RECLASSIFICATION OF PALEARCTIC PLANTHOPPERS OF THE SUBFAMILY ORGERIINAE (HOMOPTERA, DICTYOPHARIDAE)

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The extremely characteristic and original arid group of the Orgeriinae has long attracted the attention of investigators. V.F. Oshanin has made a very great contribution to the study of the Palearctic members of the subfamily. He described the Orgeriinae as a distinctive group (Oshanin, 1908), laid the foundations for its division into genera and produced a monograph on the Russian Orgeriinae. A significant role in study of the Palearctic Orgeriinae has also been played by Fieber, Horvath, Melichar, Bergevin, Kuznetsov and others. Nevertheless, despite the efforts which have been made, the taxonomy of the group has remained in a highly unsatisfactory state and had been largely superficial and formal.

As a result of a more thorough analysis of external morphology, drawing on a number of new characters, and the use of characters of the female and male genitalia it has been possible to correct a number of errors and to make significant improvements in the taxonomy of the group.

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The types of the species described in the paper are in the collections of the Zoological Institute, USSR Academy of Sciences in Leningrad.

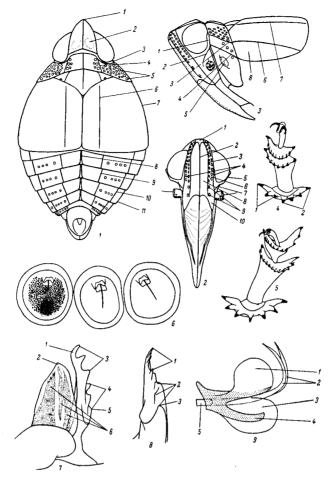
THE EXTENT OF THE SUBFAMILY ORGERIINAE FIEBER, 1872

The subfamily Orgeriinae as currently treated contains several groups from South Africa and Australia — the tribe Lyncidini (Muir, 1930) and a number of subtribes of the tribe Orgeriini (Fennah, 1962). However, analysis of the morphology of these forms, for which I do not have the space here, shows that not all of them belong to the subfamily Orgeriinae or even apparently to the family Dictyopharidae, including the subtribe incorrectly called Orgeriina by Fennah. I propose a change of status for the subtribe Orgeriina: Fennah, 1962, nec Fieber and a new name — Capenini, trib. n. (type — genus, Capena Stål). A description of this South African tribe is given by Fennah (1962). At present the tribes Lyncidini, Capenini, trib. n., and the subtribes Risiina and Strongylodematina, also with the status of tribes, can be provisionally treated as members of the subfamily Lyncidinae (Muir, 1930), stat. n.

With these clarifications the subfamily Organiae is a natural arid group of purely Holarctic distribution.

MORPHOLOGICAL DESCRIPTION OF THE PALE-ARCTIC ORGERIINAE (FIGS, 1-9)

Body lenticular: slightly dorsoventrally flattened, from moderately elongate-oval to round. Head short or prolonged, sometimes with leaf-shaped vertexal carinae. Lateral margins of vertex keel-like from apex, median carina usually also developed, sometimes not developed throughout the length of the vertex or absent. On the posterior half of the vertex to the sides of its median line there is a pair of oval areas, sometimes poorly apparent. Posterior margin of vertex usually less acute than the other margins, unkeeled, forming an edge (in the geometrical sense) separating the vertexal and occipital surfaces. Frons more or less flat or transversely convex, laterally bounded by carinae (lateral carinae of the frons) and with a median longitudinal carina and a pair of intermediate carinae separating each half of the frons into inner and outer (lateral) lobes. In nymphs and also in adults of the tribe Orgeriini, the lateral lobes of the frons have sensory pittings (Liebenberg, 1956) whose setae are arranged approximately across the frons. The lateral carinae of the frons are joined above to the lateral carinae of the vertex, receding from the apex; the intermediate carinae of the frons are joined above to the median carina at the apex of the head or slightly below, receding from it. The point where the frontal and vertexal carinae converge - the apical callus - is usually slightly thickened. The clypeus is prolonged and convex and has lateral longitudinal carinae and a median longitudinal carina continuing the corresponding carinae of the frons. The eyes are approximately hemispherical, bounded at the rear by an area whose margin, behind the eye, is usually more or less thickened and projecting keel-like (postocular swelling). The postocular swelling is sometimes continued below in an oblique "suborbital carina" running caudad and upward and forward and downward and separating the eye from the antenna. The pronotum is transverse, broad and short, its anterior margin is convex, projecting, and behind the eyes concave. It usually has a median longitudinal carina and lateral carinae on the disk separating the median frontal convex portion - the disk - from the lateral areas. The disk is slightly raised and the lateral lobes of the pronotum are depressed and slope outward. The lateral margins of the pronotum are long and diverge strongly; on the sides of the prosternum parallel to the carinae on the margins of the pronotum there is the longitudinal carina of the prosternum, dividing it into upper and lower lobes. In the tribe Orgeriini the pronotum and prosternum have sensory pittings; these entirely cover the pronotum or leave some part of its disk free laterad of median line. The sides of the prosternum have two groups of sensory pittings - one on the posterior portion of the upper lobe and the other on the posterior portion of the lower lobe. The posterior margin of the pronotum is more or less concave, sometimes practically straight. The triangular transverse scutellum has a median carina and posteriorly diverging lateral carinae. In the tribe Orgeriini there is a sensory pitting on the posterior



Figs. 1-9. Some structural details of the body and the terminology employed.

1. general appearance from above: 1) apical callus; 2) vertexal area; 3) postocular swelling; 4) lateral carinae of pronotal disk; 5) sensory pittings; 6) parasutural carina of elytra; 7) sublateral carina of elytra; 8) median carina of abdomen; 9) intermediate carina of abdomen; 10) sublateral carina of abdomen; 11) lateral carina of abdomen; 2. head from in front and below: 1) apical callus; 2) median carina of frons; 3) intermediate carina of frons; 4) lateral carina of frons; 5) postocular swelling; 6) lateral (outer) lobes of frons; 7) subocular carina; 8) median (inner) lobes of frons; 9) epiclypeal sensory pittings; 10) epiclypeal lobes of frons; 3. anterior portion of body, side view: 1) postocular swelling; 2) subocular carina; 3) lateral carina of pronotum; 4) (longitudinal) carina of prosternum; 5) mammoid; 6) sublateral carina of elytra; 7) parasutural carina of elytra; 8) pseudoepipleura; 4. appearance of apex of hind tibia (plus tarsus) from the rear along the longitudinal axis of the tibia - arrangement of apical teeth of the tibia in the subtribes Orgeriina and Almanina, including the genus Orgamarella, gen. n.: 1) inner group of teeth; 2) outer group of teeth; 5. as Fig. 4 but for the subtribe Ototettigina, subtr. n. and in the genus Orgamarella, gen. n.; 6. structure of sensory pittings; 7. 1st valve of ovipositor (left half, seen from below): 1) ventral lobe; 2) dorsal lobe; 3) apical group of teeth of dorsal lobe; 4) lateral group of teeth of dorsal lobe; 5) basal projection; 6) rods of ventral lobe; 8. dorsal lobe of 1st valve of ovipositor, side view from the inside: 1) apical group of teeth; 2) lateral group of teeth; 3) basal projection; 9. penis and theca from the side: 1) upper vesicle of theca; 2) genital hamuli; 3) lower vesicle of theca; 4) lateroventral plate of theca; 5) base of penis.

margin of the scutellum outside the lateral carinae and, in addition, some members of the tribe have a transverse row of sensory pittings (4-6) growing successively smaller to-wards the outer angles of the scutellum. The elytra are heavily sclerotized and abruptly shortened; there is no claval suture; the posterior margin of the elytra is transversely truncate and is above the 3rd abdominal tergite (the first visible tergite). The elytra have a subcostally located carina and are smooth or have ridge-like veins forming a reticulate structure or extending longitudinally, sometimes branching; a parasutural carina extending parallel to the suture of the elytra is the most constant and is normally present even on smooth elytra. The upper surface of the abdomen is in the form of a gently-sloping roof; it is laterally bounded by lateral carinae and it has a median carina, sublateral carinae parallel to the lateral ones and slightly receding from them and, in a number of instances, intermediate longitudinal carinae approximately equidistant from the median and sublateral carinae. Sensory pittings are always present on the abdominal tergites, beginning with the 4th, in the tribe Orgeriini, but only occasionally on the 3rd tergite. The pittings are arranged in a transverse row; there is usually a pitting on each side of the abdomen outside the sublateral carina, 2-4 equidistant pittings inward from the sublateral carina and one separate innermost pitting. The subgenital tergite (8) usually has a group of randomly arranged sensory pittings or pittings arranged in two rows on its lateral portions corresponding to the sensory pitting outside the sublateral carinae of the other tergites, and several pittings in a transverse row in the middle of the tergite; the sublateral carina is absent or indistinct; it is often difficult to set clear limits to these two groups of pittings. The legs are slender and long; the fore and middle tibiae and femora are often flattened more or less leaf-like and broadened. The fore legs are usually longer than the middle legs; in some species the fore femora are extended forward, projecting beyond the apex of the head. The hind legs are powerful and long. The hind tibiae have spaced out teeth along the outer lower carina and terminate apically in a row of divaricate teeth (usually 7-8 in number) on the under surface. Looking along the axis of the tibia the tops of these teeth are arranged in an arc curving downward; in most of the Orgeriini the 3rd inner tooth is clearly nearest the axis of the tibia and separates the inner group from three longer teeth; the remaining teeth form the outer group in which the size of the teeth decreases from outward toward the inner group. The 1st and 2nd segments of the hind tarsi are apically dilated and also have each an arc-shaped row of teeth on the under surface, which are smaller and more numerous than the apical teeth on the tibia.

These teeth have short subapical setae or spurs above, often in the form of platellae (Howe, 1930). The 3rd segment of the hind tarsus is narrow and of approximately the same structure as on the other tarsi. The 3rd tarsal segment ends in a pretarsus consisting of claws and arolia; the structure of the pretarsus is the same on all tarsi (Fennah, 1945; Doering, 1956). The claws are uncinate in shape, articulated above with the 3rd tarsal segment and below with the unguitractor, which can extend and retract, raising and lowering the claws. On the lower and outer surfaces of the claws there are setae arranged in a longitudinal row, up to four in number, but these are sometimes absent. Between the claws there is a vesicle-like arolium bearing two pairs of setae on its under surface and a pair of sclerotized dorsolateral plates on its upper surface appressed on the inside to the claws and proximally articulated with a process on the inner wall of the claw.

The structure of the female genitalia is that typical of the family (Müller, 1942; Doering, 1955). The 1st valve of the ovipositor is divided into two lobes — a more weakly sclerotized ventral lobe and a strongly sclerotized dorsal (principal) lobe. The apical portion of the ventral lobe is laminiform and has more strongly sclerotized longitudinal bands or rods, of which there are usually four; the margin of the ventral lobe is entire or dentate, the teeth being

formed by the apices of the rods. The dorsal lobe of the 1st valve of the ovipositor is heavily sclerotized, elongate, and has an apical group of teeth on the outer surface usually consisting of 3, sometimes 4-6 teeth. Also on the outer surface, farther from the apex, there is a lateral group of teeth differing variously in shape in the different species groups; their basic number is three and they often have the appearance of transverse ridges; the ventral and dorsal portions of these ridges sometimes form independent teeth. Proximally the teeth end in a basal projection. When the apical group consists of more than three teeth the additional teeth are located on the same plane as the main apical teeth, slightly ventrad of the teeth of the lateral group. The 3rd valve of the ovipositor is divided into dorsal and ventral spoon-shaped lobes. The ventral lobe has an apical appendage in the form of a projection or lobe separately distinguishable from the main portion of the lobe. There is often a group of macrochetae on the appendage.

The male genitalia consist of an annular pygophore bearing the anal tube above and to the rear and spoon-shaped styli below. There is a process on the upper surface of the styli - the dorsal tooth, at the base of which there is an outer lateral tooth. The penis, surrounded by a sleeve-like theca, lies in the cavity bounded by the styli, the anal tube and the posterior wall of the pygophore. The theca is joined at the top to the anal tube and above and at the sides to the pygophore. Outwards from the theca only the two processes of the penis - the genital hamuli, which may be branching, project upward and caudad. The base of the penis and the bases of the styli are joined by an inner sclerotized cord the connexivum. The theca is usually moderately sclerotized and has membranous areas above and below which are capable of strong distension — the upper and lower vesicles of the theca; these vesicles may be rather complicated in shape and may have tooth-like apical processes; the lower vesicles of the theca are sometimes covered with conical sclerotized teeth. The lateral walls of the theca in the tribe Orgariini have more heavily sclerotized plates below carrying over on to the lateral walls of the lower vesicle. These lateroventral plates of the theca are smooth or longitudinally striate or denticulate.

KEY FOR IDENTIFICATION OF GENERA OF THE SUBFAMILY ORGERIINAE

- 1(10). Median carina of abdomen simple. Apices of hind tibiae 8-toothed. Tarsal claws with 4 setae. Ventral lobe of 1st valve of ovipositor with margin entire, the dorsal lobe with teeth of apical group arranged in an oblique longitudinal row (tribe Ranissini, trib. n.).
- 2(7). Fore and middle legs (femore and tibiae) simple, not leaf-shaped.
- 3(4). Intermediate carinae of frons equidistant from its margins and from median carina at least on the lower part of the frons, where they are invariably sharp. Ventral lobe of 3rd valve of ovipositor with a broad lobelike appendage lying in the plane of the valve. Hamulus of penis tricuspid or dentate..... Sphenocratus Horváth.
- 4(3). Intermediate carinae of frons closer to its margins than to the median carina, sometimes indistinct below. Ventral lobe of 3rd valve of ovipositor with a digitiform or carinate appendage on its inner surface. Hamulus of penis simple or bicuspid, without teeth.
- 5 (6). Vertex with a double median carina throughout its extent or on its anterior half. Apical callus light. Dorsal surface of fore and middle tibiae weakly sulcate. Dorsal lobe of 1st valve of ovipositor with tricuspid teeth.... Ranissus Fieber.
- 6(5). Median carina of vertex simple. Apical callus black. Dorsal surface of fore and middle tibiae with an indistinct longitudinal ridge. Dorsal lobe of 1st valve of ovipositor with 4-6 apical teeth.... <u>Elysiaca</u>, gen. n.

- 7(2). Fore and middle legs leaf-shaped.
- 8(9). Transition from face to vertex swollen, anterior and median vertexal carinae not developed. Pronotum without a postocular carina. Apical callus light. Parasutural carina of elytra distinct and straight. Pittings—pigment spots—on the site of the larval sensory pittings on the abdomen arranged in small groups.....Parorgerius Melichar.
- 9(8). Transition from face to vertex not swollen, anterior and median vertexal carinae acute. Postocular carina present on pronotum. Apical callus black. Presutural carina of elytra irregular and indistinct. Pittings pigment spots — on abdomen uniformly arranged..... Phyllorgerius Kusnetzov.
- 10 (1). Median carina of abdomen double. Apex of hind tibia with 7(6) teeth. Claws with no more than 3 setae. Ventral lobe of 1st valve of ovipositor with a 4-toothed margin, dorsal lobe with teeth of apical group arranged in an oblique transverse row.
- 11(12). No sensory pittings (in the adult). Frons flat, lateral lobes of frons below upper margin of eyes lying on the same plane as the median lobes (tribe Colobocini, trib. n.).....Colobocus, gen. n.
- 12(11). Lateral lobes of frons, pronotum, sides of prosternum and abdominal tergites bearing sensory pittings (Figs. 1, 2, 3, 6). Frons transversely convex—lateral lobes of frons laterally deflected from the plane of the median lobes practically throughout their extent (tribe Orgeriini Fieber).
- 13 (52). Apical teeth of hind tibia viewed along the axis of the tibia not arranged in a regular arc: 3rd tooth from inner margin clearly shifted inward toward the axis of the tibia; if the teeth are arranged in a regular arc the inner group of teeth is longer than the outer group when viewed from the side. Apical lobe of 1st valve of ovipositor shorter than dorsal lobe. Ventral lobe of 3rd valve of ovipositor having macrochetae on the appendage. Apical tooth of dorsal lobe of 1st valve of ovipositor long and narrow, curved in an arc. Lateroventral plates of theca, if developed, smooth or denticulate.
- 14 (27). Sensory pittings at sides of scutellum bounded in front by a transverse carina that joins the lateral longitudinal carina of the scutellum; they are irregularly arranged, often in a cluster, and the 2nd pitting at least is clearly shifted backward. Sensory pittings of outer group on abdomen, at least three in number on each side of the tergite, arranged in a cluster. Sublateral carinae of abdomen frequently and intermediate carinae invariably indistinct, carinate irregular elevation or distinct transverse carina on each tergite in front of the sensory pittings (subtribe Orgeriina, s. str. Nearctic).
- 15 (22). Postocular swellings present. Inner lobes of frons broad, rather flat, gray. Pronotal disk near median carina largely lacking sensory pittings.
- 16(19). Apical callus small, transverse. Fore coxae with projecting lower outer angle acute.
- 17(18). Head short, not apically rostriform in profile.....
 Organius Stål.
- 18(17). Head long, apically rostriform and curved in profile..... Deserta Ball et Hartzell.
- 19(16). Apical callus large, longitudinal or pentagonal. Fore coxae with projecting lower outer angle obtuse.

- 20 (21). Apical callus longitudinal, head more or less pyramidal. Lateral carinae of pronotal disk developed. Sublateral carinae of abdomen not reduced..... Orgamara Ball.
- 21(20). Apical callus very large, pentagonal, head more or less prismatic. No lateral carinae on pronotal disk. Sublateral carinae of abdomen reduced..... <u>Yucanda</u> Ball et Hartzell.
- 22(15). No postocular swellings. Inner lobes of frons narrow, sulcate, light or black. Pronotal disk (invariably lacking lateral carinae) with sensory pittings extending to median carina.
- 23 (24). Apical callus or apical cell undeveloped. Sublateral carinae of abdomen developed, without carinae near the pittings outside them. Mammoids present..... <u>Ticidia</u> Uhler, Timodema Ball.
- 24(23). Apical cell or apical callus present and with depressions. Sublateral carinae of abdomen undeveloped, carinae alongside pittings extending to lateral margin of abdomen. Mammoids absent.
- 25 (26). Vertex lacking inflexion. Fore coxae with obtuseangled projecting lower outer angles. Third tarsal segment with sclerotized under surface. Carinae of scutellum acute. Elytra rugose..... <u>Aridia</u> Ball et Hartzell, Timonidia Ball et Hartzell.
- 26 (25). Vertex sharply transversely folded in a concave are in the middle. Fore coxae with acute-angled outer lower angles. Third tarsal segment with membranous under surface. Carinae of scutellum reduced. Elytra rather smooth..... Acinaca Ball et Hartzell.
- 27 (14). Sensory pittings at sides of scutellum not bounded in front by carina; if an indistinct carina is present it does not extend to the lateral longitudinal carinae; pittings arranged in a regular transverse row behind which there is one isolated pitting, or there may be only two pittings, which may also disappear. Sensory pittings of outer group on abdomen absent or represented only by a single pitting or very rarely by two. Sublateral carinae of abdomen invariably distinct, no transverse carinae or carinate elevations on abdominal tergites in front of sensory pittings (subtribe Almanina Kusnetzov, 1936).
- 28 (51). Apical teeth of hind tibiae not arranged in a regular arc viewed along the axis of the tibia: 3rd tooth from the inner margin clearly displaced inward toward the axis of the tibia. Dorsal lobe of 1st valve of ovipositor 6-toothed (3 apical and 3 lateral). Rods on ventral lobe of 1st valve of ovipositor normally developed, 4 in number.
- 29 (40). Fore coxae with angular projection on outer surface. No more than two rows of sensory pittings on pronotal disk and a single separate pitting. Row of sensory pittings almost invariably present along sides of scutellum, but if only one pitting is present there is only one row of sensory pittings on the pronotal disk and a single separate pitting. On the 4th-6th abdominal tergites inward from the sublateral carinae there are 3 sensory pittings on each tergite, normally together. Inner rod of the ventral lobe of the 1st valve of the ovipositor distended.
- 30 (35). Vertex with a subapical transverse carina dividing it into two parts situated at a considerable angle when viewed from the side.
- 31(32). Intermediate carinae of frons bent at a right angle subapically, so that the median lobes of the frons viewed from in front are squarely truncate. Apical callus not extending on to frons. Pronotal disk with only three sensory pittings on each side. Scutellum with a transverse carina in front of row of sensory pittings. Lateral

- carinae of frons joining apical portion of vertex. Fore and middle legs leaf-shaped.... Almana Stål.
- 32 (31). Intermediate carinae of frons only slightly and smoothly curved subapically. Apical callus extending on to frons. Pronotal disk with more than three sensory pittings on each side. Scutellum without a transverse carina in front of sensory pittings. Lateral carinae of frons, if apparent, joining median portion of vertex. Legs simple.
- 33 (34). Median and apical portions of vertex, seen from the side, meeting at an obtuse angle. Lateral carinae of frons sharp throughout their extent. Side of prosternum with at least 3 sensory pittings above the carina, at least 2 below the carina.... Tilimontia, gen. n.
- 34(33). Middle and apical portions of vertex, seen from the side, meeting at an acute angle. Lateral carinae of frons not apparent above level of lower margin of eyes. Side of prosternum with two sensory pittings above carina and one sensory pitting below carina.....

 Tachorga, gen. n.
- 35 (30). Vertex without a transverse carina and without sharp inflexions when seen from the side.
- 36(39). Scutellum with a row of sensory pittings. Side of prosternum with two sensory pittings above carina, one below carina.
- 37(38). Pronotal disk with more than three sensory pittings arranged in more than one row. Vertex not transversely convex. Dorsal lobe of 1st valve of ovipositor bearing additional lateral tooth..... Parorgerioides de Bergevin.
- 38(37). Pronotal disk with only 3 sensory pittings arranged in one row. Vertex in cross-section roof-shaped or cylindrically convex, more or less distinctly S-shaped in profile..... Bursinia A. Costa.
- 39 (36). Scutellum with only one sensory pitting. Side of prosternum with three sensory pittings above carina, usually two sensory pittings below carina. Vertex straight in profile, roof-shaped in cross-section. Sensory pittings present outside sublateral carinae, usually in twos.... Coppa, gen. n.
- 40(29). Fore coxae lacking angular process on the outer lower surface. Pronotal disk almost invariably with at least three rows of sensory pittings. Scutellum with no more than one sensory pitting; if there are less than 3 rows of sensory pittings on the pronotal disk there are none on the scutellum. Abdominal tergites IV to VI often with more than 3 sensory pittings inward from the sublateral carinae. Inner nervure of ventral lobe of 1st valve of ovipositor not widened.
- 41(42). Claws with three setae. Outer two rods of ventral lobe of 1st valve of ovipositor separate almost to base..... Nymphorgerius Oshanin.
- 42(41). Claws with no more than 2 setae. Outer 2 rods of ventral lobe of 1st valve of ovipositor equally narrow, fused from base approximately to the middle.
- 43(50). Lateral carinae of vertex normally developed, not leaf-shaped. Lateral carinae of pronotal disk developed only on its anterior portion. Tergite III normally without sensory pittings. Side of prosternum with more sensory pittings above carina than below. Tarsal segments I and II invariably with an apical pair of platellae, i.e., short setae with thick blunt ends. Lateroventral plates of theca indistinct. lacking spinules. Apical tooth of dorsal lobe of 1st valve of ovipositor less strongly developed and less strongly curved.

- 44(47). Vertex convex. Subocular carina present. Lower vesicle of theca without teeth. Sensory pittings on abdominal tergites inward from the sublateral carina invariably 4 + 1. No pittings on 3rd abdominal tergite.
- 45 (46). Vertex narrow, weakly convex, median carina distinct only on posterior part. Lateral lobes of froms normal in width, with two rows of sensory pittings. Pronotal median carina distinct. Sublateral carinae of elytra vanishing posteriorly. Lower vesicle of theca simple, round..... Coppidius, gen. n.
- 46(45). Vertex broad, strongly convex, lacking median carina. Lateral lobes of frons very broad with haphazard sensory pittings. Pronotum without median carina. Sublateral carinae of elytra acute throughout their extent. Lower vesicle of theca with one pair of processes directed forward and one pair backward.....

 Haumavarga Oshanin.
- 47 (44). Vertex flat or convex. No subocular carina. Lower vesicle of theca with terminally sclerotized teeth.
- 48(49). Median carina of vertex developed throughout its extent. Tergite III without sensory pittings; elytra without carinate veins (not counting the parasutural and sublateral carinae). Sensory pittings on pronotal disk extending all the way to the median carina..... Scirtophaca, gen. n.
- 49 (48). Median carina of vertex developed only on posterior part. Tergite III usually with sensory pittings; if they are absent the veins of the elytra are carinate. Sensory pittings on pronotal disk receding considerably from medium carina.... Mesorgerius Kusnetzov.
- 50 (43). Lateral carinae of vertex leaf-shaped and more or less sharply projecting in an angle. Lateral carinae of pronotal disk mostly extending to its posterior margin. Tergite III invariably with sensory pittings. Side of prosternum invariably with fewer sensory pittings above carina than below. Apical platellae on 1st and 2nd tarsal segments replaced by ordinary setae, i.e., setae having pointed ends. Lateroventral plates of theca with spinules. Apical tooth on dorsal lobe of 1st valve of ovipositor strongly developed and strongly curved..... Ti grahauda Oshanin.
- 51(28). Apical teeth on hind tibiae viewed along the axis of the tibia arranged in a regular row, although the teeth of the inner group are longer than those of the outer group. Dorsal lobe of 1st valve of ovipositor 5-toothed (evidently owing to reduction of the middle lateral tooth). Ribs on ventral lobe of 1st valve of ovipositor reduced, only two indistinct ones remaining..... Orgamarella, gen. n.
- 52 (13). Apical teeth on hind tibiae viewed along the axis of the tibia arranged in a regular arc; viewed from the side they are also arranged in a regular arc. Apical tooth on dorsal lobe of 1st valve of ovipositor broad and flat, not curved, sometimes less strongly developed than 2nd. Ventral lobe of 1st valve of ovipositor longer than dorsal lobe. Ventral lobe of 3rd valve of ovipositor lacking macrochetae on the appendage. Lateroventral plates of theca longitudinally striated. Intermediate carinae of frons joining median carina, falling considerably short of apex of vertex (subtribe Ototettigina, subtrib. n.).
- 53(54). Vertex noticeably longer than the part of frontal carina above junction point of intermediate carinae of frons. Median vertexal carina interrupted around the middle by a transverse fold extending along the vertex. Vertex at least twice as long as pronotum, its lateral margins not leaf-shaped or only slightly leaf-shaped. Sensory pittings on pronotal disk noticeably receding from median carina. Femora of fore and middle legs

no more than twice as wide as tibiae, not leaf-shaped Kumlika Oshanin.

54(53). Vertex of same length as the part of frontal carina above connecting point of intermediate frontal carinae. Median vertexal carina high, not interrupted, convex in profile throughout its extent. Vertex at most only slightly longer than pronotum. Sensory pittings on pronotal disk extending right to the median carina. Femora of fore and middle legs more than twice as wide as the tibiae, otherwise both leaf-shaped..... Ototettix Oshanin.

DESCRIPTION OF THE NEW GENERA ELYSIACA Emeljanov, gen. n.*

Squat-oval or ovate, slightly flattened dorsoventrally. Head short, vertex projecting for no more than one third its length in front of the eyes; vertexal carinae more or less sharply projecting. Vertex with a small black apical spot. Frons broad and short, no more than 1.5-2 times as long as wide. Intermediate carinae of frons closer to sides of frons than to median carina, often indistinct on the lower part. Lateral carinae of frons and vertex meeting in an acute angle. Clypeus projecting semicircularly on to frons, not reaching level of antennae. Median carina of postclypeus sometimes lacking, or indistinct. Pronotum transverse with a weakly concave posterior margin; pronotal disk without lateral carinae; impressions laterad of median carina absent or indistinct. Elytra with an indistinct network of veins or with a smooth, parasutural carina in most species. Upper surface of abdomen with sublateral carinae and a median carina. Legs normally developed, not leaf-shaped, tibiae of fore and middle legs with weak longitudinal ridge on dorsal surfaces.

Type-species - Orgerius ferganensis Oshanin.

COLOBOCUS Emeljanov, gen. n.

Body squatly oval, head not long. Vertex parabolic in plane section, approximately 1.5 times as long as wide. Vertexal carinae acute, median carina developed. Frons with acute carinae, its length approximately twice its width, tapering weakly upward. Intermediate carinae and median carina abruptly discontinued in front of postclypeus on the same level, forming a projection. Postclypeus extending onto frons in a trapeziform pattern and reaching the level of the antennae; postclypeus weakly convex, slightly narrower than frons and with an acute median carina. A slight oblique elongated convexity — ridge between eye and antennae. Postocular swellings weakly developed, barely apparent. Proboscis reaching genital block, its apical segment noticeably shorter than the penultimate segment. Pronotum short, strongly transverse, its posterior margin straight throughout. Median carina of pronotal disk acute, lateral carinae diverging to the sides, disappearing near the posterior margin of the pronotum, just failing to reach it. Scutellum with three carinae. Elytra with irregular carinate longitudinal veins and a less distinct network of transverse veins. Space outwards from sublateral carina broad, with weak reticulate sculpture, sublateral carina regular and acute. Abdomen above with sublateral carinae and a median carina, sides of abdomen outside the sublateral carinae not bent over toward the ventral surface. Legs not long, not flattened and not thickened. Hind tibiae with four lateral spines. Claws with two setae.

Type-species - Orgerius conspersus Puton.

TILIMONTIA Emeljanov, gen. n.

Body elongate-oval, not strongly flattened dorsoventrally, head rather long, gently ascending. Vertex rather narrow, forming a double zig-zag with obtuse angle in profile, posterior bend concave, rounded, anterior bend convex. more acute. Vertex projecting forward from eyes by approximately two thirds its length, its posterior part parallelsided, its central part slightly tapering apically; vertex narrow, tapering in the region of the posterior inflexion slightly in front of the eyes, its median part therefore narrower, of the same length as the posterior part, posterior and median parts of vertex in the shape of a gently sloping roof in cross-section and with an acute median carina. Transition from median part of vertex to apical part an acute transverse carina bent backwards in a slightly obtuse angle. Apical part of vertex triangular, slightly elongate, curved, lacking median carina, occupying less than half the height (length) of the front portion of the head, which is convex in profile; remainder of apex of head occupied by an elongate apical callus extending slightly below the junction point of the intermediate carinae of the frons. Frons in profile (its median carina) straight, slightly convex in the upper part, parallel to the median part of the vertex; lateral carinae of frons in profile in front of the eyes, gently bending, meeting on the median part of the vertex near its apex. The intermediate carinae of the frons in profile extend parallel to the median carina and therefore the lateral lobes of the frons broaden in front of the eyes. Frons narrow, slightly tapering from clypeus to posterior eye margin, then parallel-sided; lateral lobes of frons opposite eyes smoothly inflected, turning into the longitudinal plane; median lobes of frons narrow, slightly broadening toward clypeus and subapically. Lateral carinae of frons well developed throughout their extent. Lateral lobes of frons bearing sensory pittings from the level of the lower eye margins in two rows changing on the apical portion of the head to random arrangement in several rows; below the eyes there is only one epiclypeal pitting on a level with the antennae, Postclypeus weakly convex, not broad, narrower than frons in the lower part, extending on to frons to the level of the antennae. Subocular carina acute. Postocular swelling acute, but with rounded upper and lower angles. Proboscis reaching apex or middle of genital segment. Pronotum with rather strongly curved posterior margin and a not very wide trapeziform disk extending forward to its middle; the lateral carinae of the disk are acute and extend to the posterior margin, slightly convexly curved toward the inner ends. Lateral carinae of pronotum curved in front, extending along anterior margin of pronotum, practically joining lateral carinae of disk. Near the lateral carinae on the pronotal disk there are three sensory pittings in a row and a further 1-2 pittings in a second row. Scutellum with three acute carinae and outside the lateral carinae a transverse row of sensory pittings decreasing in size towards the outer margin. Elytra with acute sublateral and parasutural carinae and two sharply projecting longitudinal veins against the background of an indistinct network of fine veins. Pseudoepipleura broad. Abdomen above with acute sublateral and median carinae and indistinct intermediate carinae. No sensory pittings outside sublateral carinae, three pittings in a group inside sublateral carinae on 4th-6th tergites, four in a group on 7th tergite. Sides of prosternum flat or with mammoids, 1-3 sensory pittings below carina near posterior margin, 3-4 above carina. Legs rather long, simple; hind tibia with 5(4) -7 teeth on outer margin.

Type-species - Bursinia canariensis Lindberg

TACHORGA Emeljanov, gen. n.

Body weakly elongate-oval, not strongly dorsoventrally flattened, head not long, bent upward. Vertex rather narrow, bent in the shape of a figure 7 in profile, its anterior, positive inflexion acute-angled, sharp and carinate, its posterior inflexion convex, smoothly obtuse-angled, lying on the level

^{*}Emeljanov — Yemel'yanov in standard transliteration of Russian characters. Translator.

of the anterior margin of the eyes. Median carina of vertex distinct throughout its extent. Vertex weakly roofshaped posteriorly (to the anterior inflexion), parallel-sided from base to posterior inflexion, thereafter tapering to anterior inflexion. Part of vertex in front of transverse carina narrow, elongate; its lateral margin slightly convexly bent in an obtuse angle. Apical callus elongate, noticeably extending on to frons (in other words the median carina of the frons is apically thickened). Frons narrow, broadening in front of broad postclypeus. Lateral carinae of frons developed only below eyes, lateral lobes of frons on the same plane as the tempora from the lower eye margins. Inner lobes of frons weakly and gently tapering subapically and broadening basally. Sensory pittings on lateral lobes of frons above eye level randomly arranged on a broad expanse but forming two tows facing the eyes; below the eyes there is only one pitting on each side near the end of the intermediate carina of the frons. Subocular carina weak. Postocular swelling projecting slightly in an obtuse angle below and above. Upper margin of postclypeus extending on to frons to slightly above the level of the antennae. Proboscis extending to middle or apex of genital segment. Pronotum with a rather strongly curved posterior margin and weakly forward-projecting disk; only slightly longer in the middle than along the sides. Lateral carinae of pronotal disk acute, straight, rather strongly diverging caudad and reaching posterior margin; median carina acute. On the pronotal disk near the lateral carinae there are two rows of sensory pittings - three pittings along the carina and a further two beside these. On the scutellum there are three distinct carinae; outside the lateral carinae near the posterior margin there is a transverse row of 4-5 sensory pittings, decreasing towards the outer margin. The elytra have acute sublateral and parasutural carinae and indistinct carinate longitudinal veins. The upper surface of the abdomen has acute sublateral carinae, a median carina and a distinct intermediate carina. Three sensory pittings on each of the 4th-6th tergites and four on the 7th; no separate pittings and no pittings outside the sublateral carinae. Sides of prosternum flat, with one pitting below the carina near the posterior margin and two pittings above. Legs relatively short and simple. Hind tibiae with 4-6 lateral teeth.

Type-species - Tigrahauda recurviceps Linnavuori.

COPPA Emeljanov, gen. n.

Body weakly elongate-oval. Head fairly large, long. Vertex 1.5 times longer than pronotum plus scutellum, regularly lanceolate, convex in the form of a gently sloping roof, median carina distinct throughout its length. Apical callus approximately square. Frons moderately narrow, parallel-sided throughout the greater part of its extent, its sides slightly broadening in front of the clypeus, poorly developed in the apical part. Lateral lobes of frons sulcate, having sensory pittings in two rows from the lower eye margin and several pittings in a median (haphazard) row at the apex; no pittings below the antennae. Clypeus moderately convex, not wider than frons, extending onto frons to the level of the antennae. Subocular carina acute. Postocular swelling projecting rather acutely in an obtuse angle above, gradually disappearing below. Proboscis extending to middle of genital segment. Pronotum with a slightly forward-projecting disk and rather strongly curved posterior margin. Lateral carinae of disk acute, reaching posterior margin, median carina acute. On the disk there are only three sensory pittings on each side and an additional one on each side in a second row. Carinae of scutellum distinct, one sensory pitting on each of its lateral lobes. Elytra smooth, with barely apparent sublateral and parasutural carinae. Abdomen with acute sublateral carinae and median carina; no intermediate carinae. Tergites IV to VI with 2 + 1 sensory pittings and tergite VII with 3 + 1 inward from the sublateral carina and 1-2 outward from it; on the 3rd tergite there are 2(3) pittings outside the sublateral carinae; none elsewhere. The

sides of the prosternum have small shiny swellings and three sensory pittings above the carina and 1-2 below. Legs rather long, hind tibiae with 5-6 teeth on lateral margin.

Type-species - Sphenocratus huldaensis Linnavuori.

COPPIDIUS Emeljanov, gen. n.

Body weakly elongate-oval, slightly dorsoventrally flattened, head moderately elongate. Vertex sagittate, its lateral margins convex, the apex broadly rounded, the vertex projecting for approximately a half forward from the eyes, flat or weakly convex, its lateral carinae acute but low, median carina weakly projecting, fading out altogether and disappearing in front. Vertex straight in profile, horizontal, frons slightly concave. Frons rather broad, short, slightly tapering upward, its lateral lobes deviating increasingly sideways in an upward direction so that at the apex they are already in the longitudinal plane, median lobe slightly broader than lateral lobes. Intermediate carinae of frons parallel in the central part, slightly diverging towards clypeus and parabolically converging towards the apex. Sensory pittings on lateral lobes arranged in two rows from the lower eye margin and above, separate pittings between the rows also present at the apex, only one or two pairs of epiclypeal pittings below, if one pair then only the lower pair. Postclypeus broad and convex, broader than frons, extending onto frons to the level of the antennae and slightly distended there. Subocular carina acute; postocular swelling weak, not acute. Proboscis reaching middle of genital segment. Pronotum with posterior margin broadly concave in the middle and the lateral margins slightly convex; its disk projecting forward for half its length from the postocular notches. Disk with acute median carina but lacking lateral carinae; sensory pittings extending only onto its extreme lateral margins. Scutellum with an acute median carina and lateral carinae; sensory pittings present around the margin. Elytra regular, without distinct veins, parasutural carina absent, sublateral carinae acute basally, greatly weakening or disappearing toward posterior margin. Abdomen above with acute sublateral carinae and a median carina; no intermediate carinae. Sensory pittings absent outside sublateral carinae, 4 + 1 on the 4th-7th tergites inside the sublateral carinae, none on 3rd tergite. Side of prosternum with a single sensory pitting below carina, 3-5 pittings above. Legs of medium length, simple, hind tibia with 3-4 teeth on outer margin.

Type-species - Mesorgerius semidesertus Mitjaev.

SCIRTOPHACA Emeljanov, gen. n.

Body moderately elongate-oval, head short or slightly elongate. Vertex with acute lateral carinae and a median carina, length 1.5-2 times its width. Lateral margins of vertex smoothly convex, converging apically at an acute angle. Lateral lobes of frons and tempora visible from above along the sides from the anterior part of the vertex. Frons relatively short, slightly tapering upward, its carinae straight in the central part, sometimes slightly curved below relative to the median carina. Median carina and intermediate carinae of frons converging on the apex of the head right at the apex of the vertex. Postclypeus projecting deeply onto frons (above level of antennae), its upper margin slightly M-shaped. Intermediate carinae of frons extending along lateral margins of postclypeus to level of antennae. i.e., approximately to the middle of the margins of the frons, and surrounding the postclypeus. Lateral lobes of frons with two rows of sensory pittings, only two pittings below the level of the lower eye margin; the first row near the ends of the intermediate carinae and the 2nd row on a level with the upper margin of the postclypeus or slightly higher. Gena between antenna and eye slightly convex, subocular carina undeveloped. Postocular swelling appearing as a gentle weak carina without angular projections. Proboscis extending to genital segment or to apex of abdomen.

Pronotum with a strongly forward-projecting disk and moderately concave posterior margin. Lateral carinae of disk absent, median carina acute. Entire surface of pronotum except for median carina more or less uniformly covered with sensory pittings. Scutellum with distinct carinae, the median carina disappearing apically, lateral carinae joined along anterior margin of scutellum by an indistinct transverse carina. A single sensory pitting laterad of the lateral carinae at the posterior margin of the scutellum. Elytra smooth with a barely perceptible network of veins, sublateral carina acute, parasutural carina absent. Sensory pittings inward from sublateral carinae on 4th-7th tergites 3 + 1 or 4 + 1, no separate pitting on last tergite, 1-2 pittings additional often present on penultimate tergite outside the lateral carinae. Side of prosternum with a single pitting below the carina at the rear and three pittings above the carina. Legs relatively short, not flattened and not broadened. Hind tibiae having 3-4 lateral teeth.

Type-species - Nymphorgerius tianshanskyi Oshanin.

The genus includes a number of undescribed species whose distinctive features have been taken into consideration in the description.

ORGAMARELLA Emeljanov, gen. n.

Body squatly oval, practically round, slightly flattened dorsoventrally, head protracted. Vertex acutely emarginate, with an acute median carina, approximately 2.5 times as long as wide; its sides are parallel to the anterior eye margin, after which they bend sharply but in a weak obtuse angle toward the narrowly rounded apex; in the middle of the anterior part of the margins of the vertex where they are joined by the lateral carinae of the frons there is also a weak bend in the margin of the vertex. Lateral lobes of frons and tempora visible from above along the sides from the anterior part of the vertex. Vertex concave in profile. Frons slightly concave medially in profile, noticeably narrower than the broad convex postclypeus, lateral and median lobes of frons of approximately equal width, parallel-sided. Intermediate carinae of frons converging on apex of head right at the apex of the vertex. Lateral lobes of frons having transverse-oval sensory pittings extending all the way to the ridges of the carinae, the pittings arranged in two rows in groups separated from each other by free expanses over the entire width of the lobes of the frons. Outer row originating at lower eye margin, inner row at the level of the antennae, where there are two pittings: one at the lower end of the intermediate carina, the other facing the apex of the clypeus. Postclypeus extending deeply onto the frons, practically to the level of the lower eye margin, apex (upper margin) of clypeus M-shaped. Intermediate carinae of frons extending along the lateral margins of the postclypeus to the level of the antennae, i.e., for two thirds the length of the paraclypeal lobes of the frons. Gena between antenna and eye weakly convex, carina undeveloped. Postocular swelling appearing as a gentle weak carina without angular projections. Proboscis extending to middle of genital segment. Pronotum with the disk projecting strongly forward in an arc and with a rather deeply concave posterior margin. Lateral carinae of disk undeveloped. Median carina of pronotum acute, raised. Sensory pittings covering the entire surface of the pronotum, indistinctly interrupted at the point where the lateral carinae of the disk should be, separated from the median carina by 1.5-2 times their own diameter. Scutellum with distinct carinae; median carina falling short of apex, lateral carinae joined along the posterior margin by a transverse indistinct carina; a single large sensory pitting laterad of each lateral carina at the posterior margin of the scutellum. Elytra mat (finely shagreened), with acute epipleural and parasutural carinae. Surface of elytra slightly irregular as a result of very slightly projecting veins. Abdomen with acute lateral carinae and a median carina above, intermediate carinae absent. Each tergite except the last with 4 + 1 sensory pittings, the last tergite

with 3 above and a group of smaller pittings in two rows on the inferolateral surfaces. Side of prosternum with several pittings below carina around posterior margin and 2-3 pittings above the carina. Legs relatively short, fore and middle legs not flattened and not broadened. Hind tibia with 2-3 lateral teeth and an apical circlet of divaricate teeth.

Type-species - Orgamarella lata, sp. n.

Orgamarella lata Emeljanov, sp. n.

Ground color palish white, sandy. Vertex usually brown to dark brown, carinae also often darkened. Face pale, sensory pittings darkened, more so apically, apical callus black; postclypeus with dark indistinct V-shaped stripes. Pronotum often with darkened sensory pittings and darkening around median carina. Scutellum often darkened, carinae broadly light, a light stripe on median carina broadening at posterior end. Elytra pale, often with brown to dark brown reticulate pattern along veins, in which case the parasutural carinae are light. Upper surface of abdomen dark brown with light carinae and spots; sensory pittings lightly bordered. whitish lightening between main group of pittings and inner separate pitting, broader light border around separate pitting than around the others; lightening along sides from median carina. Ventral surface of body pale, dark spots frequently present on coxae, darkening often apparent on femora and tibiae between carinae, a dark stripe frequently present on side of prosternum, in which case the undersurface and the upper part of the side remain light as far as lower margin of antennae - base of costa and lower eye margin - sensory pittings above carina. No markings are found on lightly colored specimens.

Length: ♂ 3.0-3.6 mm, ♀ 3.2-3.4 mm.

Material: Kazakhstan, Taldy-Kurgan Province, Kushukzhal Sands west of Lepsy, 22 June 1962, 1 β , holotype (Yemel'yanov); Alma-Ata Province, Bakanas on the Ili River, 15-16 June 1939, 1 β (Shnitnikov), 5-6 July 1968, 2 $\delta\delta$ 4 \mathfrak{P} , incompletely hardened (Mityayev); Akkul' on the Ili River, 30 June 1939, 1 δ (Shnitnikov); Karaganda Province, Kense Meteorological Station, 10 June 1961, 2 nymphs (Yemel'yanov). In sandy deserts.

Orgamarella oblonga Emeljanov, sp. n.

Male unknown.

Similar to the type-species, O. lata, sp. n., from which it is distinguished by a narrower $\overline{\text{body}}$, by the lateral carinae of the pronotal disk, which extend quite clearly to the posterior margin, by the thicker and more strongly diverging median carinae of the abdominal tergites, by the less strongly posteriorly divergent lateral carinae of the scutellum, and also by the legs, which have a more distinct separate inner group of teeth in the apical circlet of the hind tibia.

Ground color palish brown, slightly greenish below. Vertex reddish brown with light carinae, face pale, sensory pittings blackened, apical callus black; postelypeus with weak brownish V-shaped stripes. Pronotum with reddishbrown sensory pittings and in places small spots; disk darkened, more or less reddish brown, darker around the median carina, carinae light. Scutellum reddish brown between lateral carinae, carinae light, a diffuse reddish-brown spot on light ground inward from the lateral carinae. Elytra pale with discontinuous reticulate brownich markings along veins, parasutural carinae also reddish brown. Upper surface of abdomen reddish brown with light carinae and spots; sensory pittings with light borders, a whitish clearing between main group of pittings and inner separate pitting, broader light border around the separate pitting than around the others, slight clearing along sides from median carina to pale brown. Undersurface of body pale without distinct markings. Upper and lower parts of sides of prosternum light, central part dark brown forming a longitudinal stripe that becomes weaker caudad. Legs lacking distinct markings. Side of pronotum with sensory pittings $\frac{2}{3-4}$.

Length: 3.7 mm.

Material: Uzbekistan, S. W. Kyzylkum, Zhamansay, $20\,\mathrm{km}$ north of Ayakguzhumdy, 27 September 1968, $1\,^{\circ}$, holotype (Fal'kovich). Nymphs, 3 specimens, same locality, 9 June 1965 (Yemel'yanov). Sandy desert.

LIST OF THE PALEARCTIC ORGERIINAE

Tribe RANISSINI, trib. n.

Sphenocratus Horváth, 1910 (type-species, Orgerius megacephalus Osh.); hastatus Oshanin, 1913; heptapotamicus (Oshanin, 1913), comb. n.; lukjanovitshi (Kusnetzov, 1933), comb. n.; megacephalus (Oshanin, 1879); palaeomastodon Kusnetzov, 1927; productus (Fieber, 1876); reticulatus (Oshanin, 1913), comb. n.; rugosus (Emeljanov, 1964), comb. n.; septentrionalis (Oshanin, 1913), comb. n.

Ranissus Fieber, 1866 (type-species, Ranissus leptopus Fieb.). = Schizorgerius Kusnetzov, 1930 (type-species, Orgerius scytha Osh.). = Palaeorgerius Fennah, 1944 (type-species, Orgerius montandoni Horv.); acucephalus Fieber, 1866; discrepans Fieber, 1866; edirenus (Dlabola, 1957), comb. n.; leptopus Fieber, 1866; montandoni (Horváth, 1911), comb. n.; punctiger (Horváth, 1905), comb. n.; scytha (Oshanin, 1913).

Parorgerius Melichar, 1912 (type-species, Ranissus platypus Fieb.); platypus (Fieber, 1866).

<u>Phyllorgerius</u> Kusnetzov, 1928 (type-species, <u>Orgerius jacobsoni</u> Osh.); <u>jacobsoni</u> (Oshanin, 1913).

Elysiaca, gen. n. (type-species, Orgerius ferganensis Osh.); chomutovi (Oshanin, 1879), comb. n.; elliptica (Oshanin, 1870), comb. n.; ferganensis (Oshanin, 1913), comb. n.; fusca (Oshanin, 1879), comb. n.; kiritshenkoi (Oshanin, 1913), comb. n.; similis (Oshanin, 1913), comb.

Tribe COLOBOCINI, trib. n.

 $\frac{Colobocus, \ gen. \ n. \ (type-species, \ \underline{Orgerius}}{Conspersus} \ \underline{conspersus}}{(Puton, \ 1888), \ comb. \ n.}$

Tribe ORGERIINI

<u>Tilimontia</u>, gen. n. (type-species, <u>Bursinia canariensis</u> Lindb.); <u>canariensis</u> (Lindberg, 1936), <u>comb. n.</u>; <u>insularis</u> (Melichar, 1912), <u>comb. n.</u>

Almana Stål, 1861 (type-species, <u>Dictyophora longipes</u> Duf.); <u>longipes</u> (Dufour, 1849).

Tachorga, gen. n. (type-species, Tigrahauda recurviceps Lnv.); recurviceps (Linnavuori, 1956), comb. n.

Parorgerioides Bergevin, 1928 (type-species, Orgerius alluaudi Brgv.);* albocinctus (Melichar, 1912), comb. n.; albofasciatus (Puton, 1888), comb. n.; alluaudi (Bergevin, 1922); angusticeps (Blöte, 1957), comb. n.; bergevini, nom. n. (=Parorgerius peyerimhoffi Bergevin, 1924*); bolivari (Horvāth, 1913), comb. n.; cyrenaicus (Linnavuori, 1965), comb. n.; dumonti (Bergevin, 1928)*, comb. n.; immundus (Horvāth, 1913), comb. n. (=Orgerius rupicola Bergevin, 1919); numanni (Blöte, 1957), comb. n.; perezi Bolivar et Chicote, 1879), comb. n.; peyerimhoffi (Bergevin, 1922), comb. n. (=Nymphorgerius pardoi Linnavuori, 1965, syn. n.); saboureti Bergevin, 1915), comb. n.; transversus (Blöte, 1957), comb. n.; transversus

Bursinia A. Costa. 1862 (type-species, Fulgora hemiptera O. Costa). = Parabursinia Blöte, 1957 — syn. n. (type-species, Bursinia latipes Horv.); acuticeps Bergevin, 1918; adelpha Horváth, 1936; asphodeli Horváth, 1910 (=Bursinia algira Matsumura, 1910, =B. flava Horváth, 1910); bouvieri Bergevin, 1913 (=Bursinia fasciata Horváth, 1913); breviceps Horváth, 1913*; carinata Horváth, 1936*; discolor Horváth, 1936; elongatula Linnavuori, 1965; fallax Horváth, 1936*; genei (Dufour, 1849); globiceps Linnavuori, 1961; griseola Horváth, 1936*; hemiptera (O. Costa, 1840); latipes Horváth, 1913; parvula Horváth, 1910; risleri Bergevin, 1925; seminitens Horváth, 1910; socors Horvath, 1910 (=Bursinia laticeps Bergevin, 1913, syn. n.).

Coppa, gen. n. (type-species, Sphenocratus huldaensis Lnv.); huldaensis (Linnavuori, 1962), comb. n.

Nymphorgerius Oshanin, 1913 (type-species, Orgerius dimorphus Osh.); =Anorgeriopus Kusnetzov, 1930 (type-species, Orgerius stali Osh.); =Sphenocratoides Kusnetzov, 1930 (type-species, Orgerius longiceps Osh.); bucharicus Oshanin, 1913; curticeps (Linnavuori, 1965), comb. n.; cyprius (Lindberg, 1949), comb. n.; dimorphus (Oshanin, 1879); gemmatus (Horváth, 1929)*, comb. n.; grigorievi Oshanin, 1913; gussakovskii (Kusnetzov, 1933) comb. n.; (=pallens Kusnetzov, 1936), horvathi Oshanin, 1913; ivanovi Kusnetzov, 1928 (=turkestanicus Kusnetzov, 1928); korol-kovi (Oshanin, 1879); longiceps (Oshanin, 1879), comb. n.; medius (Oshanin, 1879); oxianus (Oshanin, 1879); rotundus Kusnetzov, 1936; skobelevi (Oshanin, 1879); stali (Oshanin, 1879); transcaucasicus Sidorski, 1938.

Coppidius, gen. n. (type-species, Mesorgerius semi-desertus Mit.); semidesertus (Mitjaev, 1967), comb. n.

Haumavarga Oshanin, 1908 (type-species, Orgerius fedtschenkoi Osh.); fedtschenkoi (Oshanin, 1879).

Scirtophaca, gen. n. (type-species, Nymphorgerius tianshanskyi Osh.); tianshanskyi (Oshanin, 1913), comb. n.

Mesorgerius Kusnetzov, 1933 (type-species, Mesorgerius rysakovi Kusn.); =Stephanorgerius Kusnetzov, 1933 (type-species, Stephanorgerius zaisanensis Kusn.); altaicola Vilbaste, 1965; rysakovi Kusnetzov, 1933, (=sibiricus Kusnetzov, 1933); submontanus Dlabola, 1968, (=gobinus Dlabola, 1968); tshujensis Vilbaste, 1965; zaisanensis (Kusnetzov, 1933), comb. n.

Tigrahauda Oshanin, 1908 (type-species, Tigrahauda tiarata Osh.); =Otorgerius Kusnetzov, 1930 (type-species, Orgerius ototettigoides Osh.); ototettigoides (Oshanin, 1913), comb. n.; tiarata Oshanin, 1908; zarudnyi Oshanin, 1913.

Orgamarella, gen. n. (type-species, Orgamarella lata, sp. n.); lata Emeljanov, sp. n.; oblonga Emeljanov, sp. n.

Kumlika Oshanin, 1913 (type-species, Kumlika recurviceps Osh.); desertorum (Oshanin, 1913), comb. n.; recurviceps Oshanin, 1913; surda (Oshanin, 1913), comb. n.

Ototettix Oshanin, 1913 (type-species, Ototettix auritus Osh.); =Repetekia Oshanin, 1913 (type-species, Repetekia orbicularis Osh.); auritus Oshanin, 1913; jaxartensis Oshanin, 1913; orbicularis (Oshanin, 1913), comb. n.

CONCLUSIONS

The paper contains a revision of the subfamily Orgeriinae in the Palearctic fauna with a key for identification of all genera of the subfamily, including Nearctic genera. The subfamily is considered as consisting of three tribes, two of which — Ranissini and Colobocini — are described as new; the tribe Orgeriini is divided into three subtribes, one of which is described as new. Descriptions of eight new genera are given and the composition of the old genera is reviewed.

^{*}Species for which the author did not have material and which have been placed in a given genus on the basis of data in the literature are denoted by an asterisk.

A list of all species of Palearctic Orgeriinae in accordance with the new system is appended.

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