

A CONTRIBUTION TO THE KNOWLEDGE OF THE CHALCIDIDAE,
LEUCOSPIDIDAE AND EUCHARITIDAE (HYMENOPTERA, CHALCIDOIDEA)
OF THE NEAR EAST

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ABSTRACT

This paper contains notes on 50 species of Chalcididae, 5 species of Leucospididae and 8 species of Eucharitidae from Turkey, Cyprus, Syria, Iraq, Israel and Egypt; one species from Iran is described.

The following species are described as new:

Brachymeria notispina, n. sp.; *Brachymeria libyca* (Masi), new male; *Hockeria brachygaster*, n. sp.; *Eucepsis similis*, n. sp.; *Invreia novitzkyi*, n. sp.; *Invreia israelica*, n. sp.; *Peltochalcidia clypeata* Boucek, new male; *Lasiochalcidia sparsibarbis*, n. sp.; *Lasiochalcidia cincticornis* (Walker), new male; *Dirhinus cyprius* Masi, new female; *Pachyeucharis*, n. subg. in *Eucharis* Latr.; *Eucharis (Pachyeucharis) microcephala*, n. sp.; *Eucharis (Pachyeucharis) albipennis*, n. sp.; *Eucharis (Pachyeucharis) affinis*, n. sp.; *Eucharis (Pachyeucharis) nigriventris*, n. sp.; *Eucharis* (subg. *Eucharisca*, n. n. for *Chalcurella* Gussakovskij, not Girault) *bytinski-salzi*, n. sp.

Nomenclatoric and taxonomic changes: *Chalcis brevicornis* Klug, n. syn. to *Brachymeria minuta* (L.); *Neophasganophora palestinensis* Boucek, n. syn. to *Aphasganophora gallica* (Sichel); *Antrocephalus goliath* Nikolskaja, n. syn. to *Eucepsis hofferi* (Boucek); *Eucepsis mansues* (Nikolskaja), n. comb.; *Antrocephalus subelongatus* (Kohl), n. comb.; *Invreia pumila* (Klug), n. comb.; *Lasiochalcidia rubripes* (Kieffer) separated as valid species from *L. cincticornis* (Walker); *Lasiochalcidia agilis* (Klug), n. comb.; *Lasiochalcidia pubescens* (Klug), n. comb.; *Eucharis punctata* Forster, *E. acuminata* Ruschka and *E. anatolica* Boucek transferred to *Pachyeucharis*, n. subg.

The description of *Brachymeria argenteopilosa* (Radoszkowski) is completed. Many of the species are new for this territory.

The present paper summarizes descriptions of new forms and notes on some other species of the hymenopterous families Chalcididae, Leucospididae and Eucharitidae from the Eastern Mediterranean. The material of these chalcids was kindly submitted to me by Dr. H. Bytinski-Salz, Israel, Mr. G. A. Mavromoustakis, Cyprus, and Ing. S. v. Novitzki, Vienna, for identification. This material was supplemented by several forms from the collections of the National Museum in Praha and the Museum in Vienna, and one species was submitted to me by Mr. G. J. Kerrich of the British Museum, London, to whom I am indebted for his kindness in comparing several species of *Eucepsis* with types in the British Museum. I wish also to record my gratitude to Dr. M. Beier of the "Naturhistorisches Museum" in Vienna for the loan of some types.

Leucospis gigas Fabricius

Israel: Jerusalem, 7.V (Bytinski-Salz, Houska); Wadi el-Kelt near Jericho, females with two males (Houska).

Antennae black or with reddish basal part of funicle, in one specimen flagellum entirely light red. This character was given by Mader 1936 (Ent. Z., 50, 289, 290) for separating *L. grandis* Klug from *L. gigas* F., but it is of no specific value.

Leucospis gibba Klug

Israel: Tiberias, 12.VII.1945, one female (Bytinski-Salz); Wadi el-Kelt near Jericho, 25.X.1942 (Houska).

These specimens are morphologically identical with the female reported by me (1952) from Turkey (Acta ent. Mus. Nat. Pragae, 27, 47), but the yellow colouring is more extensive; it is richer still than in the type (after Schletterer's redescription, l.c., p.181—183). The Palestinian specimens have the following body parts yellow: scape, pedicel, basis of first funicle joint, pronotum except for transverse line on disk and narrow front margin, two longitudinal stripes on the sides of mesoscutum, scutellum without axillae, a spot on post-scutellum, another on mesopleura, whole metapleura, whole legs excluding basis of coxae and small black spots at teeth of hind femora, a broad saddle-like band on first tergite, narrow stripe on fourth tergite (second visible tergite), broad band on fifth tergite, a small spot on each side of sixth tergite, and dorso-caudal portion of epipygium. Bands of abdomen narrowly interrupted in median line. The specimen from Jericho bears two small rounded yellow spots on mesoscutum. Wings are somewhat less infuscate than in the Turkish specimen, subhyaline. The part of abdomen posteriorly from the hind margin of first tergite very distinctly inflated, so that these specimens cannot be considered to be *L. bifasciata* Klug, mentioned by Masi 1950 (Boll. Soc. ent. Ital., 79, 91) from Palestine. The latter species is not known to me, except from the description.

Leucospis biguetina Jurine

Israel: Jerusalem, 15.V, one female (Bytinski-Salz).

Known as yet only from Southern Europe and Northern Africa (Morocco and Algeria).

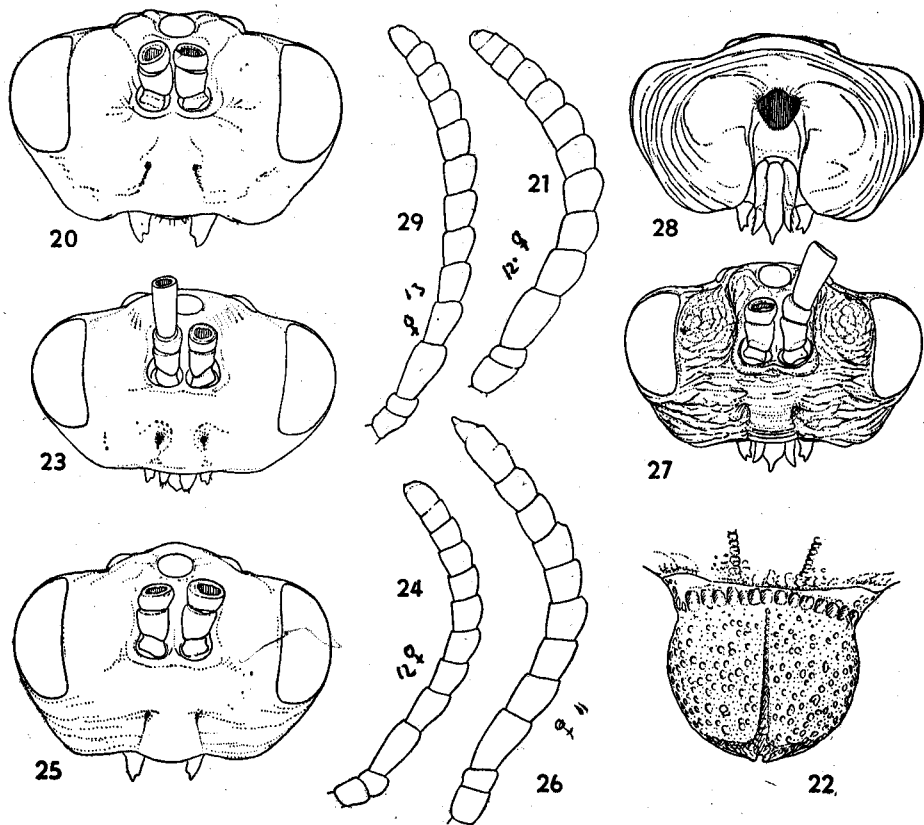
Hosts of *Leucospis* spp. are solitary bees, Apidae.

EUCCHARITIDAE

Eucharis (*Pachyeucharis*, n. subg.)

Description of the new subgenus *Pachyeucharis*:

Head strongly transverse from in front, often much narrower than thorax, and usually transversely rugose. Antennae inserted somewhat above the middle of face, with 12—14 joints, not elbowed, simple, not distinctly serrate in females, not pectinate in males; scape very short, together with transverse pedicel shorter than first funicle joint. Mandibles not falcate as in other species of *Eucharis* Latr., but more rudimentary, very short and not bent, in all checked specimens of the subgenus hanging down,



Figures 20—29

(20) *Eucharis* (*Pachyeucharis* n. subg.) *microcephala* n. sp., head in facial view; (21) antenna of female; (22) scutellum. (23) *Eucharis* (*Pachyeucharis*) *albipennis* n. sp., head in facial view; (24) antenna of female. (25) *Eucharis* (*Pachyeucharis*) *affinis* n. sp., head in facial view; (26) antenna of female. (27) *Eucharis* (*Pachyeucharis*) *nigriventris* n. sp., head in facial view, and (28) in hind view; (29) antenna of female.

bidentate, probably not normally movable and unable to close, in such supposed position not crossing, hardly touching with their apices (Figures 27, 28).

Thorax strongly vaulted, globose or subglobose, very coarsely punctate, with mostly smooth and wide interspaces at least on disks of scapulae and on posterior part of middle lobe of mesoscutum. Notaulices finely foveolate, not deep. Scutellum usually shortly bilobed apically. Propodeum slightly vaulted, with rather deep spiracular furrows. Wings, legs and abdomen as in *Eucharis* s. str.

The new subgenus is very near to *Eucharis* Latr., s.str. (genotype: *Eucharis ascendens* (Fabr.)), from which it was separated on the basis of its small, straight mandibles, and very coarsely punctate and globose thorax.

The type of the new subgenus is *Eucharis punctata* Forster. Additional species belonging here are *Eucharis acuminata* Ruschka, of which I have seen the type, lent to me kindly by Dr. Beier from the "Naturhistorisches Museum" in Vienna, and *Eucharis*

anatolica Boucek, the type of which is in my collection in the National Museum in Praha, cat. no. 3071, and four new species from Israel, described below. Thus the subgenus is confined, as far as we know, to the Mediterranean region, i.e. Southern Europe, Asia Minor, Near East and North Africa.

Eucharis (Pachyeucharis) punctata Forster

Turkey: Konia, 8.VIII.1951, one female (Bytinski-Salz).

Previously known from Balkan Peninsula (Dalmatia, Macedonia), Asia Minor and Tunisia. Host *Messor barbarus* (L.).

Eucharis (Pachyeucharis) microcephala, n.sp.

Israel: Kfar Yeroham, 20.IV, one female, holotype (Bytinski-Salz).

Body generally dark metallic green, ventrally more bluish; mesoscutum along median line and along notaulices, then axillae and an arcuately transverse stripe on scapulae (here bordered with a violaceous tinge) with a more vivid, nearly bronze tinge; disks of scapulae subviolaceous to blackish. Abdomen of the holotype blackish, with a weak metallic tinge, coxae and femora concolorous. Apical ends of femora, tibiae and tarsi pale fulvous, short mandibles of the same colour. Feelers brownish black. Wings widely infusate, more intensively beneath marginal vein, hyaline in basal two fifths.

Head much narrower than thorax (38 : 59), transverse (24 : 38), with rugulose sculpture everywhere. Frons between scrobe and eye roundedly vaulted, rugosely punctate. Tentorial pits deep, somewhat grooved vertically. Clypeus not separated from the supraclypeal area, both portions not polished, irregularly rugulose. Cheeks not strongly converging, rather buccate (Figure 20). Antennae shorter than width of thorax, 13-jointed, very slightly, indistinctly serrate (Figure 21), last two joints nearly fused. First funicle joint twice longer than broad, fifth as long as broad, the following less broad and shorter, slightly transverse, last (ninth) funicle joint broad 8, long 6; club ovate, by its half longer than preceding joint (9 : 7).

Thorax viewed from above only slightly longer than broad (69 : 59), with sparse and coarse punctation. The puncta somewhat closer on the sides and in front of scapulae, where the interspaces are as wide or nearly as wide as diameters of puncta. Notaulices formed by one row of small puncta. Median lobe of mesoscutum along the middle with two non-punctate and subdepressed stripes, which meet on the disk before scutellum, in front between them an abbreviated longitudinal line of small puncta. Disks of scapulae nearly smooth. On smooth parts sparse and very small, microscopic puncta irregularly scattered. Scutellum with similar sculpture as mesoscutum, interspaces generally as wide as scattered coarse puncta. Median groove impressed, narrow, especially posteriorly very deep, ending in a narrow incision of the hind margin (Figure 22), crossed before the narrow lobes by a transverse deep furrow. Outline of scutellum strongly sinuate laterally, narrowed in front behind axillae, these very short, separated from scutellar disk by foveolate furrow, which is nearly straight and not much deeper between both axillae; these separated by a distance little smaller than the distance between scapulae posteriorly. Vertical sides of scutellum behind

axillae (i.e. axillulae) entirely smooth and polished. Propodeum very finely rugulose, almost mat. Upper margin of mesopleurae beneath prepectus highly polished, smooth, lower part separated by horizontal stripe of reticulated punctation.

Abdominal petiole twice longer than broad behind, slightly narrowed forward, subcarinate on median line, depressed along it in hind half; ventral surface very shallowly longitudinally grooved. Gastral tergites nearly smooth, with hardly distinct, very fine punctation.

Male not known, host ant probably *Cataglyphis bicolor* ssp. *nodus* Brllé, in the nest of which several *Eucharis* larvae were found (By.S. in litt.).

Differing from other species of the subgenus by the shape of antennae, buccate cheeks, sparsely punctate thorax with short scutellum, infusate wings and black abdomen.

Eucharis (Pachyeucharis) albipennis, n. sp.

Israel: Kfar Yeroham, 5.VII, one female, holotype (Bytinski-Salz); Kurnub (Negev), 3.VI, female♂, paratype♂ (O. Theodor).

Very similar to *E. microcephala* Bck., differing by strongly converging cheeks, somewhat polished face, milky-whitish wings, striated sides of scutellum and mostly fulvous abdomen.

Female: 6.5 — 7 mm.

In colouring very similar to the preceding species, only dorsal surface of thorax more uniformly dark bluish green; wings whitish, not infusate; legs pale testaceous, except coxae, which are concolorous with the body, femora below in the middle slightly infusate. Abdominal petiole metallic, following segments fulvous, first tergite in one paratype on the sides and on base infusate, and here with slight metallic tinge; in the holotype only base of first tergite and last segment infusate.

Head viewed from in front much broader than high (35 : 21) and much narrower than thorax (35 : 49), its surface generally shallowly transversely striated; striae on frons rather rugose and better developed in its upper part where they run rather convergently towards anterior ocellus. Clypeus and supraclypeal area not separated and nearly smooth, polished, tentorial pits deeply dot-like. Cheeks strongly converging downwards (Figure 23). Feelers very similar to those in *E. microcephala*, the last but one joint somewhat more transverse (8 : 5), the sutures of club indistinct, feelers therefore more distinctly 12-jointed (Figure 24).

Thorax very similarly shaped and sculptured as in the preceding species, i.e. coarsely punctate with nearly smooth interspaces, these but somewhat smaller than diameters of dots, especially in front and on the sides of scapulae and on scutellum, as the coarse puncta are closer together. Middle lobe of mesoscutum with two smooth bands along the median line on the anterior sloping portion, median line not indicated by a row of puncta as in *E. microcephala*, but covered in a longitudinal stripe by fine, transversely rugulose sculpture. Scutellum somewhat longer and its sides more converging backwards, only slightly sinuate on the sides. Vertical sides of scutellum (axillulae) rather coarsely horizontally striated. Axillae very short, separated from scutellar disk by a foveolated furrow. Longitudinal furrow of scutellum as well as subapical cross groove not very

narrow, in one paratype quite shallow. Anterior upper portion of mesopleura separated horizontally by a foveolated furrow. Propodeum finely rugose, bottom shallowly granulated, weakly polished.

Abdominal petiole broad, not quite twice as long as broad apically (31 : 20), very shallowly concave along the median line dorsally, ventral surface distinctly but shallowly grooved longitudinally. Ovipositor on the conically narrowed point dorsally with five very fine, indistinctly saw-like teeth in a double row (ten denticles).

Male not known.

Eucharis (Pachyeucharis) affinis, n. sp.

Israel: Bat Yam, 29.IV, one female, holotype (Bytinski-Salz).

This species is very similar to the two preceding ones except for the shape of antennae, finer sculpture of face, slightly infusate wings and longer abdominal petiole.

Female: 7 mm.

Head, thorax, abdominal petiole and coxae generally bluish green, disks of scapulae, front margin of mesoscutum and mesopleurae anteriorly with a more vivid, nearly bronze tinge. Flagellum black. Legs testaceous, coxae greenish black, femora infusate in the middle. Wings slightly infusate in distal two thirds. First gastral tergite dark bluish green, its hind margin as well as following tergites testaceous, sternites and tip of abdomen fuscous.

Head much narrower than thorax (36 : 59), transverse (36 : 25) viewed from in front (Figure 25). Cheeks and lower face transversely striated, clypeus nearly smooth, polished, not separated from the supraclypeal area. Upper face between scrobe and eye globosely vaulted, finely punctate, dorsally striated, striae converging towards the anterior ocellus. Depressed area between posterior ocellus and eye smooth. Occipital carina distinctly elevated behind anterior ocellus. Cheeks converging in angle of about 90°. Feelers 13-jointed (Figure 26), all flagellar joints elongate, seventh to twelfth segment subquadrate, last joint conically pointed.

Mesoscutum sparingly, coarsely punctate, disks of scapulae as well as disk of middle lobe nearly impunctate, with a few smaller dots only. Median line indicated in front by fine transverse striae, behind them by irregular puncta. Notaulices formed by finely foveolate lines, not deep, foveoles posteriorly in front of scutellum coarser, nearly as coarse as foveoles of axillar lines. Notaulices posteriorly separated by a distance hardly greater than maximum width of abdominal petiole. Scutellum shorter than broad behind axillae (27 : 33), its outline not sinuate; between axillae deep transverse furrow; median furrow complete, foveolate, posteriorly deeper, grooves separating apical lobes very deep, lobes very narrowly separated, roundedly pointed. Surface of scutellum covered with coarse dots separated by interspaces larger than diameters of dots. Axillulae with strong striae sloping backwards. Propodeum with very irregular network of fine and low carinae, nearly areolate, bottom not very shiny, subgranulate. Upper area of mesopleurae convex, smooth and polished, with a few microscopic puncta, horizontal furrow finely rugulose, lower part also nearly smooth. Abdominal

petiole more than twice longer than broad in the middle (20 : 9), sides of its hind half parallel, dorsal surface nearly flat, shallowly, irregularly and finely longitudinally rugulose. Ventral face without distinct groove. First gastral tergite with quite indistinct fine puncta in front of hind margin.

Male not known.

Eucharis (Pachyeucharis) nigriventris, n. sp.

Israel: Nahariya, 7.V, one female, holotype; Carmel (Haifa), 13.V.1944, one female, paratype (Bytinski-Salz).

This species by its relatively close punctation of thorax stands nearest to *E. punctata* Forst., from which it differs mainly by black gaster and more slender body with relatively broader head.

Female: 6.5 mm.

Bluish green, sides of thorax more violaceous, disks of scapulae, head above and abdomen dark green to blackish. Legs pale testaceous except infuscate femora and coxae, which are concolorous with the body. Wings subhyaline, slightly infuscate.

Head considerably narrower than thorax (35 : 47 or 35 : 49), but not so much as in *E. punctata* Forst., in which in four specimens these ratios are as follows: 37 : 58, 37 : 54, 36 : 54, 35 : 54; viewed from in front more transverse (21 : 35). Face including clypeus transversely rugosely striated (Figure 27), frons with quite coarse striae, radiating from the ocelli, also depressed area between posterior ocellus and eye transversely striated. Cheeks strongly converging. Feelers (Figure 29) 14-jointed, last two joints fused. Scape subquadrate, not so long as width of first funicle joint, which is almost twice as long as broad. Funicle joints slightly serrate, gradually becoming shorter, seventh to ninth joints subquadrate, tenth funicular joint very slightly transverse.

Thorax closely coarsely punctate, disks of scapulae to a small extent smooth, scapulae anterior to this area and laterally of it as well as two subdepressed stripes along the median line of middle lobe sparsely punctate, interspaces on the sides of scapulae above the prepectus about twice narrower than diameters of dots, just at margin of scapula about as wide as diameters. Puncta above tegulae very close, without interspaces. Notaulices foveolate, posteriorly rugulose-punctate. Scutellum nearly as long as broad behind axillae, with incomplete median longitudinal row of puncta, complete in paratype, apical lobes small, subtriangular as well as the incision between them. Propodeum shallowly reticulately rugulose, sides of thorax with similar sculpture, rather polished on convex portions, here nearly smooth in the holotype. Abdominal petiole broadened posteriorly, well twice longer than broad, depressed, with shallow transversely rugulose sculpture along median line, not grooved ventrally.

Male not known.

Key to the species of the subgenus *Pachyeucharis* Boucek:

- 1 Scutellum much longer than broad behind axillae, seen from the side much protruding over the propodeum, its dorsal and posterior wall in a sharp angle of about 55°; head only little narrower than thorax (36 : 47); wings whitish; feelers of male with 14 well separated joints; female not known; Anatolia. *E. (P.) anatolica* Boucek 1952

- Scutellum shorter than broad behind axillae, from the side little protruding above the propodeum, its dorsal and posterior side in acute angle; head by more than one half narrower than thorax; feelers of male in two species (males of others not known) with 13 separated joints; females known 2
- 2(1) Scutellum with two broadly rounded apical lobes, separated by an incision which is as broad as each of both lobes, each lobe longer than broad; sides of scutellum rugose; thorax closely punctate; wings whitish, abdomen of male black, female not known; Transcaucasia
E. (P.) acuminata Ruschka 1924
- Scutellum with shorter and more or less narrowly separated, triangular lobes; other characters dissimilar 3
- 3(2) Wings whitish, abdomen mostly fulvous, vertical sides of scutellum behind axillae striated; Israel
E. (P.) albipennis Boucek, n. sp. 4
- Wings more or less but always distinctly infusate or yellowish apically. 4
- 4(3) Vertical sides of scutellum behind axillae smooth; abdomen black; wings rather strongly infusate; thorax sparsely punctate; cheeks buccate, slightly converging; penultimate antennal joints slightly transverse, last joint rounded; Israel
E. (P.) microcephala Boucek, n.sp.
- Vertical sides of scutellum behind axillae striated or horizontally rugulose or abdomen mostly fulvous; penultimate antennal joints subquadrate. 5
- 5(4) Abdomen black; thorax rather densely punctate; Israel
E. (P.) nigriventris Boucek, n. sp. 6
- Abdomen mostly fulvous. 6
- 6(5) Last antennal joint conically pointed; thorax sparsely punctate; face rather polished, frons laterally finely punctate; Israel
E. (P.) affinis Boucek, n. sp.
- Last antennal joint obtuse; thorax densely punctate; face transversely rugulose, only slightly polished; cheeks more converging; Southern Europe, Anatolia, Tunisia.
E. (P.) punctata Forster 1859

Eucharis (subg. *Eucharisca*, n. n.) *bytinski-salzi*, n. sp.

Israel: Bat Yam, 15.V, 4.VI (holotype), and 11.VI, five females; Ramat Gan, 1.VI and 8.VI, 2 females; Urim, 15.V, one female; Beersheba, 20.IV, one female (paratypes); Meged, 6.IX.1948, one male (allotype), all specimens collected by Bytinski-Salz.

This species is near to *Eucharis bedeli* (Cameron) of which I was able to reexamine the types kindly lent to me by Dr. Beier of the Vienna Museum. *E. bedeli* has differently shaped antennae (depicted by Ruschka, Dtsch. ent. Z., 1924, 87, figs. 6, 7), as well as finer sculpture of thorax; its mesoscutum is not densely punctate along notaulices. The latter species was described by Cameron as *Chalcura bedeli*, but also according to Ruschka (l.c., p.88) it differs greatly from the genotype of *Chalcura* Kirby, which is *Eucharis deprivata* Walker from Ceylon. Therefore *Chalcura* Cameron not Kirby was synonymized by Ruschka with *Eucharis* Latreille. Gussakovskij 1941 (Trav. Inst. zool. Acad. Sci. U.R.S.S., 6, 155) considers species of *Eucharis* with ramosae antennae in males to be a good subgenus and replaces (1951) *Chalcura* Cameron 1891 nec Kirby 1886 with *Chalcurella*, n.n. This name is, however, preoccupied by *Chalcurella* Girault 1913 (Trans. roy. Soc. S. Aust., 37, 94, in Eucharitidae), and as I, too, consider this subgenus valid taxonomically, I change its name to *Eucharisca*, new name for *Chalcura* Cameron not Kirby, and for *Chalcurella* Gussakovskij, not Girault. Apart from antennae, this subgenus differs from *Eucharis* s. str. by broadened prepectus. The mandibles are falcate as in *Eucharis* s. str. The type of the subgenus *Eucharisca* Boucek is *Chalcura*

but also in hypoleum.

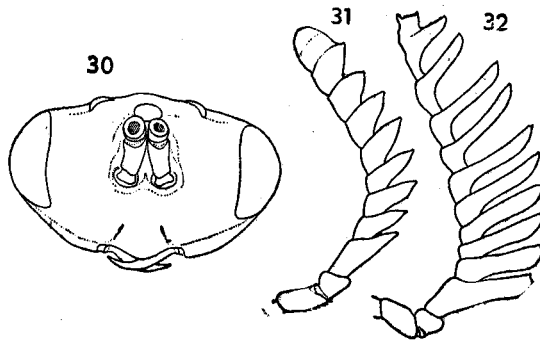
bedeli Cameron 1891, other species belonging here are *E. intermedia* Ruschka 1924, *E. schmiedeknechti* Ruschka 1924, *E. hyalipennis* Hoffer et Novitzky 1955 and *E. bytinski-salzi*, n. sp. The subgenus *Eucharisca* Bck. is confined, as far as known, to the Mediterranean region.

Description of *Eucharis (Eucharisca) bytinski-salzi*, n. sp.:

Female: 4.5 — 5.5 mm.

Body dark metallic green, mesopleurae somewhat bluish, coxae, abdominal petiole and first gastral tergite anteriorly concolorous, other gastral segments fulvous to partly fuscous; legs pale testaceous, femora infuscate; antennae brownish black, club and scape with pedicel testaceous. Wings whitish hyaline, venation whitish except the base of submarginal vein which is pale testaceous similarly to tibiae and tarsi.

Head distinctly narrower than thorax (33 : 43), viewed from in front considerably transverse (21 : 33), cheeks strongly roundedly convergent (Figure 30). Upper face finely rugulose punctate, frons between eye and scrobe flat, puncta here lengthened vertically and somewhat rugulose but not much crowded, in lower part becoming gradually smoother, lower face nearly smooth and polished, its sides and cheeks with sparse and shallow stria from eye to mouth, temples similarly striated. Clypeus slightly semicircularly protruding, not separated from the supraclypeal area, smooth and highly polished. Tentorial pits large, their bottom nearly smooth. Space between posterior ocellus and eye subdepressed, polished, nearly twice larger than the transverse diameter of the ocellus. Occiput bordered in the middle by sharp margin which is obtuse behind eyes. Antennae elbowed but scape short, cylindrical, only twice longer than broad, oblique at apex. Pedicel triangularly pear-shaped, dorsally hardly as long as broad apically, seen from the side. Flagellum very distinctly serrate, each of seven funicular joints with a short branch (Figure 31), first joint below twice longer than broad basally, and twice shorter than long dorsally, the branch acute; each following joint about twice shorter, their branches about twice longer than the lengths of corresponding joints, seen from above conically pointed. Club fused of three segments, the two apical ones nearly completely, with indistinct suture, the basal joint forming a pointed tooth dorsally; length of club twice the width of its middle joint.



Figures 30—32

Eucharis (subg. *Eucharisca* n.n.) *bytinski-salzi* n. sp. (30) head of female in facial view; (31) antenna of female; (32) antenna of male.

Thorax strongly vaulted, from above only little longer than broad (46 : 43). Notaulices complete, grooved posteriorly and at end separated by a distance four times smaller than scutellum behind axillae. Neighbourhood of notaulices crowdedly but very finely punctate in a stripe which is confined in front only to the inner side of the furrow; scapulae anteriorly and on the sides rugulose punctate, disks in an elongated area polished, smooth. Middle lobe of mesoscutum in front finely transversely striated, in the middle smooth but along median line with more or less sparse punctation. Scutellum slightly longer than broad behind axillae (47 : 44), axillae not distinctly separated one from the other, axillar furrows, however, deep, rugosely foveate, median furrow of scutellum coarsely rugose, rather deep, irregular, ending posteriorly in a strongly rugose sculpture with elevated areolae in front of the more or less shortly bilobed apex. Surface of scutellum punctate to rugosely punctate. Hind wall of scutellum vertical, areolated. Propodeum nearly smooth and polished, only basally and in the neighbourhood of petiole somewhat rugose. Abdominal petiole $1\frac{1}{2}$ times longer than broad, front third narrowed and on the sides deeply depressed, along the median line only somewhat elevated, posteriorly slightly depressed.

Male: 4.5 mm.

In colouring similar to the female but antennae and abdomen blackish. Antennae strongly branched (Figure 32), with ten branches, eleventh branched joint fused with two following segments into a cornuted club. Sculpture of body stronger and punctation more rugulose than in female. Propodeum rugose. Abdominal petiole slender, sides subparallel, nearly three times longer than broad in the middle.

Named in honour of Dr. H. Bytinski-Salz of Tel Aviv, who recognized this species as new.

Eucharis (Eucharisca) intermedia Ruschka

Israel: Karkur, 10.VII.1946, one female (Bytinski-Salz).

This specimen agrees very well with Ruschka's description. It is very near to the preceding species and to *E. bedeli* (Cam.), from which it differs mainly by the coarser and more rugulose sculpture on the punctate portions of thorax, and by differently shaped antennae.

Stilbula vitripennis Masi

Israel: Haifa (Carmel), 7.VII.1946, one male (Bytinski-Salz).

The species was reported so far only from Asia Minor and Cyprus.