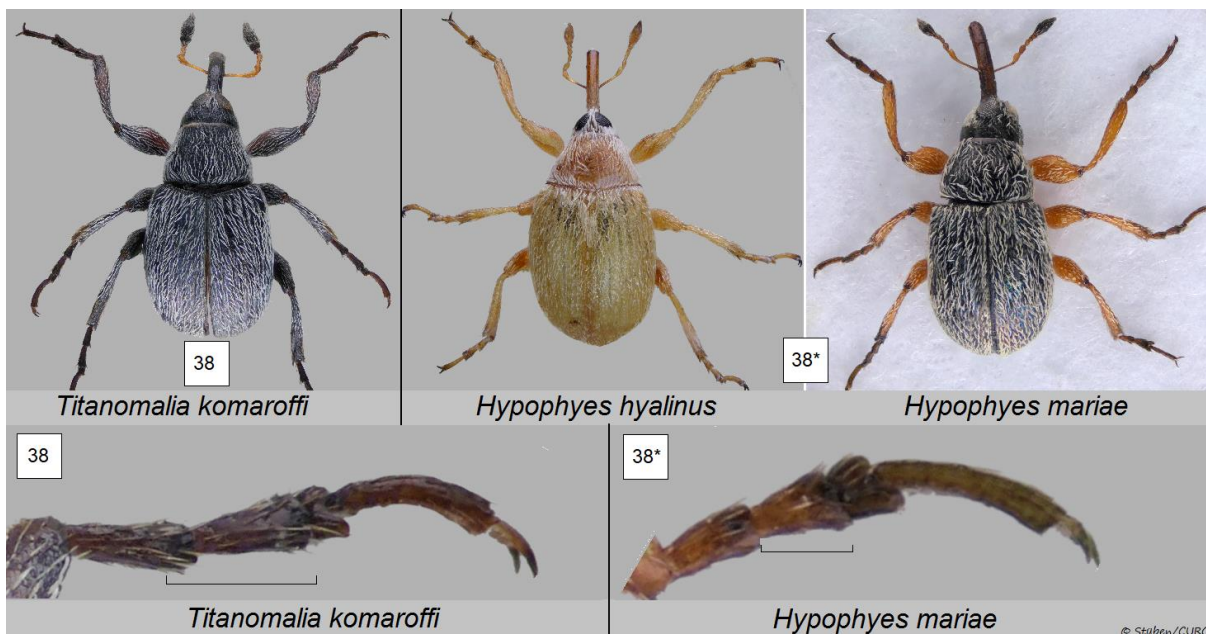
- 37** Elytra shorter (see Fig. 34*, left); rostrum of males at least as long as pronotum and head together, rostrum of females even longer; with 2 strong teeth on the fore femora (main tooth is curved dagger-like). Median lobe of aedeagus in lateral view with an elongated, hooked tip. Length: 1.1 - 1.5 mm. L.t.: Algeria: Sétif. Distribution: **E**: ST **N**: AG EG LB MO TU **A**: CY IS LE QA SI YE (Socotra) **AFR**.

..... **Allomalium setulosa (Tournier, 1868)**

- 37*** Elytra more elongated; rostrum conspicuously short, about the same length in both sexes and distinctly shorter than pronotum and head together; with only one short, fine denticle on the fore femora. Median lobe of aedeagus in lateral view with a simple, rounded tip. Size: 1.6 - 1.8 mm. L.t.: Turkey: Süleymanli near Kahramanmaras. Distribution: **A**: TU (Eastern Turkey).

..... **Allomalium armeniaca Stüben & Schön 2023**

Aedeagus symmetrical



38 Body (incl. femora and tibiae) black to brown-red. With conspicuously long and narrow fore tarsi; these as long as, or longer than, the fore tibia: 2nd fore tarsomere slender, at least 2.5 times longer than wide.

Titanomalia Alonso-Zarazaga **39**

38* Body yellow to brown; if head, pronotum and elytra black, then at least legs yellow-red (see *Hypophyes mariae*). 2nd fore tarsomere shorter, at most 1.5x longer than wide.

Hypophyes Reitter **40**

Genus: *Titanomalia*



39 Smaller species: 2.2 – 2.5 mm. Body black, with dense woolly hairs; fore femora clearly toothed; L.t. Dagestan: Derbent on *Tamarix laxa* Willd. L.t.: Dagestan: Derbend. Distribution: **E**: ST **A**: AB.

..... *Titanomalia komaroffi* (Faust, 1877)

- 39*** Larger species: 3 – 4 mm. Body brown-red, sparsely hairy, fore femora not toothed; L.t. Tajikistan: Kuljab, Ak-Sou Valley (Jachsou Valley). **A:** TD KZ.
 *Titanomalía valida* (Formáneċ & Melichar, 1916)

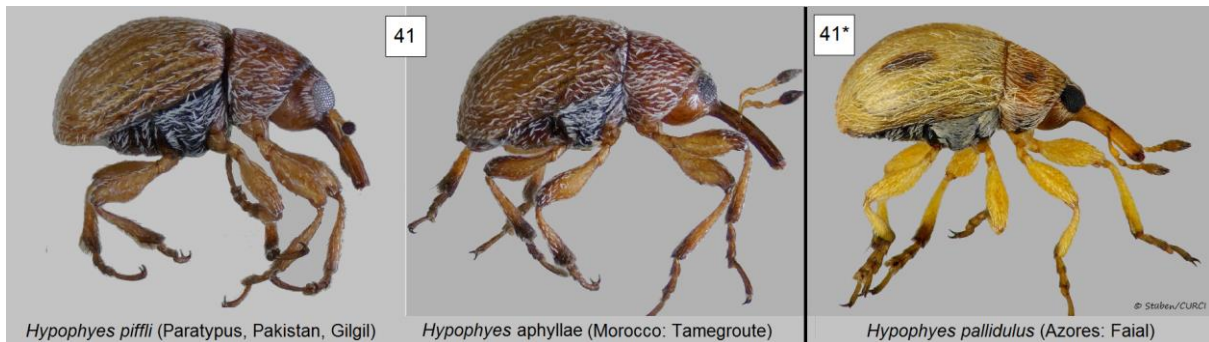
Genus: *Hypophyes*

- 40** Elytra, pronotum, head and antennal club black; legs, rostrum and antennal flagellum lightened to yellow-red (see Fig. 38*, right). Length: 1.11 - 1.51 mm. L.t. Iran: Semnan. Distribution: **A:** IN.

..... *Hypophyes mariae* Košťál, 2017

- 40** Body not black, but (light) yellow, yellow-brown or dark brown.

..... **41**

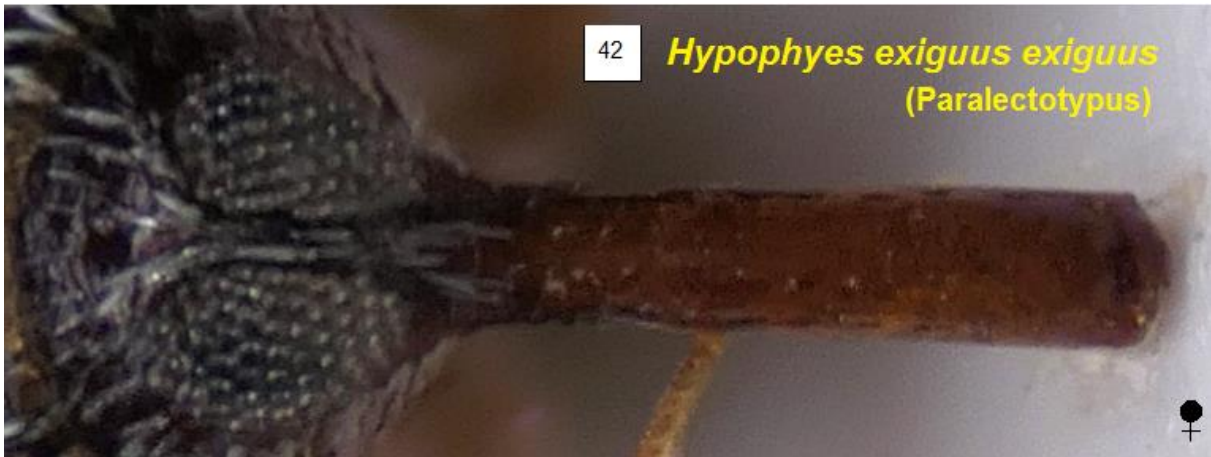


- 41** Dark brown species.

..... **42**

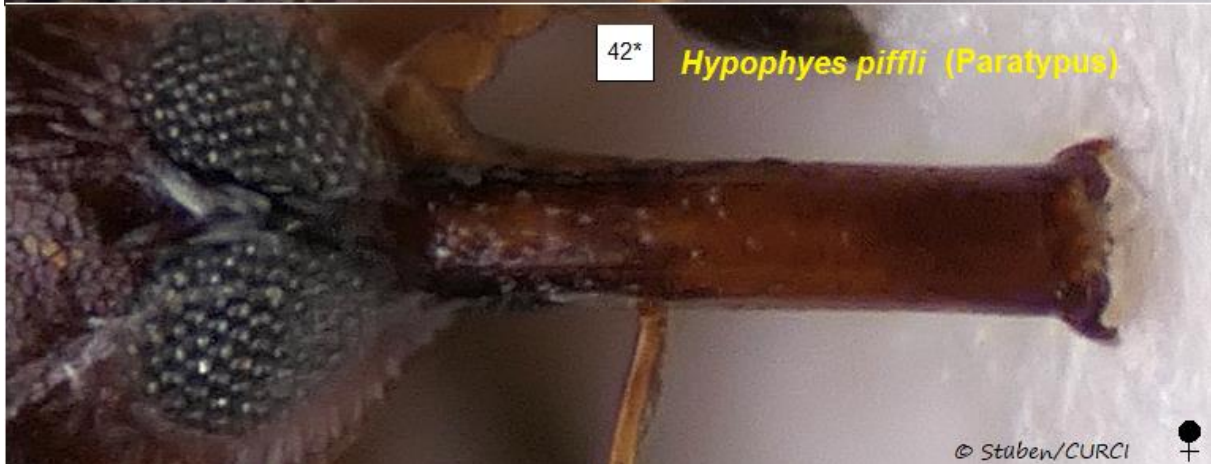
- 41*** Light yellow and yellow-brown species.

..... **44**



42

Hypophyes exiguus exiguus
(Paralectotypus)



42*

Hypophyes piffli (Paratypus)

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42 Rostrum slender (especially near the base), also appears to be slightly longer; the rostrum of females almost as long as pronotum and head together. Length: 0.9 - 1.1 mm. L.t.: "Etsine River, in central Mongolia". Distribution: **A**: MO.

..... *Hypophyes exiguus exiguus* (Faust, 1890)

42* Rostrum shorter, stouter and parallel-sided; also that of the females hardly longer than the pronotum. Nevertheless, even this distinction remains **marginal** (especially since the aedeagi do not show any differences in all three species). [Conclusion: The two following species could therefore each be a younger synonym of *Hypophyes exiguus exiguus*. Only molecular studies will be able to prove this with certainty and, if necessary, only after that will one be able to start looking for species-specific characteristics].

..... **43**



43

Hypophyes piffli



43*

Hypophyes aphyllae

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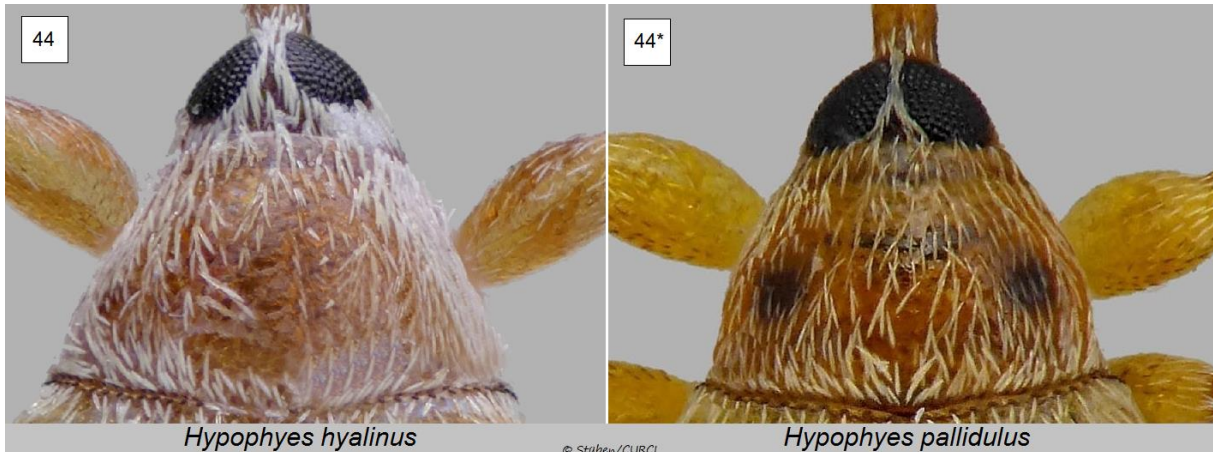
43 Pronotum more rounded laterally, widest further in front of the base. Length: (0.9) 1.2 - 1.3mm. L.t. Pakistan: Gilgit. Distribution: **A:** PA.

..... *Hypophyes piffli* (Voss, 1964)

43* Pronotum rather trapezoidal; widest just before the base. Length: 0.8-1.1mm. L.t. Algeria (Central Sahara): Hoggar Mts., In-Iker. Distribution: **N:** AG, MO, EG **A:** AB IQ QA SI TM TR UZ.

..... *Hypophyes aphyllae* (Peyerimhoff, 1929)

Yellow Species

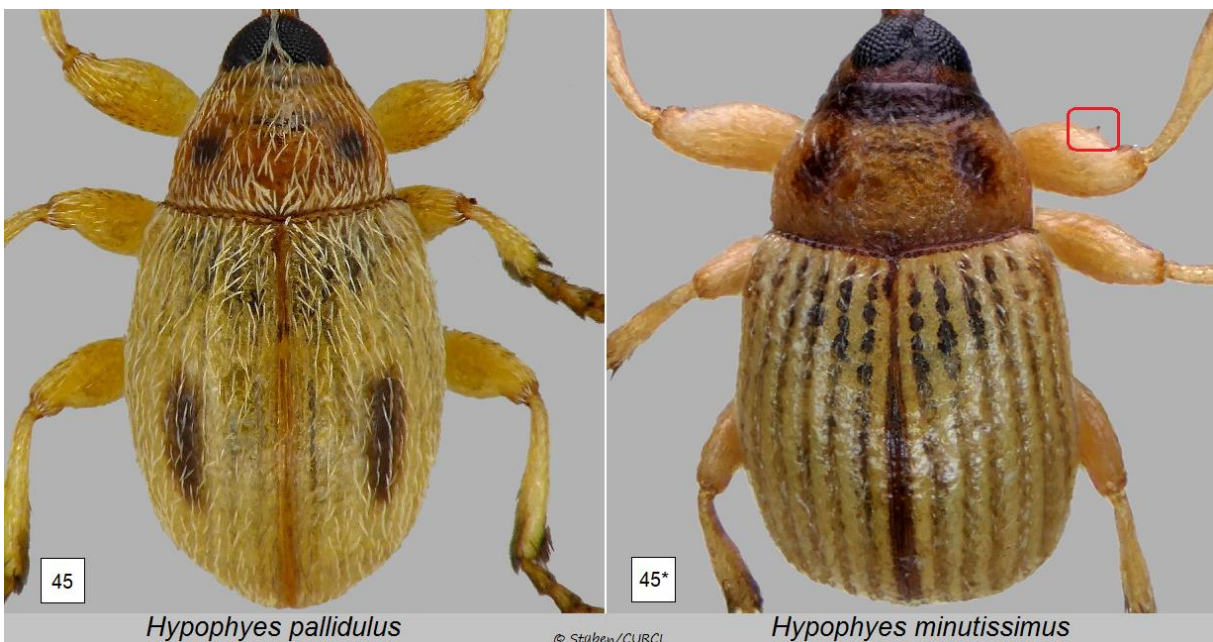


44 Pronotum trapezoidal, with straight sides; striae of elytra fine, much narrower than intervals; the fine punctures of the striae practically not visible. Length: 1.5 - 1.8 mm. L.T. Mongolia: near Bulgan. Distribution: **E:** ST **A:** KZ UZ MG WS.

..... *Hypophyes hyalinus* (Zherikhin, 1972)

44* Pronotum broader, with convex sides on posterior half; striae of elytra deeper, partly as wide as intervals, with strong, large punctures. Smaller species: <1.4 mm.

..... **45**



45 Fore femora without denticles; elytra often somewhat more elongate (almost always with two distinct longitudinal ridges on the 3rd and 4th interval behind the middle). Punctures

of the striae do not extend to the intervals; sides of the pronotum slightly convex. Length: 1.0 - 1.65 mm. L.t.: <not specified>. Distribution: **E:** FR IT PT SP SZ **N:** AG TU.

..... ***Hypophyes pallidulus* (Gravenhorst, 1807)**

45* Fore femora with 1 tiny denticle; elytra shorter, stockier, (occasionally with a few dark spots); striae with a deep and broad puncturation encroaching on the intervals; pronotum cushion-shaped, sides strongly convex. Length: 1.0 - 1.4 mm. L.t. Algeria: Sétif.

Distribution: **E:** SP ST "Caucasus" **N:** AG EG LB TU **A:** AF CY IQ SI TR TM **AFR**

..... ***Hypophyes minutissimus* (Tournier, 1868)**

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Acknowledgement

We thank Adrian Fowles (Wales) for the linguistic corrections.