

**Studies of the genus *Anthelephila* Hope (Coleoptera: Anthicidae)
18. New species and records from the Palearctic region**

**Studie rodu *Anthelephila* Hope (Coleoptera: Anthicidae)
18. Nové druhy a nálezy z Palearktické oblasti**

Zbyněk KEJVAL

Muzeum Chodska, Chodské náměstí 96, Domažlice CZ-344 01, Czech Republic;
e-mail: anthicid@seznam.cz

Abstract. Six species of *Anthelephila* Hope, 1833 are newly described: *A. achaemenis* sp. nov. (Iran), *A. anki* sp. nov. (Iraq), *A. atayalorum* sp. nov. (Republic of China: Taiwan), *A. mansoori* sp. nov. (India: Uttarakhand), *A. moratrix* sp. nov. (India: Arunachal Pradesh), and *A. merkli* sp. nov. (Republic of China: Taiwan). In addition, the first records of *A. muelleriana* (Pic, 1955) from the Palearctic Region (Yemen) are presented.

Coleoptera, Anthicidae, *Anthelephila*, new species, faunistics, Palearctic Region

INTRODUCTION

The present paper is another contribution in a series dealing with the taxonomy and faunistics of the large genus *Anthelephila* Hope, 1833. It comprises mainly the description of five new species, distributed in northern India, Iran, Iraq, and the Republic of China (Taiwan).

MATERIAL AND METHODS

Specimens were examined using a Leica MZ 9.5 stereomicroscope; morphological measurements were taken with an ocular graticule. Male genitalia were examined after being cleared in a hot 10% KOH solution and then placed on the same card in water-soluble dimethyl hydantoin formaldehyde resin (DMHF). Illustrations were made using a drawing tube attached to an Olympus CH-2 compound microscope. Photographs were taken using a Nikon Coolpix 4500 digital camera attached to a Leica MZ 9.5 trinocular stereomicroscope; images of the same specimen at different focal planes were combined with Helicon Focus 5.2 Pro and edited with Adobe Photoshop 9.0.2. software.

Separate labels are indicated by double slash (//) and comments on specimens and label data are placed in square brackets. Label data are quoted exactly for types and rewritten for clarity for the additional specimens. Terminology of body setae follows WERNER & CHANDLER (1995).

The following abbreviations are used: lgt. – collected by; prov. – province; [h] – handwritten; [p] – printed.

Acronyms of depositories: ADBC – Augusto Degiovanni collection, Bubano, Italy; HHNM – Hungarian Natural History Museum, Budapest, Hungary; NHMW – Naturhistorisches museum, Wien, Austria; NMPC – National Museum, Prague, Czech Republic; SMNS – Staatliches Museum für Naturkunde, Stuttgart, Germany; ZKDC – Zbyněk Kejval collection, Domažlice, Czech Republic; ZSMC – Zoologische Staatssammlung München, Germany.

RESULTS

***Anthelephila achaemenis* sp. nov.**
(Figs 1–4)

Type locality. Iran, Fars Province, 7 km NW of Shul, 30°02'N 52°09'E, 2100 m.

Type material. Holotype, ♂: “S. Iran, 7 km NW Shul, 2100 m 17.6.1973 [p] // Loc. no. 247

Exp. Nat. Mus. Praha [p]” (NMPC). Paratypes: 1 ♀, same data as holotype (NMPC); 1 ♂, same data, in addition: “*Anthelephilus viridipennis* (Krekich) det. G. Uhmann 1983 [p+h]” (ZKDC). **Additional material. Iran:** 2 ♂♂, Buyer Ahmad-o-Kuhgiluyeh prov., 5–9 km E of Si Sakht, 1700–4000 m, 11.vii.2003, I. Jeniš lgt. (ZKDC); 1 ♂, Fars prov., 30°22'0.768"N 51°53'59.748"E, NW of Sepidan, Poolad Kaf, 9.vi.2014, S. Murzin lgt. (ZKDC).

Description. Male (holotype). Body length 3.5 mm. Head and pronotum reddish brown, elytra brown, antennae and legs reddish brown.

Head 1.2 times as long as wide, slightly unevenly rounded posteriorly, clearly differentiated from short neck; tempora narrowing posteriorly, posterior angles absent. Eyes small, only moderately convex. Dorsal surface glossy, distinctly punctate; punctures distinctly separated. Setae mostly subdecumbent; few, short tactile setae. Antennae robust, moderately enlarged in terminal third; antennomere I 1.6 times, X 1.3 times, XI 2.3 times as long as wide.

Pronotum 1.3 times as long as wide, slightly narrower than head including eyes, nearly evenly rounded anteriorly, strongly narrowed and impressed (constricted) postero-laterally in dorsal view; pronotal disc convex and evenly sloping towards base in lateral view. Surface glossy, smooth; disc rather coarsely and densely punctate; lateral sides minutely, sparsely punctate, impunctate near coxal cavities; postero-lateral impressions with several, very short, inconspicuous wrinkles. Setae as on head.

Both meso- and metaventrite simple.

Elytra 1.6 times as long as wide, longitudinally oval, truncate apically; humeri and post-scutellar impression absent. Surface glossy, distinctly punctate; punctation distinctly double and rather evenly developed, setiferous punctures widely separated. Setae uniform, coarser and distinctly longer than on head, subdecumbent; some short tactile setae.

Metathoracic wings absent or at least strongly reduced.

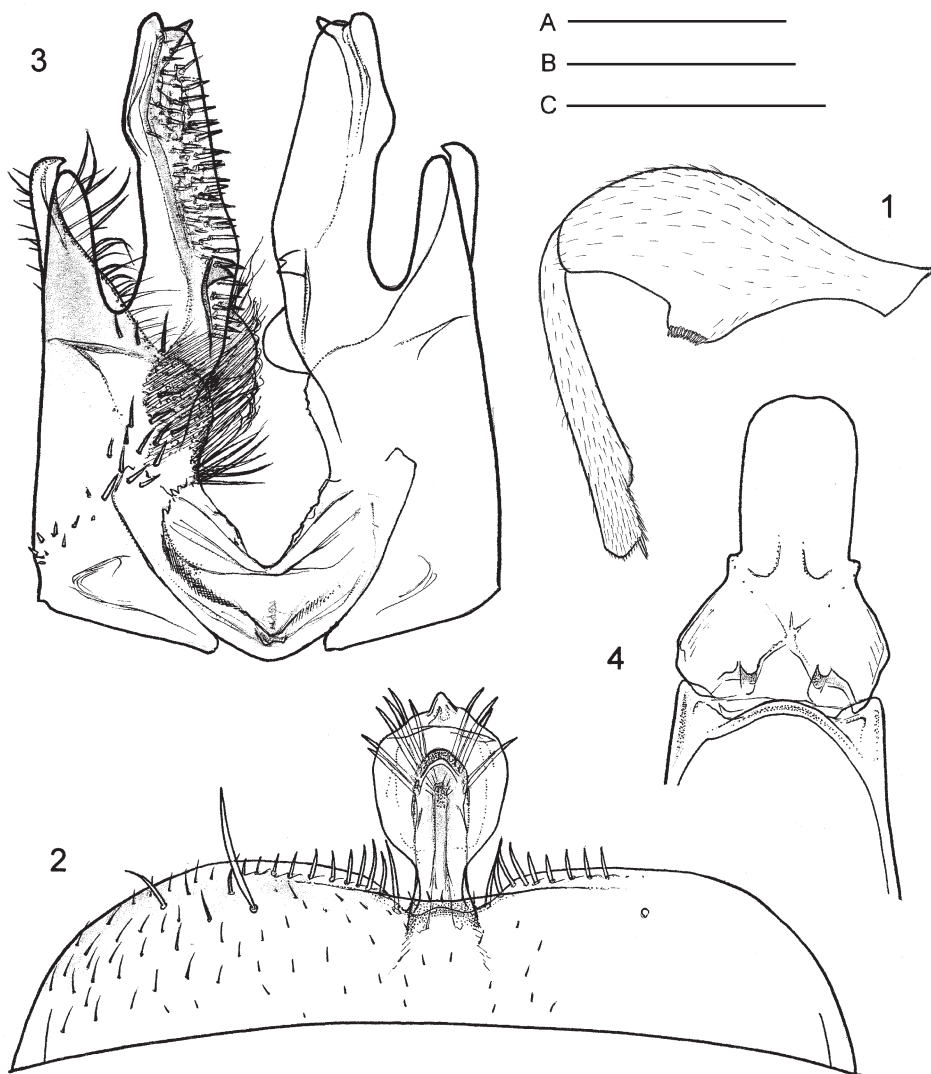
Fore legs modified (Fig. 1); profemoral process robust, obliquely truncate, bearing dense fringe of stiff setae; protibiae with short, longitudinal protrusion in distal third; terminal spurs of tibiae simple, subequal; penultimate tarsomere rather small and narrow, nearly cylindrical and with terminal tarsomere articulated apically in metatarsi. Setation normally developed.

Abdominal sternum VII (Fig. 2) with conspicuous, spoon-like median process, projecting from inner side, and bearing several longer, coarse setae on dorsal side. Sternite VIII (Fig. 3); paired prongs bilobed and with robust ventro-lateral projection. Tergum VII widely rounded posteriorly, with slightly produced apex, lacking spinulose patches (related to aptery). Tergite VIII forming a pair of simple sclerites, narrowly connected medially, rounded apically. Apical sclerite of segment IX membranous, subtriangular, moderately angled apically. Aedeagus (Fig. 4); apical portion of tegmen 0.5 as long as basal-piece, simply, inconspicuously trilobed apically (lateral lobes minute, indicated at base of large median lobe).

Female. Externally differing from male by simple front legs and abdominal sternum VII (latter slightly angled apically); tergum VII subtriangular, narrowly rounded apically.

Variation. Body length 3.3–3.7 mm. The three males from Si Sakht and Poolad Kaf are moderately aberrant in their male characters, e.g. smaller profemoral process, simple projection of protibiae (typically slightly sinuous), paired prongs simply rounded apically, distally on inner side with numerous denticles, but nearly asetose (general form of prongs is identical).

Differential diagnosis. *Anthelephila achaemenis* sp. nov. is undoubtedly very close to *A. persica* (Kejval, 2000) from Iran and *A. anki* sp. nov. from Iraq. It can hardly be distinguished using external characters, perhaps except for the truncate elytral apices (at most subtruncate in *A. anki* sp. nov., rather rounded in *A. persica*) and coarser punctation of head and pronotal



Figs 1–4. *Anthelephila achaemenis* sp. nov. (male, holotype): 1 – anterior femur and tibia; 2 – sternum VII; 3 – prolegs of sternite VIII; 4 – apical portion of tegmen. Scale (0.5 mm): A – Fig. 1; (0.2 mm): B – Fig. 3; C – Figs 2, 4.
 Obr. 1–4. *Anthelephila achaemenis* sp. nov. (samec, holotyp): 1 – přední stehno a holeň; 2 – sternum VII; 3 – párové výběžky sternitu VIII; 4 – apikální část tegmenu. Měřítko (0,5 mm): A – Obr. 1; (0,2 mm): B – Obr. 3; C – Obr. 2, 4.

disc (rather minutely punctate in *A. anki* sp. nov., but a frequently variable character in *Anthelephila* species generally). It shares some male characters with *A. persica* (simple sternum III, similar sternum VII, shape of protibiae), but clearly differs by the very short lateral lobes of the tegmen apex, and by the rather dissimilar morphology of sternum VIII.

Distribution. Iran.

Etymology. Named after Achaemenes, the king of Persia and the eponymous founder of the Achaemenid dynasty; noun in the genitive case.

Remarks. The type locality of *Anthelephila achaemenis* sp. nov. is specified and supplemented by coordinates given by Hoberlandt (1981). Being apterous and distributed in rugged mountainous regions, it may form aberrant populations or even geographical subspecies. On the other hand, the available material is very limited and especially Si Sakht (probably Sisakht, 30°51'50"N 51°27'21"E) is not far from the type locality. For these reasons, the three somewhat aberrant males (see Variation) are listed under Additional Material and their identification should be taken as tentative.

Anthelephila anki sp. nov.

(Figs 5–8, 20)

Type locality. Iraq, Diyala Governorate, SW of Khanaqin, Kizil Robat.

Type material. Holotype, ♂: "251 Under clods Kisil Robat Mesopotamia W. E. Evans. 26.12.18 [h] // 251a [h] // 7. near pedestris det. K. G. Blair [p+h] // *Anthelephilus viridipennis* Krekich det. G. Uhmman 1988 [p+h]" (NHMW).

Description. Male (holotype). Body length 3.9 mm. Head and pronotum reddish brown, elytra brown, antennae and legs reddish brown, femora moderately darker distally.

Head 1.3 times as long as wide, evenly rounded posteriorly, clearly differentiated from short neck; tempora narrowing posteriad, posterior angles absent. Eyes small, only moderately convex. Dorsal surface glossy, distinctly punctate; punctures rather widely separated. Setae mostly subdecumbent; few, short tactile setae. Antennae robust, moderately enlarged in terminal third; antennomere 1.6 times, X 1.4 times, XI 2.1 times as long as wide.

Pronotum 1.4 times as long as wide, slightly narrower than head including eyes, nearly evenly rounded anteriorly, strongly narrowed and impressed (constricted) postero-laterally in dorsal view; pronotal disc convex and evenly sloping towards base in lateral view. Surface glossy, smooth; disc minutely but distinctly punctate; lateral sides impunctate near coxal cavities, postero-lateral impressions with several, very short, inconspicuous wrinkles. Setae as on head.

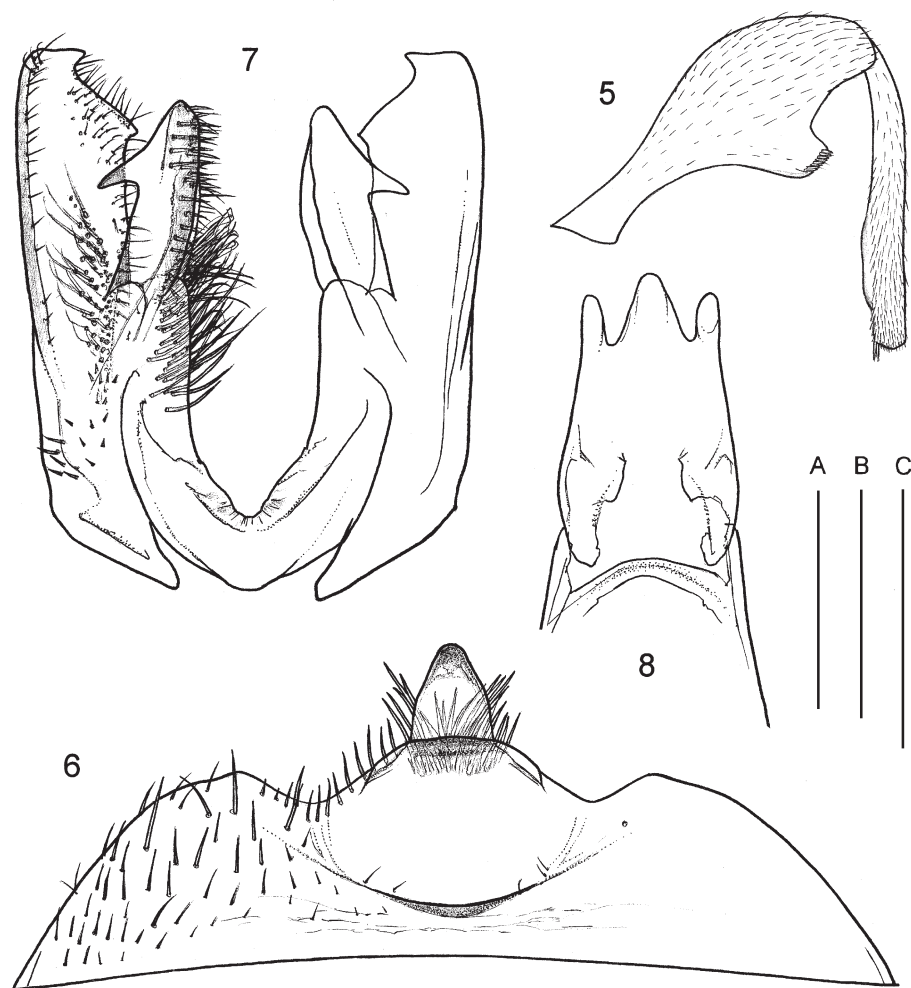
Both meso- and metaventrite simple.

Elytra 1.7 times as long as wide, longitudinally oval, subtruncate apically (Fig. 20); humeri and postscutellar impression absent. Surface glossy, distinctly punctate; punctation double and rather evenly developed, setiferous punctures widely separated. Setae uniform, coarser and distinctly longer than on head, subdecumbent; some short tactile setae.

Metathoracic wings absent or at least strongly reduced.

Fore legs modified (Fig. 5); profemoral process robust, obliquely truncate, bearing dense fringe of stiff setae; protibiae with smooth, moderately projecting edge in distal half; terminal spurs of tibiae simple, subequal; penultimate tarsomere rather small and narrow, nearly cylindrical and with terminal tarsomere articulated apically in metatarsi. Setation normally developed.

Abdominal sternum III with shallow, impunctate median longitudinal impression. Sternum VII (Fig. 6) rather distinctly impressed to excavate medially, its posterior margin sinuous (lobed medially), with wider median process and some longer coarse setae on inner side. Sternite VIII (Fig. 7); paired prongs robust, bifurcate. Tergum VII somewhat unevenly roun-



Figs 5–8. *Anthelephila anki* sp. nov. (male, holotype): 5 – anterior femur and tibia; 6 – sternum VII; 7 – prongs of sternite VIII; 8 – apical portion of tegmen. Scale (0.5 mm): A – Fig. 5; (0.2 mm): B – Fig. 7; C – Figs 6, 8.

Obr. 5–8. *Anthelephila anki* sp. nov. (samec, holotyp): 5 – přední stehno a holeň; 6 – sternum VII; 7 – párové výběžky sternitu VIII; 8 – apikální část tegmenu. Měřítko (0,5 mm): A – Obr. 5; (0,2 mm): B – Obr. 7; C – Obr. 6, 8.

ded posteriorly, lacking spinulose patches (related to aptery). Tergite VIII forming a pair of simple sclerites, narrowly connected medially, rounded apically. Apical sclerite of segment IX membranous, widely rounded to subtruncate posteriorly. Aedeagus (Fig. 8); apical portion of tegmen about 0.4 times as long as basal-piece, trilobed apically.

Female. Unknown.

Differential diagnosis. *Anthelephila anki* sp. nov. is undoubtedly close to *A. persica* and *A. achaemenis* sp. nov. from Iran, differing by the comparatively long profemoral process

(rather short and wide in *A. persica*), longer carina of protibiae, by the presence of a median longitudinal impression of male sternum III, subequal apical lobes of tegmen (middle lobe much larger in *A. achaemenis* sp. nov.), and by the morphology of male sternum VII and sternite VIII (cf. Figs 6, 7 versus 2, 3).

Distribution. Iraq.

Etymology. The species name is the Sumerian word for universe (an-ki), which refers to the god An and the goddess Ki; noun in apposition.

***Anthelephila atayalorum* sp. nov.**

(Figs 9–12, 21)

Type locality. Republic of China, Taiwan Island, Nantou County, Wushe.

Type material. Holotype, ♂: “REP. OF CHINA FORMOSA (TAIWAN) WUSHE 2.-6.6.2002 MORAVEC PETR [P. Moravec lgt.; p]” (NMPC).

Description. Male (holotype). Body length 4.2 mm. Head and pronotum reddish brown, elytra brown black, with reddish transverse band in basal fourth, narrowly interrupted medially on suture (Fig. 21); antennae largely brown black, basal 2–3 antennomeres reddish; legs reddish brown, tibiae and metafemora darker, nearly brown black.

Head 1.2 times as long as wide, semioval posteriorly, barely differentiated from short neck; tempora strongly narrowing posteriad, posterior angles absent. Eyes small, convex. Dorsal surface glossy, distinctly punctate, with some wrinkles along median margin of eyes; punctures distinctly separated. Setae mostly subdecumbent; several longer tactile setae. Antennae moderately enlarged in terminal third; antennomere I 1.7 times, X 1.5 times, XI 2.3 times as long as wide.

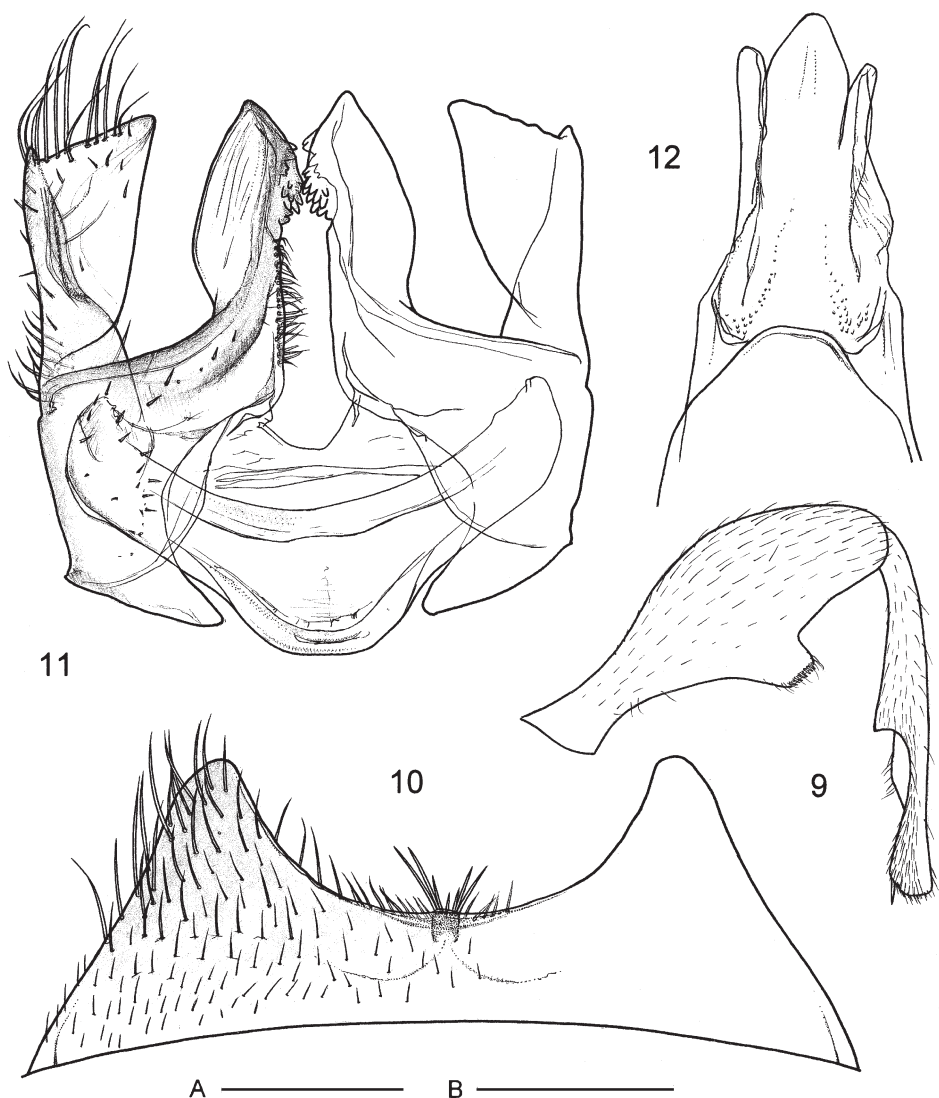
Pronotum comparatively short, 1.3 times as long as wide, slightly narrower than head including eyes, nearly evenly rounded anteriorly, narrowed and moderately impressed (constricted) postero-laterally in dorsal view; pronotal disc convex and evenly sloping towards base in lateral view. Surface glossy and largely smooth; disc distinctly punctate, similarly to head, lacking posterior transverse corrugation; lateral sides impunctate near coxal cavities, postero-lateral impressions distinctly wrinkled, also adjacent dorso-lateral strip with some traces of longitudinal wrinkles. Setation as on head.

Mesoventrite with indication of wider median longitudinal bulge; metaventricle simple.

Elytra 1.6 times as long as wide, longitudinally oval, conjointly rounded apically; humeri distinct, postscutellar impression absent. Surface glossy, distinctly punctate; punctuation double and rather evenly developed, setiferous punctures widely separated. Setae uniform, distinctly longer than on head, decumbent; some tactile setae.

Fore legs modified (Fig. 9); profemoral process robust, subtruncate, bearing dense fringe of stiff setae; protibiae with conspicuous tooth-like process medially at about mid-length, excavate, with edge margins in distal half; terminal spurs of tibiae simple, subequal; penultimate tarsomere widened/flattened distally, with terminal tarsomere articulated dorsally near base in all tarsi. Setation normally developed.

Abdominal sternum IV with a pair of small protrusions medially close before posterior margin. Sternum VII deeply emarginate, with small median process on inner side (Fig. 10). Sternite VIII (Fig. 11); paired prongs bifurcate, lateral arms lobed, median arms with peculiar verrucose structure medially. Tergum VII subtruncate posteriorly. Tergite VIII



Figs 9–12. *Anthelephila atayalorum* sp. nov. (male, holotype): 9 – anterior femur and tibia; 10 – sternum VII; 11 – prongs of sternite VIII; 12 – apical portion of tegmen. Scale (0.2 mm): A – Figs 10, 11; B – Fig. 12; (0.5 mm): B – Fig. 9. Obr. 9–12. *Anthelephila atayalorum* sp. nov. (samec, holotyp): 9 – přední stehno a holeň; 10 – sternum VII; 11 – párové výběžky sternitu VIII; 12 – apikální část tegmenu. Měřítka (0,2 mm): A – Obr. 10, 11; B – Obr. 12; (0,5 mm): B – Obr. 9.

forming a pair of sclerites, narrowly connected medially, with coarse transverse carina extending from median connection. Apical sclerite of segment IX membranous, narrowed and pointed posteriorly. Aedeagus (Fig. 12); apical portion of tegmen 0.7 times as long as basal-piece, trilobed apically.

Female. Unknown.

Differential diagnosis. *Anthelephila atayalorum* sp. nov. appears to be close to a group of several species keyed by Kejval (2002) in the differential diagnosis of *A. taliana* (Pic, 1913), as suggested by the presence of paired median protrusions of male sternum IV and similar general morphology of male sternite VIII. It differs clearly by the more robust, apically wider male profemoral process, deeply excavate male protibiae, rather small median process of male sternum VII (projecting from inner side), and by shape of the paired prongs of male sternite VIII.

Distribution. Republic of China (Taiwan).

Etymology. Named after the Atayal people, one of the major ethnic groups inhabiting the central part of Taiwan, including Nan Tou County; noun in the genitive case.

Anthelephila mansoori sp. nov.

(Figs 13, 22)

Type locality. India, Uttarakhand, Mussoorie.

Type material. Holotype, ♂: "INDIA VII.1992 Mussoorie, U. P. Werner leg. [p; yellow label; Karl Werner lgt., U. P. = Uttar Pradesh] // Formicomus braminus Laferté det. G. Uhmann 1993 [p+h]" (NMPC).

Description. Female (holotype). Body length 3.1 mm. Head and pronotum reddish, elytra largely brown black, reddish in basal third/fourth, slightly darkened on humeri (Fig. 22); antennae and legs reddish, antennomeres IX and X slightly darker.

Head 1.3 times as long as wide, semioval posteriorly, clearly differentiated from short neck; tempora distinctly narrowing posteriorly, posterior angles absent. Eyes small, moderately convex. Dorsal surface glossy, distinctly punctate, corrugated in anterior half; punctures distinctly separated, sparser at base. Setae mostly subdecumbent; few short tactile setae. Antennae moderately enlarged in terminal third; antennomere I 2.5 times, X 1.4 times, XI 1.9 times as long as wide.

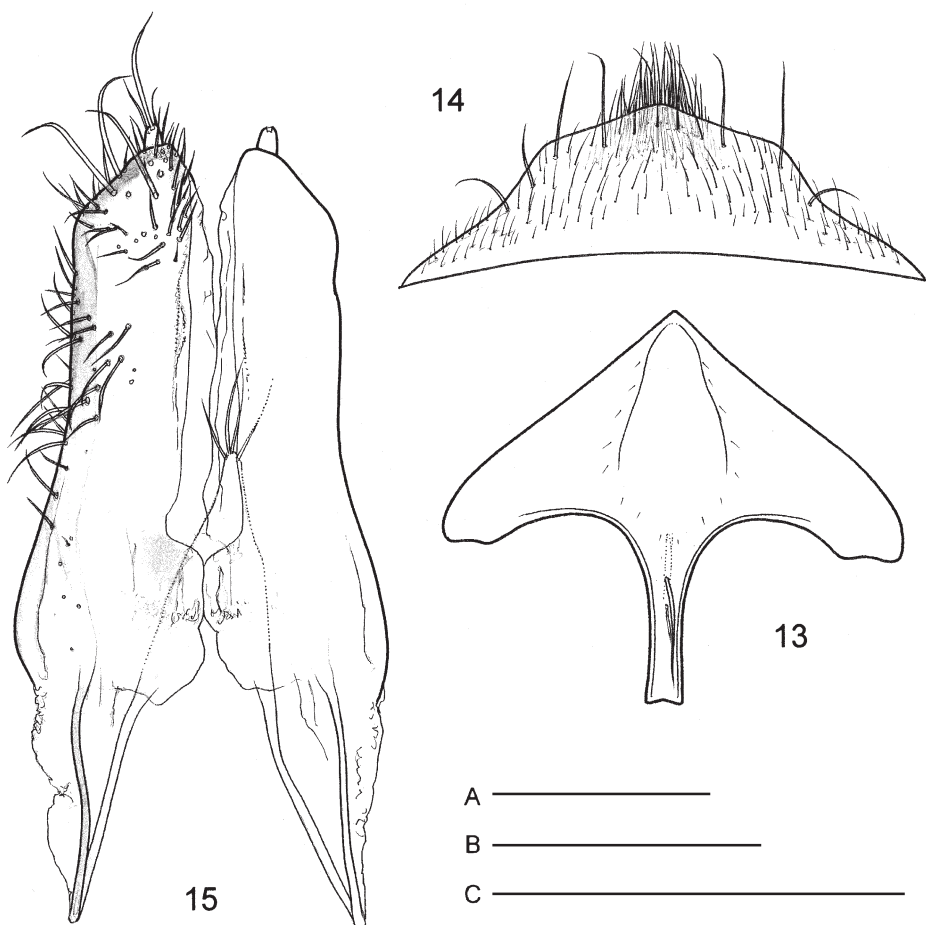
Pronotum 1.5 times as long as wide, distinctly narrower than head including eyes, evenly rounded anteriorly, strongly narrowed and impressed (constricted) postero-laterally in dorsal view; pronotal disc convex in anterior half, flattened and with slight indication of posterior bulge in lateral view. Surface glossy; disc longitudinally corrugated, with some transverse wrinkles (at place of posterior bulge) before smooth antebasal area; lateral sides smooth, minutely sparsely punctate, impunctate near coxal cavities, postero-lateral impressions conspicuously wrinkled. Setation as on head.

Mesoventrite with moderately wide, flattened, laterally rather sharply delimited median longitudinal bulge (Fig. 13), with slight indication of median longitudinal carina posteriorly; metaventrite simple.

Elytra 1.8 times as long as wide, longitudinally oval, conjointly rounded apically; humeri distinct, postscutellar impression moderate. Surface glossy, distinctly punctate; punctation double and rather evenly developed, setiferous punctures widely separated. Setae uniform, coarser and distinctly longer than on head, subdecumbent; numerous, somewhat longer tactile setae.

Legs simple; penultimate tarsomere widened/flattened distally, with terminal tarsomere articulated dorsally near base in all tarsi.

Abdominal sternum VII simple, moderately angled apically; tergum VII subtriangular, simply rounded apically.



Figs 13–15. 13 – *Anthelephila mansoori* sp. nov. (female, holotype), mesoventrite. 14–15. *A. merkli* sp. nov. (female, holotype): 14 – sternum VII; 15 – ovipositor. Scale (0.2 mm): A – Fig. 15; (0.5 mm): B – Fig. 14; C – Fig. 13. Obr. 13–15. 13 – *Anthelephila mansoori* sp. nov. (samice, holotyp), mesoventrit. 14–15. *A. merkli* sp. nov. (samice, holotyp): 14 – sternum VII; 15 – kladélko. Měřítka (0,2 mm): A – Obr. 15; (0,5 mm): B – Obr. 14; C – Obr. 13.

Differential diagnosis. *Anthelephila mansoori* sp. nov. seems to be well-characterized by the combination of the following major characters: small, slender species, elytra distinctly bicoloured, with reddish basal third/fourth, head semioval, rather produced posteriorly, pronotal disc distinctly corrugated, with indication of posterior bulge, and female mesoventrite with flattened but laterally rather sharply delimited median longitudinal bulge.

Distribution. India (Uttarakhand).

Etymology. Named after the type locality Mussoorie, which is also referred to as “Mansoori” by Indians; noun in apposition.

Anthelephila merkli sp. nov.

(Figs 14, 15, 23)

Type locality. Republic of China, Taiwan Island, Kaohsiung County, Shanping Forest Recreation Area, near Liukuei, 22°58'16"N 120°41'15"E.

Type material. Holotype, ♀: "TAIWAN, Kaohsiung county, Shanping Forest Recreation Area, near Liukuei [p] // 22°58'16"N 120°41'15"E, swept singled, 19.–21.XI.2002, L. Ronkay & O. Merkl [lgt.; p]" (HNHM).

Description. Female (holotype). Body length 5.2 mm. Head and pronotum dark reddish, elytra largely brown black, reddish in basal fourth (Fig. 23); antennae reddish, legs partly darker, reddish to reddish brown.

Head 1.2 times as long as wide, semioval posteriorly, produced and nearly smoothly merging with short neck; tempora strongly narrowing posteriorly, posterior angles absent. Eyes small, rather convex. Dorsal surface glossy, distinctly punctate; punctures distinctly separated. Setae subdecumbent to decumbent; some distinctly longer tactile setae. Antennae long, moderately enlarged in terminal third; antennomere I 2.2 times, X 1.8 times, XI 2.6 times as long as wide.

Pronotum 1.5 times as long as wide, moderately narrower than head including eyes, nearly evenly rounded anteriorly, strongly narrowed and impressed (constricted) postero-laterally in dorsal view; pronotal disc rather convex and nearly evenly sloping towards base in lateral view. Surface glossy, smooth; disc distinctly punctate, with some transverse wrinkles posteriorly (interrupted medially); lateral sides impunctate near coxal cavities, postero-lateral impressions distinctly wrinkled. Setation as on head.

Mesoventrite with indication of median longitudinal bulge, and distinct median carina posteriorly, bearing several longer setae; metaventrite simple.

Elytra 1.7 times as long as wide, oval, conjointly rounded apically; humeri distinct, postscutellar impression absent. Surface glossy, distinctly punctate; punctuation double and rather evenly developed, setiferous punctures widely separated. Setae uniform, coarser and distinctly longer than on head, subdecumbent; numerous tactile setae.

Legs simple; terminal spurs of tibiae simple, subequal; penultimate tarsomere widened/flattened distally, with terminal tarsomere articulated dorsally near base in all tarsi.

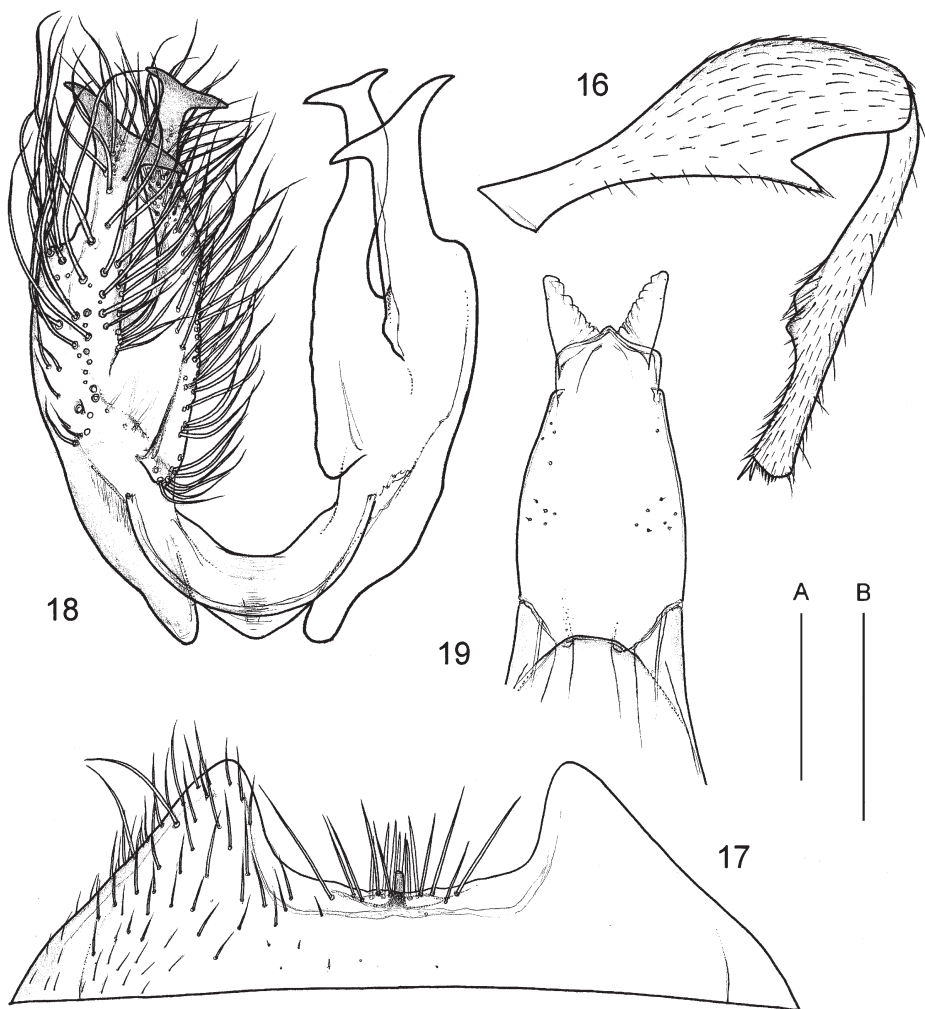
Abdominal sternum VII triangular posteriorly, densely setose subapically on dorsal side (Fig. 14); tergum VII subtriangular, simply rounded apically.

Differential diagnosis. *Anthelephila merkli* sp. nov. is possibly close to *A. himalayana* (Krekich-Strassoldo, 1914), as suggested by their similar external appearance. It differs from the latter species by the reddish head and basal portion of the elytra, distinct postero-median carina of the female mesoventrite, somewhat produced and nearly triangular apical part of the female sternum VII (rather simple, only moderately angled apically in *A. himalayana*), wider, evenly rounded apex of tergum VII (nearly triangular, apically narrowly rounded in *A. himalayana*), and by the rather unique ovipositor, with conspicuously large, well-sclerotized (dark pigmented) simple coxites, that are moderately angled laterally in terminal part (Fig. 15, see Remarks).

Distribution. Republic of China (Taiwan).

Etymology. Dedicated to Ottó Merkl, curator of the Coleoptera Collection at HNHM, and one of the two collectors of the holotype; noun in the genitive case.

Remarks. *A. himalayana* and probably most *Anthelephila* species display comparatively small, two-segmented coxites of the ovipositor; for example see figures by Kejval (1999, 2003).



Figs 16–19. *Anthelephila moratrix* sp. nov. (male, holotype): 16 – anterior femur and tibia; 17 – sternum VII; 18 – prongs of sternite VIII; 19 – apical portion of tegmen. Scale (0.5 mm): A – Fig. 16; (0.2 mm): A – Fig. 17; B – Figs 18, 19. Obr. 16–19. *Anthelephila moratrix* sp. nov. (samec, holotyp): 16 – přední stehno a holoň; 17 – sternum VII; 18 – párové výběžky sternitu VIII; 19 – apikální část tegmenu. Měřítka (0,5 mm): A – Obr. 16; (0,2 mm): A – Obr. 17; B – Obr. 18, 19.

***Anthelephila moratrix* sp. nov.**
(Figs 16–19)

Type locality. India, Arunachal Pradesh, Dirang env., 21°21–23'N 92°13–16'E, 1500–1800 m.
Type material. Holotype, ♂: “NE INDIA, W-ARUNACHAL PR.; DIRANG vicinity; 1500–1800m; 21°21–23' N 92°13–16' E; L. Dembický leg.; 1.-10.vi.2004 [p]” (NMPC).

Description. Male (holotype). Body length 5.9 mm. Head reddish-brown, neck paler; pronotum reddish; elytra brownish-black, except reddish basal fifth, with very slight greenish reflection; legs and antennae reddish-brown, metatibiae and terminal 2–3 antennomeres darker, brownish-black.

Head 1.3 times as long as wide, nearly smoothly merging with long neck; tempora strongly narrowing posteriad, posterior angles absent. Eyes comparatively large, rather convex. Dorsal surface glossy, distinctly punctate, with traces of corrugation anteriorly; punctures rather widely separated. Setae subdecumbent; some long tactile setae. Antennae conspicuously long, slightly enlarged in terminal third; antennomere I 3.0 times, X 2.3 times, XI 3.0 times as long as wide.

Pronotum nearly 1.7 times as long as wide, moderately narrower than head including eyes, nearly evenly rounded anteriorly, strongly narrowed and impressed (constricted) postero-laterally in dorsal view; pronotal disc largely convex, with slight indication of median longitudinal impression/furrow at convex portion, flattened and with small transverse bulge (transversely wrinkled) posteriorly in lateral view. Surface smooth and glossy; disc unevenly punctate, including some coarse punctures; lateral sides largely impunctate, postero-lateral impressions coarsely wrinkled, simple (not extending antero-dorsally). Setae as on head.

Mesoventrite with distinct, simple, moderately wide median bulge, its outline nearly straight, with slight posterior angulation in lateral view; metaventricle with a pair of inconspicuous, longitudinal, submedian, densely setose patches posteriorly.

Elytra 1.7 times as long as wide, conjointly rounded apically; humeri distinct, postscutellar impression at most slightly indicated. Surface glossy, distinctly, sparsely punctate; punctuation simple, rather evenly developed, punctures widely separated. Setae uniform, distinctly longer and more raised than on head, decumbent; numerous erect tactile setae.

Metathoracic wings developed.

Fore legs modified (Fig. 16); profemoral process with some coarser setae, along margin and subapically; protibiae with two blunt protrusions on inner side, shortly behind mid-length; penultimate tarsomere widened/flattened distally, with terminal tarsomere articulated dorsally near base for all tarsi.

Abdominal sternum VII (Fig. 17) deeply emarginate, with short, blunt median process on inner side. Sternite VIII (Fig. 18); paired prongs conspicuously narrowly bifurcate and both branches equally with a pair of robust, pointed apical protrusions. Tergum VII unevenly rounded to subtruncate posteriorly. Tergite VIII forming a pair of sclerites, narrowly connected medially, nearly evenly rounded posteriorly. Apical sclerite of segment IX well-sclerotized, subtriangular, pointed apically. Aedeagus (Fig. 19); apical portion of tegmen about 0.5 times as long as basal-piece, bilobed apically.

Female. Unknown.

Differential diagnosis. *Anthelephila moratrix* sp. nov. belongs to the *A. lagenicollis* species-group (Kejval 2000, 2018). Externally, it can be easily confused with *A. abdita* (Kejval, 2000), *A. latipennis* (Pic, 1914), and *A. hamata* Kejval, 2018, but differs clearly by bifurcate and apically bidentate paired prongs of male sternite VIII.

Distribution. India (Arunachal Pradesh).

Etymology. From Latin *morator* (latecomer); the single examined specimen was discovered shortly after finishing the treatment of the whole species-group (Kejval 2018); noun in apposition.



Figs 20–23. Habitus (holotypes): 20 – *Anthelephila anki* sp. nov.; 21 – *A. atayalorum* sp. nov.; 22 – *A. mansoori* sp. nov.; 23 – *A. merkli* sp. nov.

Obr. 20–23. Habitus (holotypy): 20 – *Anthelephila anki* sp. nov.; 21 – *A. atayalorum* sp. nov.; 22 – *A. mansoori* sp. nov.; 23 – *A. merkli* sp. nov.

Anthelephila muelleriana (Pic, 1955)

Formicomus Mülleri Pic, 1953: 97 (incorrect original spelling, junior primary homonym of *F. muelleri* Krekich-Strassoldo, 1928). Syntype(s): Eritrea, Saberguma (MNHN).

Formicomus mülleri (incorrect subsequent spelling): Pic (1955): 9 (homonymy); Van Hille (1955): 25, fig. 1 (male characters), (1977): 197 (record from Eritrea).

Formicomus müllerianus Pic, 1955: 9 (incorrect original spelling, replacement name for *F. muelleri* Pic, 1953).

Formicomus millerianus (incorrect subsequent spelling): Van Hille (1981): 89 (note on homonymy); Hemp et al. (1999): 3 (canthariphily, record from Tanzania); Hemp & Dettner (2001): 235 (canthariphily, check-list).

Material examined. Yemen: 3 ♂♂ 3 ♀♀, El Kasaba, 550 m, 26.VIII.1965, G. Scortecci lgt. (ADBC, ZKDC); 2 ♂♂, Mena'acha Wadi, 23 km E, 15°08'N 43°36'E, wadi, 1800 m, 7.v.1998, Brechtel, Ehrmann & Wurst lgt. (ZSMC, ZKDC).

Distribution. Eritrea, Tanzania; the records given here are the first from Yemen.

Remarks. Pic (1953) described *Formicomus muelleri* from the locality “Saberguma” in Eritrea, but later (Pic 1955) found this name precoccupied by *F. muelleri* Krekich-Strassoldo, 1928 from Indonesia and thus proposed replacement name *F. muellerianus*. This change was overlooked by Van Hille (1955, 1977), who first described the male characters of this species.

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SOUHRN

Tato práce je dalším příspěvkem v sérii věnované taxonomii a faunistice velkého rodu *Anthelephila* Hope, 1833. Obsahuje popisy šesti nových druhů z Íránu (*A. achaemenis* sp. nov.), Iráku (*A. anki* sp. nov.), ostrova Tchaj-wan (*A. atayalorum* sp. nov., *A. merkli* sp. nov.) a severní Indie (*A. mansoori* sp. nov., *A. moratrix* sp. nov.). Z faunistiky jsou uvedeny první nálezy *A. muelleriana* (Pic, 1955) v Jemenu na Arabském poloostrově, které jsou zároveň prvním dokladem o výskytu druhu v Paleartické oblasti (dříve byl známý pouze z přilehlé části severovýchodní Afriky).