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## REVISION OF THE PALEARCTIC SPECIES OF THE GENUS

### *OCITHEBIUS* LEACH

#### III. THE METALLESSENS-GROUP (HYDRAENIDAE, COLEOPTERA)

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**A b s t r a c t :** Twenty-one species and 2 subspecies of the *O. metallescens* group (subgenus *Ochthebius* s.str.) are treated. Six new species and 2 new subspecies are described: *O. ciliciae* n.sp., *O. hatayensis* n.sp., *O. himalayae* n.sp., *O. huberti* n.sp., *O. rectilobus* n.sp., *O. serpentinus* n.sp., *O. metallescens kurdistanicus* ssp.nov. and *O. metallescens levantinus* ssp.nov. Lectotypes are designated for *O. dalmatinus* GANGLBAUER, *O. metallescens* ROSENHAUER, *O. peyerimhoffi* NORMAND, *O. puberulus* REITTER, *O. alutaceus* REY and *O. semisericeus* REY.

The following new synonymies are proposed: *O. dalmatinus* = *O. butinensis* HEBAUER syn.nov.; *O. metallescens* = *O. latinorum* IENISTEA syn.nov. = *O. viganoi* PIRISINU syn.nov.; *O. metarius* ORCHYMONT = *O. loebli* FERRO syn.nov.; *O. poweri* RYE = *O. morettii* PIRISINU syn.nov. = *O. peyerimhoffi* syn.nov.; *O. puberulus* = *O. jelineki* FERRO syn.nov.; *O. alutaceus* REY (not REITTER) = *O. gestroi* GRIDELLI syn.nov. = *O. griotes* FERRO syn.nov. = *O. sennius* ORCHYMONT syn.nov. and *O. smyrnensis* SAHLBERG = *O. metallicus* ORCHYMONT syn.nov. = *O. metarioides* FERRO syn.nov. The name *O. reyi* nom.nov. is substituted for the name *O. alutaceus* REY, which is a junior homonym of *O. alutaceus* REITTER. The male genitalia of 18 species and 2 subspecies are illustrated. Distribution maps are provided.

**K e y w o r d s :** Coleoptera, Hydraenidae, Ochthebius, metallescens group, revision.

### Introduction

The *O. metallescens*-group forms a rather well-defined and separable species-group within the genus *Ochthebius* (subgenus *Ochthebius* s.str.). The combination of the following characters enables one to distinguish it from the remaining species-groups:

- pronotum with two pairs of distinct admedian foveae
- labrum always clearly excised
- anterior angle of pronotum usually rounded or angular, sometimes slightly protruding, but never acuminate; a small postocular tooth is present on the pronotum (it may be lacking in certain individuals)
- elytra with regular rows of punctures and regular rows of stiff whitish hairs on interstriae
- colour always black (never brown), frequently with metallic lustre
- aedeagus: proximal lobe short, in ventral aspect straight or curved to right side in apical half, apical setae present; distal lobe usually flat and recurved (ductus ejaculatorius opening dorsad), exceptions: *O. albacetus*, *O. puberulus*, *O. khuzestanicus*; sometimes spines are developed in the dorsal concavity of the distal lobe (*O. dalmatinus*, *O. sempronius*); parameres very slim and almost symmetrical (left one shorter and slightly wider at apex), apical setae short
- sexual dimorphism: explanate margin of elytra of females usually slightly wider than in males; last tergite of ♀♀ usually with blunt spines.

The pubescens of the metasternum was frequently used to separate the *O. metallescens*-group from the *O. foveolatus*-group. But as the metasternum may be glabrous or matt even within one species (e.g. *metallescens*) it can not serve as a reliable distinguishing feature.

Taxonomically the *O. metallescens*-group is one of the most complicated groups of the genus. Some of the species are highly variable (*O. metallescens*, *O. reyi*, *O. poweri*), while many others are morphologically constant (due to their restricted distribution). The whole problem is immensely complicated by the fact that several species comprise numerous relic populations in the arid southern parts of their distribution ranges, which is explained by their ecology. The combination of variability and geographic isolation sometimes makes it very difficult (or even impossible) to decide about the taxonomic status of certain (Mediterranean) populations. The variability

may include the external morphology as well as the aedeageal morphology. This explains the relativ high number of synonyms. Fifteen species (and at least 12! synonyms) have been described until today, six new species and 2 new subspecies are described in this paper.

1. *O. albacetinus* FERRO
2. *O. ciliciae* n.sp.
3. *O. colchicus* JANSSENS
4. *O. dalmatinus* GANGLBAUER  
= *butinensis* HEBAUER syn.nov.
5. *O. decianus* ORCHYMONT
6. *O. hatayensis* n.sp.
7. *O. himalayae* n.sp.
8. *O. huberti* n.sp.
9. *O. khuzestanicus* FERRO
10. *O. metallescens metallescens* ROSENHAUER  
= *fuscipalpis* REY  
= *latinorum* IENISTEA syn.nov.  
= *viganoi* PIRISINU syn.nov.
11. *O. m. kurdistanicus* n.ssp.
12. *O. m. levantinus* n.ssp.
13. *O. metarius* ORCHYMONT  
= *loebli* FERRO syn.nov.
14. *O. metellus* ORCHYMONT
15. *O. pierottii* FERRO
16. *O. poweri* RYE  
= *morettii* PIRISINU syn.nov.  
= *peyerimhoffi* NORMAND syn.nov.
17. *O. puberulus* REITTER  
= *jelineki* FERRO syn.nov.
18. *O. rectilobus* n.sp.
19. *O. reyi* nom.nov.  
= *alutaceus* REY (= junior homonym of *alutaceus* REITTER)  
= *gestroi* GRIDELLI syn.nov.  
= *griotes* FERRO syn.nov.  
= *semisericeus* SAINTE-CLAIRE DEVILLE syn.nov.  
= *semotus* ORCHYMONT syn.nov.  
= *sennius* ORCHYMONT syn.nov.
20. *O. scitulus* FERRO

21. *O. sempronius* ORCHYMONT

22. *O. serpentinus* n.sp.

23. *O. smyrnensis* SAHLBERG

= *metallicus* ORCHYMONT

= *metarioides* FERRO syn.nov.

Scales next to figures represent 0,1 mm.

#### Variability

Almost any part of the body can display considerable morphological variability within one species, sometimes even within one population. The pronotum can vary from smooth to matt, its apical half can be truncate or rounded. The shape of the elytra, their chagreen and puncturation and the width of the explanate margin are extremely variable within certain species. The aedeagus displays an enormous degree of variability (see figs. 1-3, 17, 18).

#### Phylogenetic grouping

Due to the variability of these character states I was not able to prove phylogenetic groupings. According to external and aedeageal similarities I tentatively distinguish two complexes: *O. ciciliae*, *O. colchicus*, *O. dalmatinus*, *O. huberti*, *O. reyi*, *O. scitulus*, *O. sempronius* (*O. dalmatinus*-complex) and *O. hatayensis*, *O. metallescens*, *O. metarius*, *O. metellus*, *O. poweri*, *O. serpentinus*, *O. smyrnensis* (*O. metallescens*-complex). Species of the *O. metallescens*-complex are rather small, their pronotum is convex and the postocular tooth inconspicuous. The species of the *O. dalmatinus*-complex seem to be allopatric. The remaining species cannot be assigned to any of these complexes.

#### Geography

So far found only in the western Palearctic (eastern boarder: Himalaya). Center of distribution: Turkey (13 species). Closely related species seem to exclude each other geographically (e.g. *dalmatinus*-complex).

#### Ecology

All species are confined to running fresh water (springs, mountain streams and rivers). They are frequently found in hygropetric habitats along these biotops.

#### Acknowledgement and abbreviations

The material used for this study was borrowed from the following insti-

tutions and private collections (abbreviations are used to refer to collections in the text):

CFS	Coll. Foster, Scotland
CHD	Coll. Hebauer, Deggendorf
CMM	Coll. Montes, Madrid
CPL	Coll. Pretner, Ljubljana (B. Drovenik)
DEI	Deutsches Entomologisches Institut, Eberswalde (L. Zerche)
HUB	Museum der Alexander Humboldt Universität, Berlin (F. Hieke)
ISNB	Institut National des Sciences Naturelles, Bruxelles (L. Baert)
MGL	Musée Guimet d'Histoire Naturelle, Lyon (J. Clary)
MHNG	Muséum d'Histoire Naturelle, Genève (I. Löbl)
MHNP	Muséum d'Histoire Naturelle, Paris (Y. Cambefort)
NMB	Naturhistorisches Museum, Basel (M. Brancucci)
NMP	Národní Museum v. Praze (J. Jelinek)
NMW	Naturhistorisches Museum, Wien
OLL	Oberösterreichisches Landesmuseum, Linz (F. Gusenleitner)
TMB	Természettudományi Múzeum, Budapest (O. Merkl, G. Szél)
ZIL	Zoological Institute (Academy of Sciences), Leningrad (A. Kirejtschuk)
ZMH	Universitetets Zoologiska Museum, Helsingfors (H. Silfverberg)

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### *Ochthebius albacetinus* FERRO

*Ochthebius albacetinus* FERRO 1984a: 113.

Type locality:

Rio Madera, Albacete Province, Spain.

Type material:

Holotype in CMM; 7 paratypes in CMM, CFL and NMW. I have examined the male paratype of the NMW.

Diagnosis:

It agrees very well with *O. poweri* (size, shape, punctuation, postocular tooth on pronotum), but differs from western Mediterranean populations of

*O. poweri* by the longer and less ovoid elytra. Eastern Mediterranean populations of *O. poweri* have more rugulously punctured elytra.

The aedeagus (fig.21) goes not conform with the general line in the species-group. The apex of the distal lobe is bent to the ventral side and not to the dorsal side as usual. But due to the close relationships with *O. poweri* there is no doubt about its assignation to the *O. metallescens*-group.

**D i s t r i b u t i o n :** (fig.26): Southern Spain.

***Ochthebius ciliciae* n.sp.**

Type locality:

Small stream near the village of Namrun (Camlyayla), flowing through pine forest ca. 1500 m; Mersin Prov., southern Turkey.

Holotype ♂: "Türkei, 22.8.81, Umg. Namrun, leg. M. Jäch, T8 Kilik.Taurus"; NMW (the specimen is teneral).

Diagnosis:

2,1 mm long. This species agrees very well in all general characters with *dalmatinus*, *huberti* n.sp. and *sempronius*.

Aedeagus (fig.14): Distal lobe quite large; apex of distal lobe very wide.

**D i s t r i b u t i o n :** Taurus mountains in southern Turkey.

Etymology:

Cilicia was the name of the Roman province in this region.

***Ochthebius colchicus* JANSSENS**

*Ochthebius colchicus* JANSSENS 1963: 26.

Type locality:

Zigana pass (2.200 m), northern Turkey.

Type material:

Holotype ♂ in ISNB. I have examined the holotype.

Diagnosis:

This species is characterized by its wide and broadly rounded pronotum,

which is very distinctly chagreened and matt, without any coarser punctures. Elytra rather oval, intervals reticulated and matt.

The aedeagus (see JANNSENS 1963: fig.19) of the holotype is unfortunately slide-mounted and squashed.

**D i s t r i b u t i o n :** Known only from the type locality.

***Ochthebius dalmatinus* GANGLBAUER**

*Ochthebius dalmatinus* GANGLBAUER 1904: 192. - KNISCH 1924. - ORCHYMONT 1942. - CHIESA 1959. - GEORGUIEV 1971. - IENISTEA 1978.

*Ochthebius butinensis* HEBAUER 1986: 77 (= **syn.nov.**).

Type locality:

Dubrovnik, Yugoslavia.

Type material:

Lectotype ♂ (by present designation) of *dalmatinus*: "Ragusa Zellich v. dalmatinus" (NMW). Five paralectotypes in the NMW. The number of syntypes is unknown.

Synonyms:

I have examined one of the two female types of *O. butinensis* HEBAUER (type locality: Butin, Krk, Yugoslavia). The pronotal chagration of that specimen is more or less reduced. But as this character is quite variable in *O. dalmatinus*, I have no doubt that *O. butinensis* is a junior synonym of *O. dalmatinus*.

Diagnosis:

*Ochthebius dalmatinus* is easily recognized by its aedeagus (fig. 15).

**D i s t r i b u t i o n :** (fig.26).

Yugoslavia; ORCHYMONT (1942) recorded it from Greece (Peloponnesos) and Turkey. At least the Turkish record seems doubtful.

**M a t e r i a l e x a m i n e d :**

Yugoslavia: Croatia: Mustajbeg, Rijeka (NMW); Salona nr Split, VII. 1913 leg. Pretner (CPL, NMW); Hercegnovi, leg. Kysely (CPL); Bosnia: Mostar,

leg. Wingelmüller (NMW); Montenegro: Ljuta, Boka Kotorska, 15.8.1959,  
leg. Pretner (CPL, NMW, CHD).

*Ochthebius decianus* ORCHYMONT

*Ochthebius decianus* ORCHYMONT 1942: 9. - IENISTEA, 1988.

Type locality:

Elmali, Lycia, southwestern Turkey.

Type material:

Holotype ♂ (ISNB) and 11 paratypes (ISNB, NMW). I have examined the holotype and several paratypes.

Diagnosis:

This species differs from other species of this group by its slightly protruding front angles of the pronotum; pronotum strongly and distinctly punctured, intervals smooth and glabrous, depressions reticulate. Elytra long and almost parallel-sided; punctures distinct and deeply impressed; intervals smooth, shining and slightly convex. Sexes alike.

D i s t r i b u t i o n : Known only from the type locality.

*Ochthebius hatayensis* n.sp.

Type locality:

Small stream, ca. 3-3 m wide, mostly shaded, flowing over limestone and serpentine, ca. 4 km west of the village of Yayladagi, along the road to Yeditepe; Hatay Province, Turkey.

Holotype ♂: "TR 23.5.1987 Yayladagi leg. Jäch (17)"; NMW .

Paratypes: 16 exs. from the same locality; - 1 ex.: "TR 26.5.1987 w. Kilis leg. Jäch (28)"; NMW, CFL, ISNB.

D e s c r i p t i o n : 1,5-1,8 mm long. Black, some specimens with a slightly greenish metallic tinge; legs, antennae and mouthparts brown.

Labral excision shallow; front margin of labrum slightly upturned in some of the males. Head distinctly microreticulated.

Pronotum densely and distinctly punctured and distinctly microreticulated



(reticulation clearly visible at 50 X magnification); postocular tooth and lateral tooth of pronotum very small; disc rather convex; sides moderately rounded in anterior half, then evenly (not abruptly) constricted towards base.

Elytral intervals microreticulated or rugulose; explanate margin of elytra very narrow in ♂♂ but wider in ♀♀.

Blunt setae of last abdominal tergite of ♀♀ only moderately developed.

Middle of metasternum glabrous.

Aedeagus (fig.9): distal lobe similar to *metallescens* and *poweri*, but dorsal emargination filled with a conspicuous and typical membranous projection.

Diagnosis:

The species is quite distinctive by its well pronounced chagrination. The only other species which may develop an equally distinct microreticulation on pronotum and elytra are *O. metarius* and *metellus*, but this chagrination is never developed on the head of *metarius* or *metellus*.

D i s t r i b u t i o n : Southeastern Turkey.

Etymology:

The type-locality lies in the Turkish province of Hatay.

*Ochthebius himalayae* n.sp.

Type locality:

Sun Kosi river, ca. 20 m wide, fast flowing, cold, at the boarder between Nepal and Tibet, near the villages of Tatopani and Kodari (north of Kathmandu).

Holotype ♂: "Nepal 27.2.81 Tibetan. Grenze leg. Jäch N29/Tatopani"; NMW

Paratype ♂: identical label data; NMW.

D e s c r i p t i o n : 1,9-2,0 mm long. Black with a distinct metallic sheen; legs, antennae and mouthparts brown.

Labrum very strongly excised, more than in any European member of the species-group.

Head and pronotum without distinct punctures, but with a strong microreticulation; median sulcus of pronotum distinctly impressed, admedian

foveae moderately deep; disc of pronotum only moderately convex; postocular tooth and lateral tooth very small; sides of pronotum rather straight in anterior third and not very abruptly constricted towards basis.

Intervals of elytra somewhat rugulous, but not microreticulated like head and pronotum; explanate margin moderately wide.

Aedeagus (fig.19): distal lobe agrees with the general shape in the species-group, but it is considerably shorter than in most other species, which gives it a rather different appearance.

D i s t r i b u t i o n : Nepal, Tibet.

*Ochthebius huberti* n.sp.

Type locality:

Spring in a forest near Mugla, southwestern Turkey.

Holotype ♂: "TÜRKEI 13 19.5.81 Umg. Mugla H. Rausch"; NMW

Paratypes: 52 exs. from the same locality; NMW, ISNB.

D e s c r i p t i o n : 1,9-2,3 mm long. Black, very rarely with a slight coppery or greenish metallic tinge; legs and mouthparts brown.

Labrum distinctly excised; head and pronotum usually strongly microreticulated.

Median sulcus and admedian foveae shallow; postocular tooth prominent, lateral tooth almost imperceptible; sides of pronotum more or less straight in anterior third, then more or less abruptly constricted towards basis; constriction rather straight.

Punctures of elytral striae small and dense; intervals smooth and glabrous; explanate margin of elytra of ♂♂ rather narrow, hardly wider in ♀♀.

Middle of metasternum only moderately punctured and shining.

Blunt setae of last abdominal tergite of ♀ not very long.

Aedeagus (fig.11): distal lobe large with pointed apex, which distinguishes it from other species of the same complex.

Diagnosis:

*O. huberti* n.sp. ist very similar and closely related to *O. dalmatinus*,

*O. diai*, *O. scitulus* and *O. ciliciae*. Due to the variability of the external morphology (size, shape of pronotum, chagration) it is almost impossible to determine significant diagnostic characters. All mentioned species differ clearly by their genitalia. They are allopatric.

**D i s t r i b u t i o n** (fig.26): Southwestern Turkey.

**Etymology:**

Named for my friend Hubert RAUSCH (Scheibbs), who collected this species.

***Ochthebius khuzestanicus* FERRO**

*Ochthebius khuzestanicus* FERRO 1982: 146.

**Type locality:**

Hoseiniyeh, Iran.

**Type material:**

The holotype ♂ and two paratypes are housed in the MNP; One paratype is deposited in the CFL.

This species is very similar to *Ochthebius puberulus*.

**D i s t r i b u t i o n** : Known only from the type locality.

***Ochthebius metallescens metallescens* ROSENHAUER**

*Ochthebius metallescens* ROSENHAUER 1847: 27. - KNISCH 1924. - ORCHY-  
MONT 1942. - HORION 1949. - CHIESA 1959. - BRAKMANN 1966. -  
ENDRÖDY, 1967. - IENISTEA, 1968, 1978, 1982. - GUEORGUIEV 1971. -  
LOHSE 1971. - BURAKOWSKI et al. 1976. - FRANZ 1974. - BALFOUR-  
BROWNE 1978. - GEISER 1979. - HEBAUER 1980. - PIRISINU 1981. -  
NIEUKERKEN 1982. - JÄCH 1982. - BALDARI et al. 1983. - SCHAE-  
FER 1985.

*Ochthebius fuscipalpis* REY 1886: 62. - KNISCH 1924. - ORCHY-  
MONT 1942.

*Ochthebius viganoi* PIRISINU 1974: 362. - PIRISINU 1981 (= **syn.nov.**)

**Type locality:**

Erlangen, FRG.

**Type material:**

Lectotype ♂ (by present designation): "49320/ Erlangen Ros." This specimen is part of the "historical" collection of the HUB, which was compiled around 1850. Thus it is quite possible that this specimen was collected by Rosenhauer before 1947. The NMW contains some old specimens labeled "Rosh. 853/ metallescens Erlangen", which were probably collected by ROSENHAUER at or near the type-locality. According to L. Zerche (in litt.) one of the syntypes is housed in the DEL. Number of syntypes unknown.

**Synonyms:**

Of the three syntypes from which *O. fuscipalpis* REY was described I have seen only one ♀: "Siagne Grouvelle/ ♀/ 11" (MGL). This specimen is identical with *O. metallescens*. The two remaining syntypes may be deposited in the Grouvelle collection (MHNP). I have not yet designated a lectotype. I have not seen the holotype of *Ochthebius viganoi* (type locality: Capraia, Italy), which is housed in the Istituto di Zoologia dell' Università di Perugia, but I examined one ♂ from eastern Liguria, determined as *O. viganoi* by Ferro. This specimen shares all the typical characters of "*viganoi*" (glabrous metasternum, aedeagus), which I consider as merely populational, without any racial value. Already ORCHYMONT (1942) mentions that the metasternum may be glabrous or pubescent in *metallescens*, even in the same population. The morphology of the aedeagus still lies within the borders of variability of that species. I was able to examine one specimen from northwestern Yugoslavia (Rijeka), which has an aedeagus (fig.2a) very much like "*viganoi*" (main piece long and straight, typical distal lobe) and an almost entirely pubescent metasternum.

**Diagnosis:**

*Ochthebius metallescens* is a highly variable species, thus a general characterization cannot be provided. Especially populations from the south-eastern part of the distribution of *O. metallescens* (Greece and Turkey) may be so devious (externally and genitally) that in several cases the border between population, subspecies and species seems unclear. The aedeagus of *O. metallescens* (figs.1,2, 3a-d) is rather constant within populations, but displays a variety of interpopulational differences, concerning mainly the length and the shape of the main piece and the shape of the distal lobe. Even the apex of the main piece, which is so constant and diagnostic in many other species, is variable in *O. metallescens*: it

can be straight or oblique.

**M a t e r i a l e x a m i n e d :**

Spain: Yunquera, leg. Rosenhauer

France: Cannes and Sospel, leg. Sainte-Claire Deville (NMW); Alp.Mar.,  
Le Rion, 20.8.1921, leg. Ochs (CPL).

Switzerland: Roveredo, leg. Halbherr (NMW; Schaffhausen (MHNG); Genève,  
Allondon, 1962 and 1968, leg. Besuchet (MHNG).

West Germany: Bavaria: Innerzell 27.8.1978, leg. Hebauer (CHD); Vilshofen/  
Donau, 14.7.1983, leg. Hebauer (CHD); Augsburg, VI.1935 (CHD); Strau-  
bing, Wörth, 14.7.1985, leg. Hebauer (CHD); Hessen, Röhn, Hilders,  
18.10.1938, leg. Ihssen (HUB).

East Germany: Potsdam (HUB).

Austria: Lower Austria: Lunz, leg. Holdhaus (NMW); Ybbsitz, 9.IX.1915,  
leg. Pinker (NMW); Gr. Hollenstein, leg. Bernhauer (NMW); Göstling/  
Ybbs, 17.VII.1976, leg. Koberwein (NMW); Erlaf nr Peutenburg, 2.8.1979,  
leg. Jäch (NMW); Bez. Scheibbs, Steinbach (Ewixengraben), 26.8.1980,  
leg. Jäch (NMW); Göstling, IX.1976, leg. E. Koberwein (OLL); Bez.  
Scheibbs, Lassingbach, Rothwald, 19.8.1984, leg. Jäch (NMW); Luegg-  
rabenbach nr Scheibbs, 30.6.1980, leg. Jäch (NMW); Jeßnitz nr Scheibbs,  
5.8.1980, leg. Jäch (NMW); Kl. Erlaf nr Perwarth, 26.8.1980, leg. Jäch  
(NMW); Meyerling, 1.6.1983, leg. Hebauer (CHD); Bad Fischau, Thermal  
spring, 15.5.1983, leg. Jäch (NMW); Schwechat, 14.VI.1980, leg. Jäch  
(NMW); Melk river nr Koppendorf, 2.6.1980, leg. Jäch (NMW); Upper  
Austria: Grünburg, VIII.1908, leg. Stolz (NMW); Steyr, 6.5.1909, leg.  
Petz (OLL); Garsten, 25.9.1909 (OLL); Dürnbach, 12.4.1909, leg. Petz  
(OLL); Stoder, 9.8.1908, leg. Petz (OLL); Styria: Gradenbach nr Köflach,  
col. Kanschegg (NMW); Carinthia: Vellach Valley, leg. Meschnigg (NMW);  
Vellach nr Eisenkappl, 20.7.1942, leg. Scheerpeltz (NMW); Gailtal, leg.  
Klimesch (ZMH); Villach, Thermal spring, 20.8.1931, leg. Strouhal  
(NMW).

Hungary: Bihar.-Com. (NMW).

Soviet Union: Podkarp., Osy, 1928, leg. Klicka (NMW);

Bulgaria: Liljacka Reka, 16.8.1963, leg. Pretner (CPL).

Yugoslavia: Slovenia: Branica VIII.1919, leg. Pretner (CPL); Lucnica nr  
Luce 28.7.1983, leg. Jäch (NMW); Kamna Gorica, 18.8.1922, leg. Pretner  
(CPL); Wochein, leg. Moczarski (NMW); Skofja Loka, 22.8.1922, leg.  
Pretner (CPL); Banska Bystrica, IX.1927, leg. Pretner (CPL); Cro-  
atia: Istria, Risano, VI.1913, leg. Pretner (CPL); Ljuta-Konavli, 9.9.1957,

leg. Pretner (CPL); Velebit, V. Paklenica, 20.6.1925, leg. Pretner (CPL); Gracac, Otuca, 8.6.1958, leg. Pretner (CPL); Castelnuovo = Hercegnovi, leg. Holdhaus (NMW); Mustajbeg, Rijeka (NMW); Bosnia: Jajce, leg. Apfelbeck (CPL); Jablanica (CPL); Ilidze, leg. Apfelbeck (CPL); Pazaric, leg. Apfelbeck (CPL); Sarajevo, coll. Kaufmann (NMW); Potok Klobucari, Cemerno, 16.7.1969, leg. Pretner (CPL); Mostar (NMW); Serbia: Ak Palanka, leg. Hilf (NMW); Toplica river, 19.7.1987, 60 km w Nis, leg. Jäch (NMW); Montenegro: Savnik, 1.7.1958, leg. Pretner (CPL); Rijeka Crnojevica, leg. Pretner (CPL, NMW); Makedonia: Treska river, 50 km n Ohrid, 19.7.1987, leg. Jäch (NMW); Negorci-Sermerin, 12.8.1988, leg. Jäch (NMW).

Albania: Treska valley, leg Apfelbeck (CPL).

Italy: Liguria, Punta Mesco, 23.VI.1975, leg. G. Gardini (NMW, CFL); Abruzzi, leg. Meschnigg (NMW, HUB); Abruzzi, Pietracamela, 26.6.1926, leg. Pretner (CPL, NMW); Toscana, Lombrici, 8.3.1922 (NMW).

Greece: Makedonia, Akhladokhori, 11.8.1988, leg. Jäch (NMW); Elefthere (w Kabala), 9.8.1988, leg. Jäch (NMW); Chalkidike, n Pirgadikia, 23.7.1988, leg. Jäch (NMW); NW Thessalia, 9.6.1929, leg. Weirather (CPL); Peloponnesos, Megaspilion (NMW); Andros, Varidion, 10.3.1980, leg. Malicky (NMW).

Turkey: Thrakia, Istranca, Demirköy 28.7.1988, leg. Jäch (NMW); Bursa, Uludag, 31.7.1988, leg. Jäch (NMW); Balikesir, Ivrendi, 4.8.1988, leg. Jäch (NMW); Taurus, 10.8.1929, leg. Weirather (CPL, NMW).

*Ochthebius metallescens levantinus* ssp.nov.

*Hymenodes* ? *metallescens* MOUBAYED 1981.

Type locality (fig.25):

Northern Israel, Snir River.

Holotype ♂: "Israel 1.8.85 N.Snir I leg. Jäch"; NMW.

Paratypes: 2 exs. from the same locality, NMW; 4 exs.: "Israel 31.7.85 Banyas III leg. Jäch", NMW; 30 exs. from 4 different localities in southern Lebanon, leg. A. Dia, NMW.

1,5-1,8 mm long. Externally these specimens from Israel and the Lebanon cannot be distinguished from certain individuals from Turkey (e.g. Ulu Dag), although the distal lobe of their aedeagus (fig.4) is quite characteri-

stically different.

*Ochthebius metallescens kurdistanicus* ssp.nov.

Type locality (fig.25):

River east of Beytüssebap, Kurdistan, Turkey.

Holotype ♂: "SO-Türkei, 31.5. Beytüssebap (48) leg. Jäch 1987", NMW.

Paratypes: 1 ♂ from the same locality and 1 ♂: "SO-Türkei 31.5. Beytüssebap (47) leg. Jäch 1987"; NMW.

1,5-1,6 mm long. This subspecies differs slightly from other Turkish specimens by its shining, almost impunctate surface. Chagration on head and pronotum almost reduced. Elytral punctures deeply impressed and sometimes irregularly arranged. Legs paler than usual in this species. Aedeagus (fig.3e) with distal lobe shorter than in the two other subspecies.

*Ochthebius metarius* QRCHYMONT

*Ochthebius metarius* ORCHYMONT 1942: 5.

*Ochthebius loebli* FERRO 1984b: 590 (syn.nov.).

Type locality:

Turkey, Denizli.

Type material:

Holotype ♂ and 16 paratypes in the ISNB. I have not seen the holotype.

Synonyms:

I have examined the type of *O. loebli* FERRO (MHNG), which undoubtedly is a junior synonym of *O. metarius*.

Diagnosis:

Very similar to *O. metallescens*, from which it cannot always be distinguished without aedeagus dissection. The body surface of *O. metarius* is usually matt and somewhat reticulated, but less distinctly than in *O. hatayensis* and *O. metellus*. Elytra usually less oval than in *O. metallescens*.

Aedeagus (fig.8): The distal lobe of the aedeagus is quite variable but

very typical and cannot be confounded with any other species of that group.

**D i s t r i b u t i o n** (fig.25): Southwestern Turkey.

**M a t e r i a l e x a m i n e d :**

Greece: Samos, A. Konstantinos, 11.9.1983, leg. Jäch (NMW).

Turkey: Canakkale, Türkmenli, 5.8.1988, leg. Jäch (NMW); Mugla, 19.5.1981, leg. Rausch (NMW); Kale-Mugla, 24.7.1983, leg. Wewalka (CWW, NMW).

### ***Ochthebius metellus* ORCHYMONT**

*Ochthebius metellus* ORCHYMONT 1942: 5. - IENISTEA 1978.

Type locality:

Baskos River, Lycia, Turkey.

Type material:

Holotype ♂ (ISNB) and 19 paratypes (ISNB, NMW). I have seen the holotype and several paratypes.

Diagnosis:

This species differs from all Turkish species, except *metarius* and *hatayensis*, by the distinct microreticulation of pronotum and elytra. From *hatayensis* it may be distinguished by the shining frons. From *metarius* it cannot always be distinguished without dissection of the male genitalia.

The aedeagus (fig.7) is very characteristic: Dorsal face of main piece sinuous. Distal lobe quite different from other related species.

**D i s t r i b u t i o n** (fig.25): Known only from the type locality. JANSSENS (1960) recorded a single female for Greece, but this record is very doubtful.

### ***Ochthebius pierottii* FERRO**

*Ochthebius pierottii* FERRO 1979: 267.

Type locality:

Hindukush, Afghanistan.



Type material:

I have not seen the holotype ♂ of *pierottii*, which is deposited in the CFL.

D i s t r i b u t i o n : Known only from the type locality.

*Ochthebius poweri* RYE

*Ochthebius poweri* RYE 1870: 4. - KNISCH 1924. - ORCHYMONT 1942. -  
balfour-BROWNE 1958, 1962. - CHIESA 1958, 1959. - PIRISINU 1974,  
1981. - IENISTEA, 1978. - HANCOCK 1985.

*Ochthebius peyerimhoffi* NORMAND 1933: 302. - ORCHYMONT 1942  
(= **syn.nov.**).

*Ochthebius morettii* PIRISINU 1974: 362. - PIRISINU 1981 (= **syn.nov.**).

Type locality:

England, south coast.

Type material:

I have not seen the single (?) syntype of *Ochthebius poweri*, which - according to HANCOCK (1985) - is deposited in the Bolton Museum and Art Gallery, Bolton. The sex of this specimen is unknown. It is labeled: "Salinis/ E.C. Rye". BALFOUR-BROWNE (1958) mentions one specimen from the BMNH, collected at Seaton (Devon) by Power in 1866, which he claims to be the single type specimen of this species. The locality data of this second specimen agree quite well with the original description: "A single specimen was originally taken in brackish water on the south coast by Dr. Power in 1866;". An uncertain number of additional specimens collected by Sharp and Crotch in Dorset must also be regarded as syntypes because they are also mentioned in the original description: "and it has recently been found in some numbers by Drs. Sharpe and Crotch under similar conditions near the Chesil Bank.". As I have not seen any of these syntypes I refrain from a lectotype designation.

Synonyms:

The lectotype ♂ (by present designation) of *O. peyerimhoffi* is deposited in the NHMP: "T.Ain-Draham Dr Normand metallescens Peyerimhoffi Norm. Type/ Museum Paris Coll. P. de Peyerimhoff 1950". I have seen one paratype of *O. morettii* from Bocca Trabaria (CFL). There is no doubt that these two species are synonyms of *O. poweri*.

**Diagnosis:**

*Ochthebius poweri* usually differs from *O. metallescens* by the more strongly punctured pronotum and elytra; the elytral punctures are usually sharply defined and strongly impressed in *O. poweri*. Elytra usually more convex than in *O. metallescens*.

Specimens from Greece (Corfu, Thasos, Samos, Rhodes and Crete) differ considerably by having elytra and pronota very strongly and rugulously sculptured, thus the single punctures are often indiscernable; a subspecific status could be discussed for them.

Sexual dimorphism very weakly developed, elytral margin of ♀ usually only very slightly wider than in ♂. Last abdominal sternite of female with blunt spines.

**Aedeagus (fig.5):** The variability of the aedeagus concerns the main piece (length and curvature) and the shape of the distal lobe. There is some inter- and intrapopulation variation. The geographical differences do not imply any racial evidence. Specimens from England with short and curved main piece; inner angle of distal lobe wide. Specimens from northern Italy: main piece usually long and straight, distance between phallobasis and insertion of parameres rather long, inner angle of distal lobe small or very small. The population from Mt. Edough (Algeria) deviates considerably by the shape of the distal lobe (fig.5b); I have examined 5 aedeagi from this population. I have not found a significant distinguishing character between the aedeagus of *O. poweri* and *O. metallescens*.

**D i s t r i b u t i o n (fig.25):** Atlanto-mediterranean.

**M a t e r i a l e x a m i n e d :**

Great Britain: Devon, Exmouth (NMW); Orcombe rocks, Soeron, 4.9.1980, leg. Foster (CFS).

Portugal: Nazare, 17.7.1985, leg. Gráf (CHD).

Spain: Ceuta, 1.7.1903, leg. Peyerimhoff (MHNP), NMW).

Italy: Triest, leg. Knisch (NMW, ZMH, HUB); Muggia nr Triest, 4.9.1912, leg. Pretner (NMW); Barcola nr Triest, VI.1913, leg. Pretner (CPL);  
Piemont (NMB); Emilia, 7.6.1897, leg. Fiori (HUB); Abruzzi, Isola, 27.7.1898, leg. Fiori (HUB); Messina (NMW).

Greece: Kerkyra = Corfu, Cap A. Elias, 25.4.1930, leg. Orchymont (MHNP, ISNB, NMW); Thasos, Kinira, 15.10.1980, leg. Malicky (NMW).

Algeria: Tlemcen, coll. Bedel (MHNP, NMW); Edough, 1885, coll. Bedel

(MHNP, NMW); Constantine (ZMH); Azazga, Kabylie (MHNP); Ras el Amouh Chenoua, 17.8.1936, leg. Seurat (MHNP); Mouzaia, s Alger, 7.6.1943 (MHNP).

*Ochthebius puberulus* REITTER

*Ochthebius puberulus* REITTER 1885: 364. - KNISCH 1924. - ORCHYMONT 1942. - IENISTEA 1978, 1988.

*Ochthebius jelineki* FERRO 1982: 145 (= *syn.nov.*)

Type locality:

Tiflis, Soviet Union.

Type material:

The lectotype ♂ (by present designation) of *O. puberulus*: "Caucasus Tiflis Leder (Reitter) / 1881 / *Ochthebius puberulus* Rtrr. / *puberulus*" is deposited in the NMW. More paralectotypes are housed in the NMW (2 exs.), TMB (7 exs.), MHNP (3 exs.) and ZIL (2 exs.). The number of syntypes was not specified in the original description. Probably there are more syntypes in other collections.

Synonyms:

I have examined one paratype ♂ of *Ochthebius jelineki* (NMW), which must be considered a junior synonym of *O. puberulus*.

Aedeagus (fig.20): The distal lobe of *O. puberulus* is very typical (apex recurved) and can only be mistaken for *O. khuzestanicus*.

D i s t r i b u t i o n : Caucasus and Elburz (type locality of *jelineki*).

Material examined:

Soviet Union: Tiflis, 13.5.1879 (ZIL, NMW).

*Ochthebius rectilobus* n.sp.

Type locality:

Same as in *O. hatayensis*.

Holotype ♂:

"TR 23.5.1987 Yaylagagi leg. Jäch (17)"; NMW.

**Description:** 1,5 mm long. In its general appearance this species resembles *O. metallescens*, especially one specimen from the Greek island of Andros. Sides of pronotum strongly rounded in anterior third. Pronotum convex. Head and pronotum only sparsely punctured, shining. Intervals on elytra smooth and shining. Pronotal foveae shallowly impressed. Elytral punctures distinctly impressed. Elytral hairs thinner and shorter than in *O. metallescens*. Explanate margin of elytra narrow. Elytral shoulders quite well developed.

*Ochthebius rectilobus* differs from *O. m.lebetinus* by the well developed shoulders, by the well impressed elytral punctures and by the thin and inconspicuous body hairs.

**Aedeagus (fig.23):** The distal lobe differs clearly from all other species of the complex in being almost straight and not distinctly recurved.

**Distribution:** Southern Turkey.

**Etymology:**

Refers to the straight distal lobe of the aedeagus.

***Ochthebius reyi* nom.nov.**

*alutaceus* REY 1886: 59. - KNISCH 1924. (= *junior homonym* of *alutaceus* REITTER 1885)

*semisericeus* SAINT-CLAIRE DEVILLE 1908: 531. - KNISCH 1924. - GRIDELLI 1926. - ORCHYMONT 1942. - SCHAEFER 1957. - CHIESA 1958, 1959. - IENISTEA 1978, 1988. - PIRISINU 1981. (= *syn.nov.*)

*semotus* ORCHYMONT 1942: 12. - BALFOUR-BROWNE 1978. - IENISTEA 1978, 1988. (= *syn.nov.*)

*sennius* ORCHYMONT 1942: 13. - CHIESA 1959. - FERRO 1986. - IENISTEA 1988. (= *syn.nov.*)

*gestroi* GRIDELLI 1926: 463. - CHIESA 1959. - BINAGHI 1967. - IENISTEA 1978. - PIRISINU 1981. (= *syn.nov.*)

*griotes* FERRO 1985: 234. (= *syn.nov.*)

**Type locality:**

Hautes Pyrénées (Aragonuet), France.

**Type material:**

The number of syntypes of *O. alutaceus* REY is unknown. The Rey collection (MGL) contains 3 specimens under the name *alutaceus*: 2 ♀♀: "H.Pyr." and 1 ♀ (lectotype by present designation): "Hte Pyr. Pandellé". According to the original description the type specimens were collected by Pandellé. As the epithet *O. alutaceus* was already used by REITTER (1885), *alutaceus* REY must be considered a junior homonym. Thus I replace the name *alutaceus* REY with *reyi* nom.nov.

**Synonyms:**

The following type localities are mentioned for *O. semisericeus* in the original description: Corsica, Alpes Maritimes (Castellar), Pyrenées orientales (Le Vernet), Hautes Pyrenées and Spain (Tragacete). The number of syntypes is not exactly known. Lectotype ♂ (by present designation): "Castellar in Umgeb. Menton / Claire-Deville Provence / semisericeus / metallescens", deposited in the NMW. Seven paralectotypes with identical label data in the NMW. In the Sainte-Claire Deville collection (NHMP). I found 16 syntypes from all type localities. Five additional syntypes from Castellar are found in the Carret collection (NHMP). I have not seen the holotype of *O. semotus* ORCHYMONT (type locality: Spain, Granada) and *O. sennius* ORCHYMONT (type locality: Icaria, Greece), which are deposited in the ISNB. But I have seen numerous specimens from Spain, Algeria and Greece which agree very well with the original descriptions of ORCHYMONT (1942). I have not seen any of the syntypes (number not exactly known) of *O. gestroi* GRIDELLI (type localities: Giglio and Genova), which are probably deposited in the Museo Civico di Storia Naturale, Genova. But I have examined one ♂ from Genova which agrees very well with the description of GRIDELLI (1926). I have not seen the holotype ♂ of *Ochthebius griotes* FERRO (type locality: Ait Khalbach, northern Morocco), which is deposited in the Inst.Sci. Charia Ibn di Rabat. Nine paratypes are housed in the same institution and in the CFL and one paratype, which I have examined, is deposited in the NMW.

**Diagnosis:**

*Ochthebius reyi* is probably the most variable species of the genus. The populations differ not only by their aedeagi but also by their external mor-

phology. The latter may even differ profoundly within populations. The body length varies from 1.8 mm to 2,2 mm. The smallest specimens are from Morocco, the largest ones from eastern Algeria. Larger ♀♀ have comparatively wider elytral margins. Head and pronotum usually moderately to densely chagreened with shallow but distinct pronotal foveae. In some populations this chagreen may be very well-pronounced and the pronotal foveae may be completely obsolete (Mt. Edough in Algeria). Only rarely is the pronotal chagreen obsolete, so that distinct punctures become visible on the disc (Oran). The densely reticulated pronota are usually flatter and wider. The sides of the pronotum may be abruptly emarginate or evenly rounded ("ears" round or angular). Surface of elytra varies from smooth and shining to strongly reticulate and matt. Specimens from Corsica and Mt. Edough are usually very strongly reticulate. The male genitalia of *Ochthebius reyi* (figs.17,18,24) differ only slightly within, but greatly between, populations. Regional similarities can be observed, but I am unable to deduce any evidence of (sub)-specification. Generally North African aedeagi differ from French ones, but I have seen a specimen from Oran which totally agrees with the penis of a French specimen. External similarities do not allow conclusions about the aedeageal morphology. The male genitalia of externally similar specimens from different populations can be very different. The aedeagi differ mainly by the size and the curvature of the main piece and by the apex and the general shape of the distal lobe, which can be short and wide (central Italy, Mt. Edough) or slender and straight (several North African populations) or long and winding (France, Algeria, northern Italy).

Generally it can be said that the variability increases from north to south. This is easily explained, as the populations from the northern part (France, northern Italy) of the distribution range of this species are not so widely separated from each other as are the populations from the islands and the highly arid southern part (southern Spain, North Africa, Icaria, Cyprus), where appropriate habitats are very scarce. *Ochthebius reyi* once was probably widely distributed all over the Mediterranean, where it is restricted to numerous relic populations today.

**D i s t r i b u t i o n** (fig.24): Mediterranean.

**M a t e r i a l e x a m i n e d :**

Spain: Sierra Morena (NMW); Malaga, S. Pedro de Alcantara 23.VII.1969,

leg. A. Senglet (MHNG, NMW).

France: Banyuls-sur-mer, IX.1980, leg. Terlutter (CPL, CHD).

Italy: Südtirol, Vallarsa, leg. Spurny (NMW); Friuli, Campone IX.1927 (CPL, NMW); Genova, Neri Scogliera, 26.4.1975, leg. L. Briganti (NMW).

Greece: Ikaria, Karavostamon, V.1979, leg. Malicky (NMW).

Cyprus: Troodos, Mesopotamos, 21.6.1939, leg. Lindberg (ZMH, NMW).

Morocco: 14.7.1946, leg. Peyerimhoff (MHNP, NMW); Tuza, 14.7.1946 (MHNP).

Algeria: Oran, coll. Fairmaire (MHNP, NMW); L'Edough (MHNP, NMW); Tlemcen, coll. Bedel (MHNP, NMW); Mouzaia, s Alger (MHNP).

Tunisia: 22.7.1934, leg. Peyerimhoff (MHNP, NMW).

### *Ochthebius scitulus* FERRO

*Ochthebius scitulus* FERRO 1982: 148

Type locality:

Elburz, Iran.

Type material:

The holotype ♂ is deposited in the MNP. Sixteen paratypes are housed in the MNP, CFL and NMW.

Diagnosis:

This species belongs to the *O. dalmatinus*-complex and can hardly be distinguished from other species of the same complex without genital dissection.

Aedeagus (fig.12) rather constant. Penis of the Turkish specimens slightly smaller than that of the paratype from Iran.

D i s t r i b u t i o n : Eastern Turkey and western Iran.

M a t e r i a l e x a m i n e d :

Turkey: Islahiye, 100 km n Antakya, 26.6.1987, leg. Jäch, 2 exs. (NMW); Mutki, w Tatvan, 11.6.1987, leg. Jäch, 1 ♂ (NMW); Tanin-tanin pass near Uludere, 31.5.1987, leg. Jäch, 2 exs. (NMW); 20 km w Uludere, 31.5.1987, leg. Jäch, 3 exs. (NMW); Beytüssebap, 31.5.1987, leg. Jäch, 2 exs. (NMW); Hakkari, large spring, 2.6.1987, leg. Jäch, 1 ♂ (NMW).

*Ochthebius sempronius* ORCHYMONT

*Ochthebius sempronius* ORCHYMONT 1942: 13. - IENISTEA 1978, 1988.

Type locality:

Chios, Greece.

Type material:

Holotype ♂ and 41 paratypes in the ISNB. I have not examined the holotype.

Diagnosis:

This species, which also belongs to the *O. dalmatinus* complex, is very variable, although the morphology of its aedeagus is quite constant.

Aedeagus (fig.16): Distal lobe with a very small but typical tooth in the middle of the concavity of the distal lobe.

Distribution (fig.26): Aegean.

Material examined:

Greece: Thasos, Kinira, 15.10.1980, leg. Malicky (NMW); Andros, Apikia, 12.6.1979, leg. Malicky (NMW); Tinos, Kardiani, 8.6.1979, leg. Malicky (NMW); Serifos, V.1979, leg. Malicky (NMW).

*Ochthebius serpentinus* n.sp.

*Ochthebius anamasicus* IENISTEA, 1988: 226 (= nomen nudum).

Type locality:

Small stream, ca. 2-3 m wide, unshaded, alt.: ca. 2.600 m, cristalline, through meadows, on Güzeldere pass, north of the village of Baskale, Van Province, Turkey.

Holotype ♂: "TR 5.6.1987 Van-Baskale 2.600 m Güzeldere P. leg. Jäch (61)"; NMW.

Paratypes: 7 exs. from the same locality; - 2 exs.: "SO-Türkei 31.5. Uludere Paß (46), leg. Jäch 1987"; - 6 exs.: "SO-Türkei 31.5. Beytüşsebab (47), leg. Jäch 1987"; - 8 exs.: "SO-Türkei 31.5. Beytüşsebab (48), leg. Jäch 1987"; - 3 exs.: "TR 11.6.1987 (71) Mutki w. Tatvan, Jäch"; - 10 exs.: "Anamas Geb., Kl.As., Pisidischer Taurus Weirather, Innsbruck" (one specimen has an additional label: "Hymenodes puberulus Rtt. det. M.Al. Ienistea"); NMW, MHNG.



**D e s c r i p t i o n :** 1,7-1,9 mm long. This species agrees very well with all general characters of *O. m.metallescens* and some other species of this complex. Pronotum usually distinctly punctured - almost as in *O. smyrnensis*. Anterior portion of pronotum slightly rounded or almost straight. Explanate margin of elytra of ♀♀ distinctly wider than in ♂♂.

Sometimes females cannot be distinguished from *O. smyrnensis*, *O. metarioides*, *O. m.metallescens* and *O. m.lebetinus*. *Ochthebius m.kurdistanicus* is much flatter and smoother. *O. hatayensis* and *O. metellus* differ by the distinct chagration. *O. rectilobus* is a smaller species (1,5 mm) with sides of pronotum strongly rounded and evenly constricted in anterior third.

**Aedeagus (fig.10):** Distal lobe very characteristic, double-arched; it cannot be confused with any other species.

**D i s t r i b u t i o n** (fig.25): Eastern and southern Turkey.

**Etymology:**

Refers to the serpentine distal lobe of the aedeagus.

#### *Ochthebius smyrnensis* SAHLBERG

*Ochthebius smyrnensis* SAHLBERG 1908: 26. - KNISCH 1924. - ORCHY-MONT 1942. - SILFVERBERG 1987. - IENISTEA 1988.

*Ochthebius metallescens metallicus* ORCHYMONT 1942: 4 (= **syn.nov.**).

*Ochthebius metarioides* FERRO 1983: 74 (= **syn.nov.**).

**Type locality:**

Izmir, Turkey.

**Type material:**

Holotype ♀: "Smyrna / U.Sahlb. / 5036 / spec.typ. / Ochthebius (Cheilochthebius) smyrnensis J. Sahlb. / Mus.Zool. H: fors Spec.typ. No 863 Ochthebius smyrnensis J. Sahlb"; deposited in the ZMH.

**Synonyms:**

The holotype ♂ of *Ochthebius metarioides* FERRO is deposited in the NMP. No doubt this species is a junior subjective synonym of *Ochthebius smyrnensis*. I have seen the female paratype of *Ochthebius metallescens metallicus* ORCHYMONT, which is housed in the ISNB. Although I did not see the male holotype, I have no doubt that *O. metallicus*, too, is

a synonym of *Ochthebius smyrnensis*. According to ORCHYMONT's illustration of the aedeagus, I assume that the apex of the distal lobe of the holotype is damaged.

**Diagnosis:**

In shape, size and general appearance *Ochthebius smyrnensis* agrees with other species of the *O. metallescens*-complex (*O. metallescens*, *O. metarius*, *O. serpentinus*, *O. hatayensis*). It differs from these species by the distinctly and strongly punctured pronotum. Space between punctures smooth or very superficially reticulated.

**Aedeagus (fig.6):** Distal lobe characterized by the undulating apical half.

**Distribution (fig.25):** Western Turkey.

**Material examined:**

Turkey: Balıkesir, Susurluk, 2.8.1988, leg. Jäch (NMW); Bergamon, 4.8.1988, leg. Jäch (NMW); Canakkale, Kalkim, 3.8.1988, leg. Jäch (NMW); Canakkale, Türkmenli, 5.8.1988, leg. Jäch (NMW); Taurus, 10.8.1929, leg. Weirather (CPL, NMW, CHD).

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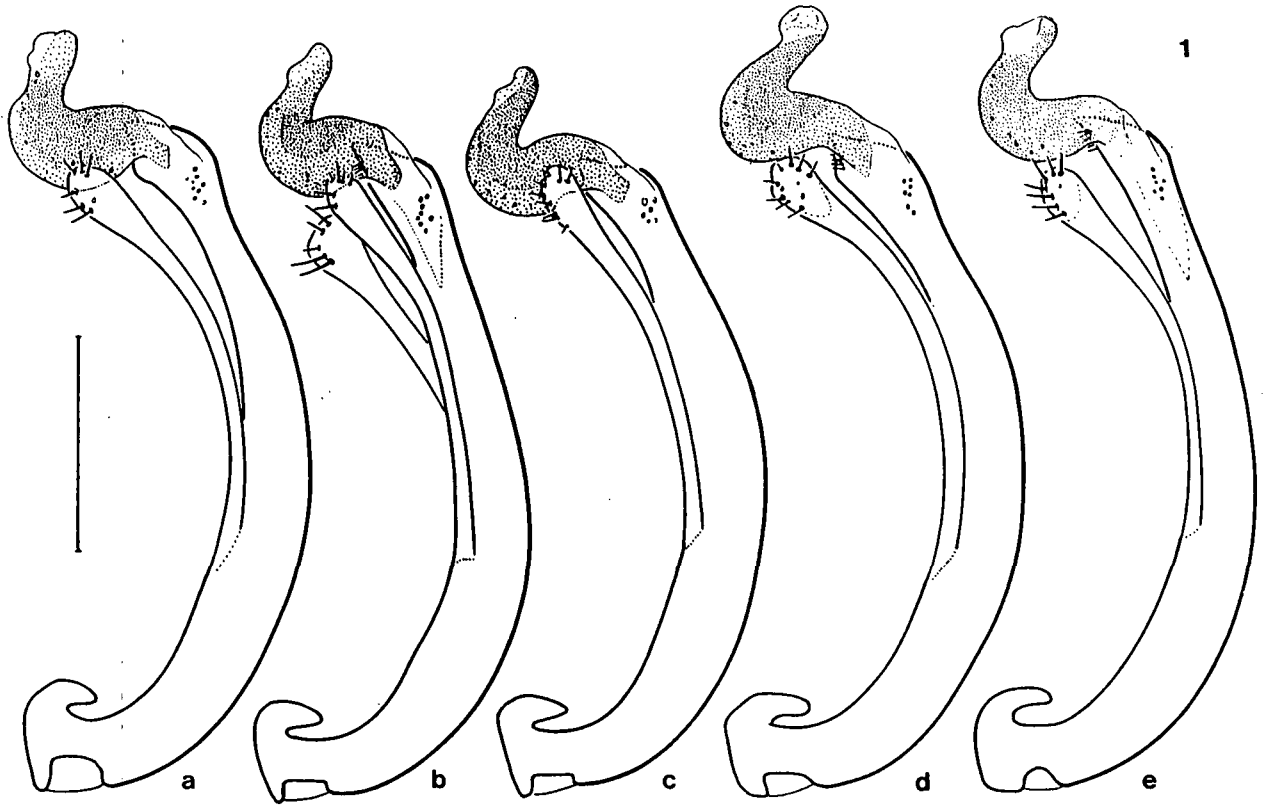


Fig.1: Lateral view of aedeagus of *O. metallescens* from Yunquera (a), Alpes Maritimes (b), Erlangen (c, Lower Austria (d) and Nis (e). All distal lobes with maximum outlines.

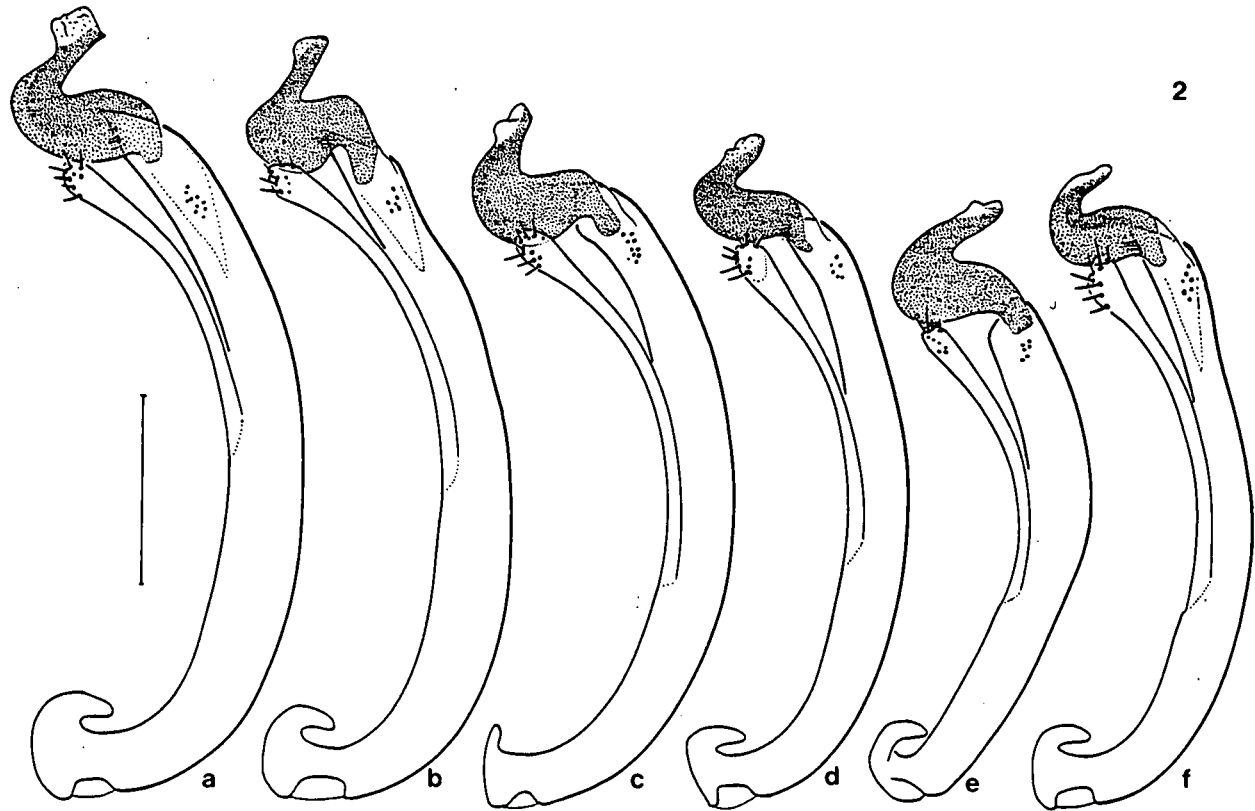


Fig.2: Lateral view of aedeagus of *O. metallescens* from Rijeka (a), Genova (b), Abruzzo (c), Khalkidhike (d), Andros (e) and the Peloponnesos (f). Distal lobes with maximum outlines.

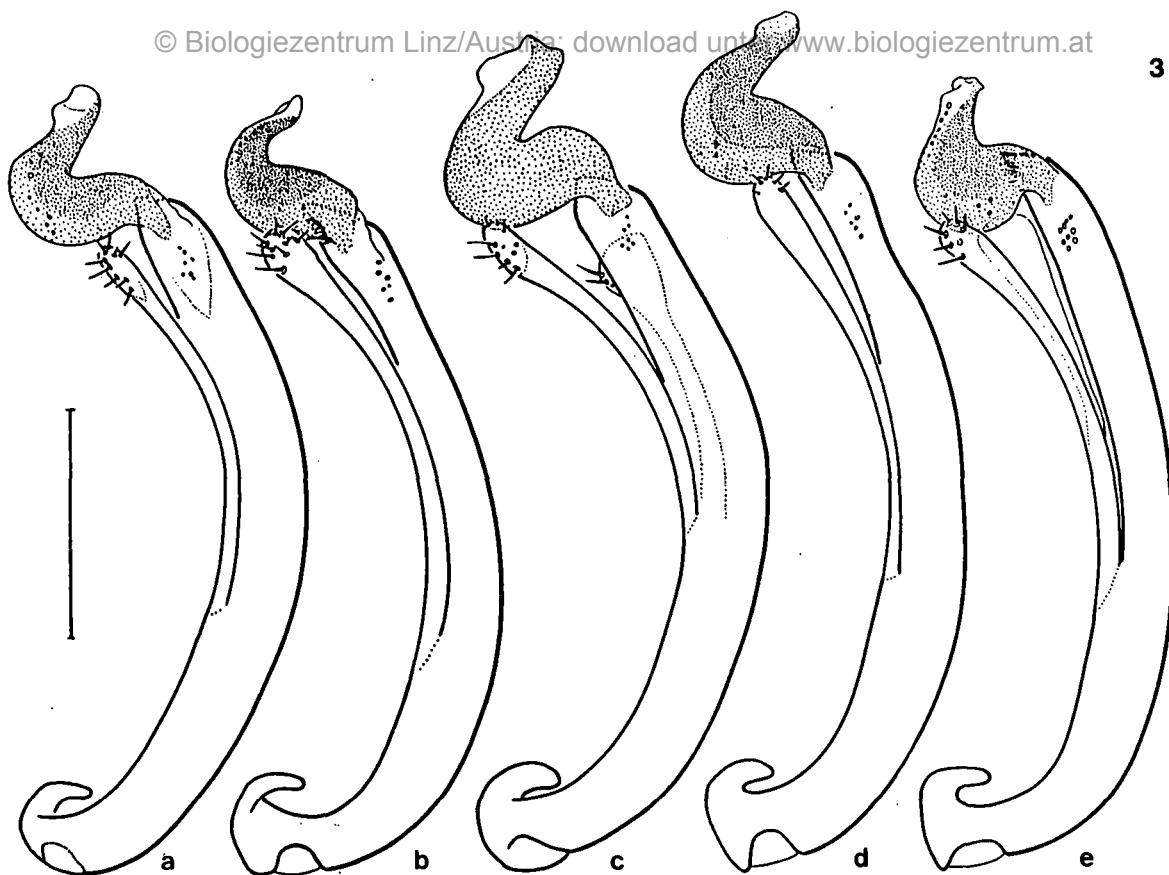
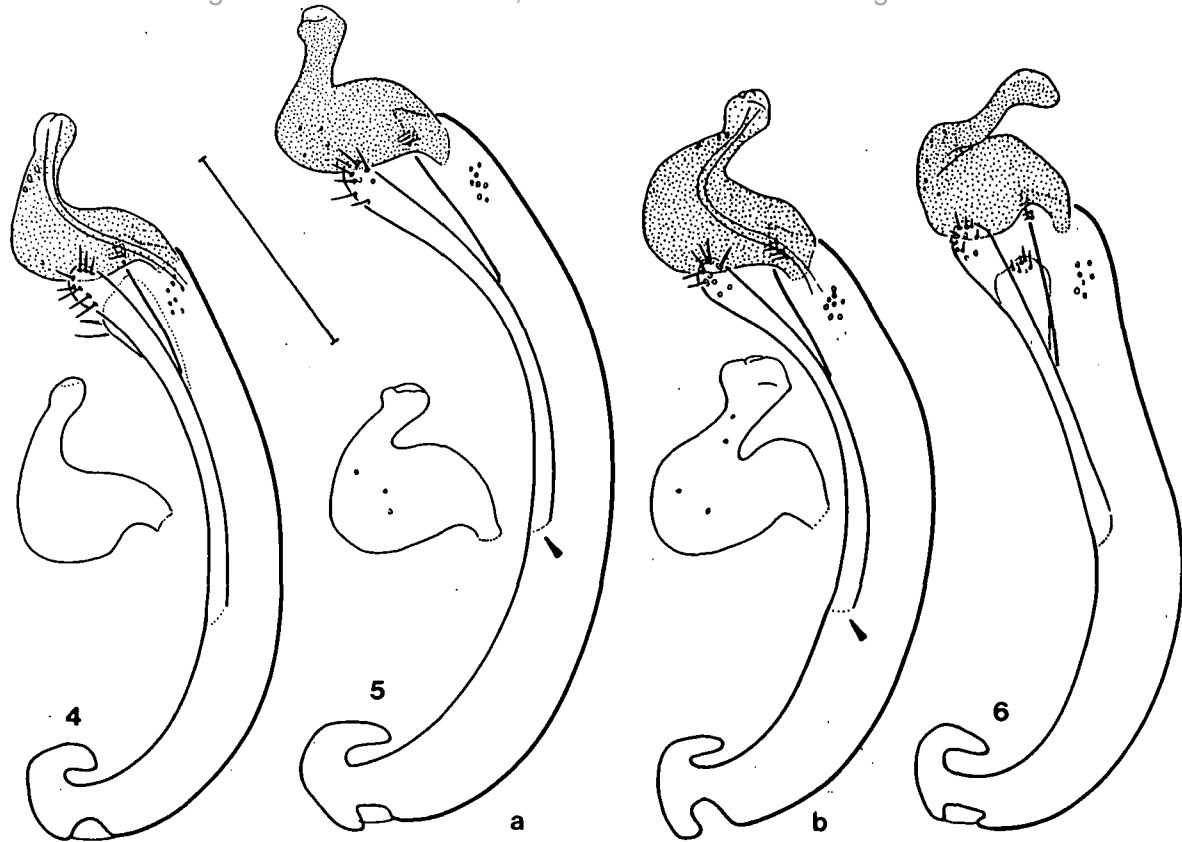
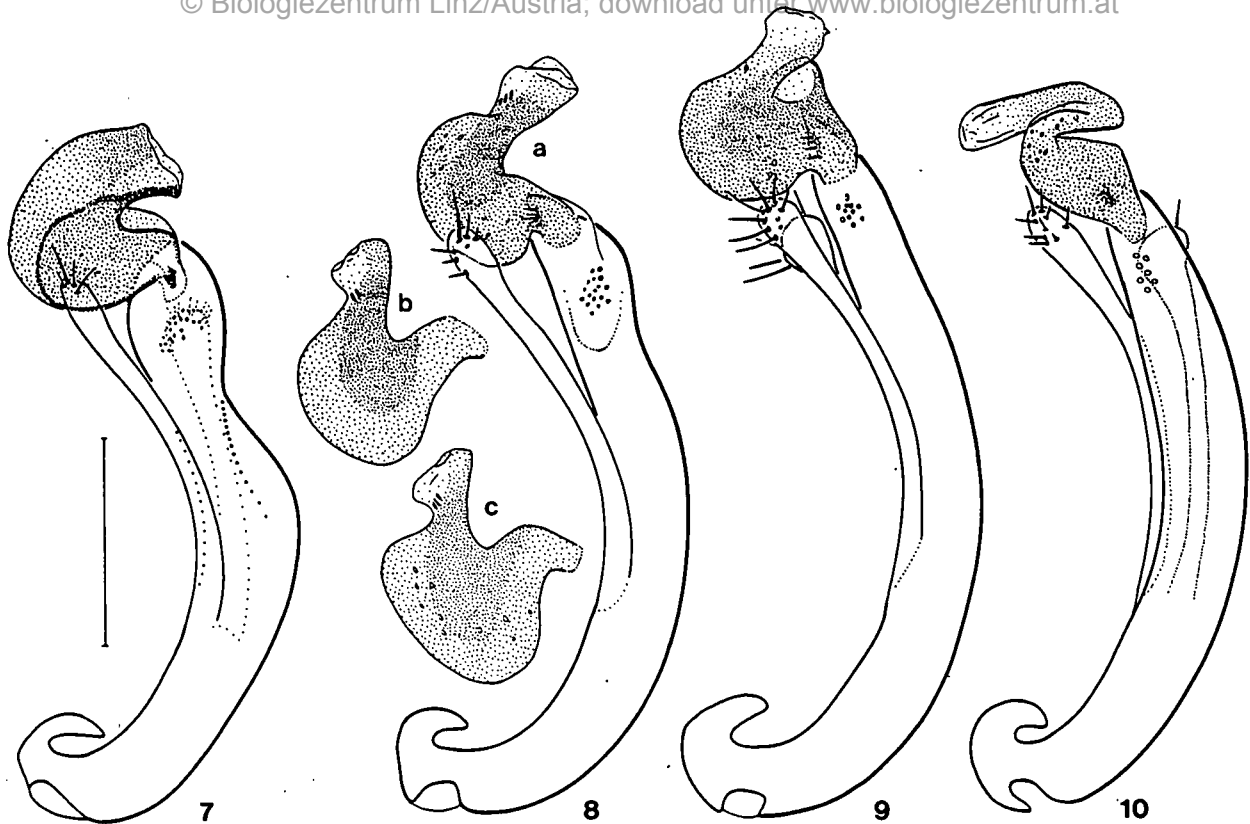


Fig.3: Lateral view of aedeagus of *O. m. metallescens* from Thrakia (a), Uludag (b), Balikesir (c), Taurus (d) and *O. m. kurdistanicus* (e). Distal lobes with maximum outlines.

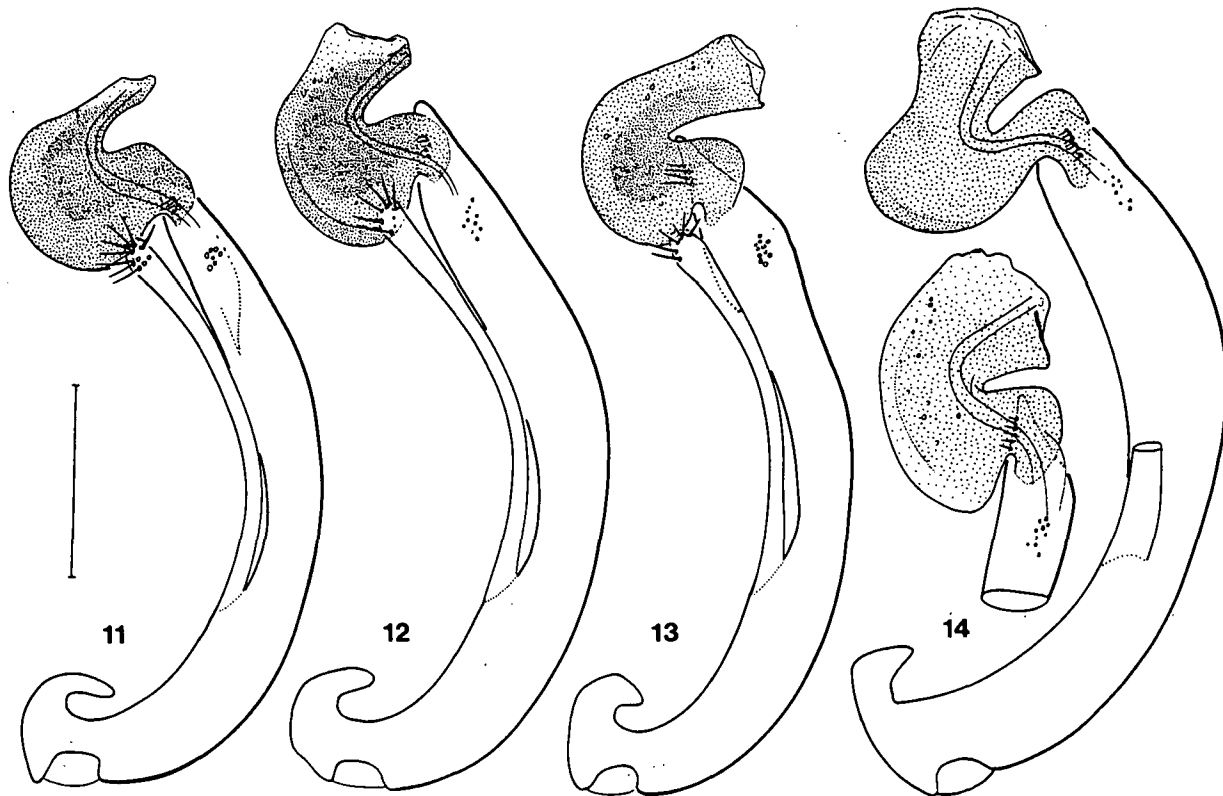




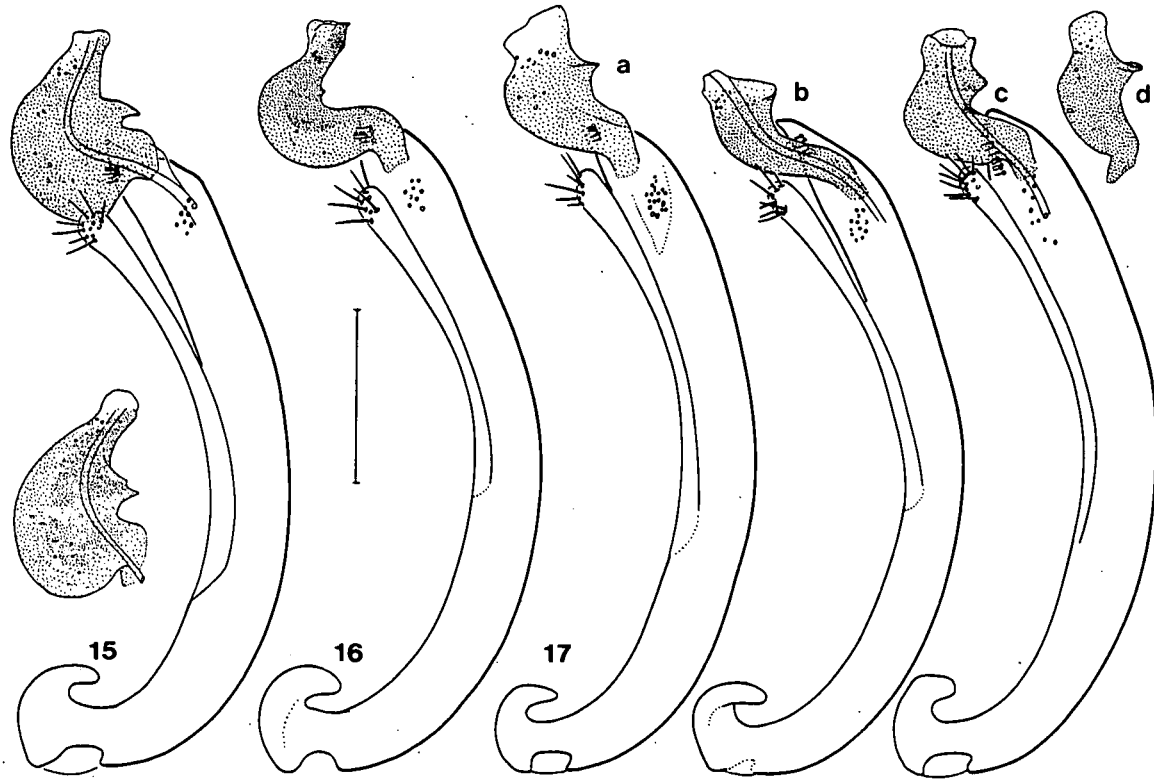
Figs.4-6: Aedeagus, lateral view: 4) *O. metallescens levantinus* (holotype); inset: distal lobe (Lebanon); 5) *O. poweri* from Triest, inset: different specimen from the same locality (a) and England, inset: specimen from Algeria, Mt. Edough (b); 6) *O. smyrnensis* (Bergama). All distal lobes with maximum outlines.



Figs.7-10: Aedeagus, lateral view: 7) *O. metellus* (paratype); 8) *O. metarius* from Samos - distal lobe not with maximum outlines (a), Samos - with maximum outlines (b) and Mugla (c); 9) *O. hatayanus* (Kilis); 10) *O. serpentinus*.



Figs.11-14: Aedeagus, lateral view: 11) *O. huberti* (paratype); 12) *O. scitulus* (paratype); 13) *O. n.* sp. from the Lebanon; 14) *O. ciliciæ* (paratype) - distal lobe not with maximum outlines; inset: apex of same - distal lobe with maximum outlines.



Figs.15-17: Aedeagus, lateral view: 15) *O. dalmatinus* (Dubrovnik), inset: specimen from Mostar; 16) *O. sempronius* (Thasos); 17) *O. reyi*, Sierra Morena (a), Malaga (b), Ikaria (c) and Cyprus (d).

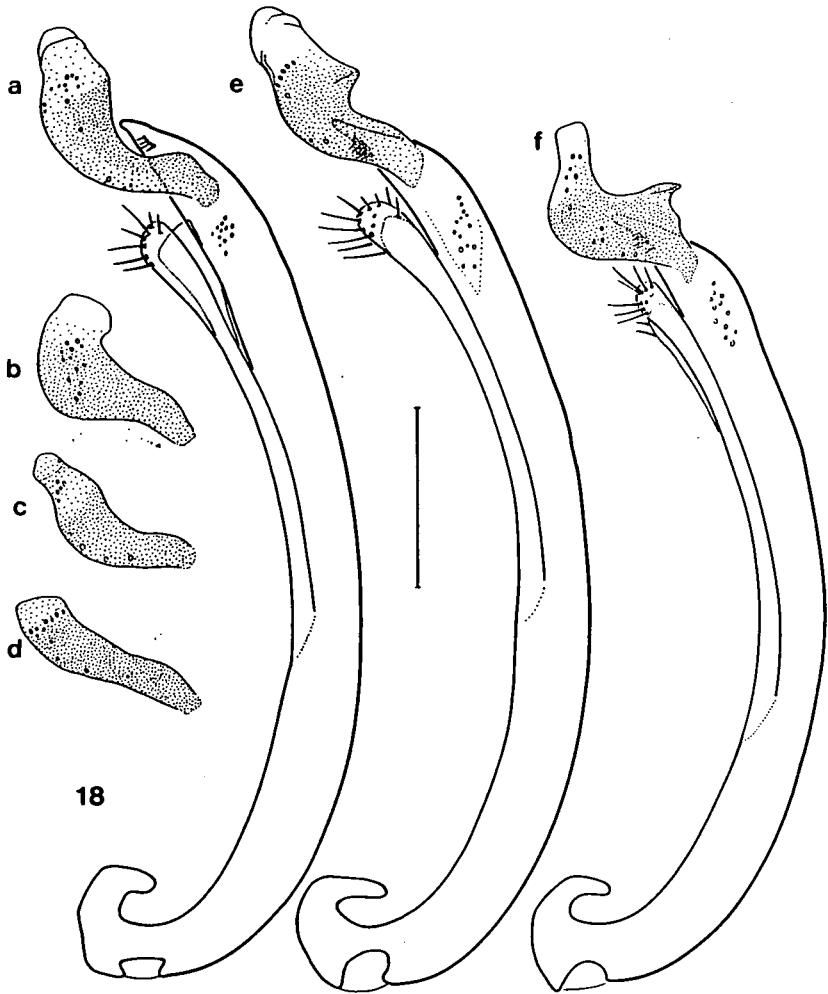
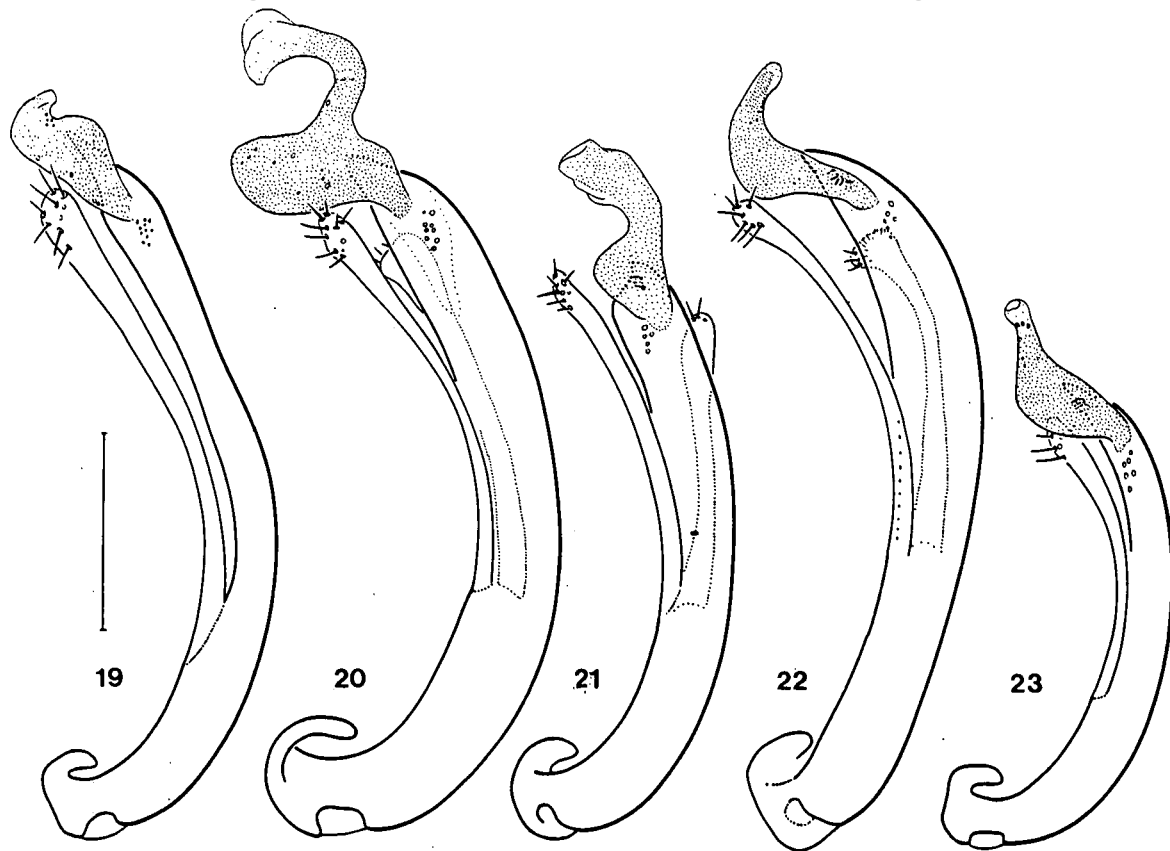


Fig.18: Aedeagus of *O. reyi* from Pyrenées orientales (a), Genova (b), Vallarsa (c), Morocco - paratype of "*griotes*" (d), Tragacete (e) and Tlemcen (f).



Figs.19-23: Aedeagus, lateral view: 19) *O. himalayae* (holotype); 20) *O. puberulus* (Elburz); 21) *O. albacetus* (paratype); 22) *O. decianus* (paratype); 23) *O. rectilobus* (holotype).

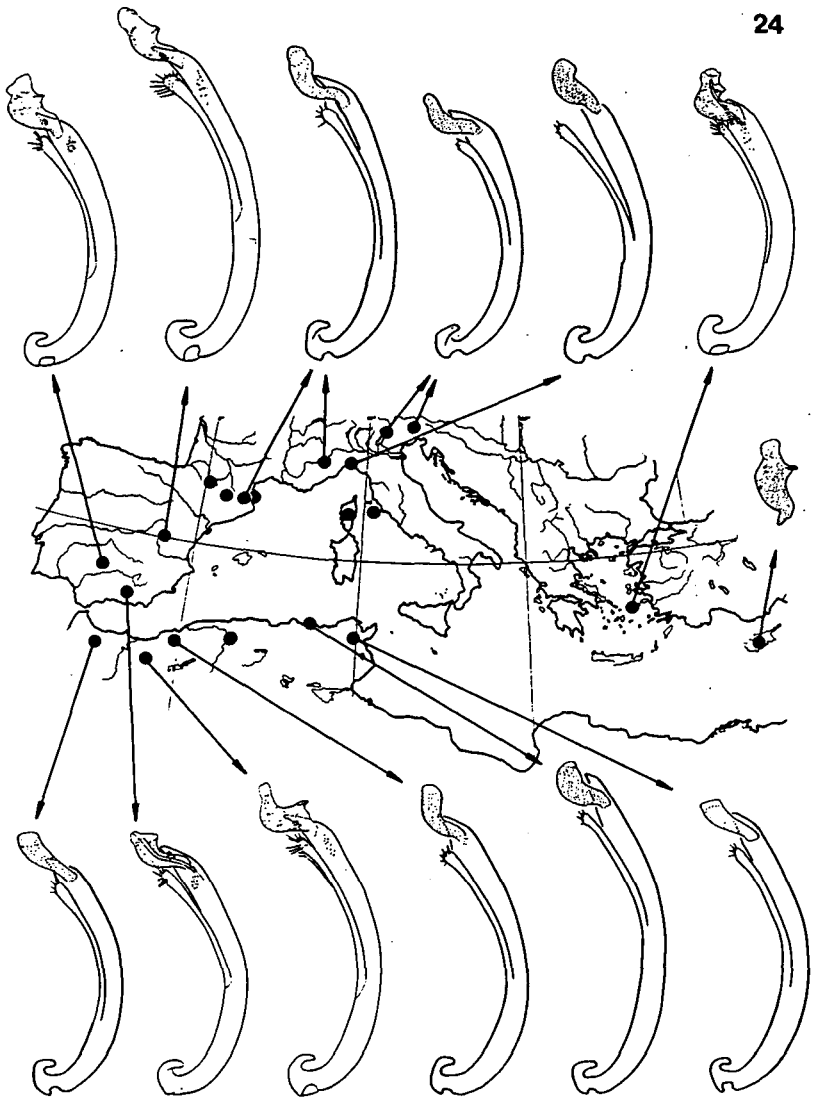
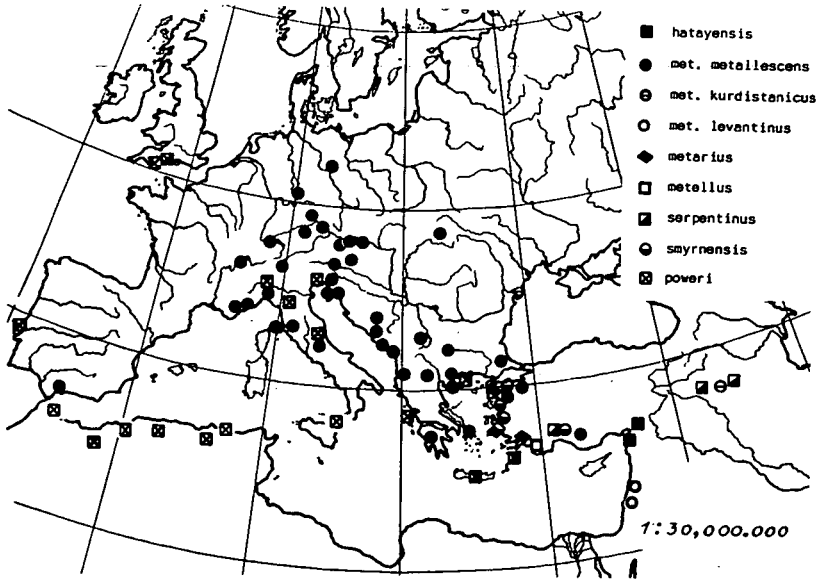


Fig.24: Geographical distribution of *Ochtthebius reyi*, showing aedeagal variation.

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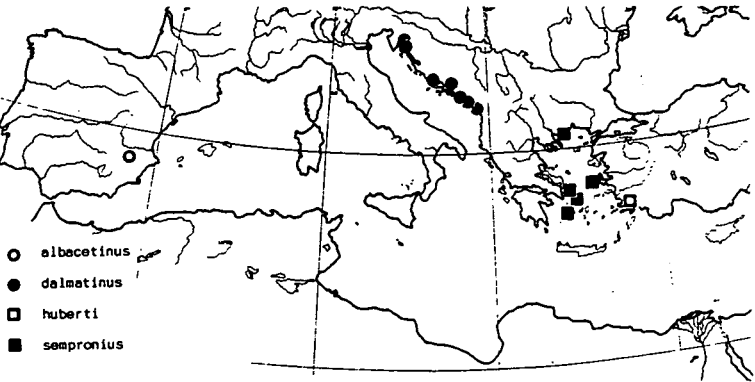


Fig.25-26: Geographical distribution of *O. hatayensis*, *O. metallescens*, *O. metellus*, *O. poweri*, *O. serpentinus*, *O. smyrnensis* (25) and *O. albacetus*, *O. dalmatinus*, *O. huberti*, *O. sempronius* (26).



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