

VÝSLEDKY ZOOLOGICKÉ EXPEDICE NÁRODNÍHO MUSEA
V PRAZE DO TURECKA

RESULTS OF THE ZOOLOGICAL SCIENTIFIC EXPEDITION
OF THE NATIONAL MUSEUM IN PRAHA TO TURKEY

12.

COLEOPTERA III.

Staphylinidae (genera *Philonthus* CURT., *Gabrius* STEPH.)*)

ALEŠ SMETANA

(Přijato pro tisk 6. listopadu 1952.)

V následujících řádcích podávám zpracování materiálu rodu *Philonthus* Curt. a *Gabrius* Steph., který byl nasbíráán při expedici Národního musea v Praze v Turecku v r. 1947. Z rodu *Philonthus* bylo nalezeno celkem 19 druhů a 3 odchylky; většinou jde o druhy celkem běžné, z pozoruhodnějších uvádím: *Ph. rectangulus*, *dimidiatus*, *fenestratus* a *juvenilis*. Z rodu *Gabrius* nalezeno 8 druhů, z nichž dva, *G. hoberlandti* a *anatolicus*, jsou nové. Z dalších zasluhují pozornosti nálezy *G. lividipes*, *stipes* a *subnigritulus*. Konečně zasluhuje zmínky, že mnoho exemplářů ze zpracovávaného materiálu bylo nalezeno velmi zajímavou sběrací methodou, a to do roztažené sítě při jízdě automobilem. Je skutečně pozoruhodné, jak bohatý materiál (a to ne pouze *Staphylinidů*) byl takto získán často na místech zdánlivě velmi sterilních.

Philonthus laminatus CREUTZ

Ankara-Çankaya, 2. VII. 47, 1 spec.

Philonthus atratus GRAV.

Çamlidere, Işik daği, 23. VI., 1 spec. — Ulukişla, 1400 m above sea level, 28. VII., 1 spec. — Yeniköy, Toros, 1000 m above sea level, 2. IX., 1 spec.

Philonthus ebeninus GRAV.

Suluhan, Toros, 11. VIII., 1 spec.

*) 6th Contribution to the knowledge of the genus *Gabrius* Steph. of the Palaearctic Region.

***Philonthus corruscus* GRAV.**

Bürücek, Toros, 900—1000 m above sea level, 29.—31. VII., 1 spec. — Suluhan, Toros, 11. VIII., 1 spec. — Çamlidere, Işık dağı, 23. VI., 1 spec.

***Philonthus rectangulus* SHARP.**

Hasanoğlan, 1000 m above sea level, 13. VII., 1 spec. in flight in the open net above the car.

***Philonthus concinnus* GRAV.**

This species was collected very abundantly in several localities; it predominated in the material collected: Suluhan, Toros, 9.—12. VIII., very abundant. — Yeniköy, Toros, 30. VIII., several spec. — Bürücek, Toros, 29.—31. VII., very abundant. — Karapınar, Toros, 800 m above sea level, 1. VIII., 1 spec. — Çamlidere, Işık dağı, 23. VI., abundant. — Erciyas, 1800 m above sea level, 24. VII., very abundant. — Kaynaşlı, Bolu dağları, 900—1100 m above sea level, 1 spec. by straining the humus under rhododendrons, 21. VI. — Ağapınari, 13. VIII., 1 spec. — Ankara-Baraj, 3.—4. VII., 1 spec., immature.

***Philonthus concinnus* GRAV. a. *ochripennis* GERH.**

Bürücek, Toros, 900—1000 m above sea level, 29.—31. VII., 1 spec. together with the typical form.

***Philonthus dimidiatus* SAHLB.**

Mucur, 22. VII., 6 spec.

***Philonthus debilis* GRAV.**

Ankara-Çankaya, 2. VII., 2 spec. — Suluhan, Toros, 14. VIII., 1 spec.

***Philonthus fuscipennis* MANNH.**

Yeniköy, Toros, 1000 m above sea level, 30. VIII., 1 spec. in the detritus on the bank of the stream.

***Philonthus bimaculatus* GRAV.**

Çamlidere, Işık dağı, 23. VI., 1 spec. — Bürücek, Toros, 900—1000 m above sea level, 29.—31. VII., 1 spec. — Suluhan, Toros, 11. VIII., 3 spec. — Karapınar, Toros, 800 m above sea level, 1. VIII., 2 spec.

***Philonthus bimaculatus* GRAV. a. *nitidicollis* BOISD. LAC.**

Çamlidere, Işık dağı, 23. VI., 2 spec.

***Philonthus longicornis* GRAV.**

Hasanoğlan, 13. VII., 1 spec. in flight in an opened net above the car. — Ağapınari, Toros, 13. VIII., 1 spec.

***Philonthus fenestratus* FAUV.**

Bürücek, Toros, 900—1000 m above sea level, 29.—31. VII., 2 spec.

Philonthus quisquiliarius GYLLH.

Moğan gölü, 5. VII., 2 spec. — Adana, 1.—3. VIII., very abundantly in flight in the open net above the car (it is very interesting that also several immature specimens were caught in this way).

Philonthus quisquiliarius GYLLH. v. inquinatus STEPH.

Moğan gölü, 5. VII., 1 spec., together with the typical form. — Adana, 1.—3. VIII., 2 spec. together with the very abundant typical form in flight in the open net above the car.

Philonthus rufimanus ER.

Bulgaria, Svilengrad (at the Turkish frontier), 14.—18. VI., very abundant.

Philonthus maritimus MOTSCH.

Alata, 26. VIII., very abundantly in flight in the open net above the car, about 30 spec. — Abacilar, (Çakit), 7. VIII., 5 spec. in flight in the net. — Adana, 1.—3. VIII., 5 spec. in flight in the net.

Philonthus juvenilis PEYRON

Ulukişla, 1400 m above sea level, 28. VII., moist locality, 3 spec. — Alahan, Toros, 900 m above sea level, 29. VIII., moist locality at a stream, 5 spec.

Philonthus n. sp. ?

Bürücek, Toros, 29.—31. VII., 1 spec. — Ulukişla, 28. VII., 1 spec. A species of the group *Ph. micans* GRAV., which is very reminiscent of *Ph. nigrita* GRAV. or *siculus* GRID. It is probably a new species and I shall later return to this problem.

Philonthus dimidiatipennis ER.

Moğan gölü, 900 m above sea level, 12. VII., 1 spec. — Adana, 1.—3. VIII., 2 spec. in flight in the open net above the car.

Philonthus punctus GRAV.

Bulgaria, Svilengrad, (at the Turkish frontier), 14.—18. VI., 1 spec.

Gabrius anatolicus n. sp.

Most closely related to the species *G. obenbergeri* SMET.*)

Coloration relatively dark, surface of the body unicoloured tar black, head and shield with a slight, elytra with a very distinct metal

*) Provisionally I have placed *G. obenbergeri* in the description (this publication, No 408) in the group of *G. splendidulus* GRAV., of which group it is very reminiscent by the shape of the body, but with the remark that the penis of this species is very different from those of this group and that it is very reminiscent of the penises of some species of the group *G. vernalis*. The discovery of *G. anatolicus*, whose penis is very similar to the penis of *G. obenbergeri* and which also according to its outer habitus quite certainly belongs to the group of *G. vernalis*, proves, however, that *G. obenbergeri* notwithstanding the rather different shape of its body belongs rightly to the group of *G. vernalis*.

lustre. Maxillae and legs, except the darkened tibiae, brownish yellow. First and second articles of the antennae and base of the third brown (apical part of the second sometimes darkened), the other articles brownish black, only the last two articles lighter, especially in ♂♂, where they are sometimes even of the same coloration as articles 1. and 2.

Head longer than wide, moderately arched, parallel on the sides, temple corners little rounded, therefore distinct. In ♀♀ the head is a little shorter so that it is only a little longer than wide; the lateral margins are more rounded and the temple corners less marked. At the anterior margin the head is only slightly flattened, without indication of a pit. In the anterior part between the eyes are four dots, of which the outer ones are close to the inner margin of the eyes, and the inner ones are $3\times$ farther from each other than from the outer ones. The eyes are small and relatively flat so that they project only quite slightly from the lateral line of the head; the temples are $2-2,5\times$ as long as the longest diameter of the eyes as seen from above. Temples and posterior margin of the head with a greater number of dots carrying long hairs. (In *G. obenbergeri* the head is somewhat smaller and narrower, of a square shape; the hairs on the temples and posterior margin of the head are finer and shorter.) Transversal microsculpture of the head fairly pronounced so that it is distinct already at a small magnification (about $35\times$).

Antennae relatively short and broad. First article very long, slightly bent, a little shorter than the two following ones together, in the direction towards the apical margin slightly broadened, 2. and 3. articles long, spherically broadened towards the apical margin, equally long, 2. article stronger than the 3.; 4. article $2\times$ as long as broad at the base; 5. article a little longer than broad at the apical margin; 6. article as long as broad at the apical margin; 7. article as broad as long, 8.—10. articles slightly transversal, increasing in width in the direction towards the apical end of the antennae; 11. article cylindrical, a little narrower than the 10. article, distinctly shorter than the two preceding articles together. In *G. obenbergeri* the antennal articles are more robust, and the antennae are lighter coloured (brown).

Shield longer than broad, posteriorly slightly narrowed, lateral margins either straight or very slightly rounded. In the broadest place, which lies in about the first fifth of the length, the shield is a little wider than the head. Central rows composed of 5 dots, besides on the sides of the shield a greater number of dots carrying hairs. Transversal microsculpture as on the head. (In *G. obenbergeri* the shield is slimmer, narrower and posteriorly more narrowed.)

Elytra relatively short and broad, strongly broadened posteriorly. Their length in the suture is either slightly less than or equal to the longest diameter of the shield; length of the lateral margins distinctly greater than the maximum length of the prothorax. Punctuation of the elytra strikingly coarse and sparse (still coarser than in *G. obenbergeri*, which has also the elytra much narrower and less broadened posteriorly). Surface very shiny, without microsculpture.

Abdomen elongated, slightly broadening to the 3. free-lying segment, then narrowing to the tip. Seventh (5. free-lying) segment at the apical margin slightly light margined. Punctuation of the abdomen sparse and relatively coarse, distinctly coarser and closer than in *G. obenbergeri*.

In ♂ the last sternite is in the anterior part slightly narrowed and its apical margin is broadly and roundedly indented; this indentation is broader and deeper than in *G. obenbergeri* (fig. 3.).

Penis is very similar to the penis of *G. obenbergeri* and proves the close affinity at the two species, it differs from the latter by the somewhat slimmer shape, by the less sharply terminating apical part, and especially by the shape of the paramera which is narrower, much less broadened in the anterior part and only very slightly indented in the apical margin. Seen from the dorsal side the paramera projects relatively slightly beyond the margin of the penis, where as in *G. obenbergeri* it projects very broadly (vid. drawing in the description of *G. obenbergeri* and fig. 2a). Apart from the shape of the male copulation organs our new species differs as follows from the other related species: from *G. vernalis* by the much coarser and sparser punctuation of the elytra with a metal lustre and by the much sparser punctuation of the abdomen. From *G. femoralis* by the smaller stature, the narrower head and shield, the sparser and coarser punctuation of the elytra. From *G. insignis* by the somewhat narrower head and shield and the much coarser and sparser punctuation of the elytra and the sparser punctuation of the abdomen. From *G. mülleri* by the distinctly longer elytra with a much coarser and sparser punctuation, etc.

Size: 6—7,2 mm.

Holotype ♂: Anatolia, Yeniköy, Toros, 1000 m above sea level, 30. VIII., Expedition of the National Museum, in coll. Nat. Mus. Praha.

Allotype ♀: Anatolia, Yeniköy, Toros, 1000 m above sea level, 30. VIII., Expedition of the National Museum, in coll. Nat. Mus. Praha.

Paratypes: 7 specimens from the same locality (1 ♂, 3 ♀♀ in coll. Nat. Mus. Praha, 1 ♂, 2 ♀♀ in coll. mea).

Gabrius astutus ER.

Bürücek, Toros, 900—1000 m above sea level, 29.—31. VII., by straining of moist moss, limestone substratum, 12 spec. — Karapınar, Toros, 900 m above sea level, 1. VIII., 1 spec. by straining of the humus under *Juniperus excelsa*.

Gabrius lividipes BAUDI.

Hasanoğlan, 900—1000 m above sea level, 13. VII., stony steppe formation, 1 ♀ caught at the river Kizil Irmak in flight in the open net above the car, together with very abundant *G. nigritulus*. The find of this species in Turkey is valuable.

Gabrius stipes SHARP.

Karapınar, Toros, 1. VIII., straining of humus under *Juniperus excelsa*, 1 ♀.

Gabrius nigrutilus GRAV.

This species predominates completely in the material collected of the genus *Gabrius* and is obviously the most abundant species of the group of *G. nigrutilus* in Asia Minor. It was collected very abundantly in many localities: Ankara; Ankara-Çankaya; Karapınar, Toros; Suluhan, Toros; Bürücek, Toros; Hasanoğlan, very abundant in flight in the open net above the car, in this material ♂♂ predominated completely over ♀♀; Alata; Yeniköy, Toros; Alahan, Toros; Çamlidere, Işık dağı.

Gabrius subnigrutilus JOY.

Ulukışla, 28. VII., 2 ♂♂, 9 ♀♀. — Erciyas, 1800 m above sea level, 24. VII., 1 ♀. — Bürücek, Toros, 29.—31. VII., 1 ♀. — Ankara-Çankaya, 2. VII., 1 ♀. — Yeniköy, Toros, 30. VIII., 1 ♀. This species is obviously rather frequent in Turkey, though its find had not yet been recorded from this territory.

Gabrius pennatus SHARP.

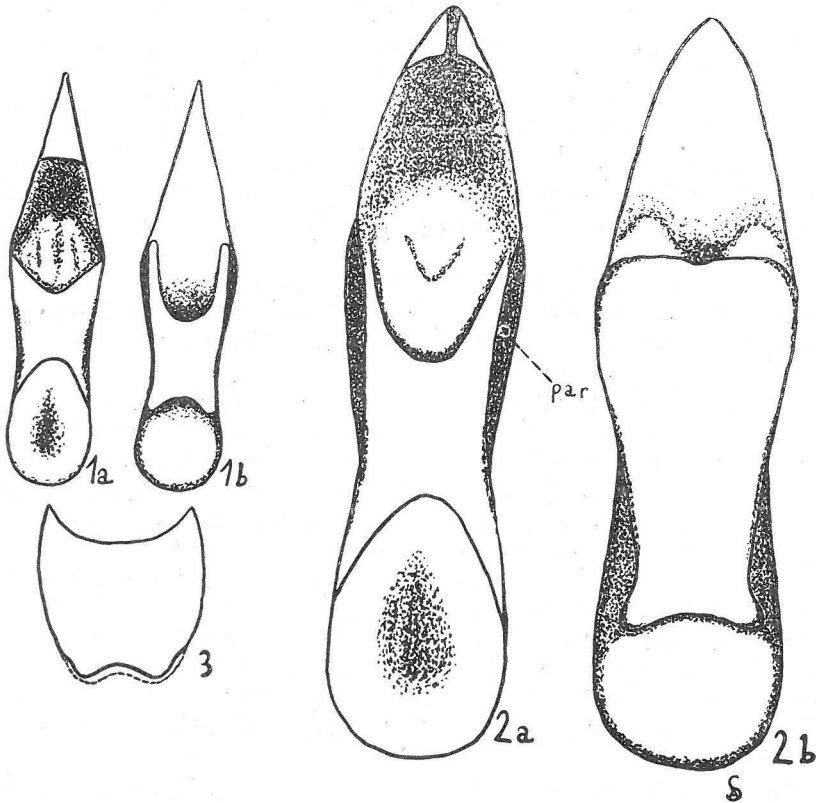
Ulukışla, 28. VII., 1 ♂, 1 ♀. — Ankara-Çankaya, 2. VII., 1 ♀. In Turkey obviously fairly rare.

Gabrius hoberlandti n. sp.

Most closely related to the species *G. cyphonotus* JOY.

Coloration: relatively light, first three articles of the antennae, palpi and legs, except the yellow tarsi, light brown, the other articles of the antennae brown. Head and prothorax black, erytra pitch black with somewhat lighter posterior margin. Segments of the abdomen blackish brown, with distinctly lighter apical margins.

Head: of square shape, only a little longer than broad, moderately arched. Lateral margins gently rounded, posteriorly slightly narrowed; temporal corners completely rounded, therefore very little distinct. The broadest place of the head is at its anterior margin at the level of the eyes. At the anterior margin the head is broadly flattened and in this flattening with a very slightly indicated shallow depression. Between the eyes are 4 dots carrying bristles, of which the outer ones are close at the inner margins of the eyes, and the inner ones are 3× farther from each other than from the outer ones. The lateral margins behind the eyes and the posterior margin of the head with a rather large number of dots carrying bristles. The eyes are very small and very flat so that they do not project from the lateral line of the head, and the temporals are twice as long as the longest diameter of the eyes visible from above. (In *G. cyphonotus* the head is slimmer, broader than long, and more arched, not narrowed posteriorly. The eyes are distinctly larger and more arched so that they project from the lateral line of the head, and the temporals are only slightly longer than the maximum diameter of the eyes visible from above.) The transversal microsculpture of the head is very fine, in the posterior part of the head almost indistinct (100× nat. size).



Explanation of figures.

1. Penis of *G. hoerlandti* n. sp. 2. Penis of *G. anatolicus* n. sp. 3. *G. anatolicus* n. sp., last sternite in male. par = paramere, a = dorsal view, b = ventral view.

A n t e n n a e relatively short and strong. 1. article very long, slightly bent, as long as the following two together, towards the apical end slightly broadened; articles 2 and 3 long, at the apical end spherically broadened, equally long; article 2 stronger than 3; 4. article twice as long as broad at the base, 5. article a little longer than broad at the apical margin, 6. article as long as it is broad at the apical margin, articles 7—10 as long as they are broad or slightly transversal, article 11 cylindrical, narrower than 10, a little shorter than the two preceding ones together.

P r o t h o r a x short and broad, a little longer than broad, transversally moderately arched, on the sides completely parallel. The prothorax is as broad as the head at the anterior margin and distinctly broader than the head at the base. Dots in rows (of 6) of medium size; outside the rows are several further dots in the anterior part on the sides. (In *G. cyphonotus* the prothorax is slimmer, distinctly longer than broad, and anteriorly

slightly narrowed.) The transversal microsculpture is just as on the head very fine, and thus also the prothorax is very shiny ($100\times$ nat. size).

Elytra distinctly broadened posteriorly, in the arms broader than the prothorax. Their length in the suture is a little longer than the maximum length of the prothorax; length of the lateral margins distinctly greater than the maximum length of the prothorax. Dotting of the elytra somewhat sparser than in *G. cyphonotus*, the interspaces between the dots as large as the diameter of the dots. Surface very shiny, without microsculpture.

Abdomen elongated, slightly broadening to the 3. free lying segment, then narrowing to the tip. 7. segment (5. free lying segment) at the apical margin finely pale bordered. Dotting of the abdomen sparse, sparser than in *G. cyphonotus*.

In ♂ the last sternite is at the apical margin deeply, relatively narrowly and sharply indented; this indentation is for the larger part filled by a membrane, and it is broader and much deeper than in *G. cyphonotus*.

The shape of the oedeagus is characteristic and entirely different from the shape of the oedeagus of all other species of the group of *G. nigritulus*. In a dorsal view the mediā part is deepened in spoon-shape, narrowing anteriorly, with entirely parallel margins, and passing into the flat apical part which has the shape of a high, narrow triangle with a very sharp tip. The paramera has the shape characteristic for the whole group, running out in two relatively short, slender and bluntly ending arms which converge in a very broad arc (fig. 1b). Size 4,8 mm.

I venture to dedicate this species to Dr. L. Hoberlandt of the National Museum in Prague.

Holotype ♂: Anatolia, Ulukişla, 28. VII. Expedition of the National Museum; in coll. Nat. Mus. Praha.

References

1. E. GRIDELLI: Quarto contributo alla conoscenza delle specie paleartiche del genere *Philonthus* Steph. — Boll. della Soc. Ent. Ital., 55., Nr. 2, 1923, p. 23—28.
2. O. SCHEERPELTZ: Wissenschaftliche Ergebnisse einer von Herrn Hofrat F. Schubert, etc. im Sommer 1935 (1936) nach Bulgarien unternommenen Studienreise. Coleoptera: I. Staphylinidae. — Mitteilungen aus den Königlichen Wissenschaftlichen Instituten in Sofia, Bd. X., 1937, p. 185—246.
3. N. H. JOY: A note on Dr Sharp's new species of *Gabrius*. — Ent. Month. Magaz., XXII., 1911, p. 80—82.