

**World revision of the *Cleptes satoi* group
(Hymenoptera: Chrysididae, Cleptinae)**

L. MÓCZÁR

Szabolcska u. 1, H-1114 Budapest, Hungary

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Abstract – Fourteen *Cleptes* species including 2 subspecies were ranged in the *satoi* group within the subgenus *Cleptes* s. str. Two new species and two new subspecies are described: *Cleptes margaritae* sp. n. ♀ from Tadjikistan, *C. triestensis* sp. n. ♂ from Italy, *C. mishimaensis hokkaidoi* ssp. n. ♂ from Japan, and *C. nigrinus rhodosensis* ssp. n. ♀ from Greece. The previously unknown male of *Cleptes halinae* KUSNETZOV-UGAMSKIJ, 1927 from Korea, and the redescription of *C. nigrinus* MERCET, 1904 female from the Iberian peninsula are published. The designation of the holotype of *Cleptes japonicus* TOSAWA, 1940 and that of *C. satoi* TOSAWA, 1940 are corrected to lectotype. The holotype of *Cleptes mishimaensis* TSUNEKI, 1986 published as female by the author, proved to be a male. *Cleptes nigriventris* BUYSSON, 1898 is a synonym of *C. nigrinus* MERCET, 1904. A key, checklist and other information are given. With 30 figures.

INTRODUCTION

The present paper revising of the subfamily Cleptinae (MÓCZÁR 1996a, b, 1997a, b, 1998a, b, c, 2000) contains an elaboration of 14 species, including 2 subspecies in the subgenus *Cleptes* s. str. (MÓCZÁR 1962: 115) *satoi* group from the East Palaearctic, from Japan, Korea to South Asia, South Europe to Portugal and one from USA: California. The following two new species and two subspecies are described: *Cleptes margaritae* sp. n. ♀ (from Tadjikistan), *C. triestensis* sp. n. ♂ (from Italy), and *C. mishimaensis hokkaidoi* ssp. n. ♂ (from Japan), *C. nigrinus rhodosensis* ssp. n. ♀ (from Greece: Rhodos). The previously unknown male of *Cleptes halinae* KUSNETZOV-UGAMSKIJ (1927) (from Korea), and the redescription of the female of *C. nigrinus* MERCET (1904) (from Iberian peninsula) are published. The designation of the holotype of *Cleptes japonicus* TOSAWA (1940) and that of *C. satoi* TOSAWA (1940) are corrected to lectotype. The holotype female of *Cleptes mishimaensis* (TSUNEKI, 1986) published by the author, proved to be a male. *Cleptes nigriventris* BUYSSON (1898) is a synonym with *C. nigrinus*

MERCET (1904). The checklist, a key and the corrections to previous descriptions are completed for the 14 species. To insure a better identification of the species, more detailed comparative keys are prepared. It seems necessary, similarly to preceding revisions, to list the original labels of types (in inverted comas) in order to facilitate future precise identifications. The details of locality labels are copied here exactly as figured on the original ones. New data are presented concerning the variability of some species. Following the detailed work of KIMSEY & BOHART (1991), only those references are included in this paper, which contain type material descriptions or new observations, not included in the above work. Some data of the earlier literature are corrected.

The following symbols or abbreviations are used throughout this as in the preceding papers. F-I (II-III) = flagellomere I (or II-III), following scape and pedicel, MS = malar space (measured across the narrowest interval (MÓCZÁR 1998c: Fig. 2) between the ventral most eye margin and the ventral edge of malar space, between the mandibular insertions), MOD = middle ocellus diameter transversally, OOL = shortest distance between hind ocellus and compound eye, POL = the same between hind ocelli, Ped = pedicellus (measured over its whole length, including the base, bending resembling a knee), PD = puncture diameter, T = T- I, II etc. tergum or tergite (the first segment dorsally of the abdomen etc.). The three dots ... indicate left out texts from the original description. Width and length of postscutellum are measured just before the transversal prolongation of the postscutellum and length is measured between the anterior margin medially (without the split before it) and the imaginary line of the tops of the two excavations.

Deposition of materials of museums and institutions – BMNH = The Natural History Museum, (formerly British Museum Natural History), Department of Entomology, London, Great Britain; CL = Collection of W. LINSSENMAIER, Ebikon, Luzern, Switzerland; CNCI = Canadian National Collection of Insects (former Agriculture and Agri-Food Canada) Ottawa, Canada; MNCN = Museo Nacional de Ciencias Naturales, Madrid, Spain; HNHM = Hungarian Natural History Museum, Magyar Természettudományi Múzeum, Budapest, Hungary; OMNH = Osaka Museum of Natural History, Japan; OÖLL = Oberösterreichisches Landesmuseum Linz, Linz, Österreich, Austria; USNM = U.S. National Museum of Natural History, (former United States National Museum) Washington, D.C., USA; ZIP = Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia; ZMB = Museum für Naturkunde der Humboldt Universität, (former Zoologisches Museum der Humboldt Universität) Berlin, Germany; ZSM = Zoologische Staatssammlung, München (Munich), German.

CLEPTES SATOI GROUP

Cleptes satoi group KIMSEY & BOHART, 1991: 56,58.

Cleptes (*Cleptes* s.str.) *satoi* group MÓCZÁR, 1998c: 506.

This group belongs to the subgenus *Cleptes* LATREILLE, 1802 sensu stricto. It is characterized by having dark coloured species. Body black, head and thorax usu-

ally with different metallic highlights. Pronotum usually bisulcate, without longitudinal sulcus. Posterior transversal groove and the row of pits well developed or only with irregular punctures and/or with a longitudinal keel in the middle. Abdomen brown or black, never with metallic highlights, at most with lighter brownish or yellowish brown lateral spots on T-I-II (-III-IV). Two species are exceptions by having the basal segments of the abdomen yellowish-reddish brown or chestnut coloured; notwithstanding this extension of the lighter colouration characterizes the semiauratus group. This ranging among its related species having the abdomen nearly entirely brownish black is reasonable on account of its insular biotope (Rhodos) and owing to the inadequately investigated southern region.

The *satoi* group comprises species from the East Palaearctic: Japan, Korea, Southern Asia, Turkey to Hungary, to South Europe, Iberian Peninsula and in USA: California.

Checklist of species

- Cleptes halinae* KUSNETZOV-UGAMSKIJ, 1927 – Russia: S. Ussuri, Korea
Cleptes humboldti MÓCZÁR, 1996 – USA: California
Cleptes japonicus TOSAWA, 1940 – Japan, Korea
Cleptes margaritae sp. n. – Tadjikistan
Cleptes mishimaensis mishimaensis TSUNEKI, 1986 – Japan
Cleptes mishimaensis hokkaidoi ssp. n. – Japan
Cleptes mocsaryi SEMENOW, 1891 – Hungary, Greece
Cleptes nigrinus nigrinus MERCET, 1904 – Spain, Portugal
= *Cleptes nigriventris* BUYSSON 1888 – Spain (synonym)
Cleptes nigrinus rhodosensis ssp. n. – Greece
Cleptes pronigrinus LINSENMAIER, 1968 – Turkey
Cleptes pseudosulcatus MÓCZÁR, 1968 – Spain
Cleptes satoi TOSAWA, 1940 – Japan
Cleptes seidenstueckeri LINSENMAIER, 1959 – Turkey
Cleptes triestenssis sp. n. – Italy

Key to species

- 1 Head and thorax partly bronze, green or golden, not blue, with or without coppery tint. Axillae remarkably large, nearly triangular, touching scutellum almost half length of its lateral edge 2

- Head and thorax of different colour but without bronze. Axillae narrow, usually touching scutellum along a shorter distance viewed from above. If body exceptionally partly bronze or axillae appearing broader, than pronotal row of pits not entirely developed 3

- 2 Lower face, pronotum largely bronze with coppery tint behind. Mesonotum partly greenish gold in front, mainly gold with more coppery tint, similarly to scutellum and postscutellum. Propodeum largely black with some greenish blue tint laterally. Abdomen reddish brown. Fore tibiae and lateral spots on T-II yellowish brown. Mesopleuron coppery gold, greenish blue above and bronze in front. Pronotum (Fig. 22) with row of 2 larger pits well outlined medially and smaller ones indistinctly bordered laterally. Mesopleuron with punctures between the very fine ridges. T-I polished, T-II-III with fine and dense punctures. 7 mm. *humboldti* MÓCZÁR ♀

- Head, thorax, including vertical part of propodeum, mesopleuron and lateral part of metanotum in front, bright green with golden tint. Mesonotum and mesopleuron with bronze tint on both sides of tegulae. Abdomen dark brown. Only the base of T-I and fore tibiae yellowish brown, tegulae, femora dark brown. Posterior groove of pronotum hardly developed, slightly impressed medially. Pits outside of hind ocelli very narrow. A row of minute foveae shining in the very narrow split between postscutellum and scutellum. Mesonotum, scutellum with fine and scattered punctures (Fig. 16: MÓCZÁR 1996a), especially in front. T-I with fine, T-II-IV with distinct and very dense punctures. Mesopleuron only with some fine wrinkles in front and ventrally, with punctures above and laterally. 5.2 mm. *humboldti* MÓCZÁR ♂

- 3 Pronotum with a well separated groove with a more or less outlined row of pits along posterior margin, shining keel rarely developed medially. Species of the far East 4

- Posterior groove of pronotum usually with indistinctly outlined or separate row of pits, the groove usually narrowly or broadly depressed, with irregular punctures, or wrinkles, at least with some pits and/or with a shining keel (Fig. 14) medially. Exceptionally T-I-III largely yellowish brown. Species of Europe, the Mediterranean region and Asia Minor (except *margaritae* sp. n.)

4 Posterior groove of pronotum usually arcuate, distinctly longer medially, than laterally, depression extending nearly to notaulices. The pits sharply outlined, sometimes not over its entire length. Head, thorax largely black or partly with greenish blue highlights. T-IV with double punctures 5

– Posterior groove not arcuate, usually with nearly parallel margins, exceptionally slightly longer medially. Pits of pronotum different. Body with different colours 6

5 Head, thorax, mesopleuron greenish blue with violet tint. Lateral corners of propodeum (Fig. 18) nearly acute angle, with minute teeth. Clypeus (Fig. 11) slightly arcuate apically with small, stumpy acute corners laterally. Ped and flagellomeres brown. T-I-II with small lighter brownish spots laterally. Frontal sulcus narrow, usually interrupted medially. Pronotum with smaller punctures or irregular wrinkles. 5.3 mm.

halinae KUSNETZOV-UGAMSKIJ ♂

– Head, thorax largely black, mesonotum partly with metallic greenish tints. Mesopleuron greenish blue. Lateral corners of propodeum small, partly rectangle. Clypeus quadrangular. Ped and F-I-II yellowish brown. T-I reddish brown basally. Upper part of frontal sulcus hardly distinct below fore ocellus. Abdomen scarcely punctate. Head and thorax with evenly dense and shallow punctures. Pronotum with deep, irregular wrinkles posteriorly. Wings with strong hairs. 5.6 mm.

halinae KUSNETZOV-UGAMSKIJ ♀

6 The well separated row of pits of pronotum round or elongate in posterior groove, at least medially. Body greenish blue or bluish green. Head with facial line converging to the curvature of eye and divergent below 7

– The row of pits of pronotum indistinctly bordered in front in posterior groove owing to the rugose-punctate sculpture (Fig. 19), or wider than long, pentagonal, widest at base, and some pits not separated distinctly. Body green, blue, violet, and purple partly. T-I-III usually with brownish spots laterally 8

7 Pronotum with a row of round pits posteriorly. Lateral edge of propodeum straight, parallel (Fig. 21), corners right angled. Postscutellum (Fig. 21) with narrow split in front showing a well perceptible row of minute foveae. 6.5 mm.

mishimaensis mishimaensis TSUNEKI

- The well separated pits remarkably elongate. Lateral edge of propodeum remarkably concave, angles (Fig. 24) with stumpy teeth, produced obliquely backwards. Postscutellum broadly touching scutellum. 5.1 mm.

mishimaensis hokkaidoi ssp. n.

8 Abdomen with 4 visible segments, females. 9

– Abdomen with 5 visible segments, males. 10

- 9 Pronotum distinctly dilated before anterior transverse row of pits (Fig. 19), collar resembling a belt. Head grossly rugose punctate. The row of pits indistinctly outlined on posterior groove of pronotum, owing to the continuation of the closely rugose striae. Lateral margins of propodeum hardly bisinuate with posterior angles narrowly produced obliquely backwards, but not pointed. Central area of propodeum coarsely striate, without an oblique furrow on each side. Axillae fairly large, triangular, broadly connected with scutellum. Head, thorax pitch black, quite lustreless owing to the rugose sculpture. Mesopleuron partly with bronze or blue tints. Tegulae, partly antennae, legs reddish dark brown. Abdomen dark brown, T-I largely, T-II-III with lateral spots chestnut coloured posteriorly

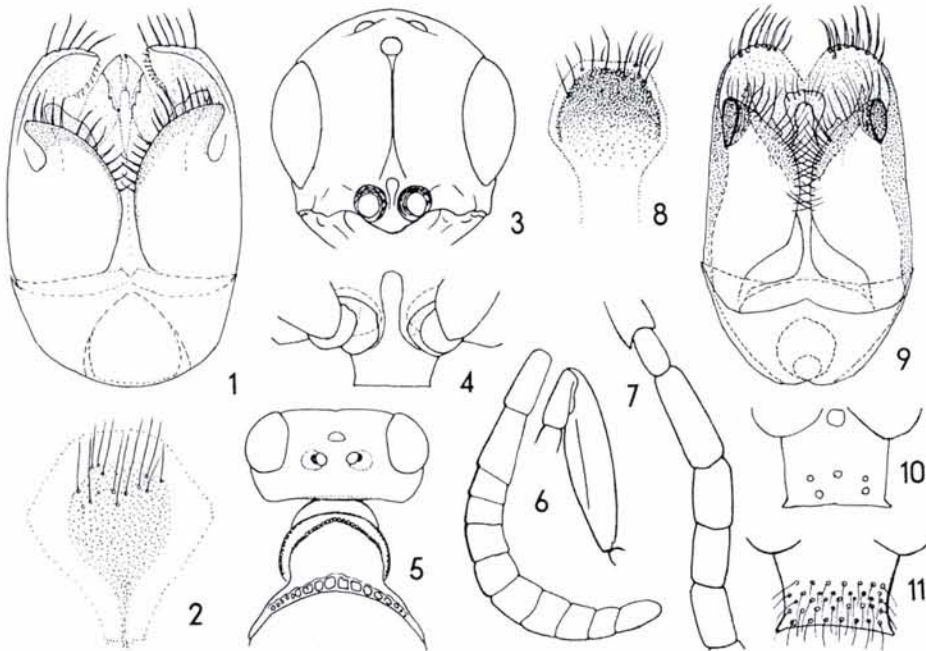
satoi TOSAWA ♀

- Pronotum strongly narrowed (Fig. 5) before anterior transverse row of pits. Frons and vertex fairly closely, partly subrugosely punctate, lower face and behind ocelli punctures somewhat sparse. Pronotum usually with a distinctly outlined posterior row of pits (Fig. 5). Surface of pronotum finely punctured in front and more sparsely and glossy punctured on the main part posteriorly. Lateral margins of propodeum parallel, slightly divergent before broad, triangular lateral angles. Central area of propodeum finely striate in front, sublateral area with a deep oblique furrow on each side. Axillae small, narrow. Head, thorax black, head partly, pronotum, mesonotum, scutellum with bronze and greenish, mesopleuron above, metapleuron with weak greenish reflections. Ped, F-I-II and partly III-IV (Fig. 6) as well as both ends of femora, tibiae yellowish brown. T-I entirely, T-II with large lateral spots basally, smaller ones on T-III reddish yellow. 5–6.8 mm.

japonicus TOSAWA ♀

10 “Resemble to female, but somewhat emaciated. Head and thoracic part blue violet. Abdomen blackish brown, (reddish brown spots with the first and second ventral abdominal segments), legs blackish violet, but tibia and tarsus yellowish brown” (according to TOSAWA 1940). “Clypeal median protuberance trapezoid, and rounded at corners as as in female... Antennae slenderer with joint 2 relatively much longer ... both 3rd and 11th joints 2.4 times as long as wide. ... Postscutellum ... as in ♀ ... small, deeply excavated from in front and from behind. ... Axillae comparatively large. ... Propodeum narrowly produced postero-lateral teeth. ... Mesopleuron anteriorly longitudinally rugose-striate... Differing thus from *japonicus* ♂ in that head, pronotum and mesopleuron rugose punctate. 5.0–6.3 mm” (according to TSUNEKI 1959).

satoi TOSAWA ♂

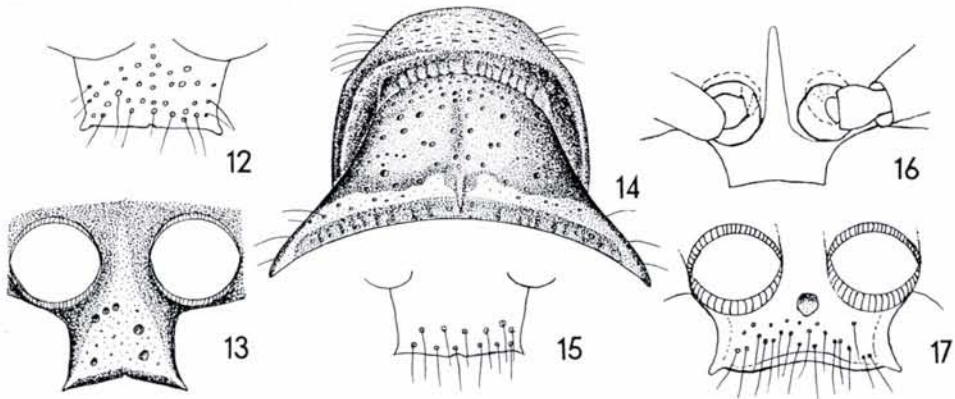


Figs 1–11. 1–2: *Cleptes humboldti* MÓCZÁR (♂), 1 = genitalia, 2 = sternum 9. 3: *C. satoi* TOSAWA (♀) head, front view with clypeus. 4–7: *C. japonicus* TOSAWA, 4 = clypeus (♂), 5 = head and pronotum (♀), 6 = antenna (♀), 7 = antennomeres I–VI (♂). 8–10: *C. triestensis* sp. n. 8 = sternum 9, 9 = genitalia (♂), 10 = clypeus (♂). 11 = *C. halinae* KUSNETZOV-UGAMSKIJ (♂) clypeus. (Figs 3 (corrected), 5–7 after TSUNEKI, Figs 1–2, 4, 8–11 orig.)

- “Similar in structure and punctation to female, differing only in the following points: Head and thorax ... blue ... partly with green, violet and purple; in some specimens ground colour violaceous purple or aeneous green with propodeum wholly or on supramedial area black ... Abdomen brown ... T-II-III with reddish yellow lateral spots ... Fore and middle femora blue ... tibiae and tarsi brown. Clypeus ... (Fig. 4) ... strongly raised apically... Antennal joints longer ... 3rd joint (Fig. 7) 2.5 times as long as wide at apex ... 11th 2.7 times as long as wide in middle ... Postscutellum with lunate excavation at base, but not foveolate”. Axillae small. “Postero-lateral teeth of propodeum ... nearly right angle at apex and not noticeably produced laterally. 5.2–6.5 mm” (according to TSUNEKI 1959). Mesopleuron coarsely longitudinally rugose-punctate. Head and thorax finely punctured.
japonicus TOSAWA ♂
- 11 Body blue, green, and violet partly. Pronotal groove hardly or at most narrowly developed with irregular punctures, rarely with a short keel across posterior groove medially. T-I with some very fine punctures medially or impunctate. Abdomen with 5 segments, males 12
- Head, thorax largely flame red, or partly coppery, greenish golden, or only head partly red or bluish green. Pronotum usually with a longitudinal shining and distinct keel across posterior groove (Fig. 14) medially. T-I smooth, polished with or without very fine punctures on disc medially. Abdomen with 4 segments, females 13
- 12 Posterior angles of propodeum with a small spine. Pits close to hind ocelli, smaller than ocelli. Central area of propodeum with a nearly round and moderately outlined areola, divided irregularly into 3 longitudinal areolae and bordered semicircularly by parallel ridges partly. Postscutellum oblong, 1.3–1.4 times as wide as long just before origin of posterior prolongation, with fine, scattered punctures on its anterior half, and with a shining split at bottom before it (holotype) excepting 1 male without a split. All femora dark greenish blue. 6–7 mm.
nigritus nigritus MERCET ♂
- Posterior angles of propodeum rectangular without spines laterally (Fig. 25). Pits close to hind ocelli at least as large as ocelli. Central area of propodeum at most with a single, larger, elongate, more or less outlined areola divided mostly into 2 smaller ones in front, parallel, semicircularly ridges not present. Postscutellum not oblong, remarkably longer than wide, with some fine

punctures in front, and with a very narrow split before it. Middle femora partly brown, fore and hind ones greenish blue. 5.5 mm. **triestensis** sp. n.

- 13 Ped and F-I usually, exceptionally with more antennomeres, yellowish brown. Head flame red entirely. Abdomen blackish brown, except lighter brown anterior part of T-I and spots of T-II laterally in front. Posterior margins of tergites I-IV with reddish tint. Pronotum with more larger and less smaller, dense and coarse punctures, posterior groove with indistinct punctures and irregular wrinkles. Pits close to hind ocelli remarkably larger than ocelli, not connected with sulcus. Lower margin of clypeus (Fig. 15) nearly straight, lateral angles acute. 5–6 mm. *pronigrinus* LINSENMAIER
- Ped partly, F-I and somewhat scape apically at most reddish brown. Vertex at most partly flame red, or bluish green. Basal segments of abdomen rarely yellowish brown or chestnut coloured. 14
- 14 Pronotum evenly convex, its summit at about the middle between collar and mesonotum, viewed from the side. Pronotum not humped. T-I impunctured or with very fine punctures medially. Vertex flame red or more or less bluish green and black. 15



Figs 12–17: 12: *Cleptes mocsaryi* SEMENOV (♀), clypeus. 13 = *C. margaritae* sp. n. (♀), clypeus. 14: *C. pseudosulcatus* MÓCZÁR (♀), pronotum. 15: *C. pronigrinus* LINSENMAIER (♀), clypeus. 16: *C. mishimaensis mishimaensis* TSUNEKI (♂), clypeus. 17: *C. nigrinus nigrinus* MERCET (♀), clypeus. (Orig.)

- Pronotum nearly flat in front and strongly curved into posterior groove on last third of its length, its summit at the posterior third, viewed laterally. Pronotum humped on both sides of the short and shallow sulcus above the medial keel. T-I impunctured. Head flame red, golden red, never greenish blue. 18
- 15 Only vertex flame red around ocelli or only behind ocelli, face partly black and to a small extent bluish green. Basal segments of abdomen dark brown or lighter. Pits distinctly larger than hind ocelli. Propodeum without pointed teeth laterally. 16
- Head entirely flame red, partly with coppery tint or entirely bluish green. Basal segments of abdomen lighter brown or remarkably chestnut coloured, almost entirely. Pits of hind ocelli distinctly smaller than hind ocelli. Propodeum stumpy or with pointed teeth laterally. 17
- 16 Occipital carina without depression and with a row of pits. Abdomen brown with lighter brown spots. Only vertex, including fore ocellus, pronotum and postscutellum dark flame red. Upper face bluish green partly below ocelli and along eye margin narrowly, lower face largely black. Mesonotum and scutellum golden red. Propodeal corners rectangular. Anterior groove of pronotum transversally green, with a rather small row of pits. Declivous, anterior part of postscutellum with sparse punctures, medially with rather apically with very dense punctures. Split very narrow toward scutellum and black. 6 mm. *mocsaryi* SEMENOW
- Occipital carina depressed and with a small row of pits. Abdominal segments I-II and sternite III chestnut coloured, except black posterior bands of T-II, and longitudinal band on sternite III medially. Vertex only behind ocelli, thorax extensively dark flame red. Upper face bluish green, lower face black. Propodeal corners (Fig. 23) with short stumpy spine (on right side), nearly rectangled (on left side). Anterior groove of pronotum green, but remarkably larger row of pits, than of *mocsaryi*. Declivous, anterior part of postscutellum with minute punctures, rest of surface with close, coarse punctures (Fig. 23) on disc. The split distinctly separate postscutellum from scutellum by golden shine at bottom. 7 mm. *seidenstueckeri* LINSENMAIER
- 17 Vertex, face bluish green, except partly black lower face. Thorax, including mesopleuron flame red nearly entirely, with few golden tint. Lateral angles of

propodeum with short, pointed spine (Fig. 27). T-I with rather dense and very fine punctures on disc medially. Pronotum hardly depressed posteriorly, without transversal yellowish band. Anterior row of pits on pronotum black as collar medially. Transversal prolongation of scutellum and postscutellum flame red and reddish golden. Abdomen (Fig. 26) brown and black with lighter yellowish brown, nearly triangular characteristic spots lateromedially. 5 mm. **margaritae** sp. n.

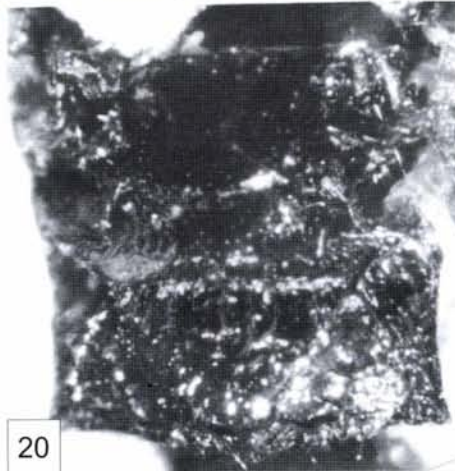
- Vertex, face, pronotum medially and postscutellum entirely flame red with some golden tint. Pronotum laterally, mesonotum, scutellum and mesopleuron reddish golden, lateral part of mesonotum between parapsidal line and tegula, as well as posterior margin of scutellum green. Propodeal corners stumpy, with less pointed spine. T-I impunctured. Posterior groove of pronotum (Fig. 14) broadly depressed, only with some small punctures indistinctly outlined, interrupted medially by a shorter keel, and a transversal yellowish band before it. Anterior groove of pronotum with a row of pits greenish medially and reddish laterally. Transversal prolongation of scutellum and postscutellum pale green. Abdomen largely light brown, with pale light yellowish, larger spots on T-I-II-III lateromedially. 6 mm. *pseudosulcatus* MÓCZÁR
- 18 T-I-II brown in front, T-II and T-III-IV blackish brown posterior. Pits close to hind ocelli smaller and hardly as large as ocelli, and not connected with shallow, incomplete sulcus. Lateral angles of propodeum stumpy at base (Fig. 28) with very short pointed tip. Frontal sulcus nearly continuous. Propodeal disc reddish basally, partly with some pale green tint on lateral side below and black on triangular part beneath the propodeal spine. Ped and F-I reddish brown. 6 mm. *nigrinus nigrinus* MERCET
- Anterior half of abdomen yellowish brown. Postero-lateral spots on T-II dark brown, the rest of abdomen black. Pits close to hind ocelli deep, and larger than ocelli and connected with a sharp sulcus. Lateral angles of propodeum rectangular (Fig 30), disc on lateral sides entirely black. Frontal sulcus sharp, just below fore ocellus to a small pit medially, then interrupted and present again at about the level of antennal sockets. Scape apially and Ped reddish brown, F-I blackish brown. 5 mm. **nigrinus rhodosensis** ssp. n.



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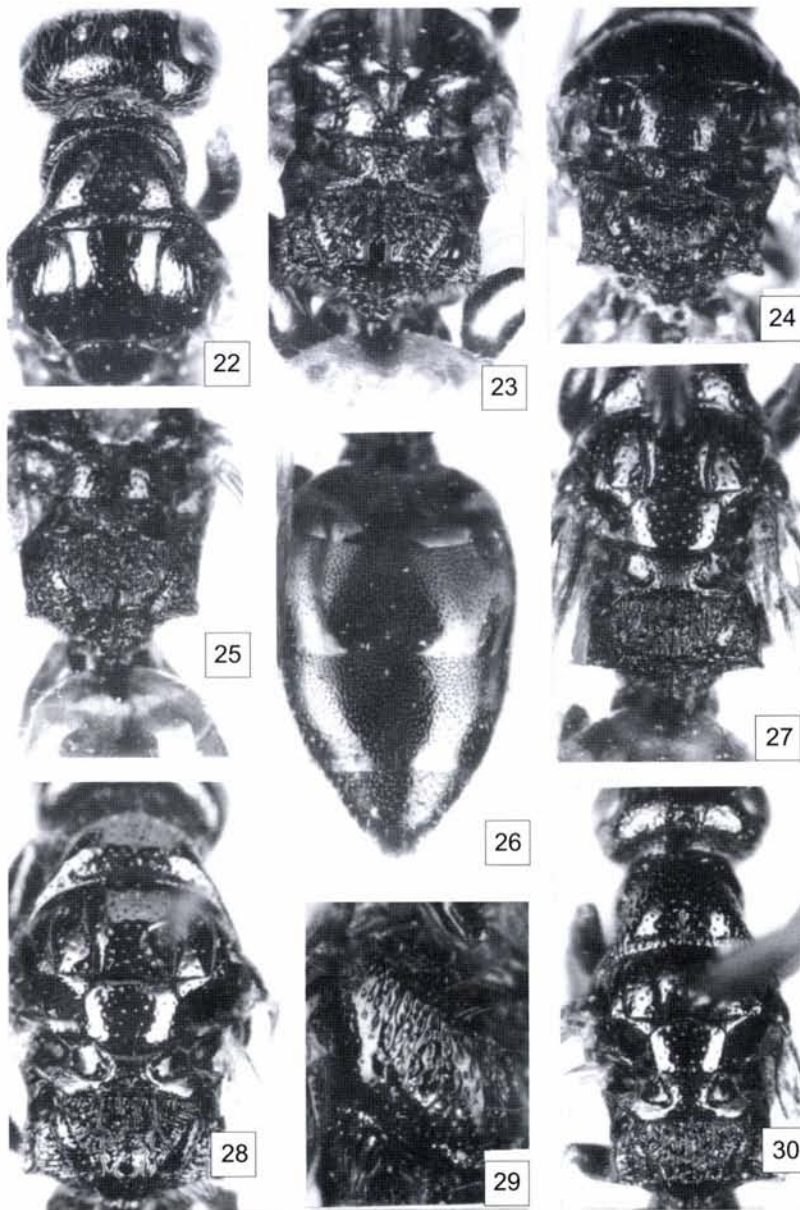


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Figs 18–21. 18: *Cleptes halinae* KUSNETZOV-UGAMSKIJ (♂) thorax and abdomen. 19: *C. satoi* TOSAWA (lectotype ♀), head, pronotum and part of mesonotum. 20: *C. japonicus* TOSAWA (lectotype ♀), scutellum, postscutellum and propodeum. 21: *C. mishimaensis mishimaensis* TSUNEKI (holotype ♂), mesonotum-propodeum. (Orig.)



Figs 22–30. 22: *Cleptes humboldti* MÓCZÁR (♀ paratype). 23: *C. seidenstueckeri* LINSENMAIER (♀ holotype). 24: *C. mishimaensis hokkaidoi* ssp. n. (holotype). 25: *C. triestensis* sp. n. (♂ holotype). 26–27. *C. margaritae* sp. n. (♀ holotype), abdomen and thorax. 28: *C. nigrinus nigrinus* MERCET, previously unknown ♀. 29–30: *C. nigrinus rhodosensis* ssp. n. (♀ holotype), 29 = lateral side of thorax, 30 = head with thorax (photo by GY. GADÁNYI).

Cleptes halinae KUSNETZOV-UGAMSKIJ

Cleptes halinae KUSNETZOV-UGAMSKIJ, 1927: 28, 1 ♀ (In Russian). Holotype ♀ Russia: Tigrovaja (Prov. Marit. Littoralis, S. Ussuri, 4.VIII.1926) (Mus. ?).

Cleptes hyalinae (sic): KIMSEY & BOHART 1991: 60. Holotype ♂ (really ♀); (*semiauratus* group)

Material examined – 3 ♂, Korea: “Ex cocoon of *Lygaeonematus* sp. nr. *L. wesmaeli* TISCHB. R. FORSIUS det.”, “Korea: (em. V. 1932 at Belleville, Ont., from Sawfly cocoon sent to Canada)”, “Parasite Laboratory Belleville Ont. 30.V.1932”, “Pres by Imp. Inst. Ent. Brit. Mus. 1932–5”, “*Cleptes halinae* K-UGAMSKIJ det. BISCHOFF det. M. C. DAY 197”, “*Cleptes halinae* KUSN-UGAMSKIJ det. L. Móczár, 1999” 1 ♂ (BMNH); the same labels except det. BISCHOFF and DAY label, 2 ♂m (BMNH and HNHM). The Russian diagnosis was kindly translated by G. SZELÉNYI.

♂ – Length 4.8–5.3 mm. The ♂ seems to have been unknown previously, consequently, this specimen represents the male of this species owing to the same data which was not published before. Head, pronotum nearly entirely greenish blue. Lower face and mesopleuron more greenish. Ped and flagellomeres brown. Head, thorax with some violet tint, mesonotum scutellum postscutellum and propodeum darker blue, bluish black, elsewhere black. T-I in front with reversed V-formed, broad, lighter brown, medially black spot and dark brown on disc posteriorly. T-II-V becoming gradually black. Legs brown, scape, fore femora with greenish blue highlights in front, middle and hind ones and the rest brown. Wings weakly infuscated, without brownish spot. Discoidal cell weakly indicated. Nervulus interstitial. Body with sparse white hairs. Frons convex, with fine, scattered punctures. MS 1.2 MOD long. Ped 1.8 times as long as width, F-I 2.0 times as long as apical width, F-II 1.6×, F-III 1.3 × apical width. Frontal sulcus narrow, beginning from fore ocellus, ending at clypeus, broadened before antennal sockets, usually interrupted medially. Lateral margins of clypeus convergent basally, stumpy, acute corners laterally and divergent apically (Fig. 11). Ocellar triangle moderate acute, POL:OOL = 10:13, hind ocelli 1.3 times as far from eye margin as from each other.. Pronotum with smaller punctures or irregular wrinkles. Mesonotum, scutellum (Fig. 18) and postscutellum finely, scatteredly punctured. Postscutellar disc 1.4 times as wide as long, anterior margin gradually bending down into an elongate row of foveae, well separated only laterally, before the posterior margin of scutellum. Posterior margin of postscutellum twice excavated deeply. Propodeum with longitudinal wrinkles, mostly in anterior half. Lateral corners of propodeum (Fig. 18) nearly acute angle, with minute teeth. Mesopleuron smooth with small punctures, after that coarsely sculptured, mostly with round, less elongate punctures between finer ridging laterally. T-I with very fine and dense punctures medially on disc and with few larger punctures laterally, T-II with fine and dense punctures, T-III (Fig. 18) except medially and T-IV entirely with dense, distinct double punctures. T-IV-V alutaceous basally, rest of T-V smooth with some larger punctures. Posterior groove of pronotum not similar in the 3 specimens. The larger pit medially divided by 2–5 fine longitudinal ridges, the groove mostly with less distinct irregular punctures. The split being broader and smaller between postscutellum and propodeum.

Distribution – Russia: S. Ussuri (KUSNETZOV-UGAMSKIJ 1927) and Korea.

Cleptes humboldti MÓCZÁR

Cleptes humboldti MÓCZÁR, 1996: 158, 1♂, 2♀, Fig 16, 19–20. Holotype ♂; USA: California: Humboldt Co. (USNM).

Material examined – 1 ♂, 1 ♀, USA: “Humboldt Co 13.6. Cal”, “Bair’s Rch Redwd Crk”, “HSBARBER Collector”, “Holotypus *Cleptes humboldti* ♂ nov.spec.det. MÓCZÁR 1994”, 1♂ (USNM); “Humboldt CoCal 19.6.09”, the same 2nd and 3rd labels, “Paratypus *Cleptes humboldti* ♀ det MÓCZÁR 1994”, “Hym.Typ.3838 Mus Budapest”, 1 ♀ (HNHM).

♀ – Additions to the original diagnosis. Head with scattered punctures. Frontal sulcus only developed on posterior half. Pits outside of ocelli small (Fig. 22). Scape with pale bronze reflection and with punctures. Clypeal truncation straight, surface punctured, lateral edges hardly converging toward apically, lateral angles with pointed apex. Postscutellum not touching scutellum, about 10 small, distinct foveae separating the anterior margin of postscutellum and scutellum.

♂ – Head more densely punctured than in female. Frontal sulcus hardly developed, medially interrupted. Pits slightly developed beside ocelli. Scape brown, with pale bronze reflection and with punctures. Clypeal truncation straight, with obtuse lateral angles, surface punctured. Lateral side of tegula rather densely punctured. Postscutellum remarkably, 1.5 times as wide as long. Lateral corners of propodeum right angled. Sublateral area of propodeum with pitch black oblique groove with polished bottom extending over its entire length, sides moderately divergent. Male genitalia: Fig. 1, sternum 9; Fig. 2.

Distribution – USA: California (MÓCZÁR 1996a).

Cleptes japonicus TOSAWA

Cleptes japonicus TOSAWA, 1940: 3, 4♀ 2♂ (in Japanese). Lectotype ♀ (desig.herein); Japan (OMNH).

Cleptes japonicus: TSUNEKI 1959: 6, 7, 16♀♂, Figs 26–32.

Cleptis (sic!) *japonicus*: ITO *et al.* 1977: 327, Fig. 1167 (in Japanese).

Cleptes japonicus: KIMSEY & BOHART 1991: 61 (Syntype ♂ Nagano Tsukuba, *semiauratus* group).

Material examined – 1 ♀, 2♂. Japan: “1.VIII.1926 Mt.Asama N. TOSAWA”, “*Cleptes japonicus* TOSAWA Holotype Tr.Kans.E.S. X/2 1940” with red writing on white label, “Lectotypus *Cleptes japonicus* TOSAWA des. Móczár 1997”, 1 ♀ (OMNH). – Korea: IV.1932, Parasite of Korean larch sawfly (G. TAKAGI), 2♂ (CNCI, HNHM).

Distribution – Japan (TOSAWA 1940). ? Korea.

Remarks – The holotype was not published by TOSAWA (1940), TSUNEKI (1959), HIRASHIMA (1989), KIMSEY & BOHART (1991) and TADASHI (1995), consequently, it was necessary to designate it. TOSAWA’s diagnosis was kindly translated by S. SAKAI. Clypeus raised, somewhat wider than long, corners rectan-

gular (Fig. 4), with somewhat convergent lateral margins. Female antenna: Fig 6. Further significant data to key: postscutellum with a transverse row of minute foveae in front. Lateral edges of propodeum hardly arcuate (Fig. 20), lateral teeth acute triangle (right side), left one nearly rectangular. Mesopleuron rugose-punctate, on main part longitudinally somewhat rugosely and very closely striate. T-II-III finely punctured, T-IV with double punctures. Additions to the descriptions: MS 1.3 MOD long. Ped 1.6 times as long as wide, F-I 1.8 ×, F-II 1.4 ×, F-III 1.3 times as long as wide. – The characteristics of male were given from TSUNEKI's description in the key, albeit, I publish here 2 ♂ from Korea. I requested original males from the Osaka Museum several times in vain. The TSUNEKI's description differs from the Korean males in the following details: by the hardly distinct few punctures of mesopleuron, and not as given "Mesopleuron coarsely longitudinally rugose-punctate", by the punctures on T-III-IV remarkably deeper, nearly coarsely double, and not "punctuation similar to ♀", i.e. "tergites 2 and 3 (of ♀) finely, closely ..., tergite 4 somewhat more largely and sparsely punctured with finer punctules (sic!) scattered in between", differing by the minute foveae distinctly present between postscutellum and scutellum in the split in males (from Korea), "not foveolate" according to TSUNEKI, by posterior groove of pronotum only with some distinct pits medially, but with irregular and not outlined punctures laterally, "not similar to ♀", i.e. pronotum with distinct outlined row of pits, by F-I (=3rd joint) 1.6 times and not 2.5 times as long as wide. Some addition to the data of the Korean males: MS 1.2 MOD long. Ped 1.4 times as long as wide, F-I 1.6 ×, F-II and F-III 1.1 times as long as wide. I am not sure that these males really represent this species. They may be a subspecies of *japonicus* TOSAWA. More materials, above all true male specimen(s) are needed for the decision.

***Cleptes margaritae* sp. n.**

Type material – Holotype: Tadjikistan: "Galifabad 28.VIII.40", "Holotypus *Cleptes margaritae* ♀ sp. n. Móczár 1999", "Hym. Typ. No. 3860", 1 ♀ (HNHM).

♀ – Length 5.8 mm. Vertex, upper face bluish green, lower face black with two small pale reddish spots on both sides medially. Scape with reddish tint in front. Ped and at most scape apically dark reddish brown, flagellomeres blackish brown. Collar medially and anterior row of pits of pronotum black. Pronotum flame red, mesonotum, scutellum, postscutellum, including prolongations, and partly mesopleuron largely flame red with some golden coppery tint. Lateral hollow of pronotum medially and both sides of mesonotum, lateral sides of thorax largely, and ventral side, entirely black. Propodeal disc with 3 pale greenish blue spots posteriorly. Tegulae, legs except light brownish tarsomeres partly, dark brown, only fore femora with pale reddish tint apically. T-I and anterior half of T-II brown, rest of tergites black; excepting T-I pale reddish brown basally, and narrower

yellowish brown spots laterally, further, larger spots on T-II-III lateromedially also yellowish brown. Wings nearly hyaline, discoidal cell weakly indicated, nervulus interstitial. Head, thorax with white, abdomen with brownish hairs.

Head 1.1 times as broad as long between lower edge of clypeus and vertex. Face convex, with smaller or larger punctures, some 3–4 rows with close punctures, the others with 1 to 3 PD apart. MS 1.0 MOD long. Ped 1.7 times as long as wide, F–1.5 ×, F-II 1.1 ×, F-III 0.9 times as long as wide. Frontal sulcus continuous, narrow above, wider posteriorly. Lateral edge of clypeus slightly diverging (Fig. 13), posterior margin somewhat excised, lateral angles acute. Ocellar triangle acute, hind ocelli 1.3 times as far from eye margin as from each other. Lateral side of head nearly parallel behind eyes and distinctly roundly converging at its posterior half. Collar finely striated transversally in front. Posterior groove of pronotum hardly developed and with irregular punctures and wrinkles. The summit of pronotum being about the middle between collar and mesonotum viewed in front. Pronotum irregularly punctured in front, the rest with scattered punctures. Punctures deeper and coarser than those of face, remarkably sparsely punctured on mesonotum (Fig. 27) and scutellum. Punctures close and very small on postscutellum in front and partly sparse posteriorly. The minute pit medially and a very narrow hardly perceptible split between postscutellum and scutellum. Posterior margin on postscutellum twice remarkably shallowly emarginate. Surface of propodeum with irregular ridges (Fig. 27). Lateral angles of propodeum with short, pointed spine (Fig. 27). T-I with dense and fine punctures on disc medially. T-II with distinct dense punctures on anterior part as is on posterior third/fourth part, and impunctate (Fig. 26) along posterior margin. T-III largely with very dense punctures, some larger punctures present only laterally. T-IV with some dense double punctures.

♂ – Unknown.

Distribution – Middle Asia: Tadzhikistan.

Remarks – This species is related especially to *Cleptes mocsaryi* SEMENOW, 1891 (Hungary and Greece), but differs from it by its not rectangular propodeum (Fig. 27), ocellar pits not larger than ocelli, T-I without very fine punctures, vertex, face not dark flame red, etc. The species is named in honour of my wife, to appreciate her steady assistance of my work.

Cleptes mishimaensis mishimaensis TSUNEKI

Cleptes mishimaensis TSUNEKI, 1986: 2, 1♂. Holotype ♂ (not ♀); Japan: Mishima (OMNH).
Cleptes mishimaensis: KIMSEY & BOHART 1991: 61 female (Tsukuba, *satoi* group).

Material examined – 2♂. Japan: “Mishima Japan (Hatsune- /on Japanese sign = wood path/12.V.1985 det.K. TSUNEKI” (in the original diagnosis 14.V.1985, and the word “det” cancelled by a line), white label, “*Cleptes mishimaensis* TSUNEKI ♀ (sic!) Holotype” orange label, really 1♂ (OMNH); “B 63–79 “B” Japan 8.IV.64”, “Host? *Pachynematus itoi*”, “Ex Lot 65–688 *Cleptes ? galloisi* UCH. det. W.R. MASON”, “*Cleptes mishimaensis* UCHIDA ♂ det MÓCZÁR 1997”, 1♂ (CNCI).

Further characters from the very short TSUNEKI's diagnosis: "... mesopleuron with epimerial area polished and sparsely punctured, while below there surface longitudinally, arcuately striate... gastral tergite 1 at central part in front of apical impunctate area very minutely, somewhat closely punctured. Wing slightly darker than in the compared species, gaster completely black, only at extreme base somewhat brownish. Head and thorax metallic blue green, legs except pale brown fore tibia black or brownish black". Additions to the diagnosis: MS 1.0 MOD long. Ped 1.5 times as long as wide, F-I 2.5 times, F-II and F-III 1.6 times as long as wide. Clypeus (Fig. 16) with concave lateral edges, with nearly obtuse angled lateral corners and slightly arcuate apical margin. Head with smaller close punctures, pronotum flat, with larger and deeper, mesonotum (Fig. 21), scutellum partly with smaller and somewhat sparse punctures. Axillae small and narrow. Postscutellum with a larger split, with some foveae in front medially and somewhat more flattened, twice emarginated posteriorly (Fig. 21). Nervulus antefurcal, nearly interstitial. T-II-III densely, T-III partly punctured and similar to T-IV with large and minute double punctures. The following small differences are between the TSUNEKI's diagnosis and the examined holotype: head, thorax more greenish blue, with some violet tint, it is not "blue green", posterior margin of T-I-II brownish only laterally, and not "gaster completely black..." One male (from Japan) differs from holotype as follows: lateral margins of propodeum slightly convergent and concave before corners with a stumpy tooth. Propodeum in front with about 9 well outlined longitudinal ridges, which divide the central area into 4 parts extending to half length of the segment. These small differences establish only the variability of the species. The proportions of this male specimen: MS 1.0 MOD long. Ped 1.6 times as long as wide, F-I 2.3 ×, F-II 1.5 ×, T-III 1.8 times as long as wide.

Distribution – Japan (TSUNEKI 1986).

Remarks – It is clear from TSUNEKI's diagnosis, the specimen and the locality label, that this specimen represents the holotype. It is presumable that TSUNEKI indicated female in his diagnosis by mistake, because the specimen is a male. After examining further type materials in Osaka Museum, the other determination labels were written probably not by TSUNEKI.

Cleptes mishimaensis hokkaidoi ssp. n.

Type material – Holotype: "Japan: Hokkaido Nukabira 600 m 5.VII.1989, swept M. J. SHARKEY", "Holotypus *Cl. mish. hokkaidoi* ♂ ssp. n. Móczár 1999", 1 ♂ (CNCI).

♂ – Length 5.1 mm. Head, pronotum, scutellum, postscutellum and partly propodeum, mesopleuron, fore femora blue outside, mesonotum greenish blue with some golden tint. Scape and hind femora bluish green outside. Tegulae, abdomen brownish black. T-T basally, T-II with very small yellowish brown spots laterally. Fore tibia and metatarsus yellowish brown. Ped, flagellomeres dark brown. Wings evenly and moderately infuscated, anterior vein of discoidal cell faintly indicated. Body covered with white hairs.

Head 1.2 times as wide as long. Frons convex, with dense punctures. MS 0.8 MOD long. Ped 1.5 times as long as wide, F-I 2.1 ×, F-II and F-III 1.6 times as long as wide. Frontal sulcus very narrow, hardly interrupted medially. Surface of clypeus convex, punctured before nearly straight

apical margin, lateral edges converging downwards, before minute, hardly acute angles laterally. Ocellar triangle acute, 1.5 times as far from eye margin as from each other, hind ocellar pits distinctly smaller than ocelli. Head closely punctured on face, broad behind eyes, and evenly converging. Pronotum sparsely punctured, partly with deeper punctures than on head, mesonotum and scutellum more sparsely, postscutellum more densely, but more finely punctured than pronotum. Posterior groove of pronotum very characteristic with its narrow, elongated and well outlined row of pits extending nearly to notaulices. Axillae small. Anterior margin of postscutellum with a small pit medially, surface convex, deeply and semicircularly excavated posteriorly and with a perceptible row of foveae at bottom. Lateral edge of propodeum remarkably concave. Angles (Fig. 24) with a stumpy teeth produced obliquely backwards. Two broad areolae well outlined in central area of propodeum (Fig. 24) as are the 2–3 narrow areolae on sublateral area in front, and about 5 along the posterior margin. These connect the deeper oblique row of narrower areolae or shallower and larger pits laterally of sublateral area. Fore tibia, metatarsus yellowish brown. T-I with very fine punctures medially on disc. T-II with fine and dense punctures, T-III mostly laterally and T-IV extensively with double punctures.

♀ – Unknown.

Remarks – This subspecies is closely related to *m. mishimaensis* TSUNEKI, the differences are as follows: pronotal row of pits not round; posterolateral corners of propodeum not right angled; anterior margin of postscutellum not relatively larger split with foveae; punctures of abdomen not less distinct. These differences are at best of subspecific value.

Cleptes mocsaryi SEMENOW

Cleptes Mocsarii SEMENOW, 1891: 184; 1892: 502, 1 ♀; Holotype ♀; Hungaria (no exact locality) (ZIP).

Cleptes Mocsaryi: BUYSSON 1896: 701 ♀ (descr. in French).

Cleptes mocsarii: SEMENOV-TIAN-SHANSKIJ 1920: 306 ♀ (in key, in Latin).

Cleptes mocsarii: KIMSEY & BOHART 1991: 61 ♀ (Hungary, Greece, Turkey, *semiauratus* group).

Material examined – 2 ♀. “Hungaria” (no more data) (ZIP). – Greece: Euboea (compared with type), 1 ♀ (HNHM).

Additions to the description – Collar reddish gold and red laterally. Anterior margin of collar and anterior transversal row of pits black. Flagellomeres reddish brown, tegulae dark. Posterior edge of scutellum with very narrow greenish tint medially. Prolongation of postscutellum pale greenish entirely, of scutellum coppery golden with reddish tint basally and pale red apically. Metanotum with reddish golden tint basally. Propodeal disc largely black, also laterally, with some small greenish spots posteriorly. T-I – II partly lighter brown, similarly to lateral spots on T-II in front, T-II on posterior part and T-III entirely black, and with traces of dark brown spots on T-III laterally. Fore femora brown with pale coppery tint, fore tibiae brown, reddish brown below, tarsi yellowish brown. Face on both sides closely punctured between eyes and with frontal sulcus. Frontal sulcus distinctly interrupted medially. MS 1.8 MOD long. Ped 1.9 times as long as wide, F-I 1.7 ×, F-II 1.0 × and F-III

0.7 times as long as wide. Clypeus with converging lateral edges (Fig. 12), strongly bending down and broadened basally, viewed from the side, lateral teeth blunt apically, directed obliquely, anterior edge nearly straight. Ocellar triangle acute. Hind ocelli 1.4 times as far from eye margin as from each other. Pronotum nearly evenly, rather densely punctured, posterior groove hardly, narrowly developed, with a longer keel medially. Mesonotum, scutellum with gradually scattered, postscutellum with denser punctures. Propodeal disc irregularly wrinkled, only with 5 regular areolae among the nearly parallel ridges at posterior margin. T-I with some very fine punctures. Punctures of T-III very dense, distinct smaller basally and gradually becoming larger at posterior third, smooth impunctured posteriorly. The usually smooth, swollen base of mesopleuron densely punctured below tegulae in front and mostly with large round and oval punctures between the ridges. Metanotum laterally striate, partly strigate.

Distribution – Hungary (SEMENOW 1891). Greece, Turkey (KIMSEY & BOHART 1991).

Cleptes nigrinus nigrinus MERCET

Cleptes nigrina MERCET, 1904: 83, 1♂. Holotype ♂; Spain: Sierra Gallina, Cadiz Prov. (MNCN).

Cleptes nigrinus: MÓCZÁR: 1951: 277 (see *C. triestensis* det MOCSÁRY, male genitalia).

Cleptes nigrinus: KIMSEY & BOHART 1991: 62 (S. Europe, *semiauratus* group).

Cleptes semiaurata var. *nigriventris* BUYSSON, 1898: 125 ♀, Spain: Barcelone (Cabrera) 1 ♀, **syn. n.**

Cleptes nigriventris: TRAUTMANN 1928: 79 ♂, 1 ♀, 4♂. Lectotype ♀ (desig. here). Spain: El Soldado (Cordoba).

Material examined – 5♀, 3♂. Spain: “Sa Gallina Cadiz, ♂ *Cleptes nigrina* MERC. mihi”, “Holotype” red label, “Cat. Typos No 11935” red label, 1 ♂ (MNCN). – Portugal: “Portugal: Vale Melhorados Evora, 28.iii.1961 L.C.FERREIRA”, “*Cleptes nigrinus* MERCET det. M.C. DAY 197?”, 1 ♀, 1♂ (BMNH); the same data without det label, 1 ♀ (HNHM); the same locality but with 21.1.1961 F.A.e SILVA and without det.label, 2 ♂ (BNMH and HNHM). – Spain: Sierra Morena, 10.5.24., *Cleptes nigrinus* MERCET det MÓCZÁR 999, 1 ♀ (ZMB). – “El Soldado (Cordoba) SEYRIG”, “*Cleptes nigriventris* BUYSS.”, “Coll.TRAUTMANN”, “Lectotypus *C. nigriventris* BUYSS. ♀, det. MÓCZÁR 999” 1 ♀ (ZMB), and the same label, but “Paralectotypus”, 1 ♀ (HNHM).

The identification of 3 male specimens by DAY seems conform with the holotype (♂), only the colour and some details do not correspond to MERCET's diagnosis. DAY indicated 1 female with det label. The same locality and collecting data confirm the affinity of the two sexes in spite of the great dimorphism. The result of DAY's determination was not published. I give the description of the female with some addition to MERCET's diagnosis.

♂ – Lateral edges of clypeus converging, straight apically, lateral corners hardly pointed, with nearly right angle. Ocellar triangle acute. Hind ocelli 1.1 times as far from eye margin as from each other. Head distinctly rounded posterolaterally viewed from above. Pronotum evenly curved in lateral view, surface shining with scattered, rather deep punctures, with a shallow, hardly perceptible

depression medially, posterior groove shallow, with irregular wrinkles and punctures. Both oblique black grooves of propodeum continuing on vertical part of disc below. T-I-II lighter or partly darker brown. T-III-V black, T-I-II(-III) with small or large pale yellowish brown spots laterally. Mesopleuron smooth, finely punctate below tegulae in front, less ridging and more with round close punctures laterally. Lateral side of metanotum and propodeum striate longitudinally above and strigate vertically on propodeum below. T-I impunctate. T-II with distinct very dense, T-III partly close and strongly double and T-IV less dense and deep double punctures. The difference between the holotype and the 3 males: Length 6 mm (holotype), 7 mm (3 males). MS 1.0 MOD long. Ped 2.0 times as long as wide apically, F-I 2.6 times, F-II 1.8 times and F-III 1.8 times as long as wide (holotype), and for the 3 males: MS 0.6–1 MOD long, and 2.0 ×, 2.6 ×, 1.8 ×, 1.7 ×. The ground colour dark greenish blue with violet reflections (holotype), and greenish blue with some violet tint (3 males). Propodeum extensively greenish blue, at most partly violet. Central and sublateral areas partly violet, rest blue and black (holotype), or only central area violet, or also central area black medially and the rest greenish blue (3 males).

♀ – Length 5.5 mm. Head, including upper face, pronotum largely and postscutellum flame red, vertex, mesonotum, scutellum with more coppery, partly golden highlights. Lower face below, mandibles, clypeus brownish black, face, occiput, pronotum laterally with greenish reflections. Antenna blackish brown nearly entirely. Ped and F-I reddish brown. Collar and an anterior row of pits on pronotum reddish golden, narrowly black in front, and golden green. Lateral side of pronotum in deep reddish golden with black spots in the middle. Transversal prolongation of scutellum reddish golden and the same of postscutellum pale golden green. Propodeal disc black, with 3 bright green spots on horizontal side posteriorly. Lateral side partly red, partly green golden, black only above, below lateral spine. Propleuron golden laterally. Mesopleuron golden green just below tegulae, then extensively gradually with golden red and black below. Metapleuron largely flame red. Legs dark brown on coxae and femora, including tarsal joints, except for lighter brown fore tibiae, middle and hind tibiae below and metatarsi, fore femora outside with some reddish tint. T-I-II brown in front, T-II-III-IV blackish brown posteriorly. Wings moderately stained below pterostigma. Discoidal cell weakly indicated. Nervulus interstitial. Body with white hairs. Head 1.07 times as broad as long. Frons with shallower punctures medially, partly with denser and deeper punctures toward ocelli. Frontal sulcus nearly continuous. Lateral side of pronotum in hollow reddish golden or golden red shining with some punctures. MS 1.3 MOD long. Ped 2.3 times as long as wide, F-I 2.0 ×, F-II 1.0 × and F-III 0.9 times as long as wide apically. Frontal sulcus interrupted very shortly below fore ocellus. Lateral edges of clypeus (Fig. 17) distinctly concave, anterior margin waved, angles with minute teeth. Pits of hind ocelli smaller and hardly as large as ocelli. Ocellar triangle acute. Hind ocellus 1.18 times as far from eye margin as from each other. Lateral margin of head behind ocelli nearly parallel behind ocelli, then strongly curved toward collar on its second half, viewed from above. Collar with irregular punctures. Pronotum without sulcus, hardly depressed (Fig. 28) before the shorter declivous part posteriorly, viewed from above. The punctures of anterior row on pronotum dense. The posterior groove with irregular punctures and with a short keel across groove. Surface of pronotum with sparser punctures than on head, at most with 3–4 close punctures longitudinally in some places, on the other hand, smooth, polished, without fine wrinkles among punctures. Mesonotum with more scattered, scutellum with some finer punctures, surface polished. Axillae broader, inclined downwards (Fig. 28), viewed from above. The narrow split hardly perceptible with a row of foveae between postscutellum and scutellum. Postscutellum depressed in front with close minute punctures, larger posterior part smooth, polished, with some fine punctures. Posterior margin of postscutellum with two remarkably flat and broad excavations. Propodeal disc with some irregular longitudinal ridges with few well-outlined areolae. Lateral angles of propodeum stumpy at base (Fig. 28) with very short pointed tip. Mesopleuron smooth, polished just below tegulae

with a few minute punctures, then with extensively broader ridges, punctures elongate. Lateral side of metanotum and lateral side of propodeum striate (EADY 1969) longitudinally above, below propodeal spine and strigose, partly strigate vertically below propodeum. T-I impunctured, T-II with fine, very dense punctures on anterior two-thirds, T-III with rather double punctures, T-IV as T-III, but with distinctly sparse punctures.

The unusually short descriptions of *Cleptes semiaurata* var. *nigriventris* BUYSSON ♀ var. nov. (1898) and of *Cleptes nigriventris* BUYSSON ♀♂ sensu TRAUTMANN (1928) are not satisfactory for identification of these taxa. There are some small colour differences between the briefly described TRAUTMANN's males and the males determined by DAY. Comparing the new females description, published by TRAUTMANN, the original type material and the female determined by DAY, there is no essential difference. The proportions of *nigritus* ♀ (see above) and *nigriventris* ♀ are nearly the same: MS 1.2 MOD long. Ped 2.1 times, F-I 2.0 ×, F-II 1.1 × and F-III 0.9 times as long as wide. The localities are the same in TRAUTMANN's description and on the 2 females. Consequently, I designate the lectotype and the paralectotype of *C. nigriventris* BUYSSON ♀♂ in sensu TRAUTMANN. The difference between *nigritus* and *nigriventris* seems to be small, therefore, *C. nigriventris* BUYSSON sensu TRAUTMANN, 1928 is a synonym of *C. nigritus* MERCET, 1904.

Distribution – Spain (MERCET 1904). Portugalia.

***Cleptes nigritus rhodosensis* ssp. n.**

Type material – Holotype ♀: Greece: "Griechenland Rhodos, Profitis ILIAS 36.15 N/27 56E 550–730 m 27-31.5.1979", "Forschungsreisen 1979 H.U. and Ch. ASPÖCK, H. und R. RAUSSCH, P. Ressler: Balkan-Ägäis-Italien", "Holotypus *C. nigr. rhodosensis* ♀ ssp. n. Móczár 1999", 1 ♀ (CL).

♀ – Length 5.5 mm. Head, including face entirely dark flame red, vertex with pale golden tint. Scape apically and Ped reddish brown. Pronotum flame red, collar reddish green medially, anterior row of pits golden green, mesonotum, scutellum and postscutellum golden red with coppery tint, transversal prolongation of scutellum less reddish gold, postscutellum more greenish gold laterally. Propodeal disc with 1 smaller greenish blue spot posteriorly in the middle and with 2 larger ones at lateral corners. Propleuron black in front and reddish on its half edge posteriorly. Mesopleuron golden just below tegulae and golden red below. Metapleuron reddish only basally. Lateral side of propodeum entirely black. Wings weakly stained on posterior half. Discoidal cell hardly perceptible. Fore tibiae largely, middle and hind ones below light brown. T-I-II and anterior half of T-III yellowish brown, exceptionally in the satoi group. Posterior margins of T-I-II and spots of T-III brownish, rest black. Vertex convex behind ocelli, in lateral view. Lower face with shallow and sparse punctures, elsewhere more densely and more deeply, among ocelli closely punctured. MS 1.4 MOD long. Ped and F-I 2.0 times as long as wide, F-II 1.0 × and F-III 0.9 times as long as wide.

Lateral edges of clypeus somewhat converging, apical margin hardly arcuate, lateral corners nearly obtuse angled. Ocellar triangle nearly acute. Pits of hind ocelli deep, and larger than ocelli. Hind ocellus 1.01 times as far from eye margin as from each other. Frontal sulcus sharp and interrupted. Head gradually converging behind eyes (Fig. 30), viewed from above. Collar medially transversally striate. Some fine longitudinal ridges beginning just below striae, with elongate punctures between the ridges, becoming gradually normal, round punctures without ridges at about the summit of pronotum. Pronotum strongly curved at its posterior third, with short, distinct sulcus in declivous part medially, before the short keel. Mesonotum rather densely punctured. Postscutellum closely punctured basally, with a narrow split between scutellum and postscutellum, posterior margin with two flat, elongate transversally excavations medially. Lateral angles of propodeum rectangular. Propodeal (Fig 30) disc with some nearly parallel ridges, mostly with irregular wrinkles, the black, and oblique furrows shining laterally. Mesopleuron partly smooth with some punctures just below tegulae, vertical face (Fig. 29) finely strigose with some punctures round and elongate. T-I impunctured, T-II with fine, dense punctures except laterally and posteriorly. T-III and partly T-IV with finer but distinct double punctures.

♂ – Unknown.

Remarks – This subspecies is related to *nigritus nigritus* both in sculpture and in colour, but differs mainly by its differently sculptured collar and pronotum, not only punctured; by the vertex having a sulcus between hind ocelli; abdomen not largely brown etc.; and by the characters given in the key; similar to females of this group, resembling *seidenstueckeri* by its abdomen basally extended light colour; but differs especially by shape of its pronotum, which is not evenly curved, etc.

Cleptes pronigritus LINSENMAIER

Cleptes pronigritus LINSENMAIER, 1968: 6, 1 Type and Paratypes. Holotype ♀; Turkey: Antakya (CL).

Cleptes pronigritus: KIMSEY & BOHART 1991: 62 (*semiauratus* group).

Material examined – 9♀. Turkey: “Antakya As.Türk. 7.VI.1965 leg. JOS.SCHMIDT”, “*Cleptes* LTR. *pronigritus* LINS. LINSENMAIER det.1965 ♀ Type”, “196”, “Holotypus *C. pronigritus* LINS. det.MÓCZÁR 998”, 1 ♀ (CL); the same 1st label, but with “6.VI.1965” data, 1 ♀ and as before but with “♀ Paratype *Cleptes* LATR. *pronigritus* LINS. LINSENMAIER det 1965”, 1 ♀ (HNHM); the same data as the two labels, 4♀ (OÖLL); the same data except “6.VI.1965” and “det. LINSENMAIER”, but with “7.VI.1965” and “SCHMIDT det”, 1 ♀ and Antakya 1.–7.6. Anatolia leg GUSENLEITNER”, “♀ Paratype *Cleptes* LTR. *pronigritus* LINS. LINSENMAIER det.”, 1 ♀ (OÖLL).

Additions to the description – MS 1.3 MOD long, Ped 1.8 times as long as wide, F-I 2.3 ×, F-II 2.0 ×, F-III 0.8 times as long as wide. “Pronotum mit deutlicher Längsfurche auf der Mitte” accordig to author. The depression is very shallow, present only on some paratypes, not at all similar to those of the species in subgenus *Holcoleptes*. Frontal sulcus broadly interrupted medially, not “Cavitas mit deutlicher, doch nicht scharfer Mittel-Furche”. The body colour in paratype (collected in 7.VI.1965) is greenish gold and head with red tint, T-I largely reddish brown. The colour of antenna

varying between the normal coloured paratype (only Ped and F-I yellowish brown) and the paratype with extended light coloured antenna (scape partly or largely, Ped, F-I-II-III yellowish red). The colouring of the left and right flagellomeres differs sometimes also on the same paratype. The same small differences are found in the punctures of abdomen, and of mesopleuron, consequently, these refer only to variety status.

Distribution – Turkey (LINSENMAIER 1968). Anatolia.

Cleptes pseudosulcatus MÓCZÁR

Cleptes pseudosulcatus MÓCZÁR, 1968: 169, 1 ♀ Figs 3–4. Holotypus ♀: Spain: Cuenca (ZSM).

Cleptes pseudosulcatus: KIMSEY & BOHART 1991: 62 (*semiauratus* group).

Material examined – 1 ♀. Spain: “Cuenca Spanien MAX KORB”, “*Cleptes mocsaryi* SEM. A. MOCSÁRY det. ♀” not MOCSÁRY’s writing!, “Holotypus *Cleptes (Cleptes) ♀ pseudosulcatus* MÓCZÁR det. MÓCZÁR L. 1967”, “typus” red label, 1 ♀ holotypus (ZSM).

Additions to the original diagnosis – Collar greenish golden, anterior row of pits green and reddish laterally. Ped and F-I reddish brown, not “2–3.Fühlerglied gelblich braun”, lower side yellowish brown. Mesonotum reddish and bright green between parapsidal line and tegula. A narrow band bright green transversally on scutellum posteriorly. MS 2.0 MOD long. Ped 2.8 times as long as wide, F-I 2.5 ×, F-II 1.2 ×, F-III 0.8 times as long as wide. Surface of clypeus with close, small punctures, lower margin finely emarginated medially and nearly right angled laterally. Propodeum with at most 3 large areolae along posterior margin.

Distribution – Spain (MÓCZÁR 1968).

Cleptes satoi TOSAWA

Cleptes satoi TOSAWA, 1940: 5, 2 ♀, 2 ♂ (in Japanese). Lectotype ♀ (desig. herein); Japan: Amami, Osaka (OMNH).

Cleptes satoi: TSUNEKI 1959: 6–7, 20 ♀♂, Figs. 18–22 (2 ♀, 3 ♂ types) (sic!)

Cleptes satoi: KIMSEY et BOHART 1991:63 (syntypes males, females) (*satoi* group).

Material examined – 1 ♀. Japan: “Amami Osaka 20-VI-37 0.4.”, white label, “*Cleptes satoi* TOSAWA Holotype Tr. Kans.E.S. X/2.1940” red writing on white label, “Lectotypus *Cleptes satoi* TOSAWA des. MÓCZÁR 1997”, 1 ♀ (OMNH).

Additions to description – ♀: collar with distinct transversal wrinkles in front. Propodeum with 4 remarkably large quadrangular and 1 longitudinal well outlined areolae along the anterior margin, between the two very deep pits of the lateral margin in front. MS 1.0 MOD long. Ped length 2.1 × apical width. F-I 2.0 times as long as wide, F-II 1.0 × and F-III 0.8 times as long as wide. TSUNEKI’s description differs from the holotype in some details. Postscutellum with a minute pit medially in

front and hardly perceptible minute foveae in the very narrow split between scutellum and postscutellum, it is not "deeply excavated from in front". Clypeal margin slightly evenly arcuate apically (Fig. 3, corrected), and not "clypeus transversely elongate rectangle, but corners rounded".

Distribution – Japan (TOSAWA 1940).

Remarks – The type material is Japan: Amami (Osaka 4.6.1934; 20.6.1937), Dougawa (Nara 10.7.1938) according to TOSAWA's original description. The indication of holotype with red writing is incorrect, because it was not published either by TOSAWA or by TSUNEKI. Consequently, I designate the specimen from Amami as the lectotype, based on the identity of the locality, data and the original diagnosis. It was kindly translated for me by S. SAKAI.

Cleptes seidenstueckeri LINSENMAIER

Cleptes seidenstueckeri LINSENMAIER, 1959: 10, 1 ♀. Holotype ♀; Turkey: Akschehir (CL).
Cleptes seidensteuckeri (sic!): KIMSEY & BOHART: 1991: 63 (*semiauratus* group).

Material examined – 1 ♀. Turkey: "Akschehir 1.–12.6. 1955 SEIDENSTÜCKER", "♀ Type *seidenstueckeri* LINS. 58 LINSENMAIER det.", "Holotypus *seidenstueckeri* LINS. des. MÓCZÁR 998", 1 ♀ (CL).

Additions to the original description – Pronotum with very dense, partly close punctures. Pronotal posterior groove very shallow, the row of pits indistinct, with irregular fine ridges, it is not "Punktreihe... etwas schwacher...wie *semiauratus*". MS 1.6 MOD long. Ped 2.0 times as long as wide, F-I 2.3 ×, F-II 0.9 ×, F-III 0.8 times as long as wide. Prolongation of scutellum and postscutellum pale greenish. Mesopleuron with dense, partly close punctures just below tegula, downwards wrinkled longitudinally with round and larger elongate punctures. Central area of propodeal disc (Fig. 23) with some longitudinal wrinkles. Punctures of T-III similar to *mocsaryi*, but with few larger punctures. For further data see in key.

Distribution – Turkey (LINSENMAIER (1959)).

Cleptes triestensis sp. n.

Type material – Holotype ♂: Italy: "Triest IX 1–6 15", "*Cleptes* spec.nov ! Nur in einer Doline des Karstes bei Nabresina gefunden", "*Cleptes nigrinus* MERCET det. MÓCZÁR", not MÓCZÁR's writing, "Prep. Gen.Clept. No 20", "Holotypus ♂ *Cleptes triestensis* sp. n. MÓCZÁR 1999", Hym.Typ.No. 3857 Mus. Budapest", 1♂ (HNHM).

♂ – 5.5 mm. Bluish green with extensive violet reflection. Vertex around ocelli bluish green and upper face partly violet. Lower face, scape, including clypeus, basis of mandible bluish green.

Pronotum, mesonotum largely violet, partly greenish blue; scutellum, postscutellum, lateral side of thorax, propleuron also ventrally, partly coxae, fore and hind femora outside, dark bluish green. Propodeum black nearly entirely. Central and sublateral areas partly with very pale violet tint. Pedicel and flagellomeres, partly mid femora, and all tibiae brown, outside of all femora more or less greenish blue. Tegulae and fore tibiae with pale bluish tint. T-I dark reddish brown and pale yellowish brown in front, T-II – V black, T-II-III-IV with traces of dark brown spots laterally. Wings nearly hyaline, slightly stained discoidal cell weakly indicated. Head 1.2 times as wide as long. Frons, vertex closely punctured. Vertex convex, slightly raised with ocellar area. MS 0.7 MOD long. Ped 1.7 times as long as wide, F-I 2.4 ×, F-II and F-III 1.7 times as long as wide. Shallow frontal sulcus beginning somewhat below the pit of fore ocellus, broadened between scape. Pits close to hind ocelli at least as large as ocelli. Ocelli with acute angle, 1.4 times as far from eye margin as from each another. Lateral edges of clypeus (Fig. 10) hardly converging, corners with minute stumpy teeth, directed laterally, anterior edge nearly truncate. Head gradually rounded behind eyes laterally, viewed from above. Pronotum with larger and shallow, partly deeper punctures with shining interspaces. Punctures 1 to 2 PD apart medially. Posterior groove less developed, with irregular wrinkles medially, fine punctures laterally and a longer keel medially. Surface of mesonotum, scutellum smooth, shining, with smaller and sparser punctures. Postscutellum remarkably longer than wide, some fine punctures in front and with dense, larger punctures posteriorly and twice deeply emarginated posteriorly. Split with very narrow between postscutellum and scutellum. Propodeal areolae of different sizes in front and with irregular ridges posteriorly, posterolateral corners of propodeum (Fig. 25) rectangular on right and with very small spine on left. Mesopleuron with small punctures below tegulae, and with extensively broader ridges below, some punctures elongate. Metapleuron and propodeum laterally striate longitudinally above and partly strigate. T-I with a few very fine punctures medially, T-II with very dense distinct punctures, T-III-IV with double punctures. Male genitalia: Fig. 9, sternum 9; Fig. 8.

♀ – Unknown.

Distribution – Italy.

* * *

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