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## Revision of the *Cleptes nitidulus* group of the world (Hymenoptera, Chrysididae, Cleptinae)

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### Abstract

Key words: Taxonomy, distribution of Hymenoptera, *Cleptes nitidulus* group.

Two species are described: *Cleptes dauriensis* sp. nov. ♀ from Russia and *C. nyonensis* sp. nov. ♀ from France. The previously unknown male of *C. rugulosus* LINSENMAIER, 1968 and female of *C. anceyi* BUYSSON, 1891 are described. *C. femoralis* MOCSÁRY, 1890 and *C. insidiosus* BUYSSON, 1891 are reinstated. Three synonyms are established: *C. antakyensis* LINSENMAIER, 1968 = identical with *C. femoralis* MOCSÁRY, 1890, *C. hyrcanus* SEMENOV, 1920 = *C. caucasicus* SEMENOV, 1920, and *C. nitidulus* var. *erdösi* MÓCZÁR, 1951 = *C. semicyaneus* TOURNIER, 1879. Lectotypes are designated in *C. caucasicus* SEMENOV, 1920 and in *C. morawitzi* RADOSZKOWSKI, 1877. In some species the statements of the holotype to lectotype and the lectotype to holotype are corrected. New data and variability of some species are given. A key is completed for the 25 species.

### Zusammenfassung

Zwei Arten werden beschrieben: *Cleptes dauriensis* sp. nov. ♀ aus Rußland und *C. nyonensis* sp. nov. ♀ aus Frankreich. Das bisher unbekannte Männchen von *C. rugulosus* LINSENMAIER, 1968 und Weibchen von *C. anceyi* BUYSSON, 1891 werden beschrieben. *C. femoralis* MOCSÁRY, 1890 und *C. insidiosus* BUYSSON, 1891 werden revalidisiert. Drei Synonyme werden erkannt: *C. antakyensis* LINSENMAIER, 1968 = identisch mit *C. femoralis* MOCSÁRY, 1890, *C. hyrcanus* SEMENOV, 1920 = *C. caucasicus* SEMENOV, 1920 und *C. nitidulus* var. *erdösi* MÓCZÁR, 1951 = *C. semicyaneus* TOURNIER, 1879. Lectotypen werden designiert für *C. caucasicus* SEMENOV, 1920 und in *C. morawitzi* RADOSZKOWSKI, 1877. Bei einigen Arten werden die Angaben über Holotypus zu Lectotypus und Lectotypus zu Holotypus korrigiert. Neue Daten und die Variabilität einiger Arten wird aufgezeigt. Ein Bestimmungsschlüssel für die 25 Arten wird angefertigt.

## Introduction

Since the world monographs written by DAHLBOM (1854) and MOCSÁRY (1889) containing information and keys for Chrysididae species known up to that time, a new monograph was only published by KIMSEY & BOHART (1991). This latest work reviews the accumulated literature of Chrysididae and not only does it give information about genera, lists species and their synonyms but also discusses biogeographical and phylogenetic relationships. This fundamental work could be developed further by describing the individual genera in more detail, carrying out a more distinctive characterization of the species and revising their distribution patterns. The authors of this latest extensive work listed 18 Cleptidea and 69 *Cleptes* species in the Cleptinae subfamily. The Cleptidea genus has recently been revised and the updated key published (MÓCZÁR 1996). The West-Palaearctic species of *Cleptes* have been located into 7 subgenera (MÓCZÁR 1962). To classify the species, KIMSEY & BOHART (1991) introduced a "more flexible" species group. The authors placed *morawitzi* in *nitidulus* species group although it does not completely correspond to the characteristics of either *nitidulus* or *satoi* species groups. It seems necessary that the compilation of the new species group will be accepted only following the total revision of all the species.

The 25 species of the *nitidulus* group, which is discussed here, are found mostly in the Palaearctic region, while two species are found in the Nearctic region. Members of this group are characterized by the unmodified pronotum, the abdominal coloration: the basal terga are reddish or yellowish brown and the apical segments are blackish or metallic (KIMSEY & BOHART 1991).

In the course of the investigation two new species have been found: *Cleptes dauriensis* sp. nov. ♀ (from Russia) and *C. nyonensis* sp. nov. ♀ (from France). The previously unknown male of *C. rugulosus* LINSENMAIER, 1968 and female of *C. anceyi* BUYSSON, 1891 are also described here. *C. femoralis* MOCSÁRY, 1890 and *C. insidiosus* BUYSSON, 1891 are reinstated. Three synonyms are established as follows: *C. antakyensis* LINSENMAIER, 1968 = identical with *C. femoralis* MOCSÁRY, 1890, *C. hyrcanus* SEMENOV, 1920 = *C. caucasicus* SEMENOV, 1920, and *C. nitidulus* var. *erdösi* MÓCZÁR, 1951 = *C. semicyaneus* TOURNIER, 1879. Lectotypes are designated in *C. caucasicus* SEMENOV, 1920 and in *C. morawitzi* RADOSZKOWSKI, 1877. The statements of holotype *C. consimilis* BUYSSON, 1887 and the lectotype *C. elegans* MOCSÁRY, 1901 to holotype are corrected. New data and variability of some species are given. A key is completed for the 25 species. Following the detailed work of KIMSEY & BOHART (1991), only those references are included in this paper which contain type material description or new observations, not included in the above work.

Most species of *Cleptes* are rare and their colour and sculpture show a great variety even within populations. The main reasons behind it are the cleptoparasitic lifestyle and the microclimatic circumstances which influence individual development. Thus, their classification is sometimes uncertain. To insure a better identification of the species, more detailed comparative keys are necessary instead of the usually applied short ones. This is one of the reasons for publishing the numerical data - mainly with the type material - introduced by BOHART & KIMSEY (1980). The numbers are rough guidelines only due to variability among specimens and because of the subjectivity of measurements.

The shape of the male genitalia is usually rather uniform. For example, it proved insufficient for the separation of the related *ignitus-scutellaris* (from Hungary) and *afer* (from Tunisia) (MÓCZÁR 1951). However, for the separation of *femoralis* and *consimilis* (see later) it proved to be sufficient.

It is necessary to list the original labels of types (in inverted commas) in order to facilitate future identifications. The details of locality labels are written here exactly as the

originals. The Carpathian Basin represents a uniform fauna. Although the names of locations in this area have changed, all the changes are listed in a previous work (MÓCZÁR et al. 1972). The material depository is indicated in parentheses. The material for the revision has been studied either in situ, or was sent by colleagues of the institutions listed below. I should like to express my gratitude for the help I received during this work.

Berlin = Museum für Naturkunde der Humboldt-Universität zu Berlin, Germany (F. KOCH, A. KLEINE-MÖLLHOF); Bet Dagan = Q. ARGAMAN, private collection, Bet Dagan, Israel; Brno = Department of Entomology, Moravian Museum, Brno, Czech Rep. (J. STEHLIK); Copenhagen = Zoologisk Museum, Copenhagen, Denmark (B. PETERSEN); Budapest = Magyar Természettudományi Múzeum, Hungarian Natural History Museum, Budapest, Hungary (J. PAPP); Davis = Bohart Museum of Entomology, University of California, Davis, USA (L.S. KIMSEY, L.A. BAPTISTE); Geneva = Museum d'Histoire Naturelle, Genève, Switzerland (C. BESUCHET); Frankfurt = Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt am Main, Germany (D.S. PETERS, J.P. KOPELKE); Lausanne = Musée Zoologique, Lausanne, Switzerland (J. DE BEAUMONT, J.F. AUBERT); Leiden = Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands (C. VAN ACHTERBERG); London = The Natural History Museum, Department of Entomology, London, England (M.C. DAY, C. VARDY, S. LEWIS); Linz = Oberösterreichisches Landesmuseum, Linz, Austria (F. GUSENLEITNER); Luzern = W. LINSENMAIER, private collection, Ebikon, Luzern, Switzerland; Madrid = Museo Nacional de Ciencias Naturales, Madrid, Spain (E. Mingo-Pérez); Moscow = Zoological Museum, Moscow Lomonosov State University, Russia (A.V. ANDROPOV); Ottawa = Agriculture and Agri-Food Canada, Ottawa (L. MASNER, J. HUBER); Prague = National Museum of Natural History, Prague, Czech Rep. (O. ŠUSTERA, ZD. BOUČEK); Paris = Laboratoire d'Entomologie, Museum National d'Histoire Naturelle, Paris, France (J. CASEVITZ-WEULERSSE); St. Petersburg = Zoological Institute, Russian Academy of Sciences, Saint Petersburg, Russia (V. TOBIAS); Tsukuba = Insect Identification Laboratory, Tsukuba, Chiba Pref., Japan; Washington = US National Museum, Washington DC, USA (K.V. KROMBEIN, A.S. MENKE); Wien = Naturhistorisches Museum Wien, Wien, Austria (M. FISCHER, S. SCHÖDL).

The following abbreviations are used throughout this paper: F-I (-II -III) = flagellomere I (II and III); MS = malar space (measured at its shortest distance from eye margin to mandible base); OOL = ocular-ocellar line; POL = postocellar line; Ped = pedicellus; PD = puncture diameter; T-I etc. = tergum or tergite (T-I the first segment of the apparent abdomen, etc.).

### Key to the species

- 1 Head, thorax entirely flame red or coppery with green, sometimes with gold highlights, or propodeum dark blue. . . . . 2
- Head, thorax at most partly with different metallic highlights. Males often with greenish, bluish and violet concolours. . . . . 3
- 2 Propodeum coppery, thorax laterally sometimes with golden greenish reflection or tints. Abdomen entirely blackish brown. Frons more densely punctured (♂). Ped and F-I-III largely yellowish brown (♀) or dark brown (♂). T-I-III with deep and very dense punctures (♂♀). Face with a deep medial sulcus ending before medocellus (♀) or hardly distinct (♂). 5.1 - 5.8 mm. . . . . *morawitzi* RADOSZKOWSKI
- Propodeum largely dark greenish blue, partly black; mesopleuron with golden green reflection. T-I-II entirely, T-III anteriorly yellowish brown, apical part of T-III and T-IV-V brownish black (♂♀). Frontal punctures 1 PD apart (♂). F-I 2.8 times as long as broad, F-II length 1.7 times breadth (♂) or F-I 1.8 times breadth and F-II 0.8 times as long as broad (♀). T-II with fine, scattered punctures, anterior part of T-III with

- deeper and less dense punctures (♀). Legs entirely red, with coppery forefemur (♀). Face with deep medial sulcus extending from midocellus to clypeal margin. 6 mm. .... *canadensis* KIMSEY
- 3 Head, thorax largely black with different metallic reflection or tint. .... 4
- Head, thorax at most partly black, with extensive metallic highlights, which extend sometimes partly to abdomen. .... 7
- 4 The metallic reflection bluish. .... 5
- The metallic reflection bronze or golden green. .... 6
- 5 Head, thorax in some cases largely black; only genae, lateral sides of thorax, propodeum horizontally with dark greenish blue reflection. Abdomen brown becoming lighter on all tergites basally. T-I polished with some very fine punctures, T-II with close punctures anteriorly and nearly impunctate posteriorly; T-III with very dense and deep, T-IV with larger but scattered punctures. F-II-III and legs pale brownish. The forewing discoidal cell at most faintly indicated. 6.0 mm (see couplet 23). .... *blaisdelli* BRIDWELL ♀
- "Kopf... Thorax vollkommen schwarz (mit Ausnahme nur eines blauen Flecks auf den Mesopleuren unter der Flügelbasis)... sonst fast wie *nitidulus*... Abdomen wie bei dieser... Punktierung ebenso... Fühler etwas länger und dünner... Genae kürzer und weniger konvergierend... Punktierung auf Thorax viel größer. 6 mm" (according to LINSENMAIER). .... *semiatrus* LINSENMAIER ♀
- 6 Scutellum golden with reddish reflection. Pronotum with bronzy tint laterally. Propodeal disc dark blue. T-I-II yellowish brown. Transverse line not present behind ocelli. Clypeus with apical margin truncate. 5.2 mm. .... *dauriensis* sp. nov. ♀
- "Body... black, with a bronzy reflection on pronotum... abdominal tergite I wholly, 2-3 partly... ferruginous to reddish brown... Collar area with an impressed transverse line just behind ocelli... Clypeus with apical border gently emarginate... Antennal joint 3 nearly as long as the following two united and 2.3 times as long as wide at apex... Abdominal tergite 1 smooth and polished, with... fine points on posterior portion... 2 and 3 microscopically minutely and densely punctured... 6 mm" (according to TSUNEKI). .... *doii* TSUNEKI ♀
- 7 "Abdomen purple with apical margin of each segment discoloured and testaceous... Head, thorax... all legs... [partly] violaceous blue, with purplish lustre... Antennal joint II slightly more than twice as long as wide... 5 mm" (according to TSUNEKI). .... *doii* TSUNEKI ♂
- Abdomen never purple with apical margin testaceous as *doii*. Head and thorax rarely and only partly violaceous blue, mostly with other colour. .... 8
- 8 Pronotum yellowish orange. T-I smooth, polished, nearly impunctate. .... 9
- Pronotum with different metallic color. At least T-I-II yellowish brown or yellowish red. T-I differently punctured. .... 10
- 9 Pronotum deeply and densely punctured except posteromedially. Mesonotum with deep scattered punctures. T-II with dense, T-III with deeper and double punctures, there are much smaller punctures among the remarkably larger ones. T-III-IV without metallic highlights. Head black and in some cases with bronze or green tint. Mesonotum and sometimes postscutellum black, scutellum-propodeum, mesopleuron with greenish blue reflection. Pale brownish line (see couplet 13 -) sometimes present. 6-7 mm. .... *nitidulus* (FABRICIUS) ♀
- Pronotum with distinct and shallow punctures. Mesonotum smooth, shining, only with some fine punctures. T-II with fine, very scattered, T-III with deeper and uniform punctures. T-III entirely or in some cases only laterally and T-IV entirely with blue (or violet) highlights. Head sometimes with bronze reflection. Mesonotum, scutellum usually tinted with greenish-bronze colour (or black), mesopleuron with distinct green

- and bronze shining or black with pale bluish tint. Legs yellowish, except brown middle and hind femora, as well as last joints. 6.2 - 6.5 (*elegans* 6.9) mm.  
 ..... *semicyaneus* TOURNIER ♀
- 10 Males: Abdomen with 5 apparent segments. Head and thorax usually nearly unicoloured. .... 11  
 - Females: Abdomen with 4 apparent segments, body usually multicoloured. .... 23
- 11 Vertex flame red (lectotype) or with partly golden red reflection behind ocelli, and gradually becoming gold and green downwards. Pronotal disc largely gold with reddish reflection, anterior third bright gree. Mesonotum greenish gold with reddish reflection. Scutellum gold posteriorly and postscutellum with green highlights. 6 mm.  
 ..... *anceyi* BUYSSON
- Head, thorax usually with blue, bluish green, golden green highlights or with violet reflection or tint. .... 12
- 12 T-III-IV without metallic highlights. T-III with very dense and distinct double punctures. T-I usually with fine, dense and extensively placed punctures. .... 13  
 - T-III-IV with less or more metallic highlights or reflection. T-III usually uniformly, rarely double punctured. T-I rarely polished, usually finely, densely, sometimes dispersedly punctured. .... 15
- 13 Pronotum with deep scattered punctures, PD and interspaces largely uniform. Frons convex (viewing from above) with deep medial sulcus, usually extending from midocellus to clypeal margin and with remarkably smaller, denser punctures than on pronotum. Lower clypeal margin truncate. Ocelli connected with a shallow sulcus. Pale brownish line moderately developed. 5.8 - 6.2 mm. .... *caucasicus* SEMENOV  
 - Pronotum with deep, dense punctures, interspace narrower than PD. Frons flat. Lower clypeal margin convex or truncate. Hind ocelli only rarely connected with sulcus. Pale brownish line along posterior margin of pronotum, on vertex, a spot below tegulae usually present. .... 14
- 14 Frontal sulcus usually slightly broadened just before clypeal margin and ending distinctly before midocellus or sometimes only as a thin line to midocellus. Lower clypeal margin slightly convex. Cavitas broader like a quadrat. Head, thorax bluish, sometimes with violet reflection. Pale brownish line partly present. 6 - 6.7 mm. ....  
 ..... *consimilis* BUYSSON
- Frontal sulcus evenly sharply margined, remarkably deep and extending to clypeal margin, which is slightly concave. Hind ocelli rarely connected with a shallow sulcus. Cavitas narrower, inner eye margin distinctly divergent downwards. Head and thorax often largely violet. Pale brownish line remarkably developed. 6 - 6.8 mm. ....  
 ..... *femoralis* MOCSÁRY
- 15 T-III-IV with mostly pale greenish blue or violet highlights, sometimes only with lateral tints, exceptionally without it. .... 16  
 - T-III-IV usually laterally with conspicuous flame red, cyclamen or gold highlights. . 18
- 16 Pronotum elongated, with remarkably smaller, scattered punctures; punctures 3 to 4 PD or more apart. Frontal sulcus very short. Head, thorax and femora greenish blue with some violet reflection. T-(III)-IV black with some blue highlights or without it. T-I polished, T-II with scattered, T-III with uniform denser and deeper punctures, T-IV-V with sparse but deeper punctures. Discoidal cell only faintly indicated. 5.5 - 6 mm. ....  
 ..... *blaisdelli* BRIDWELL
- Pronotum with distinctly denser punctures. Frontal sulcus deep, extending to midocellus. Head, thorax with bluish green highlights. .... 17
- 17 T-III distinctly double punctured. T-II, except posterior margin, with dense punctures. T-IV or also T-III pale bluish reflection or only tint laterally. Propodeal spine rather

- acute and directed laterally. Head, thorax usually with gold, gold green or violet tint. T-I with very fine scattered punctures only medially. 4.3 - 6 mm. .... *nitidulus* (FABRICIUS)
- Punctures on T-III are deeper and uniformly scattered. T-II with very fine, scattered punctures. T-IV or also T-III laterally, sometimes extensively with violet highlights, partly with bluish tints. Propodeal angles rectangular. Head, thorax with violet reflection. T-I with only some fine punctures. 4 - 6 mm. ... *semicyaneus* TOURNIER
- 18 The deep frontal sulcus with sharp margins reaching the midocellus and often broadened before the pit of midocellus. .... 19
- Frontal sulcus developed as a narrow line and ending usually before midocellus or only rarely reaching it. T-III closely punctured. .... 22
- 19 Punctures of T-I-II rather similar, deep and dense, in some cases T-II slightly deeper and denser. .... 20
- Punctures of T-I remarkably smaller and more scattered than on T-II. Propodeal angles obtuse or nearly rectangular. .... 21
- 20 Punctures of pronotum, mesonotum and scutellum deep, compressed, interspace hardly shining and mostly narrower than punctures. Head, thorax largely green, bluish green highlights, partly or rarely with violet reflection. Propodeal angles more pointed, directed obliquely backwards. T-II only laterally, T-III largely, T-IV entirely with gold, partly coppery or greenish highlights. Tibiae yellowish brown. 6 - 7 mm. .... *muti* MÓCZÁR
- Body with conspicuously coarse sculpture. Head, mesonotum-propodeum, except black disc of propodeum medially, largely with violet reflection. T-III partly, T-IV entirely with coppery gold highlights. 8.1 mm. .... *rugulosus* LINSENMAIER
- 21 Clypeus remarkably large, lower margin protruding archedly, lateral margins arise from the outer margins of antennal sockets. Pronotum with remarkably deep and close punctures, interspaces much narrower than PD. Lateral angles of propodeum very small, acute or nearly rectangular. Fore tibiae yellowish, the rest dark brown. Abdomen elongated oval. T-III laterally, T-IV usually entirely greenish gold (Hungary) or flame red (Hungary, Sarepta). 6.7 - 7.4 mm. .... *ignitus* (FABRICIUS)
- Clypeus very short, lower margin nearly straight, lateral margins arise from the middle antennal sockets. Punctures of pronotum remarkably finer, interspace generally equal or larger than PD. Lateral angles of propodeum like an equilateral triangle, directed laterally. All tibiae dark brown. lateral margin of T-II partly gold, two larger spots laterally reddish gold, T-III-IV with gold, partly flame red highlights and with violet tint medially. Tegulae bluish violet, T-V with bluish green reflection. 5 mm. .... *syriacus* BUYSSON
- 22 The punctures on T-I distinctly finer and more scattered than on T-II. Lower margin of clypeus slightly archedly truncate. Frontal line always ending before midocellus. Fore tibiae light brown, the rest dark without metallic highlights. A pale brownish line developed along posterior margin of pronotum, from vertex directed to eyes, as a spot behind eyes, below tegulae, on postscutellum and as two spots on scutellum. T-III-IV with smaller flame red, partly purple-cyclamen metallic highlights laterally. 7.1 - 7.2 mm. .... *scutellaris* MOCSÁRY
- Dense punctures of T-I rather similar to T-II, or in some cases T-I hardly scattered than T-II. Lower margin of clypeus slightly arched. Frontal line rarely reaching the midocellus. All tibiae dark brown, especially fore tibiae often with metallic highlights. Pale brownish line absent. T-III laterally, T-IV entirely with flame red, golden red or greenish gold highlights. Head and thorax mostly green, partly golden or bluish green, sometimes with violet reflection laterally and posteriorly as well as with very short, fine and white hairs. 7.2 - 7.6 mm. .... *ifer* LUCAS

- 23 Head, thorax dark greenish blue to purple (often becoming blackish dorsally, see couplet 5). Femora brown; abdomen red, in some specimens more or less brown. Ped twice as long as wide; F-I slightly more than twice as long as wide. 6.5 mm. .... *blaisdelli* BRIDWELL
- Species with different colours and sculpure. .... 24
- 24 T-IV black without metallic highlights. T-I with very fine punctures at most medially. .... 25
- T-IV conspicuous gold, flame red or cyclamen highlights with greenish blue or purple reflection rarely with pale greenish tint. T-I impunctate or very finely punctured. . . 31
- 25 T-III deeply and densely punctured with double punctures; among the remarkably larger punctures there are much smaller ones. Vertex usually purple or coppery with reddish tint, exceptionally reddish gold round ocelli. .... 28
- T-III uniformly, densely and finely or deeply punctured. Vertex largely with gold flame red highlights. .... 29
- 26 Pronotum with deep and relatively scattered punctures; punctures mostly 2 or more PD apart (posteriorly). Mesonotum flame red medially. Frons convex. Lower margin of clypeus straight, lateral corners right angled. Hind ocelli usually connected with a narrow furrow to each other. Frontal line situated in a deepening above clypeus and interrupted before midocellus. Face, propodeum black. F-I usually dark brown. Pronotum, scutellum, mesopleuron greenish gold, postscutellum purple. 4.8 - 7.5 mm. .... *caucasicus* SEMENOV
- Pronotum often with generally deep and very dense punctures. Mesonotum usually purple. Frons flat. .... 27
- 27 Frontal line usually shallow, ending before midocellus, Frons with larger and denser punctures. Punctures of mesonotum, scutellum deep and dense. Vertex partly purple. Lower face sometimes dark bluish or purple. Pronotum, scutellum, postscutellum and part of mesopleuron usually gold with reddish or greenish reflection. Propodeum black. Lower margin of clypeus slightly emarginate, raised medially, lateral corners rounded. 5.5 - 7.7mm. .... *consimilis* BUYSSON
- Frontal line developed as a sharp margined sulcus and reaching the midocellus. Frons moderately punctured. .... 28
- 28 "Von *consimilis* ♀... besonders durch das größtenteils gelbe Fühlrglied 3, hellere Tibien, grünblaue Mesopleuren und Metathorax [propodeum], goldenen, oben kupfernen Kopf und helle Behaarung verschieden... die scharfe Mittel-Furche berührt... die vordere Ocelle. 5 1/2 - 6 1/2 mm" (*antakyensis* LINSENMAIER according to LINSENMAIER). .... *femoralis* MOCSÁRY
- "Wie *consimilis*, aber Cavitas deutlich schwächer und zerstreuter punktiert, in ganzer Länge mit scharf und regelmäßig, wesentlich tiefer eingedrückter Mittellinie... Cavitas mit 2 deutlichen Furchen oben zwischen Stirngrübchen und Augen... Punktierung auf Mesonotum und Scutellum sehr weit zerstreut. Färbung der Type: goldroten Kopf und Cavitas und intensiv rosa glänzenden Tergit 3, Metanotum... weniger feurig als Scutellum und sehr undeutlich punktiert. 6.5 mm" (according to LINSENMAIER). .... *maroccanus* LINSENMAIER
- 29 Frontal sulcus deep, narrow and extending from clypeus to midocellus. T-II-III with fine and dense punctures. Head partly red, partly gold, with greenish reflection. Pronotum-postscutellum with green highlights, mesonotum and postscutellum with gold reflection. 5 mm. .... *nyonensis* sp. nov.
- Frontal sulcus only partly developed. T-II-III with deep and dense punctures. Head and thorax differently coloured. Vertex largely flame red, partly coppery red, lower face entirely or partly black. Scutellum, often mesopleuron reddish gold, pronotum greenish gold. Mesonotum, postscutellum purple. .... 30

- 30 Propodeum entirely, lower face only partly black. Frontal sulcus ending before midocellus and gradually broadened towards clypeus. Pronotum laterally, mesopleuron entirely reddish gold with distinctly larger and deeper punctures, punctures 1-2 PD apart. Mesonotum, scutellum with deeper and scattered punctures. Lateral tooth of propodeum very small, directed laterally. Fore and middle tibiae, also Ped, F-I-II partly light brown. Frons, genae dark bluish. 5 mm. *insidiosus* BUYSSON
- Propodeum only posteriorly black, disc and lateral side partly dark blue. Lower face largely black. Frontal sulcus short, developed from midocellus to the half of face. Pronotum with fine, scattered punctures, punctures 3-5 PD apart medially. Mesonotum, scutellum with very fine and scattered punctures. Propodeal lateral tooth small, directed obliquely backwards. Fore coxae with greenish reflection. F-I-V yellowish, partly brownish, rest dark. 4.4 mm. . . . . *obsoletus* SEMENOV
- 31 Scutellum gold, green or flame red. Mesonotum, sometimes also postscutellum black with dark blue or reddish purple reflection or tint, T-III-IV in some cases with moderate metallic highlights. . . . . 32
- Scutellum, mesonotum, postscutellum black with at most some bluish, bronze or purple reflection or tint. T-III-IV with more extensive, partly different metallic highlights. T-I impunctate or very finely punctured, T-II-IV closely punctured. . 34
- 32 Pronotum, scutellum with green highlights often with distinct gold reflection or some reddish tint. Mesopleuron blue with violet reflection. Mesonotum usually black, rarely with purple tint. Punctures of scutellum moderately deep and entirely scattered. T-III laterally, T-IV largely with flame red or cyclamen, nearly purple or blue highlights. F-I-II, fore tibia yellowish brown, rest brown. Pale brownish line developed. 6.9 mm. . . . . *scutellaris* MOCSÁRY
- Pronotum, scutellum at least partly flame red. Mesopleuron green with gold reflection in front. Mesonotum black, with purple, partly dark bluish tint. Scutellum, especially posteriorly, sparsely punctured. T-IV occasionally with greenish blue reflection or tint. . . . . 33
- 33 T-II-III evenly punctured, posterior half of T-III with distinct smaller and denser punctures. Pronotum with very dense and deep punctures, surface even. Punctures of mesopleuron situated between longitudinal ridges. Postscutellum black with copper tint. Apical margin of clypeus truncate, lateral corners in right angle. 7 mm. . . . . *kusdasicus* MÓCZÁR
- T-II-III differently punctured, posterior half of T-III with remarkably larger, deeper and more scattered punctures as anteriorly. Pronotum with less deep punctures, surface rarely uneven. Punctures of mesopleuron irregular, ridges present at most in front. Postscutellum green or golden red. 7.6 mm. . . . . *anceyi* BUYSSON
- 34 Head with gold, flame red, coppery, bluish or purple greenish metallic highlights. 35
- Head largely and mesonotum entirely black; vertex in some cases with bronze, pale bluish or violet tint. . . . . 36
- 35 Pronotum without a furrow. Head, thorax normally sculptured with deep and dense punctures, mesonotum and scutellum already with scattered punctures; punctures 2-4 PD apart. Lower margin of clypeus semicircularly arched. Vertex and pronotum flame red with reddish or greenish gold highlights. Scutellum black with reddish tint. T-III partly cyclamen laterally, T-IV entirely with golden flame red highlights, in some places with bluish reflection or greenish tints. Face black with dark bluish or purple reflection. 6 - 7.4 mm. . . . . *ignitus* (FABRICIUS)
- Pronotum with a longitudinal furrow on posterior half medially. Head, pronotum, mesonotum, scutellum usually coarsely sculptured, partly rugose. Lower margin of clypeus truncate. Vertex in the region of ocelli and cavitas partly bluish. Pronotum coppery with gold reflection. Mesonotum black with bluish and purple tints. T-III



- partly, T-IV entirely with golden red, partly with coppery highlights and with greenish tints laterally. 8.4 mm. . . . . *rugulosus* LINSENMAIER
- 36 Punctures in frons, pronotum posteromedially, scutellum, postscutellum deep, scattered, but the density varies between specimens from the same country (Algeria). Antenna, tegula black or dark brown. Propodeum, mesopleuron blue or greenish blue, rarely with violet tint and black anteriorly. T-III laterally, T-IV largely gold, flame red or cyclamen, rarely with bluish or greenish tint. Pronotum green, golden or flame red. 6.8 - 8.9 mm. . . . . *afér* LUCAS
- "Tête... couverte de points assez fins, peu profonds, espacés... Pronotum... ponctuation grosse... Ecusson presque complètement lisse, avec 3-4 gros points seulement... antennes rousses avec le premier article noir bronzé... metathorax bleu-noirâtre... Mésopleures noires en avant d'un beau bleu. Troisième segment avec une large tache feu-doré très légèrement verdâtre, devant un peu violacée postérieurement; quatrième segment entièrement feu-doré, très légèrement verdâtre... Pronotum... doré-verdâtre avec une teinte doré-feu... et violet-bronzé... 5.5 mm" (according to BUYSSON). . . . . *mayeti* BUYSSON

*Cleptes afér* LUCAS

*Cleptes afra* LUCAS, 1849: 315, ♀, Pl.18, Fig.1. Lectotype ♀ (desig. KIMSEY 1986: 106); Algeria: Oran (Paris); BUYSSON 1887a: 7, ♂.

*Cleptes afér*: MOCSÁRY 1889: 53, ♀♂.

Species examined: 26 ♀♀, 15 ♂♂. Morocco: Rabat (LINDBERG, NLH KRAUSS) (Washington, Berlin, Budapest); Rio Martin, Marruecos (A. COBOS) (Budapest). - Algeria: Hammam Bou Hadjar (Budapest, Berlin); Oran, Sidi bel Abbes (Berlin, Budapest). - Spain: Jaén (Budapest); Sierra Morena (SEYRIG), Viciamadrid (DUSMET) (Berlin). - Tunisia: Hamman (DE GAULLE, SCHMIEDEKNECHT) (Berlin, Budapest). - Turkey: Amasya (K.M. GUICHARD) (London). Collecting dates are April through June.

Distribution: Spain, North Africa and Middle East (KIMSEY & BOHART 1991).

*Cleptes anceyi* BUYSSON

*Cleptes Anceyi* BUYSSON, 1891: 74, ♂. Lectotype ♂ (desig. KIMSEY 1986: 106); Algeria: Tlemcen (Paris); BUYSSON 1900: 125, ♂♀.

? *C. scutellaris gurunensis* LINSENMAIER, 1987: 134, 2 ♀♀. Holotype ♀, Turkey: Gürün (Luzern).

Specimens examined: 2 ♂♂, 3 ♀♀. Algeria: "Tlemcen fin mai 88", "Gazagnaire", "Museum Paris Tlemcen coll. R. DU BUYSSON 1900", "Type" (red), "*Cleptes ♂ anceyi* BUYSSON R. DU BUYSSON det. 1898", "*Cleptes ♂ anceyi* BUYSSON Lecto det L.S. KIMSEY", "Lectotype" (red label) (Paris); Algeria (no further data). - Morocco: Isagvenib. Seddet. 1500 m Marruecos (P. ALCAIDE) 1 ♀ (Budapest) and 1 ♂ (Wien); Sfax 22-4-9Y (sic) (DE GAULLE), *C. anceyi* BUY ♂♀ (with BUYSSON's writing), *C. anceyi* BUYSS. ♀ det. MÓCZÁR 995 (Berlin).

In BUYSSON's publication (1900) only the locality of the female is indicated without its diagnosis. The female specimen was discovered in Berlin in 1965. The short description is as follows besides the couplets 32 - and 33 - of the key:

♀ - Length 6.7 mm. Head, mesonotum black with purple reflection; vertex with coppery line along occiput. Scutellum red in front and gradually golden green posteriorly. Postscutellum green. Propodeum black, disc dark blue. Antenna dark brown, except the yellowish Ped apically, F-I and flagellomeres beneath. Legs largely dark brown, except yellowish fore tibia and partly tarsi. Pale brownish line and spots present. T-I-II yellowish brown, posterior margin of T-II, T-III-IV largely dark brown, T-III black apically, lateral side and T-IV with cyclamen reflection. Body with remarkably long white hairs. Punctures

of frons deep, punctures 1-3 PD apart; frontal sulcus ending before midocellus then shortly extending by a narrow line to pit of midocellus. Ocellar triangle right angled. Apical margin of clypeus moderately arched. Punctures of mesonotum deep and scattered. Lateral margin of propodeum divergent towards the pointed tooth. T-I smooth, polished with some punctures, T-II closely basally, this becomes scattered and nearly impunctate on posterior margin. Sternite with sparse, double punctures.

The female from Morocco differs from the other females by length, 7.6 mm, by frons with dark bluish greenish reflection, by pale purple mesonotum with bluish tint laterally, by scutellum entirely flame red, by postscutellum golden red, by propodeum nearly entirely black, by yellowish brown anterior half of T-III, by T-IV largely with greenish blue reflection and by pronotum with coarser punctures and surface uneven.

The female from Algeria differs by pronotum golden red, by scutellum reddish gold anteriorly and gradually green on posterior half, by propodeal disc with still less dark blue tint.

The following table compares the proportions. The numbers were obtained by dividing the length of the studied morphological part by its width:

	Scape	Ped	F-I	F-II	F-III	MS:MOD
Sfax ♀	3.9	2.2	2.3	1.1	1.0	2.2
Morocco ♀	3.8	2.2	2.4	1.1	1.0	2.0
Algeria ♀	3.9	2.2	2.5	1.3	1.2	2.2
Lectotype ♂	3.3	1.6	3.0	1.6	1.8	1.1

These small differences establish only the variability of the species. One may presume, that *C. scutellaris gurunensis* LINSENMAIER also belongs to this species.

Distribution: Algeria, Tunisia (BUYSSON 1891, 1900), Morocco.

#### *Cleptes blaisdelli* BRIDWELL

*Cleptes Blaisdelli* BRIDWELL, 1919: 37, 1 ♂. Holotype ♂ (BOHART & KIMSEY 1982: 16); California: Poway (Washington).

Specimens examined: 4 ♀♀, 3 ♂♂. USA: Oregon: ex *Neodiprion* sp. (R.N. FURNISS) (Davis); California: Coquillet, Los Angeles (Budapest); Santa Barbara County, Santa Ynez, ex Lemon tree (B. JATVIS) (Davis); Tulare Co., Ash. Mtn. (J.A. HALSTEAD) (Ottawa, Budapest). The collecting dates were May and June.

The male superficially resembles to *C. nitidulus*, it can be distinguished mainly by the structure of the pronotum, by T-III and by the male genitalia (cf. KIMSEY 1981: 813 Fig. 24 and *nitidulus* Fig. 1-2).

Distribution: West USA, Northwest Mexico (KIMSEY & BOHART 1991).

#### *Cleptes canadensis* KIMSEY

*Cleptes canadensis* KIMSEY, 1987: 56, ♂♀, Figs 1, 5. Holotype ♂; Canada: Saskatchewan (Ottawa).

Specimens examined: 1 ♀. Canada: "Norman Wells N.W.T. 13-VII-1949 W.R.M. MASON", "Paratype *Cleptes* ♀ *canadensis* KIMSEY" (Ottawa).

Distribution: Central Canada (KIMSEY & BOHART 1991).

#### *Cleptes caucasicus* SEMENOV

*Cleptes caucasicus* SEMENOV, 1920: 322, 3 ♂♂, 2 ♀♀. Lectotype ♀ (desig. herein); Georgia: Kodzhory (St. Petersburg).

*Cleptes caucasicus*: KIMSEY & BOHART 1991: 59, ♂♀ as syntype.

*Cleptes hyrcanus* SEMENOV, 1920: 322, 1 ♂. Holotype ♂; Iran: Astrabad (according to KIMSEY & BOHART 1991: 60) (St. Petersburg). Syn. nov.

Specimens examined: 3 ♀♀, 3 ♂♂. Georgia: "Kodzhorj. Tifli. gub. 9.VIII.13 V.A. RACIBORSKI", "coll. A. SEMENOV-TIAN-SHANSKY", *Cleptes caucasicus* m. ♀. Typ. A. SEMENOV-TIAN-SHANSKY det. VIII.18." with SEMENOV's original writing, "Lectotypus" red label (not published), "Lectotypus ♀ *Cleptes caucasicus* SEMENOV desig. MOCZAR 995", 1 ♀ (St. Petersburg); Paralectotypes: with the same data but "5.VIII.13" 1 ♂ (St. Petersburg) and with "11.VIII.13 aberr β" 1 ♂ (Hym. Typ. No. 3839 Mus. Budapest); Caucasus: Araxesthal (L. REITTER), 1 ♀ (Wien). - Turkey: Asia min. 1 ♀ (Budapest). - Iran: "Astrabad, 3.V.1914. Kiritsenko", coll. A. SEMENOV-TIAN-SHANSKY", "*Cleptes hyrcanus* m. ♂ Typ. un. A. SEMENOV-TIAN-SHANSKY det. VIII.18", "Holotypus" red label, (not published), 1 ♂ (St. Petersburg).

Additions to the original diagnosis. Lectotype: Scape length 4.3 times width, Ped 2.4 times as long as wide, F-I length 1.9 times width; MS 1.3 MOD long. (Left antenna and wing lacking). Males: Scape length 3.6 - 3.6 times width (the first figure refers to *caucasicus*, the second to *hyrcanus*); Ped 1.6 - 1.6 times as long as wide, F-I 2.5 - 2.4 times width; F-II 2.1 - 2.2 times width, F-III 1.8 - 2.1 times width; MS 1.0 - 1.2 MOD long.

Neither the dark tint of colour of abdomen in *hyrcanus*, nor the slightly denser punctures of mesonotum-postscutellum, or the absent shallow impressed deepening between the pits behind the ocelli give sufficient grounds for a separate species. This deepening is present in the paratype of *caucasicus* collected on 11.VIII and lacking in paratype, collected on 5.VIII at the same place, also lacking in ♀ (Asia min.). Taking together, I propose that *C. hyrcanus* SEMENOV, 1920 is a synonym of *C. caucasicus* SEMENOV, 1920.

Distribution: Georgia, Iran (SEMENOV 1920), South Russia (NIKOLSKAYA 1978), Turkey.

#### *Cleptes consimilis* BUYSSON

*Cleptes consimilis* BUYSSON, 1887b: 198, 2 ♂♂. Lectotype ♂ (desig. herein); France: Vernet (Paris).

*Cleptes consimilis*: KIMSEY & BOHART 1991: 59. As holotype ♂.

*Cleptes Chyzeri* MOCSARY, 1889: 50, ♀. Lectotype (desig. MÓCZÁR 1962: 119); Szöllöske (Budapest).

Specimens examined: 19 ♀♀, 29 ♂♂. Hungary (MÓCZÁR 1949: 41): Budapest: Gellérthegy, Farkasvölgy, Hidegkút, Budaörs, Högyész, Máriagyűgy, Mecsek hgys., Nagytétény, Pilismarót, Simontornya (collected by E. BAJÁRI, E. CSIKI, J. ERDŐS, K. KERTÉSZ, S. MOCSÁRY, L. MÓCZÁR, PÁVEL, F. PILLICH, Gy. SZÉPLIGETI, SZTUDVA) (Budapest). - Slovakia: "Szöllöske 2.8.84", "*chyzeri* MOCS. Typ. det. MOCSÁRY", "Lectotypus *C. chyzeri* ♀ MOCS. det. MÓCZÁR 1962", "*C. consimilis* MOCS. det. MÓCZÁR" (Hym. Typ. No. 3840); 3 ♀♀ paralectotypes: with the same data, but "3.8.84", "16.7.87" and "Hungaria septentrion" and "Paralectotypus *Cl. chyzeri* MOCSÁRY", (Hym. Typ. No. 3841-3843 Mus. Budapest); Seleska (= Szöllöske) (O. ŠUSTERÁ); Turda nad. Bodv. (BOUČEK) (Prague). - Romania: Hagieni Db. (C. NAGY) (Bet Dagan); Transylvania: Peér (KISS), Német Bogsán; Apateleak (DIÓSZEGHY). - Bosnia: Sarajevo (WINNEGTH) (Budapest). - Croatia: Portoroz (H. HEINRICH) (Frankfurt). - Austria: Burgenland: Neusiedlersee Umg. (KUSDAS) (Budapest); Winden (J. SCHMIDT) (Frankfurt). - Czech Rep.: Moravia: Čejč (SNOFLAK); Bzenec (V. ZAVADIL) (Prague). - Switzerland: Genève, Nice (Geneva). - France: "Brouët-Vernet, R. DU BUYSSON" printed label, "*Cl. consimilis* BUYSS. ♂ de *Cl. Chyzeri* MOCS.", "Paralectotypus ♂ *C. consimilis* BUYSS. des. MÓCZÁR 95" (Hym. Typ. No. 3844 Mus. Budapest). - Spain: Almeria, DHSA de la Alfahara Maria (A. COBOS). - Albania: Ipek (E. CSIKI). - Greece: Taygetos. - Bulgaria: Rhodopi Matan dere (N. ATANASOV). - Russia: Kasan (E. CSIKI). - Turkey: Asia min. (Where the deposit

of the material is absent: all Budapest). The collecting dates were July and June, exceptionally the beginning of August.

According to BUYSSON's diagnosis: "J'ai pris deux exemplaires du *consimilis* dans les environs du Vernet, commune de Brout-Vernet (Allier), sur des ombrelles de *Paucedanum cervaria* LAP., les 21 et 31 juillet 1887". According to the information kindly provided by J. CASEWITZ-WEULERSSE in a letter, only the specimen described by KIMSEY & BOHART as holotype can be found in the Paris Museum. A second specimen has recently emerged in the collection of the museum in Budapest and it is the same as the "holotype". The writing on its label is probably BUYSSON's original handwriting. Thus, no doubt this is the second specimen included in the original diagnosis. I suggest, in regard to the specimen deposited in Paris, that it is a lectotype instead of a holotype and the second male (in Budapest) is the paralectotype.

Distribution: Israel (LINSENMAIER 1969), Europe, North Africa, Turkey, Russia (KIMSEY & BOHART 1991).

#### *Cleptes dauriensis* sp. nov.

Holotype ♀: Southeast Russia: "Dauria", F. SAHLB., *Cleptes* n. sp. *nitidulo* FBR. aff.", "Holotypus *Cleptes dauriensis* ♀ MÓCZÁR n. sp. det. MÓCZÁR 995" (Hym. Typ. No. 3845 Mus. Budapest).

Length 5.2 mm. Head, mandible base, clypeus, prothorax brownish black with bronzy tint partly on face, on pronotal disc and mesonotum in front. However, mesonotum largely black. Scutellum, postscutellum and mesopleuron partly black, but scutellum and mesopleuron in front with gold-reddish reflection, postscutellum with greenish tint, mesopleuron with greenish reflection medially and posteriorly. Propodeum black, except dark blue disc. Apical half of mandible, scape, Ped, F-I, legs and T-I-II largely yellowish brown, rest of antenna, coxa, upper side of femora, tegula, posterior margin of T-II, and T-III-IV darker brown. Pale brownish line on vertex and on pronotum posteriorly present. Fore wing hyaline brownish stained medially; discoidal cell weakly indicated; nervulus interstitial. Long white hairs only ventrally present.

Punctures of front distinct and scattered; frontal sulcus narrow, sharply margined and extending from midocellus to clypeal margin. Ocellar triangle acute, POL : OOL = 8 : 7. MS 1.4 MOD long. Apical margin of clypeus truncate. Scape length 3.8 times apical width, length of Ped 2.5 x, F-I 2.6 x, F-II 1.4 x and F-III 1.4 times width. Pronotum evenly rounded from anterior cross groove to posterior margin and with distinctly larger, deeper and scattered punctures than on frons. Mesonotum smooth, with more scattered and shallower punctures than on pronotum. Mesopleuron with deep scrobe. Propodeal disc irregularly rugulosus, lateral margin of propodeal disc divergent towards the pointed tooth. T-I polished with some very fine punctures, T-II evenly densely and finely punctured, except smooth posterior margin, T-III double and T-IV with more deep and scattered punctures. Sternite II-III with deep larger and scattered punctures.

♂ unknown.

This species is related to *doii* TSUNEKI and it differs from it by data given in the key. It differs from non metallic black *townesi* KIMSEY (from Taiwan) (from *townesi* group), and differs by the pronotum not flattened posteriorly, by the colouration not restricted to face, by the MS not 0.8 MOD long, etc.

#### *Cleptes doii* TSUNEKI

*Cleptes doii* TSUNEKI, 1959: 7, ♀♂. Holotype ♀; Korea: Nansan, Keijo, Seoule (Tsukuba).

Specimens examined: - .

Distribution: Korea (TSUNEKI 1959).

*Cleptes femoralis* MOCSÁRY

*Cleptes femoralis* MOCSÁRY, 1890: 47, 1 ♂. Holotype ♂ (MÓCZÁR 1962: 119); Turkey: Brussa (Budapest).

*Cleptes femoralis*: SEMENOV 1920: 324 (as aber. of *C. consimilis* BUYSSON).

*Cleptes antakyensis* LINSENMAIER, 1968: 7, ♀♂. Holotype ♀ (single ♀ as type in diagnosis); Turkey: Antakya (Luzern). **Syn. nov.**

Specimens examined: 10 ♂♂, 1 ♀. Turkey: "Asia min.", "Brussa", "Holotypus ♂ *C. femoralis* MOCSÁRY", 1 ♂ (Hym. Typ. No. 3846 Mus. Budapest); Asia min., 1 ♂ (Budapest); Antakya As. Türk. 2.VI.1965 leg. Jos. SCHMIDT, "Paratype *Cleptes* LTR. *antakyensis* LINS. LINSENMAIER det. 1968", "*Cleptes femoralis* ♂ MOCS. det. L. MÓCZÁR 1995" 1 ♂; the same data but "6.VI.", 1 ♂ (Linz); the same data but "4.VI." and without "Paratype" 1 ♂ (in the diagnosis only June is given without the day) (Budapest); Ürgüp 17-19 VI.1976 (J. HEINRICH) 2 ♂♂, 1 ♀ (Frankfurt). - Greece: Taygetos, Morea mer., 1 ♂. - Russia: Kasan 10.VI.1898 (CSIKI), 1 ♂ (Budapest); Caucasus 1 ♂ (Berlin).

The most significant of the morphological characteristics of *antakyensis* is the sharply margined frontal sulcus which extends from clypeus to front ocellus. It is also the same in *femoralis*, similarly to the other parts of LINSENMAIER's description. The proportions of certain parts of the body are identical in the two species. The first figure refers to *femoralis*, the second one to the paratype of *antakyensis*: Ped 1.4 (1.4) times as long as wide, F-I 2.7 (2.7) x, F-II 1.9 (1.9) x, F-III 1.7 (1.7) times width; MS 1.0 (0.8 - 0.9) MOD long. Thus, based on these observations, I reinstate the species *C. femoralis* MOCSÁRY, 1890 as a distinct species and simultaneously indicate that *C. antakyensis* LINSENMAIER, 1968 should be regarded as a synonym.

While the 2 ♂♂ originating from Ürgüp correspond to the description, the 1 ♀ (collected together with the males at the same place and time) differs from the single specimen known (♀ holotype) according to LINSENMAIER's description, mainly as follows: its frontal sulcus narrow, not so sharp margined as in males on lower face; mesonotum flame red, not "violet" as in LINSENMAIER's diagnosis; propodeum black, mesopleuron gold with reddish reflection in front and greenish tint behind, not both of them "grünblau". It is to be expected that these specimens will represent an other population, when the variety among the related species will be more established.

The male genitalia of *femoralis* seems to be rather similar to that of *consimilis*. However, the paramere is shorter, rounded and curved apically in *femoralis* (MÓCZÁR 1951, Figs 35-36) and it is longer, pointed and nearly straight in *consimilis* (l. c. Figs 11-12).

Distribution: Turkey (MOCSÁRY 1890), Russia.

*Cleptes ignitus* (FABRICIUS)

*Ichneumon ignitus* FABRICIUS, 1787: 269, ♀. Holotype ♀ (KIMSEY & BOHART 1991: 60); "Barbaria" (Copenhagen).

*Cleptes Ignita*: BUYSSON 1891: 77, 82, ♀♂.

*Cleptes ignitus*: LINSENMAIER 1968: 60 ♀♂ (about variability).

Specimens examined: 9 ♀♀, 22 ♂♂. Hungary (MÓCZÁR 1949: 41): Buda, Pest (FRIESE) (Berlin); Budapest: Széchenyi h., Apajpuszta, Csákvár, Hajduvágás, Dombiratos (Z. KASZAB, D. KUTHY, F. MIHÁLYI, S. MOCSÁRY, SZÓCS) (Budapest). - Slovakia: Kamenica (O. ŠUSTERA) (Prague). - Yugoslavia: Ulma (Budapest). - Russia: Crimea (Berlin); Sarepta (M. KOCH) (Budapest). - Turkey: Asia minor (NOVSKI) (Prague). - Tunisia: "*I. ignita* Tunis VAHL" ("Barbaria" collected by VAHL, "Type" red label, ♀ (Copenhagen). Nearly all collection dates were in June, except some in the beginning of July or at the end of May.

Additions to the description of males (two specimens): Scape 3.2 - 3.6 times as long as wide, Ped length 1.22 - 1.25 times width, F-I 2.1 x, F-II 1.4 - 1.5 times as long as wide (cf. *syriacus*).

Distribution: France, Switzerland, Austria, Hungary, South Russia, North Africa (MOCSÁRY 1889), South Europe, Palestine, West Asia (LINSENMAIER 1969).

#### *Cleptes insidiosus* BUYSSON

*Cleptes Insidiosa* BUYSSON, 1891: 85, ♀. Holotype ♀ (KIMSEY & BOHART 1991: 60); Russia: Caucasus, Novorossisk (Paris).

*Cleptes insidiosus*: SEMENOV 1920: 321 (as BUYSSON 1896 [correctly 1891] and as = aberr. ♀ a, syn. of *C. obsoletus* SEMENOV).

Specimen examined: 1 ♀. Russia: "Novo-rossisk", "Museum Paris Caucase Coll. R. DU BUYSSON 1900", "F.W. KONOW", "Type" red label, "*Cleptes insidiosus* BUYSS. type. R. DU BUYSSON det."

SEMENOV did not consider that although the last part of BUYSSON's book has been published in 1896 (cf. p. 755), the part including *Cleptes* (p. 1-88) had already been published in July 1891. In the light of this, if *insidiosus* BUYSSON has been identified as *obsoletus* SEMENOV, described in November 1891, than the correct name of the taxon is *insidiosus* BUYSSON and not *obsoletus* SEMENOV. Based on the different characteristics observed during the comparative study of the two species and described in the new key, here I reinstate *Cleptes insidiosus* as a distinct species.

Additions to the female description: Scape length 3.3 times width, Ped 1.6 times as long as wide, F-I 1.8 times width, F-II 1.1 times width.

Distribution: Southwest Russia (KIMSEY & BOHART 1991).

#### *Cleptes kusdasicus* MÓCZÁR

*Cleptes kusdasicus* MÓCZÁR, 1968: 368, ♀. Holotype ♀; Turkey: Mut (Linz).

Specimens examined: 2 ♀♀. Turkey: Mut (K. KUSDAS), holotype (Linz); with the same data paratype ♀ (Budapest).

Additions to the description: Scape length 3.4 - 3.7 times width (holotype-paratype). Ped length 2.0 - 2.1 times width, F-I length 2.2 - 2.0 times width, F-II 1.2 - 1.0 times as long as wide, F-III 1.0 - 0.9 times width; MS 2.0 MOD long (in paratype).

Distribution: Turkey (MÓCZÁR 1968).

#### *Cleptes maroccanus* LINSENMAIER

*Cleptes maroccanus* LINSENMAIER, 1987: 134, ♀. Holotypus ♀; Morocco: Maroc. M. Atlas (Luzern).

*Cleptes maroccanus*: KIMSEY & BOHART 1991: 61 (as holotype).

Specimen examined: - .

Distribution: Morocco (LINSENMAIER 1987).

#### *Cleptes mayeti* BUYSSON

*Cleptes Mayeti* BUYSSON, 1891: 81, ♀. Holotype ♀ (KIMSEY & BOHART 1991: 61); Algeria: Ponteba (? Paris, PÉRES coll.).

Specimen examined: - .

According to an information kindly sent to me in a letter by J. CASEWITZ-WEULERSSE, the spelling of the name, "coll. PÉRES" in the diagnosis of... and "PÉRES" by KIMSEY & BOHART, are both a copyist's or printer's error and should correctly be written as "PEREZ". It has been pointed out in the same letter that the holotype has been misplaced. However, it is likely that due to the minimal differences, which might only be individual variations of *ajfer* LUCAS (*mayeti* is a possible synonym).

Distribution: Algeria (BUYSSON 1891).

*Cleptes morawitzi* RADOSZKOWSKI

*Cleptes Morawitzi* RADOSZKOWSKI, 1877: 1, ♂♀, T.III. Fig.3. Lectotype ♀ (desig. herein); Uzbekistan: Taschkent (Berlin); RADOSZKOWSKI 1889: 6 (corrections).

*Cleptes morawitzi*: BUYSSON 1920: 305, ♂♀.

*Cleptes morawitzi*: KIMSEY & BOHART 1991: 61 (as syntype).

Specimens examined: 8 ♀♀, 5 ♂♂. Uzbekistan: "Taschkent" with cyrillic characters, "Taschkent RADOSZKOWSKI" with author's writing, "Type" red label, "Lectotype *Cleptes morawitzi* RAD. ♀ det. MÓCZÁR 995" 1 ♀; with the same labels, but "Paralectotypus etc." 1 ♂ (Berlin); "Taschkent", "*Cleptes morawitzi* RADOSZK. Typ." with author's writing "Paralectotypus ♀ *C. morawitzi* RADOSZK. det. MÓCZÁR 995" 1 ♀; Prov. Maracadia: Samarkand (KIRITSCHENKO) (abdomen missing) 1 ♀; Okr. Tashkenja (antenna missing) (IVANOV) 1 ♂ (all St. Petersburg); paralectotypes continued: No "12" 1 ♂ and No "19" 1 ♀ (without head), each "Samarkand"; No "3" 1 ♀ and No "5", "*Cl. morawitzi* ab β ♂ RAD." "Tashkent"; No "27" Chardara" 1 ♀ (without head) (all Moscow). Arjüsz (LUKINOVISH) 1 ♂ (Budapest). - Kazakhstan: Turkestan 2 ♀♀ (Budapest). The collecting dates are April, May and August.

The original material (6 specimens) was deposited in Mus. Zool. Moscow and Mus. Zool. Acad. Sci. St. Petersburg (SEMENOV 1920: 305). The lectotype is designated from the original material meanwhile discovered in Berlin.

Additions to the diagnosis, the comparison of the proportions (cf. *anceyi*):

	Scape	Ped	F-I	F-II	F-III	MS:MOD
Lectotype ♀	4.0	2.0	2.8	1.2	1.0	1.8
Paralectotype ♂	3.9	2.0	3.4	2.2	1.8	1.4
Russ.: Arjüsz ♂	3.4	2.0	3.4	1.7	1.3	1.8

Distribution: Uzbekistan (RADOSZKOWSKI 1877), Kazakhstan (SEMENOV 1920).

*Cleptes muti* MÓCZÁR

*Cleptes muti* MÓCZÁR, 1968: 369, ♂. Holotype ♂; Turkey: Mut (Linz).

Specimens examined: 4 ♂♂. Turkey: Mut (K. KUSDAS) holotype ♂ (Linz); the same data, paratypes (Budapest).

Additions to the male's description (paratype): Scape 3.7 times as long as wide, Ped 1.8 times as long as wide, F-I length 2.6 times width, F-II 1.8 x, F-III 1.8 times as long as wide (cf. the same data with *syriacus* and *ignitus*).

Distribution: Turkey (MÓCZÁR 1968).

*Cleptes nitidulus* (FABRICIUS)

*Ichneumon nitidulus* FABRICIUS, 1793: 184. Holotype ♀ (KIMSEY & BOHART 1991: 62, ♀♂); Italy: (? Paris).

*Cleptes fallax* MOCSÁRY, 1889: 49, ♂. Lectotype ♂ (desig. MÓCZÁR 1962: 119); Hungary: Budapest (Budapest).

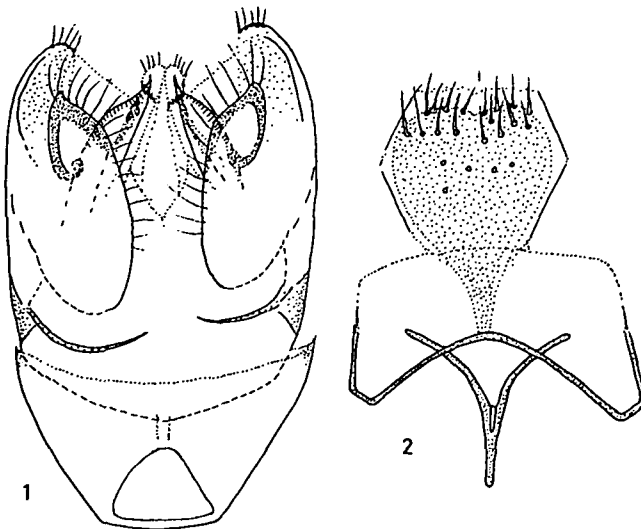
*Cleptes nitidulus*: BUYSSON 1891: 86, ♀♂ (*fallax* MOCSÁRY as synonym).

Specimens examined: 73 ♀♀, 55 ♂♂. Hungary (MÓCZÁR 1949: 43): "Budapest Kuthy", "*fallax* MOCS. typ. det. MOCSÁRY", "Lectotypus *Cleptes fallax* MOCSÁRY", 1 ♂ (Hym. Typ. No. 3847 Mus. Budapest); Balatonszék, Bugac on *Pimpinella saxifraga*, Dombóvár, Gárdony, Guti e. on *Quercus robur*, Hild (J. ERDŐS, L. MÓCZÁR, J. PAPP, J. SZŐCS) (Budapest); Ungarn (Berlin). - Slovakia: Parkan (OBERBERGER) (Prague). - Austria: Neusiedlersee (K. KUSDAS) (Budapest). - Czech Rep.: Praha, Bubeneč, Cheb, Chucle, Hilové, Hlubočepy, Jirina, Kocire, Kárany, Krc, Modrany, M. Cely, Sadská, Spaleny, Davle, Sbyclav, Verkyvrestov, Vrané, Zbiroh; Moravia: Brno, Čejč, Cobyly, Hodina,

Modrice n. Brna, Pavlovská vrhy, Pouzdrany (BILLER, Zd. BOUČEK, CEPELAK, GRADL, Fr. GREGOR, HOLIK, O. ŠUSTERA, OBERBERGER, ZEMAN) (Prague, Brno). - Germany: Dresden (H. KOKSCH), Weissenfls., Jena (FRIESE) (Budapest); Dessau, Berlin, Bollwiller (Berlin); Aschaffenburg, Frankfurt/M, Kahl, Karlstadt/M, Lohr, Liederbach, Mainfranken, Marktheidenfeld, St. Wifo, Worms (HABERMEHL, mostly J. HEINRICH, S. PETERS) (Frankfurt). - Danmark: 14 ♀♀, 10 ♂♂ (Copenhagen). - Switzerland: Champay (PAUL), Peney, Genève (Geneva, Berlin). - France: no more data (Washington); Nyon (Geneva); Pyren.-orient. (Berlin). - Spain: Algeciras, Bronchales 1700 m, Teruel (Budapest). - Italy: Roma (Brno). - Albania: Plostan (E. CSIKI) (Budapest). - Turkey: Asia minor (Budapest). The dates of collecting were mainly June and July, in a few cases August and only in two cases September (two males from Brno and Bugac, respectively).

Male genitalia (Fig. 1-2): Paramere slightly rounded apically, cuspis pointed and with distinctly chitinized apical margin, digitus with sharp pointed apex.

Distribution: Europe, Turkey, Manchuria (KIMSEY & BOHART 1991).



Figs 1-2 male *Cleptes nitidulus*: 1 genitalia, 2) sternite 7-8.

*Cleptes nyonensis* sp. nov.

Holotype ♀: France: "Nyon", "CHEVR. collecti.", "Holotypus *Cleptes yonensis* ♀ MÓCZÁR n. sp. det. MÓCZÁR 995" (Hym. Typ. No. 3848 Mus. Budapest).

Length 5 mm. Head only partly posteriorly black, upper face and vertex with red highlights, elsewhere, including occiput, gold with greenish reflection. Pronotum-postscutellum with bright green highlights, partly with gold reflection. Mesopleuron largely, medial part of propodeal disc dark blue, rest of propodeum black. F-I-II and tarsi light brown. T-I-II and a spot on T-III laterally in front yellowish brown. Mandible, clypeus, tegula, rest of antenna, legs and abdomen brown. Fore wing moderately infuscate, discoidal cell distinctly indicated, nervulus antefurcal. White hairs only ventrally perceptible.

Punctures of face remarkably deep and dense, punctures 1 PD apart and smaller, scattered on vertex; medial sulcus sharply margined, deep and broadened before clypeal



margin and extending to midocellus. Ocellar triangle acute, POL : OOL = 7 : 13. MS 1.4 MOD long. Apical margin of clypeus moderately concave. Scape 3.3 times as long as broad. Ped length 1.8 times breadth, F-I 1.6 times, F-II 1.1 times apical breadth. Pronotum rather deep, mesonotum and scutellum smooth, polished with fine scattered punctures. Mesopleuron with remarkably deep scrobe. Propodeal disc irregularly rugulose, lateral margin of disc divergent into the pointed tooth. T-I smooth, polished with fine punctures, T-II-III with fine and evenly dense, T-IV with sparse, fine punctures.

♂ unknown.

This species is related to some other smaller sized species with metallic highlights on head and thorax, especially to *obsoletus* and *insidiosus*, but it differs from them as given in the key.

#### *Cleptes obsoletus* SEMENOV

*Cleptes obsoletus* SEMENOV (sic!), 1891: 182, 1 ♂. (not SEMENOV 1892: 500, KIMSEY & BOHART 1991: 62). Holotype ♀; Russia: Sarepta (St. Petersburg).

*Cleptes obsoletus*: SEMENOV-TIAN-SHANSKIJ 1920: 321 ♀.

Specimens examined: 1 ♀. Russia: "Sarepta BEKKER 67", "*Cleptes obsoletus* m. Typ. un. ♀ A. SEMENOV-TIAN-SHANSKY det. 1891. VIII.18", "Holotypus" red label, 1 ♀ (St. Petersburg).

Additions to the description: Scape length 4.3 times width, Ped 1.7 times as long as wide, F-I length 1.7 times width, F-II 0.9 times width, F-III 0.8 times width. MS 2.0 MOD long.

Distribution: Russia: Sarepta (SEMENOV 1891). Southeast Asia (NIKOLSKAYA 1978).

#### *Cleptes rugulosus* LINSENMAIER

*Cleptes rugulosus* LINSENMAIER, 1968: 8, ♀. Holotype ♀; "Palästina" (Luzern).

Specimens examined: 1 ♀, 1 ♂. Israel: Daganiam am Genezarethsee (T. PALMONI) ♀ and Syrian Arab Rep.: "Szyria" (MÜRZHOFEN) ♂ (Budapest).

Additions to the female description: Ped 2.3 times as long as wide, F-I 2.4 times width, F-II 1.1 times width, F-III 1.1 times width. MS 1.5 MOD long.

The previously unknown male is described below.

♂. - Length 8.1 mm. Head and thorax largely bluish violet, except green scape, pronotum, coxa and femora; propodeal disc medially, Ped and flagellomeres entirely black. Pale brownish line developed on temple, on mesonotum medially, on scutellum and on postscutellum. Mesopleuron partly with greenish tints. Tibia dark brown, fore tibia and tarsi partly lighter. T-I-II yellowish brown, T-III and T-IV with coppery gold highlights except black middle of T-III. T-V black. Fore wing evenly infusate, discoidal cell weakly indicated; nervulus antefurcal. Lower side of body with scattered white hairs.

Head broadened behind eyes, temple only weakly convergent backwards. Frons closely, vertex coarsely and more deeply punctured. Frontal sulcus rather broad, extending from clypeus to midocellus. Ocelli distinctly right angled, POL : OOL = 12 : 15. MS 1.2 MOD long. Apical margin of clypeus arched, with obtuse angles laterally. Scape 3.3 times as long as broad, Ped length 1.6 times breadth, F-I 2.8 times width, F-II 1.6 times width and F-III 1.6 times width. Surface of pronotum becomes rugose longitudinally, punctures remarkably deep, interspaces shining, partly broader than PD. Mesonotum and scutellum with deep and coarse punctures. Mesonotum with a longitudinal furrow medially. Mesopleuron with deep punctures, most of the forming longitudinal lines. Horizontal part of T-I-IV more evenly and closely punctured and with deeper punctures than that of ♀; punctures become gradually deeper and larger particularly on T-IV towards posteriorly than in front; T-V largely smooth, polished and with few larger and deeper punctures before posterior margin than on preceding terga.

Albeit the male is identical neither in colour nor in sculpture to the single female described as *rugulosus*, I nevertheless suggest on the basis of the exceptionally coarse sculpture and of the locality to regard it as the male of *rugulosus*.

Distribution: Palästine - Isreal (LINSENMAIER 1969), Syrian Arab Rep.

#### *Cleptes scutellaris* MOCSÁRY

*Cleptes ignitus* var. *scutellaris* MOCSÁRY, 1889: 53, ♀♂. Lectotype ♀ (desig. MÓCZÁR 1962: 121); Nyitra (Budapest).

*Cleptes scutellaris*: MOCSÁRY 1890: 48, ♀♂.

*Cleptes scutellaris gurunensis* LINSENMAIER, 1987: KIMSEY & BOHART 1991: 63 (cf. *anceyi*).

Specimens examined: Hungary (MÓCZÁR 1949: 41): Budapest, Csép = Szigetcsép, Csömör, Érd, Foktő, Kalocsa, Simontornya, Szentes (E. CSIKI, J. ERDŐS, HENSCH, F. PILLICH, A. SOÓS, J. SZÓCS) (Budapest). - Slovakia: "Nyitra MOCSÁRY 1886 aug" with MOCSÁRY's original writing (not as in HORN & KAHLÉ 1935 and in HORN et al. 1990: T.7 No.69, they are incorrect), "*scutellaris* MOCS. typ. det. MOCSÁRY", "Lectotypus *C. ignitus* var. *scutellaris* MOCSÁRY" (Hym. Typ. No. 3849 Mus. Budapest); Bratislava (KAVAN), Filakovo (ZAVADIL), Parkan (O. ŠSustera) (Prague). - Czech Rep.: Kamenice (O. ŠSustera) (Prague). - Romania (Transylvania): Herkulesfürdő (Budapest). - Slovenia: Piran (J. HEINRICH) (Frankfurt). - Austria: Wien (Budapest). - Greece: Alt. Korinth, Peloponnes (M. SCHWARTZ), Leoadia (W. LINSENMAIER), Fthiotis Dhomokos (I. ROZNER) (Budapest). - Spain: Madrid (Madrid). - Algeria: without further data (Budapest). The greatest number of collecting dates were in June, some in July and May, one female in August from Nyitra.

Additions to the original diagnosis: Scape 4.1 times as long as wide, Ped length 1.8 times width, F-I 1.9 times width, F-II 1.0 times as long as wide, T-III 0.8 times width. MS 1.6 MOD long.

Distribution: Hungary, Austria (MOCSÁRY 1889), Jerusalem (LINSENMAIER 1969), South Europe (KIMSEY & BOHART 1991).

#### *Cleptes semiatrus* LINSENMAIER

*Cleptes semiatrus* LINSENMAIER, 1968: 7, ♀. Holotype ♀; "Palästina" (Luzern).

Specimen examined: -

Distribution: "Palästina" (LINSENMAIER 1968).

#### *Cleptes semicyaneus* TOURNIER

*Cleptes semicyaneus* TOURNIER, 1879: 88, ♂. Holotype ♂ (KIMSEY & BOHART 1991: 64); Russia: Sarepta (Geneva).

*Cleptes elegans* MOCSÁRY, 1901: 158, 1 ♀. Holotype ♀ (desig. herein instead of lectotype desig. MÓCZÁR 1962: 119); Russia: Kasan (Budapest).

*Cleptes elegans*: SEMENOV 1920: 320 as aberr. ♀ β; MÓCZÁR 1967: 8 (as var).

*Cleptes nitidulus* var. *erdosi* MÓCZÁR, 1951: 278, 1 ♀. Holotype ♀; Hungary: Fajsz (Budapest). **Syn. nov.**

Specimens examined: 17 ♀♀, 16 ♂♂. Hungary: "Fajsz 1943.VIII.4. dr. ERDŐS", "Holotypus *Cleptes nitidulus* var. *erdosi* MÓCZÁR" (Hym. Typ. No. 3851 Mus. Budapest), "*Cleptes semicyaneus* TOURN. ♀ det. L. MÓCZÁR 1995" 1 ♀; Fajsz (L. MÓCZÁR), Dunaszentbenedek (J. ERDŐS), Paks (E. HORVÁTH), Tiszacsege (GYARMATINÉ), Tompa (BAJÁRINÉ) (Budapest). - Slovakia: Pöstyén (Budapest); Trencsén (CEPALAK) (Prague). - Austria inf.: (DAMIANITSCH) (Budapest). - France: Dunkerque (Lausanne). - The Netherlands: Rotterdam (Leiden; Zeeuws Vlaanderen Clinge (P.H. PRONK), Terschelling dunes (PRONK), Meijndel N. V. Bierlap (PRONK) (Budapest). - Bulgaria: Viddin (Budapest). - Ukraine: Kiev (A. LYNBISHEV) (St. Petersburg). - Russia: "Sarept BECKER",

"Typus", "C. TOURNIER", "*semicyanea* TOURN" (Geneva); "Rossia Kasan 98 6/11", "Exp. Zichy leg. CSIKI", "*elegans* MOCS. typ. det. MOCSÁRY", "Holotypus *Cleptes elegans* MOCSÁRY ♀ det. MÓCZÁR 1951" (Hym. Typ. No. 3850 Mus. Budapest); Irkutsk (V.E. JAKOVLEV), Kozlova gory (V. GUSSAKOVSKIJ) (St. Petersburg). The greatest number of collecting dates were in August, some in June and July.

Distribution: Southeast Europe, South Russia (KIMSEY & BOHART 1991), The Netherlands, Hungary, Slovakia, Bulgaria, Ukraine, Austria inf.

#### *Cleptes syriacus* BUYSSON

*Cleptes syriaca* BUYSSON, 1887a: 8, 1 ♂. Holotype ♂ (KIMSEY & BOHART 1991: 64); Israel: Nazareth (Paris).

Specimen examined: 1 ♂ holotype: Israel: "Naz"[areth], "Museum Paris Coll. A. DE PERRIN", "*Cleptes syriaca* DU BUYSSON" (Paris).

Additions to the description: Scape 4.1 times as long as wide, Ped length 1.7 times width, F-I 2.5 times width, F-II 1.3 times as long as wide (cf. *ignitus*).

Distribution: Israel (BUYSSON 1887).

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