

Monograph of the tribe Quasimusini (Insecta: Coleoptera, Elateridae, Negastrinae)

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ABSTRACT. As results of this study we know now 161 species of the new tribe Quasimusini which occur in the Palaearctic and in the Oriental region. This monograph presents the first compendium of species of genera, which are in close relationship to the genus *Quasimus* GOZIS, 1886. A new tribe (Quasimusini tribus novum) of the subfamily Negastrinae NAKANE & KISHII, 1956, four new subtribes (Loebliquasina subtribus novum; Quasimusina subtribus novum; Striatoquasina subtribus novum; Wittmeroquasina subtribus novum), and a new genus (*Striatoquasimus* novus genus) are established; 23 new species (*Paraquasimus flavopodus* sp. nov., *P. javanensis* sp. nov., *P. lamellatus* sp. nov., *Quasimus anjae* sp. nov., *Q. antennatus* sp. nov., *Q. bicoloratus* sp. nov., *Q. bosi* sp. nov., *Q. fujianensis* sp. nov., *Q. ingridae* sp. nov., *Q. hergovitsi* sp. nov., *Q. kubani* sp. nov., *Q. muangensis* sp. nov., *Q. steffenskyi* sp. nov., *Q. yipinglangensis* sp. nov., *Q. yunnanus* sp. nov., *Striatoquasimus dolini* sp. nov., *Wittmeroquasimus cangshanensis* sp. nov., *W. claudiae* sp. nov., *W. gaoligongshanensis* sp. nov., *W. hubeiensis* sp. nov., *W. laoticus* sp. nov., *W. spinosus* sp. nov. and *W. yanmenensis* sp. nov.) of the new tribe are described and illustrated, the accessory species from the Palaearctic and from the Oriental regions are introduced; one group is raised with a new systematic status to genus level (*Wittmeroquasimus* novus status); 15 species are introduced with new name combinations (*Miquasus cariosus* (DOLIN, 1997) comb. nov., *M. convexicollis* (DOLIN, 2001) comb. nov., *Quasimus amriki* (PUNAM, VASU & VATS, 1995) comb. nov., *Q. colocassius* (VATS & CHAUHAN, 1991) comb. nov., *Q. dubius* (DOLIN, 2001) comb. nov., *Q. improvisus* (DOLIN, 2001) comb. nov., *Q. ohirai* (DOLIN, 2001) comb. nov., *Q. pacholatkoii* (DOLIN, 2001) comb. nov., *Q. pyrusus* (VATS & CHAUHAN, 1991) comb. nov., *Wittmeroquasimus ocellatus* (DOLIN, 1993) comb. nov., *W. paradoxus* (DOLIN, 1993) comb. nov., and *W. parallelus* (SCHWARZ, 1902) comb. nov., *W. sausiai* (DOLIN, 2001) comb. nov., *Yukoana bhutanicus* (DOLIN, 1993) comb. nov., *Y. kashmirensis* (DOLIN, 1993a) comb. nov.). A key to the species of *Quasimus* and *Wittmeroquasimus* from China and from the Indochinese subregion are given. Overviews on the distribution of the habitats and ecological remarks to the behaviour of the species are provided. Commendatory lists are given for the species from China, for these

from the Indochinese subregion, from the Malayan subregion, from Wallacea, from the Papuan subregion, from Himalaya, from the Indian and Ceylonese subregions as well as from Eurasia. Alphabetic lists being given for the species from Korea, Japan and from Taiwan. The distribution of the species and the altitudinal zonating of their habitats, and a phylogenetic hypothesis are provided. Species incertae sedis: *Quasimus setosus* BUYSSON, 1914. Species recorded from the fauna of China for the first time: *Quasimus exilis* (MOTSCHULSKY, 1858), *Q. geminus* FLEUTIAUX, 1941, *Q. horaki* DOLIN 1997, *Q. meghalayanus* DOLIN, 1993, *Q. subovalis* FLEUTIAUX, 1930 and *Q. wittmeri* DOLIN, 1993, *Wittmeroquasimus ocellatus* DOLIN, 1993, *W. parallelus* SCHWARZ, 1902 and *Yukoana tenasserimensis* ÔHIRA, 1970. Species recorded from the fauna of Nepal for the first time: *Miquasus besucheti* Dolin, 2001; *M. dubius* (DOLIN, 2001), *M. improvisus* (DOLIN, 2001); *Quasimus malaisei* Fleutiaux, 1942; *Wittmeroquasimus paradoxus* (DOLIN, 1993); *Yukoana tenasserimensis* ÔHIRA, 1970. Species recorded from the fauna of Thailand for the first time: *Quasimus malaisei* FLEUTIAUX, 1942. Species recorded from the fauna of Laos for the first time: *Quasimus geminus* FLEUTIAUX, 1942, *Q. malaisei* FLEUTIAUX, 1942.

Key words: entomology, taxonomy, Coleoptera, Elateridae, Negastrinae, Quasimusini new tribe, Loebliquesina, Quasimusina, Striatoquasina and Wittmeroquasina new subtribes, *Striatoquasimus* new genus, new species, *Paraquasimus*, *Quasimus*, *Wittmeroquasimus* new species, Palaearctic and Oriental regions.

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1. INTRODUCTION

The genus *Quasimus* has been proposed by GOZIS (1886) basing on the type species *Elater minutissimus* GERMAR, 1822. In the following years LEWIS (1894) and BUYSSON (1914) published species of *Quasimus*, especially from Japan. This material has been cited by SCHENKLING (1925) in the Coleopterorum Catalogus. The same author (SCHENKLING), in his catalogue also listed species under the genus *Quasimus*, which have been published by CANDÈZE (1873) as belonging to the genus *Cryptohypnus*: *C. ellipticus*, *C. luteipes* and *C. ovalis* from Japan, and the *C. liliputanus* published by GERMAR (1844) from Sicily. More recently the fauna of the subfamily Negastriinae NAKANE & KISHII, 1956, which also includes the genus *Quasimus*, has been studied by DOLIN (1993, 1997, 2001), JIANG (1999), KISHII (1980), MIWA (1930), ÔHIRA (1966, 1968) and STIBICK (1971, 1979), which resulted in the publication of many new species from Japan and Taiwan, from the Indochinese and Malayan subregions, as well as from Himalaya and from India. Therefore, the fauna of the genus *Quasimus* and related genera from India, Himalaya, Korea, Japan, and from Taiwan can be said to be well known today. However, only one species of *Quasimus* was published so far from China, while twelve species of *Quasimus*, *Miquasus* and *Yukoana* have been published from Taiwan. Also, only few species from the Indochinese subregion have been known until today.

In one of the abovementioned papers DOLIN (1997a: 143) made remarks about the world fauna of the genus *Quasimus*: "Bis vor kurzem, zum Jahr 1993 waren in der Weltfauna etwas mehr als 40 Arten dieser Gattung bekannt. Durch die Veröffentlichungen der Beschreibungen der neuen Arten aus West Malaysia (KISHII 1980), aus dem Himalaya und Indonesien (DOLIN 1993a, 1993b) kamen noch 30 Arten hinzu, und es wird angenommen, dass die Weltfauna etwa 80 Arten dieser Gattung zählt. Die weitere Bearbeitung...läßt vermuten, dass die Zahl dieser Arten durchaus verdoppelt werden kann" [Until the year 1993 some more than 40 species of the world fauna of this genus have been known. Due to the publication of the descriptions of new species from West-Malaysia (KISHII 1980), and from Himalaya (DOLIN 1993a, 1993b), 30 species could be added and it can be presumed that the world fauna consist of approximately

80 species. Further works...will show that this number of species can be doubled]. However, including the species described in this work, the total number of species of the tribe Quasimusini from the world fauna is increased to 161 (subspecies not considered).

STIBICK (1979: 180) mentioned about the Negastrinae: "A large subfamily which has not been well studied at the species level". This remains valid today as the material of Negastrinae is generally very rare in collections, and therefore this group of Elateridae is still improperly studied and little known. STIBICK (1979) mentioned also about the necessity to group the genera of the Negastrinae into several tribes: "It may eventually be necessary to group the genera into tribal units. This is not advisable until the majority of species has been described and assigned to appropriate genera." DOLIN (1997) described the genera *Loebliquasis*, *Paraquasimus*, and *Pseudoquasimus* from Malaysia and Indonesia, as closely related to the genus *Quasimus*. Especially, the publication of DOLIN (1997) extends our knowledge about the relations of the species-groups near the genus *Quasimus*. Basing on the new characters given for these new groups near *Quasimus* by DOLIN (1997), the need to place them into a common taxonomical higher category (tribe) arose, which was already proposed by STIBICK (1979). Through colleagues and friends, as well as from several museums we recently received newly collected material of Negastrinae to study. This material has been collected in China, Indonesia, Laos, Malaysia, Nepal, Thailand and Vietnam. Among these collections we again found several new species and a new genus which we describe and illustrate below. As the majority of these material has been collected from China and from the continent of the Indochinese subregion, we are now in the position to provide the first overview of the Chinese and of the Indochinese species of the genus *Quasimus* and closely related groups. In this way other gaps in our knowledge about *Quasimus* and species of related groups from Southeast Asia could be filled.

Basing on the material provided here and in the available publications, we group the known genera near *Quasimus* and the new genus described in this paper, into the new tribe Quasimusini.

2. ABBREVIATIONS AND METHODS

ABBREVIATIONS

The following abbreviations have been used:

Abbreviations used in the text:

a.s.l.	Above sea level;
CPG	Coll. PLATIA, Gatteo, Italy;
CSB	Coll. SĀUSĀ, Bratislava, Slovakia;
CSV	Coll. SCHIMMEL, Vinningen, Germany;
CTW	Coll. TARNAWSKI, Wrocław, Poland;
ICZN	International code for zoological nomenclature;
IZW	Institute for Zoology, Warsaw, Poland;
Pd	Phylogenetic diagram;
SMNE	Staatliches Museum für Naturkunde, Erfurt;
SMNS	Staatliches Museum für Naturkunde, Stuttgart, Germany;
TICB	TAMIN insect collection, Brno, Czech Republic.

Abbreviations used in the phylogenetic diagram:

A	apomorphous (character);
P	plesiomorphous (character);
Sa	synapomorphous (character).

METHODS

The examination of the collected material has been executed using a ZEISS Stemi 2000-C binocular with a micron insert. Photographs were taken with a NIKON E4500 camera with a TV2/3" C 0.63x adaptor to the binocular, the scanning electron microscopic photographs have been taken with a JEOL, 7000F SEM.

Body length of the specimens has been measured from apical margin of frons up to apex of elytra, and body width along basal angles of pronotum by using the ocular micrometer.

The examined specimens are fixed on white past board. The genitalia of the males have been pulled out of the abdomen, cleaned and fixed beside the body of the specimen using water-soluble transparent glue.

Types of new species have been marked with red labels indicating the type status (holotype or paratype), the gender, and the name of the species and of the author.

The keys to genera and species are provided and based on characters of the males (some exceptions), and being structured as dichotomous.

The lists of species of the new tribe are generally provided as commentary lists, these of the species from Japan, Korea and Taiwan are given as alphabetic check-lists including the citation of the original description and the distributions of the species. The new tribe and the new subtribes are taxonomically separated from the further genera of the subfamily Negastrinae by a careful treatment and an assessment of characters that indicate importance on a genus level.

The systematic position of the tribe Quasimusini as member of the regnum animalia is given from regnum to genera level considering the systematic categories: regnum, divisio, phylum, classis, ordo, familia, tribus, genera and the subsections between them. Used literature: HENTSCHEL & WAGNER (1996), KAESTNER (1967, 1969, 1972, 1973), KÜKENTHAL et al. (1971) and REMANE et al. (1974).

A phylogenetic hypothesis on the tribe Quasimusini is provided basing on the principle of parsimony and the out-group character comparison. For the given phylogenetic hypotheses and the monophyletic tree, especially the works of AX (1984, 1988) and HENNIG (1950, 1953, 1955, 1969, 1974, and 1982) have been considered.

The sectioning of the work is made in accordance with the zoogeographical regions and subregions (basing on FRANZ and BEIER 1970) inhabited by the species. The various sections are divided depending on the accessory genera.

Geographical check-lists of the groups and of the species, and chorological distribution patterns, which are divided in various altitudinal zones, have been given as table-charts.

The distributions of the populations of the various species-groups (genera) are shown on maps of Southeast Asia.

The phylogenetic structure of the tribe is analyzed under the assumption of dichotomous speciation with the two possible biological events of the total extinction or the continuing existence of the ancestral population. The three computational hypotheses: synapomorphy, symplesiomorphy and convergence have been considered for the hypothesis, and the following have been employed:

1. The evolutionary species concept. The concept is basing on the requirement that "...a single lineage of ancestor-descendant populations maintains

its identity from other such lineages and has its own evolutionary tendencies and historical fate” sensu WILEY (1978, 1979, 1980, 1981) in AX (1984) and WILLMANN (1983, 1992).

2. The principle of maximum parsimony. A principle stating that the most accurate (probable) phylogenetic tree is one that requires fewest changes in the evolution of the character states. Alternative are arrangements of trees that assume more changes in the course of evolution.

3. The outgroup character comparison. Characters of two species or groups of species (adelphotaxa) are compared to group outside adelphotaxa. The character state in the outgroup is likely to have been ancestral in the group under consideration.

3. THE PHYLOGENY TAXONOMY AND THE SYSTEMATICAL STRUCTURE OF THE SUBFAMILY NEGASTRIINAE AND THE NEW TRIBE QUASIMUSINI

3.1 PHYLOGENETIC ANALYSIS OF THE GENERA RELATED TO TRIBE QUASIMUSINI

3.1.1 Assessment of some characters of the tribe Quasimusini

Body minute

The body length of the specimens of the tribe Quasimusini ranges between 1.40 and 4.32 mm, body width between 0.50 and 1.31 mm. The length-width ratio of the specimen ranges between 3.3:1 and 3.0:1, depending on the outline of the body.

Body form and outline

The body form of the species ranges between subcylindrical, suboval and obovate (dorsal view). The subcylindrical form appears to be restricted to the genus *Wittmeroquasimus*. The species of this group are also the largest of the whole tribe, and the length-width ratio is accordingly.

Prosternal sutures

The prosternal sutures of the specimens of the tribe Quasimusini in general are conspicuously visible, and are perfect for the accommodation of the antennae while immobilized (fig. 1, SEM-photographes). The sutures reaching from base to the apex of the prosternum appear as a double line with the lateral borders slightly elevated. The space between the lines is slightly excavated and extended basally. The sutures are structured as a groove-like cast of the antennae. The width of the groove is depending on the width of the antennae.

Outline of pronotum

The pronotal outline in general appears to be of trapezoidal tendency with some modifications at the subbasal area of the surface. This area in some species is more or less constricted and therefore showing a campaniform outline. The need of having a constricted subbasal region on the pronotum is in correlation with the functional process while moving. This is why from the form of the pronotum we can also draw conclusions on the behaviour of species.

Posterior angles of pronotum

The posterior angles of pronotum in most of the species possess a carina which is reaching from base up to the apex and being clearly visible as an elevated line (figs. 4 and 5, SEM-photographes). In some of the species this carina is reduced or shortened (*Paraquasimus*, *Pseudoquasimus*) or simply absent (*Loebliquasis*). As the species of all the other groups which represent the majority of the species carry the complete carina, the reduction of this character in *Loebliquasis*, *Paraquasimus* and *Pseudoquasimus* is noticeable. Therefore, the character of reduced carina should be taken as apomorphic while the complete carina very probably is the plesiomorphous.

Head

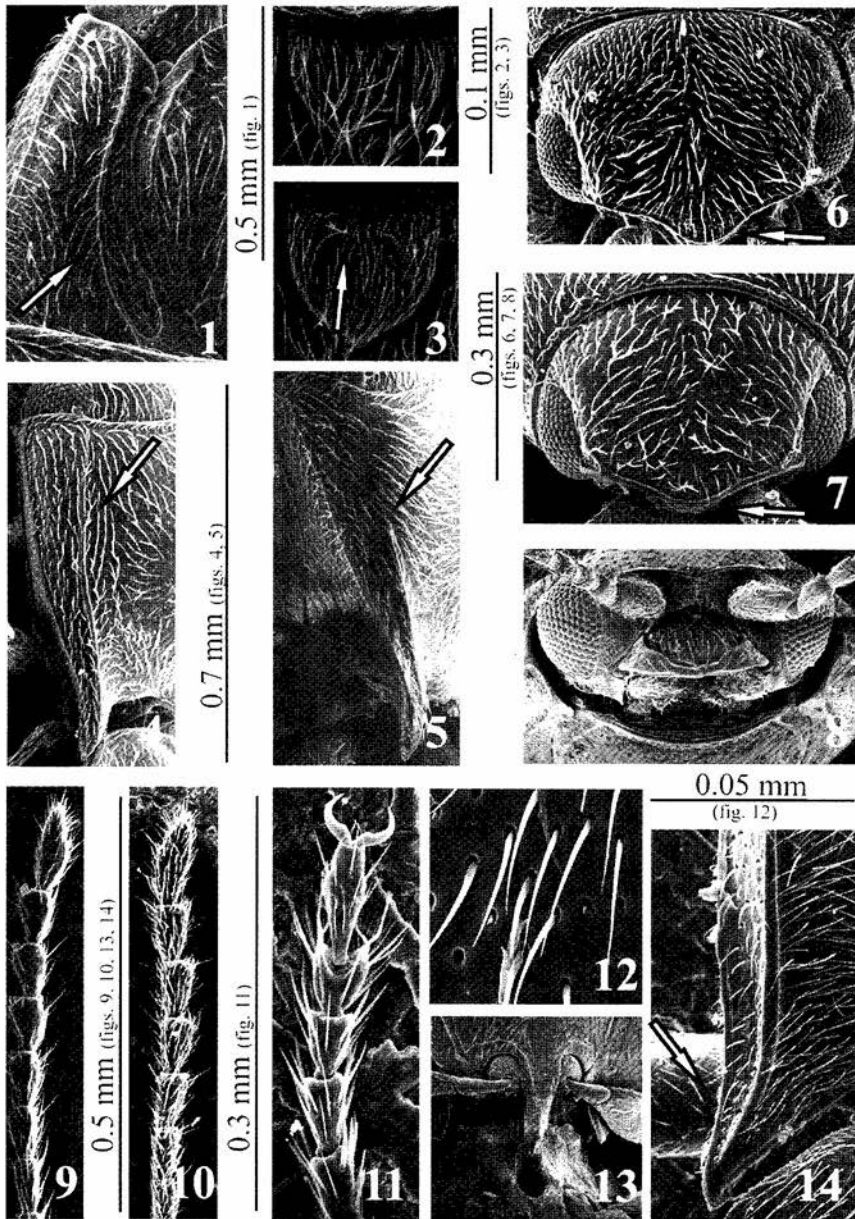
The boundary carina of the frons in most of the species is semi-circular to triangular infundibuliform (in the species of *Wittmeroquasimus* only) and conspicuously visible (figs. 6, 7 and 8, SEM-photographes). The eyes are semi-spherical to distinctly prominent (in *Wittmeroquasimus* only) and occupying one fifth to on fourth of the width of the head (figs. 6, 7 and 8, SEM-photographes).

Antennae

The antennae of the specimens are moniliform to slightly serrate or lamellate. The majority of species possess moniliform antennae with the second and the third antennomere subcylindrical, as long as wide, or being slightly longer than wide apically, and fourth to tenth antennomere being serrate or dentate (figs. 9 and 10, SEM-photographes). The last antennomere in all species is suboval and distinctly bevelled subapical. The antennae of males of the species of *Paraquasimus* are lamellate from fourth antennomere on. This undoubtedly also is the result of a functional transformation process in that group and shows the form of the antennae of *Paraquasimus* as a synapomorphic character.

Surface of scutellum

The surface of the scutellum is smooth to asperate, without or with an unguate impression centrally (figs. 2 and 3, SEM-photographes). The central impression of the scutellum is variable in the species and could be a useful character to separate them taxonomically. But sometimes this impression is not clearly visible and very often covered with the pubescence of the pronotal surface.



Figs. 1-14. SEM-photographies of characters of species of the tribe Quasimusini: 1 – prosternal sutures (ventral view) of *Quasimus* sp.; 2-3 – scutellum (dorsal view): 2 – *Quasimus* sp., 3 – *Paraquasimus* sp.; 4-5 – carina of left pronotal hind angle (dorso-lateral view): 4 – *Quasimus* sp., 5 – *Paraquasimus* sp.; 6-7 – head (dorso-lateral view): 6 – *Wittmeroquasimus* sp., 7 – *Quasimus* sp.; 8 – head (frontal view) of *Wittmeroquasimus* sp.; 9-10 – antennomeres 5-11: 9 – *Paraquasimus* sp. 10 – *Quasimus* sp.; 11 – left front tarsomere (dorsal view) of *Quasimus* sp.; 12 – pilosity of exocuticle (elytron) of *Quasimus* sp.; 13 – Mesosternal fossa and prosternal apophysis (ventral view) of *Quasimus* sp.; 14 – left hind angle of pronotum of *Wittmeroquasimus* sp.

Surface of elytra

In most of the published papers on the subfamily Negastrinae and in keys to its genera (STIBICK, 1971) the non-striate elytra of the genus *Quasimus* are presented as the typical character to separate the genus from all others of the mentioned subfamily. In fact, in most species of Quasimusini there are no striae to on the elytra, and the latter appear to be very plane and without any trace of punctures. In only a few species of the tribe the base of the elytra is appearing to be slightly furrowed.

The typical pattern of striate elytra of species of Coleoptera is formed by medially adjusted rows of punctures, and the interspaces between them, that are more or less being raised. Therefore, the upper surface of the elytra is extending and the aerodynamic properties of the elytra are increased by the raised interspaces.

In the species of the genus *Quasimus* and closely allied groups, the punctured rows on elytra are reduced, and difficult to see, the interstices between them appearing to be very smooth. In addition to this, the surface of the elytra is microreticulate, and causing reflexions under light of a microscope, which results in a difficulty of accurate observation of the surface sculpturing.

However, as a result of this study, it is shown that the interstices of punctured rows on the elytra of the specimen of Quasimusini are very smooth. The punctured rows on the elytra are clearly present, especially at base of the elytra, but indistinctly. This pattern is available in all groups of Quasimusini, except for *Striatoquasimus*. The punctured rows on elytra of the species *S. dolini* are visible from base to apex, and forming clearly visible striae.

Therefore, one of the typical characters to separate Quasimusini from other groups of Negastrinae should be the plane interstices of the median adjusted and punctured rows on elytra.

Integument

The integument of the specimens of the new tribe is micro-punctured on pronotum and microreticulate on elytra. This character becomes visible with a magnification higher than 50X, but sometimes it is covered by the dense and semi-erected pubescence. The punctures of the body integument in all species are fine and circular, and the interstices once to manyfold their diameter. The punctures on head become little more dense apically; the puncturation on pronotum in general is less dense centrally, but becomes more dense laterally. The pubescence of the epi- and exocuticle is bronze-coloured or argenteal in the various species and falcate (fig. 12, SEM-photographes). The majority of the hairs of the pubescence are semi-erect and function as parts of the mechanoreceptory sensilla of the specimen. Beside the semi-erected hairs, there

are 8–12 conspicuously long and erect hairs, present around the apices of the antennomeres. These hairs function as parts of the receptors of the specimen.

DISCUSSION

The genus *Thurana* STIBICK, 1971, placed by the author basing on "... presumed natural affinities ..." (STIBICK 1971: 373) within a group together with the genera *Quasimus* and *Yukoana* is not considered here a member of the new tribe Quasimusini. The lateral tooth on the basis of the elytra separates the species of the genus *Thurana* from the species grouped here under the new tribe Quasimusini, and places them near to the genus *Zorochros* or into it as a subgenus sensu DOLIN (2002: 33-34).

One genus of the new tribe Quasimusini, *Striatoquasimus*, includes a species with clearly striate elytra. This character is unique in the tribe and has not been known before for species of the genus *Quasimus* and allied genera. However, all further characters of the type species *S. dolini* sp. nov. classify this species as a member of the new tribe, and being closely allied to those species of the tribe having non-striate elytra.

The majority of species of the tribe Quasimusini have non-striate elytra. However, in some of them, at least the base of elytra is covered with reduced rows of median adjusted punctures, and with a fleeting treatment of this character, the elytra may appear to be striate. Also, this character is not clearly visible sometimes, as the integument of the elytra is micro-reticulate and causes reflexions under the light of a binocular. In this case, the bases of the elytra, appear to be non-striate, although covered with rows of punctures. The character of striate elytra is developed in all groups of the subfamily Negastrinae, except for *Loebliquasis*, *Miquasus*, *Paraquasimus*, *Pseudoquasimus*, *Quasimus*, *Wittmeroquasimus* and *Yukoana*. As the striae on elytra are also present in the majority of the species of all subfamilies of the Elateridae, this structure most probably represents a plesiomorphous character. From this perspective, the non-striate elytra in the species of the genera mentioned above can be taken as a reduction of the original condition and being inherited by the descendants as a result of synapomorphous evolution. *Striatoquasimus* which is included here into the new tribe Quasimusini in our understanding still represents the plesiomorphous structure of the elytra.

3.1.2 Taxonomical characters of the subfamily Negastrinae

The species of the subfamily Negastrinae possess the following common characters:

1. Head with a complete and distinct boundary carina.
2. Pronotum subtrapezoidal to campaniform, slightly too strongly raised centrally, bent laterally.
3. Elytra cuneate to subparallel, and slightly raised; shoulder edged (winged species).
4. Scutellum lingulate to cuneate.
5. Mesepimeron and mesepisternum separated from mesocoxae by meso- and metasternum.
6. Prosternum widened in middle, prosternal sutures arcuate.
7. Tarsi with simple, lobed or lamellate tarsomeres.
8. Claws of tarsi simple or feebly toothed, without setae at base.

3.2 ESTABLISHMENT OF THE NEW TRIBE QUASIMUSINI TRIBUS NOVUM

TYPE GENUS

Quasimus GOZIS, 1886.

The designated type-genus: *Quasimus* is selected in accordance with the ICZN, articles 11.7.1, 35.3 and 63.

JUSTIFICATION

Quasimusini, the new tribe of the subfamily Negastrinae NAKANE & KISHII, 1956, is established to group eight genera (see 3.3 Taxonomy, and the phylogenetic diagram) closely related to the genus *Quasimus* GOZIS, 1886. The individuals of the species of all of these genera share various characters of taxonomical significance above species level, that indicate close phylogenetic relationships of the various species-groups (genera). The high number of common characters of the groups (see the taxonomical characters 9-21 of the tribe Quasimusini below), indicate close relations to all of them, and therefore justifies the assembling of these groups into the next higher taxonomical category: the new tribe Quasimusini. The same characters also separate those genera from furthers of the subfamily Negastrinae known so far.

The type genus has been selected on the fact that the name *Quasimus* represents the oldest available name among the genera of the tribe, and that with the highest number of species described so far.

The new tribe Quasimusini is established to include eight genera within a common group (tribe). The below listed characters of the species of the appertaining genera of this group are taxonomically important on genus level.

Therefore, these characters are significant for the formation of a natural group. The following genera are included:

- Loebliquasis* DOLIN, 1997;
- Miquasus* KISHII, 1959;
- Paraquasimus* DOLIN, 1997;
- Pseudoquasimus* DOLIN, 1997;
- Quasimus* GOZIS, 1886;
- Striatoquasimus* genus novus;
- Wittmeroquasimus* DOLIN, 1993 novus status;
- Yukoana* KISHII, 1959.

TAXONOMICAL CHARACTERS OF THE TRIBE Quasimusini

Beside the characters of the subfamily Negastrinae, the species of the mentioned genera of the new tribe Quasimusini share the following characters:

1. Body minute; body length from approximately 1.40 mm (*Quasimus liliputanus*) up to 4.32 mm (*Wittmeroquasimus yanmenensis*).
2. Body subcylindrical, suboval to obovate.
3. Prosternal sutures distinctly segmented, and lacunose acting as the insertions of the antennae (fig. 1).
4. Third and fourth tarsomere only slightly lobed apically (fig. 11).
5. Nasal space aspirate and without carina (fig. 5).
6. Boundary carina of frons of the head semi-circular (fig. 7) to triangular infundibuliform (fig. 6) apical (best visible from frontal view), and declivous from centre to apex (best visible from lateral view).
7. Eyes semi-spherical (fig. 7), slightly (all genera except *Wittmeroquasimus*) to distinctly (fig. 8) prominent (only *Wittmeroquasimus*).
8. Antennae elongate to moniliform (fig. 9), slightly serrate (fig. 10) or lamellate (A7 of Pd, *Paraquasimus*), and distinctly extended apical from fourth antennomere on; second and third antennomere subcylindrical and slightly extended apical, last antennomere oblong-elliptic, subapically bevelled.
9. Surface of the scutellum smooth to aspirate, without (fig. 2) or with (fig. 3) a more or less visible unguulate impression centrally (A10 of Pd), which raises the lateral margins of its basal half. Scutellum medially longer than wide at basis, or as long as wide (*Yukoana*).
10. Elytra slightly raised, surface even, shoulders prominent; interstices of punctured rows smooth (fig. 11) (all genera except *Striatoquasimus*), or clearly raised, elytra therefore appearing striate (fig. 12) (*Striatoquasimus*).
11. Outline of pronotum subtrapezoidal (A5 of Pd) to campaniform (A4 of Pd).

12. Posterior angles of pronotum without carina (*Loebliquasis*), or with a shortened carina (*Paraquasimus*), *Pseudoquasimus* (A7 of Pd)), or a complete one (fig. 4) which is extending up to the anterior angles (all other genera).

13. Integument micro-punctured on pronotum and microreticulate on elytra.

3.2.1 Establishment of the new subtribe

Loebliquasina subtribus novum

TYPE GENUS

Loebliquasis DOLIN, 1997.

The designated type-genus: *Loebliquasis* is selected in accordance with the ICZN, articles 11.7.1, 35.3 and 63.

JUSTIFICATION

Loebliquasina, the new subtribe of the tribe Quasimusini, is established to group three genera (see 3.3 Taxonomy, and the phylogenetic diagram) closely related to each other. The individuals of the species of the genera *Pseudoquasimus*, *Paraquasimus* and *Loebliquasis* have share various characters. Especially the reduction of the lateral carina of the posterior angles of pronotum is significant for all species of these genera. This character indicates the close relations of all of them and justifies therefore the assembly of these groups into the next higher taxonomical category: the new subtribe Loebliquasina. The same characters also separate those genera from furthers of the tribe Quasimusini.

3.2.2 Establishment of the new subtribe

Quasimusina subtribus novum

TYPE GENUS

Quasimus GOZIS, 1886.

The designated type-genus: *Quasimus* is selected in accordance with the ICZN, articles 11.7.1, 35.3 and 63.

JUSTIFICATION

Quasimusina, the new subtribe of the tribe Quasimusini, is established to group three genera (see 3.3 Taxonomy, and the phylogenetic diagram) closely related to each other. The individuals of the species of *Yukoana*, *Quasimus* and *Miquasus* share various characters. Especially the moniliform antennae and the carina of the posterior angles of pronotum are significant for all species of

these genera. These characters indicate the close relations of all of them and justifies assembling of these groups into the next higher taxonomical category: the new subtribe. The same characters also separate those genera from furthers of the tribus Quasimusini.

3.2.3 Establishment of the new subtribe **Striatoquasina subtribus novum**

TYPE GENUS

Striatoquasimus genus novus.

The designated type-genus: *Striatoquasimus* is the only known genus of the subtribe.

JUSTIFICATION

Striatoquasina, the new subtribe of the tribe Quasimusini, is established for structuring the tribus Quasimusini (see 3.3 Taxonomy, and the phylogenetic diagram) properly. The only known species of the subtribe is the *Striatoquasimus dolini* which is described in this paper as new to sciences. The characters of this species separate it from the other genera and subtribes of the tribe. Especially the apomorphous structure of elytra is significant for this species and indicates the separate phylogenetic lineage.

3.2.4 Establishment of the new subtribe **Wittmeroquasina subtribus novum**

TYPE GENUS

Wittmeroquasimus DOLIN, 1997.

The designated type-genus: *Wittmeroquasimus* is the only known genus of this subtribe.

JUSTIFICATION

Wittmeroquasina, the new subtribe of the tribe Quasimusini, is established for structuring the tribus Quasimusini (see 3.3 Taxonomy, and the phylogenetic diagram) properly. The only known genus of the subtribe is *Wittmeroquasimus*. The apomorphic characters of the species of this genus separates them from the other genera and subtribes of the tribe. Especially the extended body size and the constricted part of the subbase of pronotum are significant to separate these species from furthers of he tribus, and indicate the separate phylogenetic lineage.

3.2.5 The systematic position of the tribe Quasimusini in the animal kingdom

REGNUM ANIMALIA

1. Regnum: Animalia

1.1 Subregnum: Eumetazoa

2. Cladus: Bilateria

2.2 Subcladus: Protostomia

3. Superphylum: Ecdysozoa

3.1 Phylum: Arthropoda

3.2 Section: Mandibulata

3.3 Subphylum: Hexapoda

4. Classis: Insecta

4.1 Subclassis: Pterygota

5. Divisio: Neoptera

5.1 Subdivisio: Endopterygota

6. Superordo: Coleoptera

6.1 Ordo: Coleoptera

6.2 Subordo: Polyphaga

7. Superfamilia: Elateriformia

7.1 Familia: Elateridae

7.2 Subfamilia: Negastrinae

8. Tribus: Quasimusini

8.1 Subtribus: Loebliquasina

8.1.1 Genera: *Loebliquasis*
Paraquasimus
Pseudoquasimus

8.2 Subtribus: Quasimusina

8.2.1 Genera: *Miquasis*
Quasimus
Yukoana

8.3 Subtribus: Striatoquasina

8.3.1 Genera: *Striatoquasimus*

8.4 Subtribus: Wittmeroquasina

8.4.1 Genera: *Wittmeroquasimus*

The species of the tribe Quasimusini are included into the family Elateridae, the subfamily Negastrinae. The positions of the tribe Quasimusini, and the

accessory subtribes and genera in the system of the regnum animalia are given here in linear sectioning. The sectioning is particularly based on works of HENTSCHEL and WAGNER (1996), KAESTNER (1967, 1969, 1972, 1973), KÜKENTHAL et al. (1971), and REMANE et al. (1974).

3.3 ETYMOLOGY

The name of the new tribe is derived from *Quasimus*, the first name for a genus described by GOZIS, 1886 for species of Negastrinae with non striate integument of elytra (selected in accordance with ICZN, articles 63 and 64 (KRAUS O. 2000: 109)). The genus *Quasimus* is well known and can be taken as characteristic for the family-group (see recommendations of the ICZN, article 64A (KRAUS O. 2000: 109)). Article 29.1 of the ICZN regulates the procedure of the naming of a new tribe: "A family-group name is formed by adding to the stem of the name (Art. 29.3) of the type genus, or to the entire name of the type genus (article 55.3) a suffix as specified in Article 29.2" (KRAUS O. 2000: 100-101). For the naming of the new tribe we decided to add suffix to the complete name of the type genus (*Quasimus*), in accordance with the recommendations of the ICZN, article 29A (KRAUS O. 2000: 74). The ICZN, article 29.2 (KRAUS O. 2000: 72) regulates that "... the suffix on the tribe level has to be the INI, that on subtribe level has to be the INA". The selected etymon combined with the suffix results in the name of the new tribe. Therefore, the etymology of the name of the new tribe is as following.

ETYMOLOGY OF THE NEW TRIBE QUASIMUSINI

Quasimus (designated stem) + INI (suffix on tribe level) = **Quasimusini**.

The names of the new subtribes are derived from the stems of the names: *Loebliquasis*, *Quasimus*, *Striatoquasimus* and *Wittmeroquasimus*. For the names of the new subtribes: *Loebliquasina*, *Striatoquasina* and *Wittmeroquasina* we used stems instead the whole generic name to result names of the subtribes that are easier to pronounce. For the etymology of the names of the new subtribes we used the same procedure as for the tribe *Quasimusini*.

ETYMOLOGY OF THE NEW SUBTRIBE LOEBLIQUASINA

Loebliquas (designated stem of *Loebliquasis*) + INA = **Loebliquasina**.

ETYMOLOGY OF THE NEW SUBTRIBE QUASIMUSINA

Quasimus (designated stem: *Quasimus*) + INA = **Quasimusina**.

ETYMOLOGY OF THE NEW SUBTRIBE STRIATOQUASINA

Striatoquas (designated stem of *Striatoquasimus*) + INA = **Striatoquasina**.

ETYMOLOGY OF THE NEW SUBTRIBE WITTMEROQUASINA

Wittmeroquas (designated stem of *Wittmeroquasimus*) + INA = **Wittmerroquasina**.

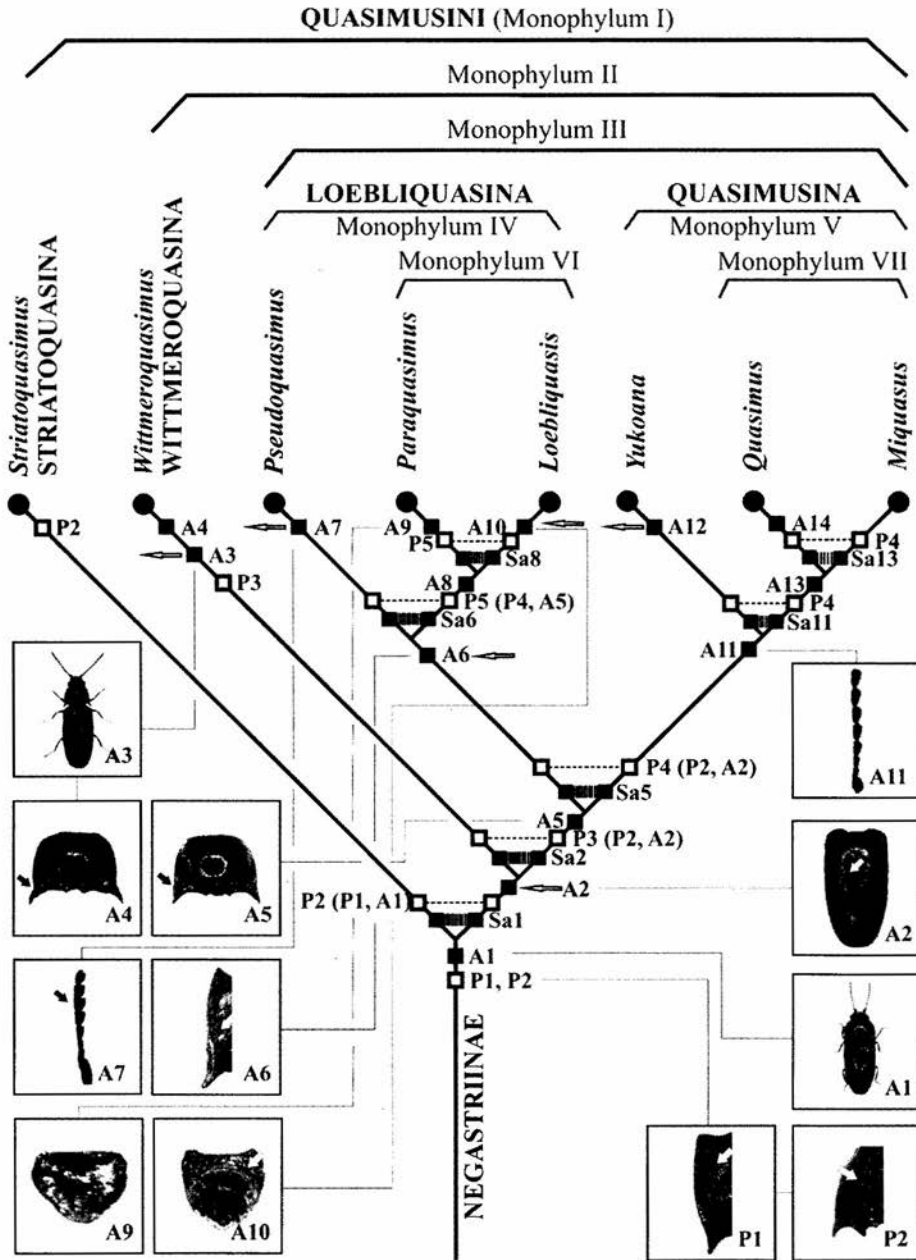
3.4 PHYLOGENETIC HYPOTHESIS ON THE MONOPHYLY OF THE TRIBE QUASIMUSINI

(APPLY TO THE GIVEN PHYLOGENETIC DIAGRAM)

In the phylogenetic line of the monophylum Quasimusini various changes of characters and body transformations important for the reconstruction of the phylogenetic tree of the tribe. Direction of changes of characters and body transformations used in the following hypothesis are such as: transformation of body from subparallel and cuneate form to suboval and obovate form; the change (reduction) of the raised interstices of elytral rows up to even and plain ones; the change of the relative straight lateral line of pronotum up to a constricted one at the beginning of its hind angles; the change of antennae from moniliform up to elongate and serrate; the change of lateral carina of the pronotum from complete to reduced or totally absent; the transformation of the scutellum from cuneate form up to as long as wide.

HYPOTHESIS FOR MONOPHYLA I-VII

Monophylum I. In the ancestral line of the tribe Quasimusini beside the plesiomorphous character P1 (prosternal sutures distinctly segmented and lacunose for the insert of the antennae, which is a common character of the species of the subfamily Negastrinae) and the new character A1 (body suboval to obovate) have evolved. In the species of the further groups of Negastrinae the body appearance is sub-parallel to cuneate. The transformation of body from suboval to obovate appearance has been inherited to the descendants at the time of speciation and is quite different from all other species of the Negastrinae (outgroup character comparison). The direction of changes of this character clearly is that from subcylindrical and cuneate body to suboval to obovate.



A phylogenetic diagram of the tribe Quasimusini (characters P1, P2, and A1-A14): P1, carina of posterior angles of pronotum. P2, prosternal sutures of *Quasimus* sp. A1, habitus. A2, surface of elytra. A3, habitus. A4, form of pronotum. A5, form of pronotum. A6, carina of posterior angles of pronotum (reduction). A7, antennae lamellate. A8, antennae serrate. A9, reduction of carina of posterior angles of pronotum up to anterior third. A10, total reduction of carina of posterior angles of pronotum. A11, antennae moniliform. A12, scutellum medially shorter than wide at basis. A13, scutellum medially longer than wide at basis. A14, scutellum with an unguulate impression centrally.

Alternative: Hundredfold separate and convergent transformation which results in identical phenotypic organization of the mentioned characters would be the alternative to the synapomorphous evolution (according to the principle of parsimony).

Monophylum II. In the ancestral line of the Monophylum II, the plesiomorphous character P1 was already present. The autapomorphous character A2 is taken as new in this ancestral line. The plesiomorphous characters as well as the new character, have been transferred to the descendants at the time of speciation. The direction of change of character is that of raised interspaces of punctured rows of elytra up to a even surface of elytra with smooth interspaces of punctured rows.

Alternative: Hundredfold polyphyletic and convergent transformation which results in identical phenotypic organization of the mentioned characters would be the alternative to the synapomorphous evolution (according to principle of parsimony). The species *Striatoquasimus dolini* is excluded from this Monophylum because of the absence of character A2 (outgroup character comparison). Including the species into the monophylum II would create a paraphyletic group basing on the symplesiomorhous character P2.

Monophylum III. In the ancestral line of the tribe Monophylum III, the plesiomorphous characters P3, P1 and P2 were already present. The apomorphous character A5 evolved and was transferred to the descendants at the time of speciation. The direction of change of character is that of a relatively weak constriction of the pronotum at the beginning of its hind angles up to a conspicuous one.

Alternative: Manyfold polyphyletic and convergent genotypic transformation which results in identical phenotypic organization of the mentioned characters in the subtribes Loebliquasina and Quasimusina would be the alternative to the synapomorphous evolution (according to principle of parsimony). The species *Striatoquasimus dolini* and the species of *Wittmeroquasimus* are excluded from this Monophylum because of the absence of character A5 (outgroup character comparison). Including the mentioned groups into the monophylum III would create a paraphyletic group basing on the symplesiomorhous characters P2 and P3.

Monophylum IV. In the ancestral line of the tribe Monophylum IV, the plesiomorphous character P4 was present. The apomorphous character A6 were transferred to the descendants at the time of speciation. The direction of changes of characters includes the serration of the formerly moniliform antennae and

the reduction of the lateral carina of pronotum which is complete from basis to apex in all other groups of Negastrinae.

Alternative: Manyfold polyphyletic and convergent genotypic transformations which result in identical phenotypic organization of the mentioned characters in the subtribe Loebliquisina would be the alternative to the synapomorphic evolution (according to principle of parsimony). The species *Striatoquasimus dolini* and the species of *Wittmeroquasimus* and the species of the subtribe Quasimusina are excluded from this Monophylum because of the absence of character A6 (outgroup character comparison). Including the species into the monophylum IV would create a paraphyletic group basing on the symplesiomorphous characters P3 and P4.

Monophylum V. In the ancestral line of the tribe Monophylum V, the plesiomorphous character P4 was present. The apomorphic character A11, was transferred to the descendants at the time of speciation. The direction of change of character is that from moniliform antennae up to elongate antennae with antennomeres 4-10 slightly extended apically, last antennomere oblong-elyptic, subapically bevelled. This character is different from that of all other species of the further groups of Quasimusini and the whole Negastrinae. The antennae of the majority of species of this subfamily are moniliform the antennomeres are conspicuously extended apically.

Alternative: Manyfold polyphyletic and convergent genotypic transformations which result in identical phenotypic organization of the mentioned characters in the subtribe Quasimusina would be the alternative to the synapomorphic evolution (according to principle of parsimony). The species *Striatoquasimus dolini*, the species of *Wittmeroquasimus* and the species of the subtribe Loebliquisina are excluded from this Monophylum because of the absence of character A11 (outgroup character comparison). Including the species into the monophylum V would create a paraphyletic group basing on the symplesiomorphous characters P3, P4 and P5.

Monophylum VI. In the ancestral line of the tribe Monophylum VI, the plesiomorphous characters P5 (P4, A5) were present. The apomorphic character A8 was transferred to the descendants at the time of speciation. The direction of change of character is the reduction of the lateral carina of the pronotum which is just visible in *Paraquasimus* and absent in *Leobliquisis* but complete in all other genera of the group.

Alternative: Manyfold polyphyletic and convergent genotypic transformation which results in identical phenotypic organization of the mentioned characters in the species of *Leobliquisis* and *Paraquasimus* would be the alternative to the

synapomorphous evolution (according to principle of parsimony). The species *Striatoquasimus dolini*, the species of *Wittmeroquasimus*, *Pseudoquasimus* and the species of the subtribe Quasimusina are excluded from this Monophylum as of the absence of character A8 (outgroup character comparison). Including the species into the monophylum VI would create a paraphyletic group basing on the symplesiomorhous characters P4 and P5.

Monophylum VII. In the ancestral line of the tribe Monophylum VII, the plesiomorphous characters P4 were present. The apomorphous character A13 was transferred to the descendants at the time of speciation. The form of scutellum separates *Quasimus* and *Miquasus* from *Yukoana* and from all other groups of the tribe Quasimusini. The cuneate scutellum is as long as wide, basally straight, and acute apically.

Alternative: Manyfold polyphyletic and convergent genotypic transformations which results in identical phenotypic organization of the mentioned characters in the species of *Quasimus* and *Miquasus* would be the alternative to the synapomorphous evolution (according to principle of parsimony). The species *Striatoquasimus dolini*, the species of *Wittmeroquasimus*, *Yukoana* and the species of the subtribe Loebliquisina are excluded from this Monophylum because of the absence of character A13 (outgroup character comparison). Including the species into the Monophylum II would create a paraphyletic group basing on the symplesiomorhous characters P3 and P4.

RESULTS AND DISCUSSIONS

As results of the phylogenetic analysis we received a systematic structure of the tribe Quasimusini which includes seven higher monophyletic groups (monophyla I-VII). Four of them being grouped on subtribes level, as the monophyletic relation of the belonging genera of the various groups, are justified by monophyletic hypotheses.

The subtribe Quasimusina (monophylum V) includes currently three genera: *Yukoana*, *Quasimus* and *Miquasus*. Within this group, the genera *Quasimus* and *Miquasus* are hypothesized adelphotaxa. Both genera obviously have closer phylogenetic relations to each other, then each of them with the genus *Yukoana* (differing especially in the form of scutellum).

The subtribe Loebliquisina also includes three genera: *Pseudoquasimus*, *Paraquasimus* and *Loebliquisis*. Also, *Loebliquisis* and *Paraquasimus* are justified in this study as adelphotaxa, and *Pseudoquasimus* as a singular genus (reduction of lateral carina of the pronotum, which is visible in *Pseudoquasimus* up to basal half of the pronotum at best, and absent in *Loebliquisis*). In accordance with our hypothesis, for the genera *Wittmeroquasimus* and *Striatoquasimus*

currently there are also no adelphotaxa known. These genera are accepted as singular genera without a known sister-group. However, to get a homogenous systematic structure of the tribe, we also established subtribes for the singular genera in which we include *Wittmeroquasimus* (subtribe Wittmeroquasina) and *Striatoquasimus* (subtribe Striatoquasina).

3.5 A KEY TO THE GENERA OF THE TRIBE QUASIMUSINI

1. Punctured rows of elytra recognizable from base to apex; elytra appearing striate *Striatoquasimus* **genus novus.**
- Punctured rows of elytra rudimentary at basis or absent; elytra appearing non-striate **2.**
2. Carina of posterior angles of pronotum extending up to anterior angles of the latter. **3.**
- Carina of posterior angles of pronotum not extending to anterior angles of the latter or being totally absent **6.**
3. Body subparallel; antennae moniliform from fourth antennomere on; posterior angles of pronotum concave subbasally, and completely and distinctly divergent *Wittmeroquasimus* **DOLIN, 1993.**
- Body obovate to suboval; antennae serrate from fourth antennomere on; posterior angles of pronotum straight to slightly concave subbasally, and divergent at their apices only **4.**
4. Scutellum triangular, clearly wider at basis than long across median line *Yukoana* **KISHII, 1959.**
- Scutellum cuneate, clearly smaller at basis than long across median line **5.**
5. Scutellum plane *Miquasus* **KISHII, 1959.**
- Scutellum with an unguulate impression centrally *Quasimus* **GOZIS, 1886.**
6. Carina of posterior angles of pronotum absent *Loebliquasis* **DOLIN, 1997.**
- Carina of posterior angles of pronotum extended to anterior third of the latter at best **7.**
7. Carina of posterior angles of pronotum extended to anterior third of the latter; antennae apical extended from fourth or lamellate from fifth antennomere on *Paraquasimus* **DOLIN, 1997.**
- Carina of posterior angles of pronotum extending up to anterior half of the latter; antennae serrate from fourth antennomere on *Pseudoquasimus* **DOLIN, 1997.**

3.6 GEOGRAPHICAL CHECK-LIST OF THE GENERA OF THE TRIBE QUASIMUSINI

The geographical overview below, constitutes a rough help for orientation only. The sectioning is given as political pattern.

(The given overview is taken from data of the JUNK and SCHENKLING catalogues (1925-27), from the data of the material of CSV, and from a so far unpublished catalogue of Prof. Dr. G. PLATIA, of Elateridae described after the abovementioned catalogue).

DISCUSSIONS TO THE GEOGRAPHICAL CHECK-LIST

Of the genus *Striatoquasimus* genus novus as a member of the tribe Quasimusini, currently there is only one species known from Indonesia (Irian Jaya): *S. dolini*.

The genus *Wittmeroquasimus* DOLIN, 1993, was described by DOLIN (1993) as a subgenus of *Quasimus* and which is raised in this paper to generic status. The species have distributions in China, Indochina and in the Himalaya. Together, nine species of *Wittmeroquasimus* are known until today.

Tab. 1. General distribution of the tribe Quasimusini

Tribe Quasimusini	Region								
Genus	Europe Russia	Philip- pines	China Taiwan	Indo- china	Japan Korea	Malay- sia	Indo- nesia	India	Hima- laya
<i>Striatoquasimus</i>							x		
<i>Wittmeroquasimus</i>			x	x					x
<i>Yukoana</i>		x	x	x	x	x		x	x
<i>Miquasus</i>			x		x	x		x	x
<i>Quasimus</i>	x		x	x	x	x	x	x	x
<i>Loebliquasis</i>						x			
<i>Paraquasimus</i>						x	x		
<i>Pseudoquasimus</i>						x			

Yukoana KISHII, 1959 has is distributed in the Palaearctic region (Japan, Korea) and in the Oriental region (Philippines, China, Indochina, Malaysia, India, and Himalaya).

Miquasus KISHII, 1959 is known from Taiwan, Japan, Malaysia, India and from Himalaya.

Quasimus GOZIS, 1886 the type genus of Quasimusini has species distributed across Europe and Russia, Turkey, Korea, China and Taiwan, in Indochina, Japan, Malaysia, Indonesia, India and in the Himalaya. With 94 species the genus *Quasimus* currently includes most of the species of Quasimusini. *Loebliquasis*

DOLIN, 1997 is known from Malaysia. *L. burkhardti* which is currently the only known species of this genus has been found at the Mount Kinabalu (Sabah, Borneo).

Paraquasimus DOLIN, 1997 currently is known from Indonesia and Malaysia and includes two species.

Pseudoquasimus DOLIN, 1997 is also known from Malaysia only, and is present by one species.

The genus *Quasimus* has the most widespread distribution of species of the new tribe Quasimusini, and the habitats of its species cover the landmass from Europe to Japan, including the Himalaya, India and China. The genus also is present in the islands of the Indochinese subregion, as well as in Indonesia and Malaysia. *Loebliquasis*, *Paraquasimus* and *Pseudoquasimus*, as well as the new genus *Striatoquasimus* seem to be restricted to the islands of Indonesia and Malaysia. *Wittmeroquasimus* is known from China, from the Indochinese subregion and from Himalaya, and the distributions seem to be restricted to these territories. *Yukoana* also seem to be widespread on the continent of the Indochinese subregion, India and Himalaya, as well as on the islands of the Philippines, China, Taiwan, Japan, Korea and Malaysia. *Miquasus* also has a distribution similar to this of *Yukoana* except for Korea, the Indochinese subregion, and the Philippines, from where this genus is currently unknown.

The genus *Quasimus* seems to be the most studied and the richest in species of the new tribe. Not less than 36 species of the genus have been described from Japan so far and from the islands of this country exclusively.

From this perspective, one easily can imagine that some more species of *Quasimus* and related genera will be discovered and described from China and from the Indochinese and the Malayan subregions within the next years.

4. THE SPECIES OF THE TRIBE QUASIMUSINI FROM CHINA

4.1 GEOGRAPHICAL AND CHOROLOGICAL REPORT

The study on the Chinese species of the new tribe Quasimusini including the fauna of the provinces Fujian, Hubei, Shaanxi, Sichuan, and Yunnan.

The species described in this paper have been found in an altitude from 1500 up to 3500 m (*Quasimus*), and from 2200 up to 3700 m (*Wittmeroquasimus*).

4.2 DESCRIPTION AND REVIEW OF THE SPECIES OF THE TRIBE QUASIMUSINI FROM CHINA

All species of the new tribe Quasimusini from China, introducing in this study belong to the genera *Quasimus*, *Wittmeroquasimus* and *Yukoana*. Together we found 13 species of the genus *Quasimus*, seven of *Wittmeroquasimus* and one of *Yukoana* which we are going to introduce in the following.

4.2.1 Subtribe *Quasimusina subtribus novum*

4.2.1.1 Genus *Quasimus* Gozis, 1886

Quasimus Gozis, 1886: 22.

TYPUS GENERIS

Elater minutissimus GERMAR, 1822.

***Quasimus anjae* sp. nov.**

(Fig. 15)

TYPE LOCATION

China: Hubei province, Tongshan.

TYPE MATERIAL

Holotype ♀ (CSV): China: Hubei, 20 km north-west of Tongshan, stream valley, 6. and 19.VI.2002, leg. J. TURNA.

Paratypes 5 ♀♀ (CPG, CSV, CTW): Same data as holotype.

DIAGNOSIS

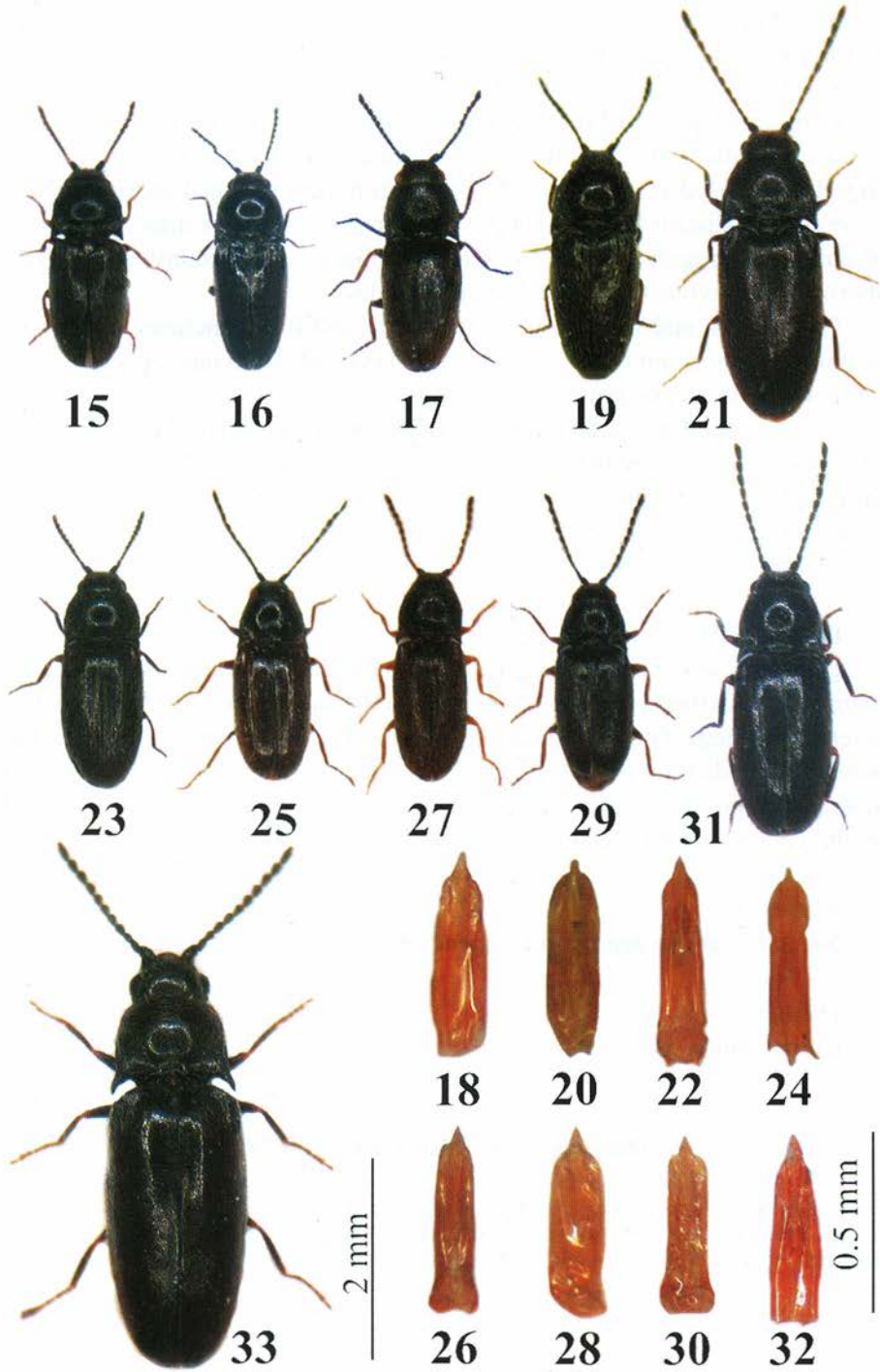
Holotypus ♀. Suboval, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; black, epipleura and posterior angles of pronotum brownish subapical, femora light brown, tibia and tarsi yellow, antennae brownish, first antennomere black, second and third antennomere light yellow; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence argenteal and semi-erected; dimensions: length: 1.80 mm, width: 0.65 mm.

DESCRIPTION

Head with distant, fine, circular and simple punctures, interstices once to double their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, slightly serrate from fourth antennomere on, outreaching the posterior angles of pronotum by the length of half of the last antennomere, their apex are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, each of them one and a half times as long as wide, and slightly extended apical; fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.54:0.65), slightly and regularly raised on centre, slightly bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum divergent at the apices only, and with a distinctly raised carina which is reaching the apex of pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and simple, very fine, just visible, interstices irregularly, once to double their diameter, subbasally slightly denser, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Figs. 15–33 (see next page). Habitus and aedeagus of new *Quasimus*- and *Wittmeroquasimus*-species from China: 15–17, 19, 21, 23, 25, 27, 29, 31, 33 – habitus: 15 – *Quasimus anjae* sp. nov., 16 – *Q. fujianensis* sp. nov., 17 – *Q. kubani* sp. nov., 19 – *Q. steffenskyi* sp. nov., 21 – *Q. yipinglangensis* sp. nov., 23 – *Q. yunnanus* sp. nov., 25 – *Wittmeroquasimus cangshanensis* sp. nov., 27 – *W. claudiae* sp. nov., 29 – *W. gaoligongshanensis* sp. nov., 31 – *W. hubeiensis* sp. nov., 33 – *W. yanmenensis* sp. nov., 18, 20, 22, 24, 26, 28, 30, 32 – aedeagus: 18 – *Q. kubani* sp. nov., 20 – *Q. steffenskyi* sp. nov., 22 – *Q. yipinglangensis* sp. nov., 24 – *Q. yunnanus* sp. nov., 26 – *Wittmeroquasimus cangshanensis* sp. nov., 28 – *W. claudiae* sp. nov., 30 – *W. gaoligongshanensis* sp. nov., 32 – *W. hubeiensis* sp. nov.



Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, with an unguulate impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without a inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures, interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Males are unknown.

DIFFERENTIAL DIAGNOSIS

Quasimus anjae is closely allied to *Q. improvisus*, but may be easily distinguished from this species by the smaller body, and by the form and colour of antennae and legs. The new species is also closely allied to *Q. shaxianensis*, but may be easily distinguished from this species by the different colour of legs and antennae. From the similar *Q. wittmeri*, the new species can be distinguished by the yellow second and third antennomere.

ETYMOLOGY

Named after our dear woman-friend, Anja Sand, Blieskastel.

DISTRIBUTION

China: Hubei province.

Quasimus exilis (MOTSCHULSKY, 1858)

Cryptohypnus exilis MOTSCHULSKY, 1858: 58; CANDÈZE 1891: 118.

Hypnoidus exilis (CANDÈZE 1891; SCHENKLING 1925: 210).

Quasimus exilis (DOLIN 1997a: 156; 2001: 121).

NEW MATERIAL

China: Yunnan, Yipinglang, 1800-2000 m, 17.-20.VI.1994, 1 spm., leg. V. KUBÁŇ.

DISTRIBUTION

Myanmar (type locality).

China: Yunnan.

REMARKS

The species described by MOTSCHULSKY (1858) as *Cryptohypnus exilis* has been cited by CANDÈZE (1891), but being transferred to the genus *Hypnoidus*. This change of the genus was overtaken by SCHENKLING (1925), but DOLIN (1997a) transferred the species to *Quasimus*. Also DOLIN (1997a: 156) provided a re-description of the type material, in which he explicit described also the appearance of traces rows at the base of the elytra. This was mentioned too in the original description given by MOTSCHULSKY (1858) and is also congruent with the results of our study: in many specimen of the genus *Quasimus* and closely allied genera, there are traces of punctured rows at the elytra bases. This is contrary to the common meaning, that in specimen of the genus *Quasimus* the surface of the elytra is totally non-striate.

Quasimus fujianensis sp. nov.

(Fig. 16)

TYPE LOCATION

China: Fujian province, Fengshui Guan.

TYPE MATERIAL

Holotype ♀ (CSV): China: Fujian, Fengshui Guan, 1700 m, 1.-4.VI.2004, leg. J. TURNA.

Paratype ♀ (CSV): Same data as holotype, leg. J. TURNA.

DIAGNOSIS

Holotypus ♀. Suboval, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; black, legs brownish; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence bronze-coloured and semi-erected; dimensions: length: 2.60 mm, width: 0.90 mm.

DESCRIPTION

Head with very distant, fine, circular and simple punctures, interstices twice to fourth their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, slightly serrate from fourth antennomere on, not reaching the posterior angles of pronotum by the length of the last antennomere, their apex are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, second one and a half times as long as wide, third slightly shorter, and both slightly extended apical; fourth to tenth antennomeres slightly longer than third antennomere, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.72:0.90), conspicuously and regularly raised at centre, slightly bent laterally, with a relatively precipitous slope posteriorly; posterior angles of pronotum slightly divergent, and with a distinctly raised carina which is reaching the apex of pronotum; apices of basal angles acute and extended as a fine spine; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and simple, very fine, just visible, interstices irregularly, twice to fourth their diameter, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, with a very fine, just visible unguate impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without a inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery,

third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Males are unknown.

DIFFERENTIAL DIAGNOSIS

Quasimus fujianensis is closely allied to *Q. steffenskyi*, but may be easily distinguished from this species by the suboval form of body, the more distant interstices of punctures on pronotum and head, as well as by the bronze-coloured pubescence.

ETYMOLOGY

Named after the type location.

DISTRIBUTION

China: Fujian province.

Quasimus geminus FLEUTIAUX, 1942

Quasimus geminus FLEUTIAUX, 1942: 8; DOLIN 2001: 121.

NEW MATERIAL

China: Yunnan, Maguan, 1500-1600 m, 25.-26.VI.1994, 13 spm., leg. V. KUBÁŇ; 2 spm., same data but leg. Z. ČERNÍN. Yunnan, Yipinglang, 17.-20.VI.1994, 1 spm., leg. V. KUBÁŇ; Yunnan, Xinjie, 1250-1500 m, 24.VI.1994, 1 spm., leg. V. KUBÁŇ.

DISTRIBUTION

Myanmar: Kambaiti (type locality).

Himalaya: Nepal.

China: Yunnan.

Laos: Phongsaly province; Hua Phan province; Bolikhamxai province.

REMARKS

The above published data are the first of *Quasimus geminus* from China.

Quasimus horaki DOLIN, 1997a

Quasimus horaki DOLIN 1997a: 150.

NEW MATERIAL

China: Yunnan, Gaoligong mts., 2200-2500 m, 8.-16.V.1995, 1 spm., leg. V. KUBÁŇ.

DISTRIBUTION

Thailand: Mae Hong Son (type locality).

China: Yunnan province.

REMARKS

The above published data are the first of *Quasimus horaki* from China.

***Quasimus kubani* sp. nov.**

(Figs. 17-18)

TYPE LOCATION

China: Yunnan province, Jizushan mts.

TYPE MATERIAL

Holotype ♂ (TICB): China: Yunnan, Jizushan mts., 2500-3100 m, 30.V.-3.VI.1993, leg. V. Kubáň.

Paratypes 7 ♂♂, 7 ♀♀ (TICB, CPG, CSV, CTW): Same data as holotype, 9 spm, leg. V. KUBÁŇ.; same location but 2500-2700 m, 6.-10.VII.1994, 1 spm., leg. V. KUBÁŇ.; Yulongshan mts., Baishui, 2900-3500 m, 7.-12.VII.1990; 1 spm., leg. V. KUBÁŇ.; Dali, 1600-2000 m, 5.-8.VII.1990, 1 spm., leg. L. & M. BOČÁK; Yunnan, Baoshan env., 6.-8.VI.1993, 1 spm., leg. E. JENDEK & O. SAUSA; Yunnan, Lugu Lake, Luo Shui, 8.-9.VII.1992, 1 spm., leg. E. JENDEK & O. SAUSA.

DIAGNOSIS

Holotypus ♂. Suboval, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; black, elytra and legs blackish-brown, apex of prosternal elongation and tarsi brownish; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence argenteal and semi-erected; dimensions: length: 2.10 mm, width: 0.71 mm.

DESCRIPTION

Head with densely, fine, circular and umbilici punctures, interstices once their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary

carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, slightly serrate from fourth antennomere on, not reaching the posterior angles of pronotum by the length of the half of the last antennomere, their apex are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, second one and a half times as long as wide, third slightly shorter, and both slightly extended apical; fourth to tenth antennomeres slightly longer than third antennomere, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.61:0.71), slightly and regularly raised on centre, slightly bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum slightly divergent, and with a distinctly raised carina which is reaching the apex of pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and finely umbilici, interstices irregularly, once to twice their diameter, and on the whole surface flat and semi-matt; pubescence declivous from apex, basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface very slightly raised, and aspirate, with a just visible and fine, unguulate impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without a inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe widened apical, extending apices of the paramere conspicuously, the latter slightly bent apical, and without any hairs.

Females have slightly shorter antennae than the males, which not reaching the posterior angles of the pronotum for the length of the last two antennomeres.

DIFFERENTIAL DIAGNOSIS

Quasimus kubani is closely allied to *Q. exilis*, but may be easily distinguished from this species by the smaller scutellum, the denser punctures of pronotum, by the argenteal pubescence of integument, and by the different form of aedeagus.

ETYMOLOGY

Named after our good friend and collector of the new species, Mr. V. KUBÁŇ, Brno.

DISTRIBUTION

China: Yunnan province.

***Quasimus meghalayanus* DOLIN, 1993**

Quasimus meghalayanus DOLIN, 1993a: 181.

NEW MATERIAL

China: Yunnan, Weibaoshan mts., western slope, 2000-2800 m, 25.-28.VI.1992, 1 spm., leg. V. KUBÁŇ.

DISTRIBUTION

India: Meghalaya (type locality).
China: Yunnan province.

REMARKS

The above published data are the first of *Quasimus meghalayanus* from China.

***Quasimus shaxianensis* JIANG, 1999**

Quasimus shaxianensis JIANG, 1999: 186.

NEW MATERIAL

China: Fujian, Fengshui Guan, 1700 m, 1.-4.VI.2004, 10 spm., leg. J. TURNA; Yunnan, Weibaoshan mts., western slope, 2000-2800 m, 25.-28.VI.1992, 1 spm., leg. V. KUBÁŇ.

DISTRIBUTION

China: Fujian, Yunnan provinces.

REMARKS

The above published data are the second ever of *Quasimus shaxianensis*.

Quasimus steffenskyi sp. nov.

(Figs. 19-20)

TYPE LOCATION

China: Hubei province, Dashenongjia Mts.

TYPE MATERIAL

Holotype ♂ (CSV): China: Hubei, Dashenongjia mts, 2100-2900 m, 10.-14.VI.2002, leg. J. TURNA.

Paratypes 4 ♂♂, 6 ♀♀ (CPG, CSV, CTW): Same data as holotype, 4 spm.; same data as holotype but 21.-24.VI.2001, 4 spm., leg. J. Turna; Daloshan forest park, 9.-10.V.2004, 1 spm., leg. J. TURNA; Fujian, Shaowu, 5.-10.VII.1991, 1 spm., leg. R. CERVENKA.

DIAGNOSIS

Holotype ♂. Obovate, surface of pronotum and elytra slightly raised, shiny, and covered with pilosulose hairs; black, tibiae and tarsomeres brown, femora blackish-brown, antennae blackish-brown, last antennomere reddish apical; integument micro-punctured, pubescence argenteal and semi-erected; dimensions: length: 2.25 mm, width: 0.90 mm.

DESCRIPTION

Head with distant, fine, circular and simple punctures, interstices double to twice their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, slightly serrate from fourth antennomere on, reaching the posterior angles of pronotum, their apex are covered with 8–12 conspicuously long and erected trichana; second and third antennomere cylindrical, each of them twice as long as wide, and slightly extended apical; fourth to tenth antennomeres as long as second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.60:0.90), slightly and regularly raised on centre, conspicuously bent laterally, and with a relatively precipitous

slope posteriorly; posterior angles of pronotum divergent, and with a distinctly raised carina which is reaching the apex of pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and simple, interstices irregularly, once to twice their diameter, and on the whole surface flat and shiny; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, with an unguate impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without an inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant fine punctures, interstices flat and semi-matt; pubescence short and declivous.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe extending apices of the paramere slightly, the latter bent apical, and covered with a fine tuft of long protruding hairs.

Females are of the same shape than the males, with slightly shorter antennae, which not reaching apices of the posterior angles of pronotum for the length of the last antennomere.

DIFFERENTIAL DIAGNOSIS

Quasimus steffenskyi is closely allied to *Q. fujianensis*, but may be easily distinguished from this species by the shorter antennae, by the more distant punctures of pronotum, and by the form of aedeagus.

ETYMOLOGY

Named after our good friend and colleague PETER STEFFENSKY, Blieskastel.

DISTRIBUTION

China: Hubei; Fujian provinces.

***Quasimus subovalis* FLEUTIAUX, 1930**

Quasimus subovalis FLEUTIAUX, 1930: 643.

NEW MATERIAL

China: Hubei, 10 km east of Wufeng, 2.IX.2004, 1 spm., leg. J. TURNA; Yunnan, Maguan, 1500-1600 m, 25.-26.VI.1994, 1 spm., leg. V. KUBÁŇ; China: Yunnan, Yipinglang, 2000 m, 8.-10.VI.1993, 7 spm., leg. V. KUBÁŇ.

DISTRIBUTION

Vietnam: Tonkin (type locality).

Malaysia.

China: Sichuan; Yunnan provinces.

REMARKS

The above published data are the first of *Quasimus subovalis* for China.

***Quasimus wittmeri* DOLIN, 1993a**

Quasimus wittmeri DOLIN, 1993a: 189.

NEW MATERIAL

China: Sichuan, pass 20 km south of Muli/Bowa, mixed forest, 3500 m, 25.VII.1995, 2 spm. (CSV), leg. J. TURNA; Sichuan, Jiushaigou, 2400 m, 29.VI.1996, 1 spm. (CSV), leg. D. ERBER; Sichuan: pass between Wupo and Jinyang, *Corylus-Rhododendron-Quercus* shrubs, 2600-2700 m, 15.-21.VI.2004, 1 spm., leg. R. FABBRI; Yunnan, Habashan mts., SE slope, 2000-3000 m, 10.-13.VII.1992, 1 spm., leg. V. KUBÁŇ (in CPG, det. Dolin as *Quasimus (Miquasus)* in the original description DOLIN (1993a): *Quasimus* (s. str.).

DISTRIBUTION

Himalaya: Nepal; Bhutan (type locality).

China: Sichuan and Yunnan provinces.

REMARKS

The above published data are the first of *Quasimus wittmeri* from China.

Quasimus yipinglangensis sp. nov.

(Figs. 21-22)

TYPE LOCATION

China: Yunnan province, Yipinglang.

TYPE MATERIAL

Holotype ♂ (TICB): China: Yunnan, Yipinglang, 1800-2000 m, 17.-20.VI.1994, leg. V. KUBÁŇ.

Paratypes 4 ♀♀, 7 ♀♀ (CSV, TICB): Same data as holotype, 7 spm., leg. V. KUBÁŇ; same data as holotype, but leg. Z. ČERNIN, 1 spm.; Yunnan, Gaoligong mts., 2200-2500 m, 8.-16.V.1995, 1 spm., leg. V. KUBÁŇ; Yunnan, Dongchuan, 1500-3200 m, 3 spm., leg. V. KUBÁŇ.

DIAGNOSIS

Holotypus ♂: Suboval, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; black, femora, tibia and tarsi brownish, knees and apices of tarsi are slightly lighter; integument micro-punctured, pubescence bronze-coloured and semi-erected; dimensions: length: 3.21 mm, width: 1.11 mm.

DESCRIPTION

Head with dense, fine, circular and umbilici punctures, interstices once their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, slightly serrate from fourth antennomere on, outreaching the posterior angles of pronotum by the length of the last two antennomeres, their apexa are covered with 8-12 conspicuously long and erected trichana; second and third antennomere subcylindrical, each of them one and a half times as long as wide, and slightly extended apical; fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum subtrapezoidal, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.82:1.11), slightly and regularly raised on centre, slightly bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum slightly divergent at the apices only, and with a distinctly raised carina which is reaching the apex of pronotum;

apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and umbilici, very fine, just visible, interstices irregularly, once to double their diameter, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised and aspirate, with an unguulate impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without a inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures, interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe extending apices of the paramere conspicuously, the latter slightly but regularly bent apical, with a single bristle at apex.

Females have shorter antennae, which just reaching apices of posterior angles of pronotum.

DIFFERENTIAL DIAGNOSIS

Quasimus yipinglangensis is closely allied to *Q. subovalis*, but may be easily distinguished from this species by the longer antennae, which are outreaching the posterior angles of pronotum by the length of the last two antennomeres, by the bronze-coloured pubescence, and by the different form of male genitalia.

ETYMOLOGY

Named after the type location.

DISTRIBUTION

China: Yunnan province.

Quasimus yunnanus sp. nov.

(Figs. 23-24)

TYPE LOCATION

China: Yunnan province, Jizu shan mts.

TYPE MATERIAL

Holotype ♂ (TICB): China: Yunnan, Jizu shan mts., 2500-2700 m, 6.-10.VII.1994, leg. V. KUBÁŇ.

Paratypes 31 ♂♂, 17 ♀♀ (TICB, CPG, CSV, CTW): Same data as holotype, 12 spm., leg. V. KUBÁŇ; Yunnan, Hutiao gorge, Jinsha, 2000 m, 18.-22.VII.1992, 1 spm., leg. V. KUBÁŇ; Yunnan, Dongchuan, 1500-3200 m, 28.VI.-3.VII.1994, 6 spm., leg. V. KUBÁŇ; Yunnan, Xinjie, 1250-1500 m, 24.VI.1994, 1 spm., leg. V. KUBÁŇ; Yunnan, Hengduan mts., part Meil I, 2700 m, 5.-8.VII.1996, 2 spm., leg. V. KUBÁŇ; Yunnan, Sichuan, Emei mts., 1000 m, 4.-20.V.1989, 1 spm., leg. V. KUBÁŇ; Shaanxi, Quinling mts, Xunyangba, 1000-1300 m, 23.V.-13.VI.2000, 2 spm., leg. V. KUBÁŇ; same location but 2000-2250 m, 14.-18.VI.2000, 1 spm., leg. V. KUBÁŇ; same location but Lianghekou, 500 m, 18.-19.VI.1998, 1 spm., leg. V. KUBÁŇ; Yunnan, Cangshan mts., 2600-3100 m, 5.-6.VI.1993, 11 spm., leg. V. KUBÁŇ; Yunnan, Jiasa river, 1400 m, 21.V.1993, 1 spm., leg. V. KUBÁŇ; Yunnan, Habashan mts., south-east slope, 2000-3000 m, 10.-13.VII.1992, 2 spm., leg. V. KUBÁŇ; Yunnan, Yulongshan mts., Baishui, 2900-3500 m, 7.-12.VII.1992, 2 spm., leg. V. KUBÁŇ; Yunnan, Lugu lake, 8.-9.VII.1992, 3 spm., leg. E. JENDEK; Yunnan, Dali, 1600-2000 m, 5.-8.VII.1990, 2 spm., leg. L. & M. BOČÁK.

DIAGNOSIS

Holotypus ♂. Suboval, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; black, legs and elytra blackish-brown; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence argenteal and semi-erected; dimensions: length: 2.20 mm, width: 0.75 mm.

DESCRIPTION

Head with distant, fine, circular and simple punctures, interstices once to twice their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate,

slightly serrate from fourth antennomere on, not reaching the posterior angles of pronotum by the length of the last two antennomere, their apex are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, second one and a half times as long as wide, third slightly shorter, and both slightly extended apical; fourth to tenth antennomeres slightly longer than third antennomere, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum semi-globular, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.61:0.75), slightly and regularly raised at centre, slightly bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum straight, not divergent, and with a distinctly raised carina which is reaching the apex of pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and finely umbilici, interstices irregularly, once to third their diameter, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface very slightly raised, and asperate, with a just visible and fine, unguate impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without a inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures, interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe widened subapical, extending apices of the paramere slightly, the latter subapical bevelled, slightly bent apical, and without any hairs.

Females have shorter antenna than males, not reaching the posterior angles of pronotum by the length of the last three antennomeres.

DIFFERENTIAL DIAGNOSIS

Quasimus yunnanus is closely allied to *Q. kubani*, but may be easily distinguished from this species by the shorter antennae, the denser punctures of pronotum, and by the different form of aedeagus.

ETYMOLOGY

Named after the type location.

DISTRIBUTION

China: Yunnan; Sichuan; Shaanxi provinces.

4.2.1.2 Genus *Yukoana* KISHII, 1959

Yukoana KISHII, 1959: 7.

TYPUS GENERIS

Cryptohypnus ellipticus CANDÈZE, 1873.

Yukoana tenasserimensis ÔHIRA, 1970

Yukoana tenasserimensis ÔHIRA, 1970: 239.

NEW MATERIAL

China: Yunnan, Maguan, 1500-1600 m, 25.-26.VI.1994, 1 spm. (CSV), leg. Z. ČERNIN.

DISTRIBUTION

Myanmar: Tenasserim (type locality).

China: Yunnan province.

Nepal: Sankhua Sabha district; Dolakha district.

REMARKS

The above published data are the first of *Yukoana tenasserimensis* from China. DOLIN (2001) is treating *Y. tenasserimensis* as a subspecies of *Q. geminus*. The smaller larger body of *Y. tenasserimensis*, the more semis globular pronotum, the shorter antennae, and different male genitalia clearly separates the first from the latter species.

4.2.1.3 A key to the species of the genus *Quasimus* from China

1. Body obovate; pronotum subparallel to slightly bent laterally 2.
- Body suboval; pronotum distinctly to extremely bent laterally 5.
2. Pubescence bronze-coloured 3.
- Pubescence argenteal 4.
3. Body length up to 2.0 mm; legs black ... *Q. exilis* (MOTSCHULSKY, 1858).
- Body length up to 2.5 mm; legs brown *Q. horaki* DOLIN, 1997a.
4. Apices of posterior angles of pronotum straight *Q. subovalis* FLEUTIAUX, 1930.
- Apices of posterior angles of pronotum divergent 6.
5. Antennae not reaching posterior angles of pronotum for the length of the last antennomere *Q. shaxianensis* JIANG, 1999.
- Antennae reaching posterior angles of pronotum *Q. steffenskyi* sp. nov.
6. Antennae brownish and/or yellowish 7.
- Antennae black 8.
7. Antennae of species brownish, last antennomere yellow apical *Q. wittmeri* DOLIN, 1993a.
- Antennae of species brownish, second and third antennomere yellow *Q. anjae* sp. nov.
8. Pronotum subtrapezoidal 9.
- Pronotum semi-globular to campaniform 10.
9. Antennae outreaching posterior angles of pronotum by the length of the last two antennomeres; pronotum subtrapezoidal, along median line distinctly shorter than wide at the posterior angles (length-width ratio: 0.82:1.11) *Q. yipinglangensis* sp. nov.
- Antennae outreaching posterior angles of pronotum by the length of the last antennomere; pronotum subtrapezoidal, along median line slightly shorter than wide at the posterior angles (length-width ratio: 0.72:0.91) *Q. geminus* FLEUTIAUX, 1941.
10. Pubescence bronze-coloured; pronotum campaniform 11.
- Pubescence argenteal; pronotum semi-globular 12.
11. Interstices of umbilici puncture on pronotum once their diameter *Q. meghalayanus* DOLIN, 1993.
- Interstices of simple punctures on pronotum twice to fourth their diameter *Q. fujianensis* sp. nov.
12. Antennae not reaching posterior angles of pronotum for the length of half of the last antennomere *Q. kubani* sp. nov.
- Antennae not reaching posterior angles of pronotum for the length of the last two antennomeres *Q. yunnanus* sp. nov.

4.2.2 Subtribe **Wittmeroquasina subtribus novum**4.2.2.1 Genus **Wittmeroquasimus DOLIN, 1993a novus status**

Wittmeroquasimus DOLIN, 1993a: 195.

DOLIN (1993a) described in Entomologica Basiliensia the subgenus, *Wittmeroquasimus*, which is differing from *Quasimus* by the spherical eyes, and the long antennae, which exceeding the posterior angles of pronotum. Further differences, not mentioned by DOLIN (1993a), are the triangular and apical infundibuliform frons, the incrassate antennomeres, the conspicuously divergent apices of posterior angles of pronotum, the length-width ratio of elytra, and the size of the specimen.

The study of newly collected material of the group of species described by DOLIN (1993a) as *Wittmeroquasimus* result in the necessity to separate this group from *Quasimus* and other genera of the new tribe Quasimusini, and place it with new status as a separate genus.

***Wittmeroquasimus cangshanensis* sp. nov.**

(Figs. 25-26)

TYPE LOCATION

China: Yunnan province, Cangshan.

TYPE MATERIAL

Holotype ♂ (CSV): China: Yunnan, Cangshan, 2600-3100 m, 5.-6.VI.1993, leg. V. KUBÁŇ.

Paratypes 5 ♀♀ (CSV, TICB): Same data as holotype, 5 spm., leg. V. KUBÁŇ.

DIAGNOSIS

Holotypus ♂. Subparallel, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; blackish, basis of pronotum, elytra and legs brownish; integument micro-punctured, pubescence bronze-coloured and semi-erected; dimensions: length: 2.01 mm, width: 0.70 mm.

DESCRIPTION

Head with distant, fine, circular and simple punctures, interstices twice to fourth their diameter; pubescence fine, short and directed to apex, and to lateral

sides; eyes semi-spherical, little prominent; frons infundibuliform apically, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, moniliform from fourth antennomere on, outreaching the posterior angles of pronotum by the length of the last three antennomeres, their apexes are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, second antennomere twice as long as wide, third antennomere one and a half times as long as wide, and slightly extended apical; fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.52:0.71), slightly and regularly raised on centre, bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum conspicuously divergent, and with a distinctly raised carina which is reaching apex of pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum very distant, points circular, and simple, very fine, just visible, interstices irregularly, twice to fourth their diameter, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, without impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without a inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures, interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe extending apices of the paramere conspicuously, the latter subparallel, slightly bent apical.

Females have shorter antennae, which just reaching apices of posterior angles of pronotum.

DIFFERENTIAL DIAGNOSIS

Wittmeroquasimus cangshanensis is closely allied to *W. gaoligongshanensis*, but may be easily distinguished from this species by the brownish colour of basis of pronotum and elytra, by the longer antennae, by the denser punctures of head and pronotum, and by the different form of male genitalia.

ETYMOLOGY

Named after the type location.

DISTRIBUTION

China: Yunnan province.

Wittmeroquasimus claudiae sp. nov.

(Figs. 27-28)

TYPE LOCATION

China: Yunnan province, Gaoligong mts.

TYPE MATERIAL

Holotype ♂ (CSV): China: Yunnan, Gaoligong mts., 2200-2500 m, 8.-16.V.1995, leg. V. KUBÁŇ.

Paratype ♀ (TICB): Same data as holotype.

DIAGNOSIS

Holotypus ♂. Subparallel, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; blackish-brown, apices of posterior angles of pronotum reddish, elytra brownish, legs yellow, antennae blackish-brown, second and third antennomere yellowish; integument micro-punctured, pubescence argenteal and semi-erected; dimensions: length: 2.08 mm, width: 0.62 mm.

DESCRIPTION

Head with distant, fine, circular and simple punctures, interstices twice to fourth their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons infundibuliform apically, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; man-

dible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, moniliform from fourth antennomere on, outreaching the posterior angles of pronotum by the length of the last antennomere, their apexes are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, second antennomere twice as long as wide, third antennomere one and a half times as long as wide, and slightly extended apical; fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.52:0.61), slightly and regularly raised on centre, bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum conspicuously divergent, and with a very vague, short carina which is reaching basal fifth of pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and simple, very fine, just visible, interstices irregularly, twice to fourth their diameter, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, with an unguulate impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without an inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures, interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe extending apices of the paramere conspicuously, the latter subparallel, slightly bent apical.

Female has shorter antennae, just reaching apices of posterior angles of pronotum, apices of posterior angles of pronotum are slightly divergent.

DIFFERENTIAL DIAGNOSIS

Wittmeroquasimus claudiae is closely allied to *W. parallelus*, but may be easily distinguished from this species by the smaller size, by the conspicuously divergent posterior angles of pronotum, by the yellow legs, and by the different form of male genitalia.

ETYMOLOGY

Named after our woman-friend and colleague Dr. CLAUDIA WEBER, Mölschbach.

DISTRIBUTION

China: Yunnan province.

Wittmeroquasimus gaoligongshanensis sp. nov.

(Figs. 29-30)

TYPE LOCATION

China: Yunnan province, Gaoligong mts.

TYPE MATERIAL

Holotype ♂ (CSV): China: Yunnan, Gaoligong mts., 2200-2500 m, 8.-16.V.1995, leg. V. KUBÁŇ.

Paratypes 4 ♂♂, 3 ♀ (CSV, TICB): Same data as holotype, leg. V. KUBÁŇ; same locality, 29 km east-southeast of Tengchong, 2350 m, devast. Decid. forest (beaten from shrubs), 1.VI.2007, 1 spm. (SMNE), leg. D. WRASE.

DIAGNOSIS

Holotypus ♂. Subparallel, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; blackish, legs brownish; integument micro-punctured, pubescence bronze-coloured and semi-erected; dimensions: length: 1.94 mm, width: 0.69 mm.

DESCRIPTION

Head with distant, fine, circular and simple punctures, interstices once to twice their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons infundibuliform apically, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, moniliform from fourth antennomere on, outreaching the

posterior angles of pronotum by the length of the last two antennomeres, their apexes are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, second antennomere twice as long as wide, third antennomere one and a half times as long as wide, and slightly extended apical; fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.52:0.71), slightly and regularly raised on centre, bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum conspicuously divergent, and with a distinctly raised carina which is reaching apex of pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and simple, fine and just visible, interstices irregularly, once to twice their diameter, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, without impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without a inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures, interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe extending apices of the paramere conspicuously, the latter subparallel, slightly bent apical.

Female has shorter antennae, just reaching apices of posterior angles of pronotum.

DIFFERENTIAL DIAGNOSIS

Wittmeroquasimus gaoligongshanensis is closely allied to *W. cangshanensis*, but may be easily distinguished from this species by the blackish colour of basis

of pronotum, by the shorter antennae, by the more distant punctures of head and pronotum, and by the different form of male genitalia.

ETYMOLOGY

Named after the type location.

DISTRIBUTION

China: Yunnan province.

Wittmeroquasimus hubeiensis sp. nov.

(Figs. 31-32)

TYPE LOCATION

China: Hubei province, Mufu Shan.

TYPE MATERIAL

Holotype ♂ (CSV): China: Hubei, Mufu Shan, Jiugongshan, 5.-6.V.2004, leg. J. TURNA.

Paratype ♀ (CSV): Hubei, Dashennongjia mts, 2500-3000 m, 21.-24.V.2001.

DIAGNOSIS

Holotypus ♂. Subcylindrical, surface of pronotum and elytra slightly raised, shiny, and covered with pileous fine hairs; black, tarsomeres and knees brown; integument micro-punctured, pubescence bronze-coloured and semi-erected; dimensions: length: 2.90 mm, width: 0.95 mm.

DESCRIPTION

Head with distant, fine, circular and simple punctures, interstices double to fourth their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons triangular, infundibuliform apically, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, from fourth antennomere on, outreaching the posterior angles of pronotum by the length of the last three antennomeres, their apexa are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, each of them one and a half times as long as wide, and slightly extended apical; fourth to tenth antennomeres slightly

longer than second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line slightly shorter than wide at the posterior angles (length-width ratio: 0.71:0.95), slightly and regularly raised on centre, conspicuously bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum strongly divergent, and with a distinctly raised carina which is reaching the apex of pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and simple, very fine, just visible, interstices irregularly, double to fourth their diameter, and on the whole surface flat and shiny; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, without a centrally impression; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without an inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures, interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe extending apices of the paramere conspicuously, the latter bent apical, without any hairs.

Females are of the same shape than the males, but with dimensions: length: 3.71 mm, width: 1.15 mm. with slightly shorter antennae, which are just reaching the apices of the posterior angles of pronotum.

DIFFERENTIAL DIAGNOSIS

Wittmeroquasimus hubeiensis is closely allied to *W. parallelus*, but may be easily distinguished from this species by the distant punctures of pronotum, with points circular and simple, very fine, just visible, interstices irregularly, double to fourth their diameter, shorter antennae, which are outreaching the posterior angles of pronotum by the length of the last three antennomeres.

ETYMOLOGY

Named after the type location.

DISTRIBUTION

China: Hubei province.

***Wittmeroquasimus ocellatus* (DOLIN, 1993a) comb. nov.**

Quasimus (*Wittmeroquasimus*) *ocellatus* DOLIN, 1993a: 195.

NEW MATERIAL

China: Yunnan province, Jizushan mts., 2500-3100 m, 30.V.-3.VI.1993,
1 spm. (CSV), leg. V. KUBÁŇ.

DISTRIBUTION

Himalaya: Bhutan (type locality).

China: Yunnan province.

REMARKS

The above published data are the first of *Wittmeroquasimus ocellatus* from China.

***Wittmeroquasimus parallelus* (SCHWARZ, 1902) comb. nov.**

Hypnoidus parallelus SCHWARZ, 1902: 332.

Quasimus parallelus (DOLIN 1993): 121.

NEW MATERIAL

China: Yunnan province, Gaoligong mts., 2200-2500 m, 8.-16.V.1995,
1 spm., leg. V. KUBÁŇ.

DISTRIBUTION

India: Darjeeling (type locality).

Nepal: Sindhupalchok; Koshi; Karnali-Humla.

China: Yunnan province.

REMARKS

The above published data are the first of *Wittmeroquasimus parallelus* from China. The species possess the typical characters of the genus *Wittmeroquasimus* and is transferred to this genus therefore.

Wittmeroquasimus yanmenensis sp. nov.

(Fig. 33)

TYPE LOCATION

China: Yunnan province, Yanmen.

TYPE MATERIAL

Holotype ♀ (CSV): China: Yunnan, Yanmen, 13.-23.VI.2005, leg. E. KUČERA.**Paratypes** 2 ♀♀ (CSV, TICB): Yunnan, Hengduan mts., part: Meil I, 3700 m, 10.-13.VII.1996, leg. V. KUBÁŇ; Yunnan province, Jizushan mts., 2500-3100 m, 30.V.-3.VI.1993, leg. V. KUBÁŇ.

DIAGNOSIS

Holotypus ♀. Subparallel, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs: black, femora brownish, tibia and tarsi, as well as mandibles yellowish-brown; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence argenteal and semi-erected; dimensions: length: 4.32 mm, width: 1.31 mm.

DESCRIPTION

Head with distant, fine, circular and umbilici punctures, interstices once to double their diameter, near boundary carina interstices of punctures reduced to small wrinkles; pubescence fine, short and directed to apex, and to lateral sides, basally cuspidate; eyes spherical, conspicuously prominent; frons triangular, infundibuliform apically, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, slightly moniliform from fourth antennomere on, outreaching the posterior angles of pronotum by the length of the last two antennomeres, their apexa are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, each of them one and a half times as long as wide, and slightly extended apical; fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 1.04:1.31), slightly and regularly raised on centre, bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum slightly divergent, and with a distinctly raised carina which is reaching the apex of pronotum; apices of basal angles

acute; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and simple, very fine, just visible, interstices irregularly, once to fourth their diameter, subbasally slightly denser, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum, along median line cuspidate-forming.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and asperate, with an unguate impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without an inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures, interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Males are unknown.

DIFFERENTIAL DIAGNOSIS

Wittmeroquasimus yanmenensis is closely allied to *W. parallelus*, but may be easily distinguished from this species by the cuspidate pubescence on head and pronotum, by the fine and distant punctures of pronotum, and by the conspicuously divergent apices of posterior angles of the latter.

ETYMOLOGY

Named after the type location.

DISTRIBUTION

China: Yunnan province.

4.2.2.2 A key to the species of the genus *Wittmeroquasimus* from China

1. Body blackish, elytra brownish 2.
- Body unicoloured black or blackish 3.

2. Pubescence bronze-coloured; antennae outreaching posterior angles of pronotum by the length of the last three antennomeres *W. cangshanensis* sp. nov.
- Pubescence argenteal; antennae outreaching posterior angles of pronotum by the length of the last antennomere *W. claudiae* sp. nov.
3. Legs totally brownish *W. gaoligongshanensis* sp. nov.
- Legs black or blackish, knees in some species brownish or yellowish .. 4.
4. Antennae outreaching posterior angles of pronotum by the length of the last three antennomeres 5.
- Antennae outreaching posterior angles of pronotum by the length of the last two antennomeres 6.
5. Punctures of pronotum distant, points circular and simple, very fine, just visible, interstices irregularly, double to fourth their diameter *W. hubeiensis* sp. nov.

Tab. 2. General distribution in the Chinese provinces.

Tribe Quasimusini		Provinces				
genus	species	Hubei	Yunnan	Fujian	Sichuan	Shaanxi
<i>Quasimus</i>	<i>anjae</i>	X				
<i>Q.</i>	<i>exilis</i>		X			
<i>Q.</i>	<i>fujianensis</i>			X		
<i>Q.</i>	<i>geminus</i>		X			
<i>Q.</i>	<i>horaki</i>		X			
<i>Q.</i>	<i>kubani</i>		X			
<i>Q.</i>	<i>meghalayensis</i>		X			
<i>Q.</i>	<i>shaxiensis</i>			X		
<i>Q.</i>	<i>steffenskyi</i>	X		X		
<i>Q.</i>	<i>subovalis</i>		X		X	
<i>Q.</i>	<i>wittmeri</i>				X	
<i>Q.</i>	<i>yipinglangensis</i>		X			
<i>Q.</i>	<i>yunnanus</i>		X		X	X
<i>Wittmeroquasimus</i>	<i>cangshanensis</i>		X			
<i>W.</i>	<i>claudiae</i>		X			
<i>W.</i>	<i>gaoligongshanensis</i>		X			
<i>W.</i>	<i>hubeiensis</i>	X				
<i>W.</i>	<i>ocellatus</i>		X			
<i>W.</i>	<i>parallelus</i>		X			
<i>W.</i>	<i>yanmenensis</i>		X			
<i>Yukoana</i>	<i>tenasserimensis</i>		X			

- Punctures of pronotum less distant, points circular and simple, interstices irregularly, once to double their diameter *W. parallelus* (SCHWARZ), 1902.
- 6. Posterior angles of pronotum conspicuously divergent; body size: 3.20:1.00 mm *W. ocellatus* DOLIN, 1993a.
- Posterior angles of pronotum slightly divergent; body size: 4.32:1.31 mm *W. yanmenensis* sp. nov.

4.3 GEOGRAPHICAL CHECK-LIST OF THE CHINESE SPECIES OF THE TRIBE QUASIMUSINI

(The given overview is taken from data of the JUNK and SCHENKLING catalogues (1925, 1927), from the data of the material of CSV, and from a so far unpublished catalogue of Prof. Dr. G. PLATIA, of Elateridae described after the abovementioned catalogue: Table 2).

5. THE SPECIES OF THE TRIBE QUASIMUSINI FROM THE INDOCHINESE SUBREGION

5.1 GEOGRAPHICAL AND CHOROLOGICAL REPORT

The following review of species of the new tribe Quasimusini from the Indochinese including the fauna of Myanmar, Laos, Thailand and Vietnam.

The listed species have been found in an altitude from 600 up to 1750 m (*Quasimus*), and from 1750 up to 2000 m (*Wittmeroquasimus*).

The already well known species from Taiwan are listed in 5.4. A list of species of the tribe Quasimusini from Taiwan.

5.2 DESCRIPTION AND REVIEW OF THE SPECIES OF QUASIMUSINI FROM CONTINENT OF THE INDOCHINESE SUBREGION

The fauna of the tribe Quasimusini from the Indochinese subregion introduced in this paper consist off the genera *Quasimus*, *Wittmeroquasimus* and *Yukoana*. Together we found ten species of the genus *Quasimus*, two of *Wittmeroquasimus* and one of *Yukoana*.

In the alphabetic list of species from Taiwan we provide two species of *Miquasus*, six species of *Quasimus* and four species of *Yukoana*.

5.2.1 Subtribe **Quasimusina subtribus novum**

5.2.1.1 Genus *Quasimus* Gozis, 1886

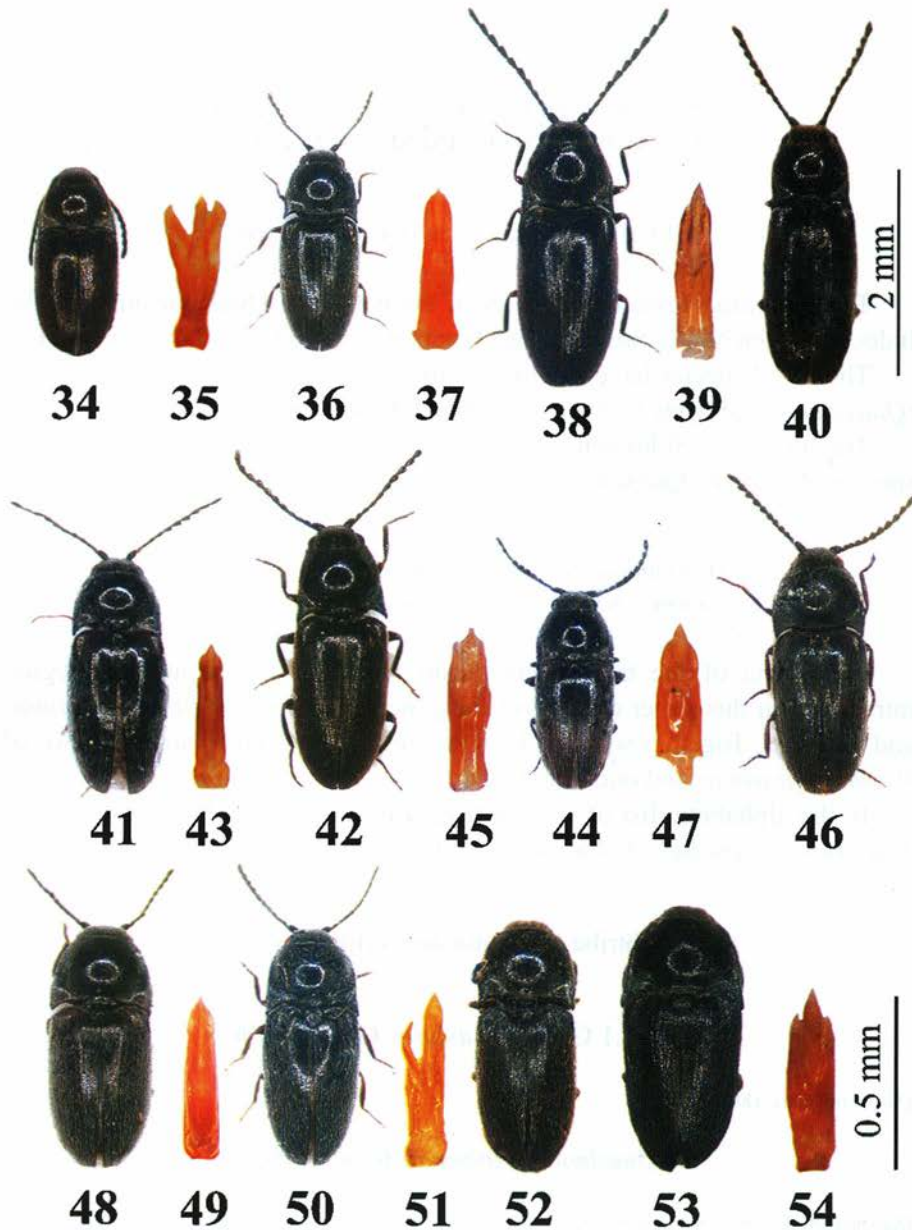
Quasimus Gozis, 1886: 22.

Quasimus carinipennis KISHII, 1980

Quasimus carinipennis KISHII, 1980: 92.

NEW MATERIAL

Laos: Phongsaly province, Phongsaly env., 1500 m, 28.V.-20.VI.2003, 27 spm., leg. V. KUBÁŇ; Vietnam: Ninh Binh province, Cuc-Phuang, 6.VI.1966, (IZW), 1 spm., leg. R. BIELAWSKI & B. PISARSKI.



Figs. 34-54. Habitus and aedeagus of new *Quasimus*-, *Paraquasimus*- and *Wittmeroquasimus*- species from the Indo-Chinese subregion, Indonesia, Malaysia and Nepal: 34, 36, 38, 40-42, 44, 46, 48, 50, 52, 53 - habitus, 35, 37, 39, 43, 45, 47, 49, 51, 54 - aedeagus: 34-35 - *Quasimus hergovitsi* sp. nov., 36-37 - *Q. muangensis* sp. nov., 38-39 - *Wittmeroquasimus laoticus* sp. nov., 40 - *W. spinosus* sp. nov., 41 - *Paraquasimus flavopodus* sp. nov., 42-43 - *P. javanensis* sp. nov., 44-45 - *P. lamellatus* sp. nov., 46-47 - *Quasimus antennatus* sp. nov., 48-49 - *Q. bicoloratus* sp. nov., 50-51 - *Q. bosi* sp. nov., 52 - habitus of *Q. ingrıdae* sp. nov., 53-54 - *Striatoquasimus dolini* sp. nov.

DISTRIBUTION

Malaysia: Malacca (type locality).

Laos: Phongsaly province.

REMARKS

The above published data are the first of *Quasimus carinipennis* from Laos.

***Quasimus geminus* FLEUTIAUX, 1942**

Quasimus geminus FLEUTIAUX, 1942: 8.

NEW MATERIAL

Laos: Phongsaly province, Phongsaly env., 1500 m, 28.V.-20.VI.2003, 25 spm., leg. V. KUBÁŇ; Hua Phan province, Hua Phan mts., 1750 m, 17.V.-3.VI.2007, 55 spm., leg. V. KUBÁŇ; Bolikhamxai province, Ban nape, 600 m, 1.-18.V.2001, 9 spm, leg. V. KUBÁŇ.

DISTRIBUTION

Myanmar: Kambaiti (type locality).

Himalaya: Nepal.

China: Yunnan.

Laos: Phongsaly province; Hua Phan province; Bolikhamxai province.

REMARKS

The above published data are the first of *Quasimus geminus* from Laos.

***Quasimus horaki* DOLIN, 1997a**

Quasimus horaki DOLIN, 1997a: 150.

NEW MATERIAL

Thailand: Chiang Mai province, San Pakia, 1400 m, 1.-15.V.1998, 31 spm., leg. V. KUBÁŇ.

DISTRIBUTION

Thailand: Mae Hong Son province; Chiang Mai province (type locality).

China: Yunnan.

REMARKS

The above published data are the second ever of *Quasimus horaki*.

Quasimus hergovitsi sp. nov.

(Figs. 34-35)

TYPE LOCATION

Laos: 60 km south of Vientiane.

TYPE MATERIAL

Holotype ♂ (CSV): Laos: 60 km south of Vientiane, 1.IX.2001, leg. R. HERGOVITS.

DIAGNOSIS

Holotypus ♂. Obovate, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; black, legs blackish-brown; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence argenteal and semi-erected; dimensions: length: 1.80 mm, width: 0.72 mm.

DESCRIPTION

Head with distant, very fine, just visible, circular and simple punctures, interstices double to fifth their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, slightly serrate from fourth antennomere on, outreaching the posterior angles of pronotum by the length of the last two and a half antennomeres, their apexa are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, second one and a half times as long as wide, third slightly shorter, and both slightly extended apical; fourth to tenth antennomeres slightly longer than third antennomere, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum subtrapezoidal, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.50:0.65), slightly and regularly raised at centre, slightly bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum divergent, and with a distinctly raised carina which is reaching the apex of pronotum; apices of basal angles acute;

pronotum without a fovea or mould; punctures of pronotum very distant, points circular, and simple, very fine, just visible, interstices irregularly, twice to fourth their diameter, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, with an unguate impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without a inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures, interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe subparallel, slightly bevelled subapical, extending apices of the paramere conspicuously, the latter slightly bent apical, and without any hairs.

Females are unknown.

DIFFERENTIAL DIAGNOSIS

Quasimus hergovitsi is closely allied to *Q. robustus*, but may be easily distinguished from this species by the smaller body, by the longer antennae, by the less distant punctures of pronotum, and by the form of aedeagus.

ETYMOLOGY

Named after the long antennae of the holotype.

DISTRIBUTION

Laos: south of Vientiane.

Quasimus malaisei FLEUTIAUX, 1942

Quasimus malaisei FLEUTIAUX, 1942: 9.

NEW MATERIAL

Thailand: Doi Pui, 1400 m, 2.-3.VII.1995, 8 spm., leg. V. KUBÁŇ; Laos: Hua Phan province, Phu Phan mts., 1750 m, 17.V.-3.VI.2007, 9 spm., leg. V. KUBÁŇ; Myanmar: Tenasserim, Tandong, 4000 ft., 1 spm., leg. V. FRUHSTORFER (in CPG, det. CATE).

DISTRIBUTION

Myanmar: Kambaiti (type locality).

Thailand: Doi Pui.

Laos: Hua Phan province.

Nepal: Dolakha district.

REMARKS

The above published data are the first of *Quasimus malaisei* from Laos and Thailand.

***Quasimus minutus* FLEUTIAUX, 1930**

Quasimus minutus FLEUTIAUX, 1930: 643.

NEW MATERIAL

Thailand: Khao Sok, 9.-11.IV.2001, 4 spm., leg. A. KUDRNA.

DISTRIBUTION

Vietnam: Tonkin, Lac-Tho, Hoa-Bhin (type locality).

Thailand: Mae Hong Son; Khao Sok.

REMARKS

The abovementioned data are the first of *Quasimus minutus* from Thailand.

***Quasimus muangensis* sp. nov.**

(Figs. 36-37)

TYPE LOCATION

Laos: Louangphrabang province, 25 km east of Muang Ngoy.

TYPE MATERIAL

Holotype ♂ (CSV): Laos: Louangphrabang province, 25 km east of Muang Ngoy, 1000 m, 23.IV.1999, leg. V. KUBÁŇ.

Paratypes 28 ♂♂, 5 ♀♀ (CSV, CTW, CPG, TICB): Same data as holotype.

DIAGNOSIS

Holotypus ♂. Obovate, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; black, knees and femora blackish-brown; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence argenteal and semi-erected; dimensions: length: 2.00 mm, width: 0.72 mm.

DESCRIPTION

Head with distant, fine, just visible, circular and simple punctures, interstices once to twice their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, slightly serrate from fourth antennomere on, just reaching the posterior angles of pronotum, their apex are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, second one and a half times as long as wide, third slightly shorter, and both slightly extended apical; fourth to tenth antennomeres slightly longer than third antennomere, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.55:0.65), slightly and regularly raised at centre, bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum divergent, and with a distinctly raised carina which is reaching the apex of pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum very distant, points circular, and simple, very fine, just visible, interstices irregularly, twice to fourth their diameter, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, without central impression; punctures distant and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without an inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices

of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures, interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe subparallel, slightly bevelled subapical, just extending apices of the paramere, the latter slightly bent apical, and without any hairs.

Females have slightly shorter antennae than males, not reaching posterior angles of pronotum for the length of the last antennomere.

DIFFERENTIAL DIAGNOSIS

Quasimus muangensis is closely allied to *Q. robustus*, but may be easily distinguished from this species by the smaller body, by the much denser punctures of pronotum, by the colour of the legs, and by the form of aedeagus.

ETYMOLOGY

Named after the type location.

DISTRIBUTION

Laos: Louangphrabang province.

Quasimus robustus KISHII, 1980

Quasimus robustus KISHII, 1980: 86.

NEW MATERIAL

Laos: Louangnamtha province, from Namtha to Muang Sing, 900-1200 m, 5.-31.V.1997, 29 spm., leg. V. KUBÁŇ.

DISTRIBUTION

Malaysia: Malacca (type locality).

Laos: Louangnamtha province.

REMARKS

The abovementioned data are the first of *Quasimus robustus* from Laos.

***Quasimus subovalis* FLEUTIAUX, 1930**

Quasimus subovalis FLEUTIAUX, 1930: 643.

NEW MATERIAL

Thailand: Chiang Mai province, San Pakia, 1400 m, 1.-15.V.1998, 2 spm., leg. V. KUBÁŇ; Mae Jong Son province, Soppong, 1500 m, 7.-12.V.1996, 1 spm., leg. V. KUBÁŇ; Laos: Phongsaly province, Phongsaly env., 1500 m, 28.V.-20.VI.2003, 4 spm., leg. V. KUBÁŇ; Vietnam: Vinh Phu province, Tam Dao, 80 km north of Hanoi, 900 m, 13.IV.1986, 1 spm., without further data; same data but 20.IV.1986, 1 spm; 10 km south of Palat, 1 spm., leg. DEMBICKY & PACHOLATKO (in CPG, det. DOLIN).

DISTRIBUTION

China: Sichuan; Yunnan (type locality).

Laos: Phongsaly province.

Thailand: Chiang Mai province; Mae Jong Son province.

Indonesia.

Malaysia.

Vietnam: Tonkin.

REMARKS

The abovementioned data are the first of *Quasimus subovalis* from Thailand.

***Quasimus unicus* FLEUTIAUX, 1930**

Quasimus unicus FLEUTIAUX, 1930: 644.

NEW MATERIAL

Thailand: Chiang Mai province, Doi Pui, 1600 m, 2.-6.V.1996, 1 spm., leg. V. KUBÁŇ.

DISTRIBUTION

Tonkin: Lac-Tho, Hoa-Bhin (type locality).

Thailand: Mae Hong Son; Khao Sok.

REMARKS

The abovementioned data are the first of *Quasimus robustus* from Thailand.

5.2.1.2 Genus *Yukoana* KISHII, 1959*Yukoana* KISHII, 1959: 7.

TYPUS GENERIS

Cryptohypnus ellipticus CANDÈZE, 1873.*Yukoana tenasserimensis* ÔHIRA, 1970*Yukoana tenasserimensis* ÔHIRA, 1970: 239.

NEW MATERIAL

Laos: Phongsaly province, Phongsaly env., 1500 m, 28.V.-20.VI.2003,
25 spm., leg. V. KUBÁŇ.

DISTRIBUTION

China: Yunnan.

Laos: Phongsaly province.

Myanmar: Tenasserim.

REMARKS

The abovementioned data are the first of *Yukoana tenasserimensis* from
Laos.

5.2.1.3 A key to the species of the genus *Quasimus* from continent of the
Indochinese subregion

1. Body subparallel *Q. minutus* FLEUTIAUX, 1930.
- Body obovate 2.
2. Pubescence bronze-coloured 3.
- Pubescence argenteal 4.
3. Punctures of pronotum umbilici; body length approximately 2.5 mm;
antennae just reaching posterior angles of pronotum
..... *Q. carinipennis* KISHII, 1980.
- Punctures of pronotum simple 5.
4. Pronotum distinctly raised centrally; antennae not reaching posterior angles
of pronotum by the length of the last antennomere
..... *Q. horaki* DOLIN, 1997a.

- Pronotum slightly raised centrally; antennae outreaching posterior angles of pronotum by the length of the last antennomere *Q. malaisei* FLEUTIAUX, 1942.
- 5. Antennae outreaching posterior angles of pronotum by the length of the last 2.5 antennomeres *Q. hergovitsi* sp. nov.
- Antennae shorter, outreaching posterior angles of pronotum by the length of the last antennomere at best 6.
- 6. Punctures of pronotum umbilici *Q. geminus* FLEUTIAUX, 1942.
- Punctures of pronotum simple 7.
- 7. Elytra and antennae brownish *Q. unicus* FLEUTIAUX, 1930.
- Elytra and antennae blackish 8.
- 8. Knees and femora blackish-brown; pronotum and elytra slightly raised *Q. muangensis* sp. nov.
- Legs totally brownish; pronotum and elytra distinctly raised 9.
- 9. Interstices of punctures of pronotum centrally once their diameter and clearly visible *Q. subovalis* FLEUTIAUX, 1930.
- Interstices of punctures of pronotum centrally once to twice their diameter, fine and just visible *Q. robustus* KISHII, 1980.

5.2.2 Subtribe *Wittmeroquasina* subtribus novum

5.2.2.1 Genus *Wittmeroquasimus* DOLIN, 1993a

Quasimus (*Wittmeroquasimus*) DOLIN, 1993a: 195.

Wittmeroquasimus laoticus sp. nov. (Figs. 38-39)

TYPE LOCATION

Laos: Hua Phan province.

TYPE MATERIAL

Holotype ♂ (CSV): Laos: Hua Phan province, Hua Phan mts., 1750 m, 17.V.-3.VI.2007, leg. V. KUBÁŇ.

Paratypes 8 ♂♂, 4 ♀♀ (CSV, TICB): Same date as holotype.

DIAGNOSIS

Holotypus ♂. Suboval, surface of pronotum and elytra slightly raised, shiny, and covered with pileous fine hairs; black, knees and tarsi apical brownish;

integument micro-punctured, pubescence bronze-coloured and semi-erected; dimensions: length: 2.80 mm, width: 1.00 mm.

DESCRIPTION

Head with distant, circular and simple punctures, interstices once to double their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons triangular, infundibuliform apically, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriliform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, moniliform from fourth antennomere on, outreaching the posterior angles of pronotum by the length of the last three antennomeres, their apexes are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, each of them one and a half times as long as wide, and slightly extended apical; fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line slightly shorter than wide at the posterior angles (length-width ratio: 0.75:1.00), slightly and regularly raised on centre, conspicuously bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum very slightly divergent, and with a distinctly raised carina which is reaching the apex of pronotum; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and simple, interstices irregularly, double to fourth their diameter, and on the whole surface flat and shiny; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, central impression deep; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without an inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures, interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery,

third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe conspicuously extending apices of the paramere, the latter subparallel, slightly bent apical, and covered with long black setae. Aedeagus conspicuously bent (best visible from lateral view).

Females have slightly shorter antennae than the males, outreaching the posterior angles of pronotum by the length of the last antennomere.

DIFFERENTIAL DIAGNOSIS

Wittmeroquasimus laoticus is closely allied to *W. parallelus*, but may be easily distinguished from this species by the laterally conspicuous bent pronotum, by the more distant punctures of the latter, and by the bent form of aedeagus.

ETYMOLOGY

Named after the type location.

DISTRIBUTION

Laos: Hua Phan province.

Wittmeroquasimus spinosus sp. nov.

(Fig. 40)

TYPE LOCATION

Vietnam: Da Lat., Nui Lang-Bian mts.

TYPE MATERIAL

Holotype ♀ (HNMB): Vietnam: Da Lat., Nui Lang-Bian mts., pine forest, 12.XII.1994, leg. S. MAHUNKA, GY. SZIRÁKI & L. ZOMBORI.

Paratype ♀ (CSV): Thailand: Fang province, Mae Fang nat. park, Doi Pha Hom Pok., 2000 m, 23.XI.2003, 1 spm., leg. M. FÖLDVÁRI.

DIAGNOSIS

Holotypus ♀. Subcylindrical, surface of pronotum and elytra slightly raised, shiny, and covered with pileous fine hairs; black, knees yellowish-brown; integument micro-punctured, pubescence bronze-coloured and semi-erected; dimensions: length: 2.55 mm, width: 0.72 mm.

DESCRIPTION

Head with distant, circular to oval and umbilici punctures, interstices once to double their diameter; pubescence fine, short and directed to apex, and to

lateral sides; eyes semi-spherical, little prominent; frons triangular, infundibuliform apically, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, moniliform from fourth antennomere on, outreaching the posterior angles of pronotum by the length of the last two antennomeres; second and third antennomere subcylindrical, each of them one and a half times as long as wide, and slightly extended apical; fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line slightly shorter than wide at the posterior angles (length-width ratio: 0.62:0.72), slightly and regularly raised on centre, conspicuously bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum strongly divergent, apical with a fine and falcate spine, and with a distinctly raised carina which is reaching the apex of pronotum; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and simple, very fine, just visible, interstices irregularly, double to fourth their diameter, and on the whole surface flat and shiny; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, without a centrally impression; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without an inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures, interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Males are unknown.

DIFFERENTIAL DIAGNOSIS

Wittmernoquasimus spinosus is closely allied to *W. paradoxus*, but may be easily distinguished from this species by the smaller body, and by the fine and

falcate spine at apices of posterior angles of pronotum. From all already known species of *Wittmeroquasimus*, the new species can easily be separated by the latter mentioned character.

ETYMOLOGY

Named after the spine at posterior angles of pronotum.

DISTRIBUTION

Vietnam: Da Lat., Nui Lang-Bian mts.

Thailand: Fang province.

5.2.2.2 A key to the species of the genus *Wittmeroquasimus*
from the continent of the Indochinese subregion

1. Apex of posterior angles of pronotum with a fine and falcate spine
..... *W. spinosus* sp. nov.
- . Apex of pronotum without spine *W. laoticus* sp. nov.

5.3 GEOGRAPHICAL CHECK-LIST OF THE SPECIES OF THE TRIBE QUASIMUSINI
FROM CONTINENT OF THE INDOCHINESE SUBREGION

Tab. 3. General distribution in the Indo-Chinese subregion

Tribe Quasimusini		Region				
genus	species	Laos	Myanmar	Thailand	Cambodia	Vietnam
<i>Quasimus</i>	<i>carinipennis</i>	X				
<i>Q.</i>	<i>geminus</i>	X	X			
<i>Q.</i>	<i>horaki</i>			X		
<i>Q.</i>	<i>malaisei</i>	X	X	X		
<i>Q.</i>	<i>minutus</i>			X		X
<i>Q.</i>	<i>muangensis</i>	X				
<i>Q.</i>	<i>robustus</i>	X				
<i>Q.</i>	<i>subovalis</i>	X		X		X
<i>Q.</i>	<i>tenasserimensis</i>	X	X			
<i>Q.</i>	<i>unicus</i>			X		X
<i>Wittmeroquasimus</i>	<i>laoticus</i>	X				
<i>W.</i>	<i>spinosus</i>					X
<i>Yukoana</i>	<i>tenasserimensis</i>	X				

(The given overview is taken from data of the JUNK AND SCHENKLING catalogues (1925, 1927), from the data of the material of CSV, and from a so far unpublished catalogue of Prof. Dr. G. PLATIA, of Elateridae described after the abovementioned catalogue).

5.4 A CHECK-LIST OF THE SPECIES OF THE TRIBE QUASIMUSINI FROM TAIWAN

The following list of species of the tribe Quasimusini from Taiwan including species of the genera *Miquasus*, *Quasimus* and *Yukoana*.

5.4.1 Subtribe **Quasimusina subtribus novum**5.4.1.1 Genus ***Miquasus* KISHII, 1959**

Quasimus (*Miquasus*) KISHII, 1959: 9.

Miquasus (ÔHIRA 1992: 124).

TYPE SPECIES

Cryptohypnus luteipes CANDÈZE, 1873.

***Miquasus atayal* KISHII, 1994**

Miquasus atayal KISHII, 1994: 193; SUZUKI 1999: 101.

***Miquasus formosanus* ÔHIRA, 1968**

Miquasus formosanus ÔHIRA, 1968: 364; SUZUKI 1999: 101.

5.4.1.2 Genus ***Quasimus* GOZIS, 1886**

Quasimus GOZIS, 1886: 22.

***Quasimus ami* KISHII, 1994**

Quasimus ami KISHII, 1994: 195; SUZUKI 1999: 98.

***Quasimus horishanus* MIWA, 1930**

Quasimus horishanus MIWA, 1930: 4; SUZUKI 1999: 98.

***Quasimus miwai* ÔHIRA, 1966**

Quasimus miwai ÔHIRA, 1966: 217; SUZUKI 1999: 99.

***Quasimus reclinatus* ÔHIRA, 1966**

Quasimus reclinatus ÔHIRA, 1966: 217; SUZUKI 1999: 99.

***Quasimus shirakii* MIWA, 1930**

Quasimus shirakii MIWA, 1930: 3; SUZUKI 1999: 100.

***Quasimus vunum* KISHII, 1994**

Quasimus vunum KISHII, 1994: 197; SUZUKI 1999: 101.

5.4.1.3 Genus ***Yukoana* KISHII, 1959**

Yukoana KISHII, 1959: 7.

TYPE SPECIES

Cryptohypnus ellipticus CANDÈZE, 1873.

***Yukoana formosana* ÔHIRA, 1966**

Yukoana formosana ÔHIRA, 1966: 217; SUZUKI 1999: 96.

***Yukoana housaniana* KISHII, 1994**

Yukoana housaniana KISHII, 1994: 199; SUZUKI 1999: 96.

***Yukoana takasago* KISHII, 1994**

Yukoana takasago KISHII, 1994: 201; SUZUKI 1999: 97.

***Yukoana taiwana* ÔHIRA, 1968**

Yukoana taiwana ÔHIRA, 1968: 365; SUZUKI 1999: 97.

6. THE SPECIES OF THE TRIBE QUASIMUSINI FROM THE MALAYAN SUBREGION

6.1 GEOGRAPHICAL AND CHOROLOGICAL REPORT

The study on the species of the new tribe Quasimusini from the Malayan subregion including the fauna of the islands of the Sunda-archipelago with the main islands Sumatra, Java, Borneo, and the Philippines, including Palawan.

The species listed in the following, have been found in an altitude from 900 up to 1900 m a.s.l. (*Quasimus*), from 1800 up to 3700 m a.s.l. (*Pseudoquasimus*) and from 1800 up to 2600 m a.s.l. (*Loebliquasis* and *Paraquasimus*).

6.2 DESCRIPTION AND REVIEW OF THE SPECIES OF THE TRIBE QUASIMUSINI FROM THE MALAYAN SUBREGION

All species of the new tribe Quasimusini from the Malayan subregion listed in the following check-list belong to the genera *Loebliquasis*, *Miquasus*, *Paraquasimus*, *Pseudoquasimus*, *Quasimus* and *Yukoana*. Together we found one species of *Loebliquasis*, one species of *Miquasus*, three species of *Paraquasimus*, one species of *Pseudoquasimus*, 20 species of *Quasimus*, and four of *Yukoana*.

A key to the species of the Malayan subregion is given by KISHII (1980).

6.2.1 Subtribe **Quasimusina subtribus novum**

6.2.1.1 Genus ***Miquasus* KISHII, 1959**

Quasimus (*Miquasus*) KISHII, 1959: 9; *Miquasus* (ÔHIRA 1992: 124).

TYPE SPECIES

Cryptohypnus luteipes CANDÈZE, 1873.

***Miquasus scutellaris* KISHII, 1980**

Miquasus scutellaris KISHII, 1980: 80.

TYPE MATERIAL

Malaysia: Cameron highlands, 18.V.1979, 1 spm., leg. HATAYAMA.

DISTRIBUTION

Malaysia: Cameron highlands.

REMARKS

There are no new data on this species.

6.2.1.2 Genus *Quasimus* GOZIS, 1886

Quasimus Gozis, 1886: 22.

Quasimus bicoloratus sp. nov.

(Figs. 48-49)

TYPE LOCATION

Malaysia: Borneo, Sabah, Crocker range.

TYPE MATERIAL

Holotype ♂ (SMNS): Borneo: Sabah, Crocker range, N.P., N.W. Keningau, 900-1200 m, 16.-20.XI.1996, leg. W. SCHAWALLER.

Paratype ♂ (CSV): Same data as holotype, but 18.XI.1996 (at light), leg. W. SCHAWALLER.

DIAGNOSIS

Holotypus ♂. Suboval, surface of pronotum and elytra conspicuously and regularly raised, semi-matt, and covered with pileous fine hairs; black, posterior angles of pronotum, base of elytra and legs brownish; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence argenteal and semi-erected; dimensions: length: 2.40 mm, width: 1.00 mm.

DESCRIPTION

Head with dense, distinct, circular and umbilici punctures, interstices half to once their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae stout, serrate from third antennomere on, and just reaching the posterior angles of

pronotum, their apex are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, each of them of the same length, fourth to tenth antennomeres slightly longer than second and third antennomeres, but slightly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum semi-circular, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.71:1.00), conspicuously and regularly raised on centre, conspicuously bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum non-divergent apical, and with a distinctly raised carina which is reaching the apex of pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum dense, points circular, and umbilici, interstices irregularly, half to once their diameter, subbasally slightly denser, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised and aspirate, with an unguate impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without a inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe subparallel, extending apices of the paramere conspicuously, the latter falcate subapical and bevelled, and pointed apical.

Females are unknown.

DIFFERENTIAL DIAGNOSIS

Quasimus bicoloratus is closely allied to *Q. brevis*, but may be easily distinguished from this species by the bicoloured body, the shorter antennae, and by the form of aedeagus.

ETYMOLOGY

Named after the bicoloured body.

DISTRIBUTION

Malaysia: Borneo, Sabah.

***Quasimus brevis* KISHII, 1980**

Quasimus brevis KISHII, 1980: 88.

NEW MATERIAL

Malaysia: Sabah, Borneo, Sapulut env., 24.V.1995, 1 spm., leg. HOZIAK.

DISTRIBUTION

Malaysia: Sabah; Malacca (type locality).

Wallacea: Sulawesi.

***Quasimus brevisculus* KISHII, 1980**

Quasimus brevisculus KISHII, 1980: 90.

NEW MATERIAL

Indonesia: Sumatra, Singgalang, south of Bukittingi, 14.-16.II.1991, 1300 m, 1 spm., leg. BOČAK & BOČAKOVA.

DISTRIBUTION

Malaysia: Fraser hills (type locality).

Indonesia: Sumatra.

REMARKS

The abovementioned data are the second ever of this species.

***Quasimus cameronensis* KISHII, 1980**

Quasimus cameronensis KISHII, 1980: 83.

NEW MATERIAL

Malaysia: Pahang, 30 km east of Ipoh, 1500 m, Cameron highlands, 20.II.-3.III.1998, 1 spm., leg. ČECHOVSKÝ; Pahang, Genting highland, 17.-19.XI.1987,

1 spm., leg. L. BARTOLOZZI (in CPG, det. KISHII); Pagang, Centr. Highland, 17.-19.XI.1987, 1 spm., (CPG), leg. S. TAITI & L. BARTOLOZZI.

DISTRIBUTION

Malaysia: Cameron highlands.

REMARKS

The abovementioned data are the second ever of this species.

***Quasimus carinipennis* KISHII, 1980**

Quasimus carinipennis KISHII, 1980: 92.

NEW MATERIAL

Malaysia: Perak, Tanah Rath, 13.-17.II.1997, 1 spm., leg. DULIK & JENIS; Fraser hill, 15.V.1878, 1 spm., leg. S. IMASAKA (CPG); Pahang, Genting highland, 17.-19.XI.1987, 5 spm., leg. S. TAITI & L. BARTOLOZZI; Indonesia: Sumatra: Prastagi, Sibayak, 1450-1900 m, 19.-23.II.1991, 1 spm., leg. BOCAK & BOCAKOVA.

DISTRIBUTION

Malaysia: Cameron highlands.

Indonesia: Sumatra; Sulawesi.

***Quasimus catei* DOLIN, 1997a**

Quasimus catei DOLIN, 1997a: 146.

NEW MATERIAL

Malaysia: Pahang, Cameron highlands, Tanah Rath, 21.-30.III.1995, 2 spm., leg. O. MERKL.

DISTRIBUTION

Malaysia: Cameron highlands.

Indonesia: Java (type locality).

***Quasimus curticornis* DOLIN, 1993b**

Quasimus curticornis DOLIN, 1993b: 113.

NEW MATERIAL

There is no new data for this species.

DISTRIBUTION

Malaysia: Singapore.

***Quasimus haddeni* FLEUTIAUX, 1934**

Quasimus haddeni FLEUTIAUX, 1934: 483; DOLIN 1997b: 105.

NEW MATERIAL

There is no new data for this species.

DISTRIBUTION

Philippines.

***Quasimus hatayamai* KISHII, 1980**

Quasimus hatayamai KISHII, 1980: 81.

NEW MATERIAL

Malaysia: Kinabalu, 1500-1600 m, 11.-15.XI.1996, 1 spm., leg.
W. SCHAWALLER.

DISTRIBUTION

Malaysia: Cameron highlands; Kinabalu.

***Quasimus idiophallus* DOLIN, 1993b**

Quasimus idiophallus DOLIN, 1993b: 114.

NEW MATERIAL

Ost Java: Bandung, Tangkumb, Anprachu, 2 sp., leg. HAMANN (in CPG,
det. DOLIN).

DISTRIBUTION

Indonesia: Java.

***Quasimus indistinctus* DOLIN, 1997a**

Quasimus indistinctus DOLIN, 1997a: 148.

MATERIAL

There is no new data for this species.

DISTRIBUTION

Indonesia: Java; Sumatra.

***Quasimus javanus* DOLIN, 1997b**

Quasimus javanus DOLIN, 1997b: 106.

MATERIAL

There is no new data for this species.

Distribution

Indonesia: Java.

***Quasimus longicornis* DOLIN, 1993b**

Quasimus longicornis DOLIN, 1993b: 113.

NEW MATERIAL

(see the data from Indonesia: Sulawesi).

DISTRIBUTION

Indonesia: Sumatra (type locality); Sulawesi.

***Quasimus malayanus* KISHII, 1980**

Quasimus malayanus KISHII, 1980: 84.

NEW MATERIAL

Malaysia: Perak, Tanah Rata, 13.-17.II.1997, 7 spm., leg. DULIK & JENIS.

DISTRIBUTION

Malaysia: Malacca; Perak.

***Quasimus misellus* (BOHEMANN, 1858)**

Cryptohypnus misellus BOHEMANN, 1858: 69.

Hypnoidus misellus (SCHENKLING 1925: 210).

Quasimus misellus (DOLIN 1993b: 112).

NEW MATERIAL

Malaysia: Sarawak, Kapit distr., Sebong, Baleh, 9.-21.III.1994, 1 spm., leg.
J. HORAK (in CPG, det. DOLIN).

DISTRIBUTION

Malaysia: Sarawak.
Indonesia: Java (type locality).

***Quasimus palawanensis* ÔHIRA, 1974**

Quasimus palawanensis ÔHIRA, 1974: 167.

NEW MATERIAL

Philippines: Mindanao, mt. Apo Ilomavis, 1400 m, 18.-19.V.1996, 3 spm.,
leg. BOLM.

DISTRIBUTION

Palawan
Philippines: Palawan (type locality); Mindanao.

***Quasimus robustus* KISHII, 1980**

Quasimus robustus KISHII, 1980: 86.

NEW MATERIAL

(see new data from Laos).

DISTRIBUTION

Malaysia: Malacca (type locality).
Indochina: Laos.

***Quasimus subcarinatus* DOLIN, 1993b**

Quasimus subcarinatus DOLIN, 1993b: 115.

MATERIAL

There is no new data for this species.

DISTRIBUTION

Indonesia: Sumatra; Java.

***Quasimus subcordatus* DOLIN, 1993b**

Quasimus subcordatus DOLIN, 1993b: 111.

MATERIAL

There is no new data for this species.

DISTRIBUTION

Malaysia: Borneo.

***Quasimus subovalis* FLEUTIAUX, 1930**

Quasimus subovalis FLEUTIAUX, 1930: 643.

NEW MATERIAL

Malaysia: Pahang, Genting highland, 17.-19.XI.1987, 1 spm., leg. S. TAITI & L. BAROLOZZI; see also data from China, Laos and Thailand.

DISTRIBUTION

Malaysia: Borneo; Malacca.

Indonesia: Sumatra.

China.

Indochina: Thailand; Laos, Vietnam.

***Quasimus sumatrensis* DOLIN, 1993b**

Quasimus sumatrensis DOLIN, 1993b: 109.

MATERIAL

There is no new data for this species.

DISTRIBUTION

Indonesia: Sumatra.

6.2.1.3 Genus *Yukoana* KISHII, 1959

Yukoana KISHII, 1959: 7.

TYPE SPECIES

Cryptohypnus ellipticus CANDÈZE, 1873.

***Yukoana cordiimpressa* KISHII, 1980**

Yukoana cordiimpressa KISHII, 1980: 79.

TYPE MATERIAL

Malaysia: Cameron highlands, 15.V.1979, 1 spm., leg. S. IMASAKA.

DISTRIBUTION

Malaysia: Cameron highlands.

REMARKS

There are no new data on this species.

***Yukoana costalis* KISHII, 1980**

Yukoana costalis KISHII, 1980: 75.

Quasimus problematicus (DOLIN, 1993b: 116).

NEW MATERIAL

Malaysia: Perak, Tanah Rata, 13.-17.II.1997, 2 spm., leg. DULIK & JENIS;
Pahang, Genting highland, Berembah, 1700 m, 27.XI.1987, 2 spm., leg. S. TAITI
& L. BARTOLOZZI (in CPG, det. KISHII).

DISTRIBUTION

Malaysia: Cameron highlands.

***Yukoana longicornis* KISHII, 1980**

Yukoana longicornis KISHII, 1980: 77.

NEW MATERIAL

Malaysia: Cameron highlands, 17.V.1979, 1 spm., leg. S. IMASAKA.

DISTRIBUTION

Malaysia: Cameron highlands.

REMARKS

There are no new data of this species.

***Yukoana philippinensis* DOLIN, 1997b**

Quasimus (Yukoana) philippinensis DOLIN, 1997b: 103.

NEW MATERIAL

Philippines: Mindanao, mt. Apo Ilomavis, 1400 m, 18.-19.V.1996, 2 spm., leg. BOLM.

DISTRIBUTION

Philippines.

6.2.2 Subtribe *Loebliquasina subtribus novum*6.2.2.1 Genus *Loebliquasis* DOLIN, 1997

Loebliquasis DOLIN, 1997: 845.

Loebliquasis burkhardti DOLIN, 1997

Loebliquasis burkhardti DOLIN, 1997: 846.

TYPE MATERIAL

Malaysia: Sabah, Borneo, mt. Kinabalu, 2600 m, 1.V.1987, 10 spm., leg. BURCKHARDT & LÖBL; same place but Layang Layang, 2.-8.V.1987, 4 spm., leg. A. SMETANA.

DISTRIBUTION

Malaysia: Sabah.

REMARKS

There are no new data on this species.

6.2.2.2 Genus *Paraquasimus* DOLIN, 1997

Paraquasimus DOLIN, 1997: 846.

REMARKS

One of the following described species, *P. lamellatus*, possess characters for which DOLIN (1997) mentioned to be significant for *Paraquasimus* (fourth to tenth antennomeres lamellate) and for *Quasimus* (carina of the posterior angles of pronotum reaching up to the anterior apex).

Currently it seems that the character of the lamellate antennae is more constant in the species of *Paraquasimus* than the character of the carina of the posterior angles of pronotum, which is more variable in length and in expression. Furthermore, the mentioned character of the lamellate antennae hypothetically

can be taken as apomorphus, derived from a structure of antennae which is elongate to moniliform and slightly serrate, and which is available in the majority of the species of the tribe Quasimusini. For the mentioned reason, we take the *P. lamellatus* as to be a member of the genus *Paraquasimus*.

***Paraquasimus baliensis* DOLIN, 1997**

Paraquasimus baliensis DOLIN, 1997: 849.

TYPE MATERIAL

Indonesia: Bali, Penulisan, 22.XI.1978, 3 spm., leg. J. T.

DISTRIBUTION

Indonesia: Bali.

REMARKS

There are no new data on this species.

***Paraquasimus smetanai* DOLIN, 1997**

Paraquasimus smetanai DOLIN, 1997: 848.

TYPE MATERIAL

Malaysia: Sabah, mt. Kinabalu, below Layang Layang, 2600 m, 9.-20.V.1987, 3 spm., leg. A. SMETANA.

DISTRIBUTION

Malaysia: Sabah.

REMARKS

There are no new data on this species.

***Paraquasimus javanensis* sp. nov.**

(Figs. 42-43)

TYPE LOCATION

Indonesia: Java, Ijen pl. Nat. Park.

TYPE MATERIAL

Holotype ♂ (SMNS): Indonesia: Java, Ijen pl. Nat. Park, 1800 m, Sodong, 26-27.II.1994, leg. BOLM.

Paratypes 18 ♂♂ (CSV, SMNS): Same location as holotype.

DIAGNOSIS

Holotypus ♂. Subparallel, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; black, knees and tarsi brownish; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence bronze-coloured and semi-erected; dimensions: length: 2.60 mm, width: 0.90 mm.

DESCRIPTION

Head with distant, fine, circular and simple punctures, interstices twice to fourth their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, conspicuously shiny, slightly serrate from fourth antennomere on, not reaching the posterior angles of pronotum by the length of the last two antennomeres, their apexa are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, each of them one and a half times as long as wide, and slightly extended apical; fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.71:0.90), slightly and regularly raised on centre, nearly subparallel laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum divergent at the apices only, and with a distinctly raised carina which is reaching apical half of the pronotum; apices of basal angles obtuse; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and simple, very fine, just visible, interstices irregularly, twice to fourth their diameter, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, with an unguate impression centrally; punctures distant and simple, just visible; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without an inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe subparallel extending apices of the paramere slightly, the latter falcate subapical, and pointed apical.

Females are unknown.

DIFFERENTIAL DIAGNOSIS

Paraquasimus javanensis is closely allied to *P. baliensis*, but may be easily distinguished from this species by the distant and fine punctures on head, by the totally bronze-coloured pubescence, as well as by the shorter carina of posterior angles of pronotum.

ETYMOLOGY

Named after the locus typicus.

DISTRIBUTION

Indonesia: Java.

6.2.2.3 Genus *Pseudoquasimus* DOLIN, 1997

Pseudoquasimus DOLIN, 1997: 849.

Pseudoquasimus arcanus DOLIN, 1997

Pseudoquasimus arcanus DOLIN, 1997: 850.

TYPE MATERIAL

Malaysia: Sabah, Borneo, mt. Kinabalu, below Sayat, 3700 m, 7.VIII.1988, 3 spm., leg. A. SMETANA; same place but above Gunting Lagadan, 3400 m, 6.VIII.1988, 1 spm., leg. A. SMETANA.

DISTRIBUTION

Malaysia: Sabah.

REMARKS

There are no new data on this species.

6.3 GEOGRAPHICAL CHECK-LIST OF THE SPECIES OF THE TRIBE QUASIMUSINI
IN THE MALAYAN SUBREGION

Tab. 4. General distribution in the Malayan subregion

Tribe QUASIMUSINI		Region					
genus	species	Perak	Borneo	Sumatra	Java	Bali	Philipp.
<i>Loebliquasis</i>	<i>burkhardtii</i>		X				
<i>Miquasus</i>	<i>scutellaris</i>	X					
<i>Paraquasimus</i>	<i>baliensis</i>	X				X	X
<i>P.</i>	<i>smetanai</i>		X				
<i>P.</i>	<i>javanensis</i>				X		
<i>Pseudoquasimus</i>	<i>arcanus</i>		X				
<i>Quasimus</i>	<i>bicoloratus</i>		X				
<i>Q.</i>	<i>brevis</i>		X				
<i>Q.</i>	<i>breviusculus</i>	X		X			
<i>Q.</i>	<i>cameronensis</i>	X					
<i>Q.</i>	<i>carinipennis</i>	X		X			
<i>Q.</i>	<i>catei</i>	X			X		
<i>Q.</i>	<i>curticornis</i>	X					
<i>Q.</i>	<i>haddeni</i>						X
<i>Q.</i>	<i>hatayamai</i>	X					
<i>Q.</i>	<i>idiophallus</i>				X		
<i>Q.</i>	<i>indistinctus</i>			X	X		
<i>Q.</i>	<i>javanus</i>			X	X		
<i>Q.</i>	<i>longicornis</i>			X			
<i>Q.</i>	<i>malaysianus</i>	X					
<i>Q.</i>	<i>palawanensis</i>						X
<i>Q.</i>	<i>robustus</i>	X					
<i>Q.</i>	<i>subcarinatus</i>		X				
<i>Q.</i>	<i>subovalis</i>		X	X			X
<i>Q.</i>	<i>sumatrensis</i>			X			
<i>Yukoana</i>	<i>cordiimpressa</i>	X					
<i>Y.</i>	<i>costalis</i>	X					
<i>Y.</i>	<i>longicornis</i>	X					
<i>Y.</i>	<i>philippinensis</i>						X

(The given overview is taken from data of the JUNK AND SCHENKLING catalogues (1925-27), from the data of the material of CSV, and from a so far unpublished catalogue of Prof. Dr. G. PLATIA, of Elateridae described after the abovementioned catalogue. The abbreviation "Philipp." is for the Philippines including the Island of Palawan).

7. THE SPECIES OF THE TRIBE QUASIMUSINI FROM WALLACEA

7.1 GEOGRAPHICAL AND CHOROLOGICAL REPORT

The following list of the species of the new tribe Quasimusini from Wallacea includes the fauna of the island of Sulawesi. There are no data known until now from islands of Flores, Sumba, Timor, Seram, Buru, and from the archipelago of Maluku. Currently, there are only a few data available on the fauna of this subregion.

7.2 DESCRIPTION AND REVIEW OF THE SPECIES OF THE TRIBE QUASIMUSINI FROM THE WALLACEA

All the species of the new tribe Quasimusini from the Wallacea introduced in the following belong to the genera *Paraquasimus* and *Quasimus*. Together we found two species of the genus *Paraquasimus* and two species of *Quasimus*.

7.2.1 Subtribe *Quasimusina subtribus novum*

7.2.1.1 Genus *Quasimus* Gozis, 1886

Quasimus Gozis, 1886: 22.

TYPUS GENERIS

Elater minutissimus GERMAR, 1822.

***Quasimus antennatus* sp. nov.**

(Figs. 46-47)

TYPE LOCATION

Indonesia: Sulawesi, Kab Dongala Tono.

TYPE MATERIAL

Holotype ♂ (SMNS): Indonesia: Sulawesi, 8 km west of Mamasa, 950 m, 18.-21.VII.1999, leg. BOLM.

Paratypes 8 ♂♂, 4 ♀♀ (CSV, SMNS): Same data as holotype, 1 spm., leg. Bolm; same data as holotype, but 1100 m, 1.-3.VII.2991, 6 spm., leg. BOLM; same data as holotype, but 29.-30.VII.2991, 1 spm., leg. BOLM; Tanah Toraja, Poding to Pulu Pulu, 1600-1800 m, 13.-17.VIII.1990, 4 spm., leg. A. RIEDEL.

DIAGNOSIS

Holotypus ♂. Suboval, surface of pronotum conspicuously, of elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; black, base of elytra and legs brownish; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence argenteal and semi-erected; dimensions: length: 2.40 mm, width: 0.89 mm.

DESCRIPTION

Head with distant, fine, circular and umbilici punctures, interstices once to double their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae stout, covered with long hairs, serrate from third antennomere on, and just reaching the posterior angles of pronotum, their apexa are covered with 8-12 conspicuously long and erected trichana; second antennomere subcylindrical, third triangular, each of them of the same length, fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly biturbinate apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum semi-circular, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.71:0.89), conspicuously and regularly raised on centre, conspicuously bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum non-divergent apical, and with a distinctly raised carina which is reaching the apex of pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and umbilici, very fine, just visible, interstices irregularly, once to double their diameter, subbasally slightly denser, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, with an unguulate impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without a inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe subparallel, extending apices of the paramere conspicuously, the latter falcate subapical, and pointed apical.

Females have slightly shorter antennae than the males, which not reaching posterior angles of pronotum by the length of the last antennomere.

DIFFERENTIAL DIAGNOSIS

Quasimus antennatus is closely allied to *Q. misellus*, but may be easily distinguished from this species by the larger body, by the conspicuously bent lateral sides of pronotum, by the stout antennae, and by the form of aedeagus.

ETYMOLOGY

Named after the form of the antennae.

DISTRIBUTION

Indonesia: Sulawesi.

Quasimus bos sp. nov.

(Figs. 50-51)

TYPE LOCATION

Indonesia: Sulawesi, Kab Donggala Tono.

TYPE MATERIAL

Holotype ♂ (CSV): Indonesia: Sulawesi, Kab Donggala Toro, 920 m, from cacao under forest remnants, 30.II.2004, M. Bos.

Paratypes 6 ♂♂ (CPG, CSV, CTW): Same location as Hopotype but 825 m, 20.XII.2003, 5 spm; same location but 750-1000 m, 4.V.2005, 1 spm.

DIAGNOSIS

Holotypus ♂. Obovate, surface of pronotum and elytra conspicuously and regularly raised, semi-matt, and covered with pileous fine hairs; black, legs and bevelled apex of last antennomere brownish; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence argenteal and semi-erected; dimensions: length: 2.40 mm, width: 0.91 mm.

DESCRIPTION

Head with distant, fine, circular and umbilici punctures, interstices once to double their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, slightly serrate from fourth antennomere on, not reaching the posterior angles of pronotum by the length of the last antennomere, their apexa are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, each of them one and a half times as long as wide, and slightly extended apical; fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.71:0.91), conspicuously and regularly raised on centre, nearly subparallel laterally, and with a relatively prominent slope posteriorly; posterior angles of pronotum divergent at the apices only, and with a distinctly raised carina which is reaching the apex pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and simple, very fine, just visible, interstices irregularly, once to double their diameter, subbasally slightly denser, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, with an unguate impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without an inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra

covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe widened subapical, extending apices of the paramere conspicuously, the latter falcate subapical, and pointed apical.

Females are unknown.

DIFFERENTIAL DIAGNOSIS

Quasimus bos is closely allied to *Q. scutellaris*, but may be easily distinguished from this species by the smaller body, by the nearly subparallel form of pronotum, by the argenteal pubescence, and by the form of aedeagus.

ETYMOLOGY

Named after the discoverer of the new species, Mr. M. Bos.

DISTRIBUTION

Indonesia: Sulawesi.

7.2.2 Subtribe **Loebliquasina subtribus novum**

7.2.2.1 Genus ***Paraquasimus* DOLIN, 1997**

Paraquasimus DOLIN, 1997: 846.

TYPUS GENERIS

Paraquasimus smetanai DOLIN, 1997.

***Paraquasimus flavopodus* sp. nov.**

(Fig. 41)

TYPE LOCATION

Indonesia: Sulawesi, 25 km east of Mamasa.

TYPE MATERIAL

Holotype ♀ (SMNS): Indonesia: Sulawesi, 25 km east of Mamasa (Kalama), 1100 m, 1.-3.VII.2001, leg. BOLM.

DIAGNOSIS

Holotypus ♀. Suboval, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; black, basis and epipleura of elytra and second and third antennomeres reddish-brown, legs shiny yellow; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence argenteal and semi-erected; dimensions: length: 2.21 mm, width: 0.91 mm.

DESCRIPTION

Head with distant, very fine, oval and simple punctures, interstices twice to fourth their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, conspicuously shiny, slightly serrate from fourth antennomere on, just reaching the posterior angles of pronotum, their apexa are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, each of them one and a half times as long as wide, and slightly extended apical; fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum subtrapezoidal, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.61:0.91), slightly and regularly raised on centre, nearly subparallel laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum parallel, not divergent, and with a distinctly raised carina which is reaching apical half of the pronotum; apices of basal angles arcuate; pronotum without a fovea or mould; punctures of pronotum very distant, points trapezoidal to obovate, and simple, very fine, just visible, interstices irregularly, twice to fourth their diameter, and on the whole semi-matt, little shiny; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, with an unguate impression centrally; punctures distant and simple, just visible; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter

arcuate, without a inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Males are unknown.

DIFFERENTIAL DIAGNOSIS

Paraquasimus flavopodus is closely allied to *P. baliensis*, but may be easily distinguished from this species by the colour of the legs, by the much smaller body, and the much more distant punctures on head and pronotum.

ETYMOLOGY

Named after the colour of the legs.

DISTRIBUTION

Indonesia: Sulawesi.

Paraquasimus lamellatus sp. nov.

(Figs. 44-45)

TYPE LOCATION

Indonesia: Sulawesi, 38 km south-east of Pendolo, village.

TYPE MATERIAL

Holotype ♂ (SMNS): Indonesia: Sulawesi, 38 km south-east of Pendolo, village, 1200 m, 10.-11.VII.2001, leg. BOLM.

Paratype ♂ (CSV): Same location as holotype.

DIAGNOSIS

Holotypus ♂. Suboval, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; blackish-brown, base of

elytra slightly lighter brownish; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence argenteal and semi-erected; dimensions: length: 1.91 mm, width: 0.74 mm.

DESCRIPTION

Head with distant, fine, circular and simple punctures, interstices twice their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, conspicuously shiny, serrate from fourth antennomere on and lamellate apical, outreaching the posterior angles of pronotum by the length of the last antennomere, their apexa are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, each of them one and a half times as long as wide, and slightly extended apical; fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly lamellate apical, last antennomere dolabriform.

Pronotum campaniform, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.60:0.74), slightly and regularly raised on centre, conspicuously bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum divergent, and with a distinctly raised carina which is reaching apex of pronotum (fragmentary from half of the pronotum on); apices of basal angles arcuate; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and simple, very fine, just visible, interstices irregularly, twice to fourth their diameter, and on the whole surface flat and semi-matt; pubescence declivous from apex to basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, with an unguate impression centrally; punctures distant and simple, just visible; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without a inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple punctures, but without striae, interstices of punctures irregularly, once to twice their diameter, and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe extended subapical, extending apices of the paramere conspicuously, the latter falcate and pointed apical.

Females are unknown.

DIFFERENTIAL DIAGNOSIS

Paraquasimus lamellatus is closely allied to *P. smetanai*, but may be easily distinguished from this species by the longer carina of posterior angles of pronotum, by the unicoloured pubescence of the elytra, and by the form of male genitalia.

ETYMOLOGY

Named after the form of the antennae.

DISTRIBUTION

Indonesia: Sulawesi.

7.2.2.2 A key to the species of the genus *Paraquasimus*

(The following key to species of the genus *Paraquasimus* includes all species known so far from Malayan subregion and from Wallacea).

1. Antennomeres 4–8 lamellate 2.
- Antennomeres 4–8 serrate 3.
2. Carina of posterior angles of pronotum reaching apex of pronotum; pubescence unicoloured *P. lamellatus* sp. nov.
- Carina of posterior angles of pronotum reaching half of pronotum; pubescence bi-coloured *P. smetanai* DOLIN, 1997.
3. Legs shiny yellow *P. flavopodus* sp. nov.
- Legs brownish or blackish 4.
4. Pubescence unicoloured bronze; carina of posterior angles of pronotum reaching half of pronotum *P. javanensis* sp. nov.
- Pubescence bi-coloured, bronze with white hairs laterally and medially; carina of posterior angles of pronotum reaching to 2/3 of pronotum
..... *P. baliensis* DOLIN, 1997.

8. THE SPECIES OF THE TRIBE QUASIMUSINI FROM THE PAPUAN SUBREGION

8.1 GEOGRAPHICAL AND CHOROLOGICAL REPORT

The following list of the species of the new tribe Quasimusini from the Papuan subregion includes the fauna of Irian Jaya and New Guinea. Until today, there is very little known about the fauna of these species from the Papuan subregion, and only a few data being available.

8.2 DESCRIPTION AND REVIEW OF THE SPECIES OF THE TRIBE QUASIMUSINI FROM THE WALLACEA

All species of the new tribe Quasimusini from the Papuan subregion introduced in the following belong to the genera *Quasimus* and *Striatoquasimus* genus novus. Together we found one species of the genus *Quasimus*, and one of *Striatoquasimus*.

8.2.1 Subtribe **Quasimusina subtribus novum**

8.2.1.1 Genus *Quasimus* Gozis, 1886

Quasimus Gozis, 1886: 22.

TYPUS GENERIS

Elater minutissimus Germar, 1822.

***Quasimus divisus* Van Zwaluwenburg, 1963**

Quasimus divisus Van Zwaluwenburg, 1963: 338.

NEW MATERIAL

New Guinea: Wau, mt. Kaindi, 24.IX.1969, 1 spm., leg. J. Balogh; same place but 15.-16.IV.1965, 1 spm., leg. Szent & Iványi.

DISTRIBUTION

New Guinea.

8.2.2 Subtribe **Striatoquasina subtribus novum**8.2.2.1 Genus **Striatoquasimus genus novus**

TYPE SPECIES

Striatoquasimus dolini sp. nov.

DESCRIPTION

Small species with dimensions: length: 2.50 mm, width: 1.12 mm; obovate, surface of pronotum and elytra distinctly and regularly raised, semi-matt, and covered with pileous fine hairs; integument micro-punctured on pronotum and micro reticulate on elytra; head with dense, fine, circular and umbilici punctures; nasal space without carina; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; antennae elongate, slightly serrate from fourth antennomere on, just reaching the posterior angles of pronotum, their apexa are covered with 8–12 conspicuously long and erected trichana; prosternal sutures conspicuous segmented; Posterior angles of pronotum with a complete carina which is extending to anterior angles; elytra slightly raised, their surface even and clearly striate by median adjusted punctures from base to apex; third and fourth tarsomere with apically slightly extended euplantulae.

DIFFERENTIAL DIAGNOSIS

Striatoquasimus genus novus is very closely allied to *Quasimus*, but may be easily distinguished from this genus by the structure of elytra, which is striate. This character is unique in the new tribe Quasimusini, and separates *Striatoquasimus* from all other genera of the tribe.

***Striatoquasimus dolini* sp. nov.**

(Figs. 53-54)

TYPE LOCATION

Indonesia: Irian Jaya, Nabire.

TYPE MATERIAL

Holotype ♂ (SMNE): Indonesia: Irian Jaya, Nabire, road Nabire-Illaga, 750 m, X.1997, leg. BALKE.

Paratypes 5 ♀♀ (SMND, CSV): Same data as holotype, leg. BALKE.

DIAGNOSIS

Holotypus ♂. Obovate, surface of pronotum and elytra distinctly and regularly raised, semi-matt, and covered with pileous fine hairs; black, knees and tarsi brownish; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence argenteal and semi-erected; dimensions: length: 2.50 mm, width: 1.12 mm.

DESCRIPTION

Head with dense, fine, circular and umbilici punctures, interstices half to once their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, slightly serrate from fourth antennomere on, just reaching the posterior angles of pronotum, their apexa are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, each of them one and a half times as long as wide, and extended apical; fourth to tenth antennomeres slightly longer than second and third antennomeres, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum subtrapezoidal, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.73:1.12), conspicuously and regularly raised on centre, slightly bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum straight, not divergent, and with a distinctly raised carina which is reaching the apex of pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum distant, points circular, and simple, very fine, just visible, interstices irregularly, once to double their diameter, subbasally slightly denser, and on the whole surface flat and semi-matt; pubescence declivous from apex, basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface slightly raised, and aspirate, with an unguulate impression centrally; punctures densely and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without an inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra covered with distant fine and simple, median adjusted punctures from base to apex, which forming medially striae, surface and shiny; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Aedeagus trilobate, median lobe widened subapical, extending apices of the paramere conspicuously, the latter falcate subapical, and pointed apical.

Females are unknown.

DIFFERENTIAL DIAGNOSIS

Striatoquasimus dolini is not to compare currently with any species else of the new tribe Quasimusini, but may be easily determined by the striate elytra.

ETYMOLOGY

Named after Prof. Dr. V. DOLIN, Kiew, in posthumous honour of his excellent works on the subfamily Negastrinae.

DISTRIBUTION

Indonesia: Irian Jaya.

DISCUSSION

Striatoquasimus dolini is the first species of the genus, and the first of the whole tribe Quasimusini with clearly visible striae on the surface of elytra. All other characters of the species clearly identify it as to belong to the new tribe Quasimusini. Further studies of more material of species of Quasimusini with striate elytra need to be executed to show the development of this character.

9. THE SPECIES OF THE TRIBE QUASIMUSINI FROM HIMALAYA

9.1 GEOGRAPHICAL AND CHOROLOGICAL REPORT

The check-list of the species of the new tribe Quasimusini from Himalaya including the fauna from North India (Darjeeling, Sikkim, Uttar Pradesh, Meghalaya) Nepal and Bhutan. A key to species is given by DOLIN (2001).

9.2 DESCRIPTION AND REVIEW OF THE SPECIES OF THE TRIBE QUASIMUSINI FROM HIMALAYA

The species of the new tribe Quasimusini from Himalaya belong to the genera *Miquasus*, *Quasimus*, *Wittmeroquasimus* and *Yukoana*. Together we found five species of *Miquasus*, 16 species of *Quasimus*, four of *Wittmeroquasimus* and four of *yukoana* which we are going to introduce in the following.

9.2.1 Subtribe **Quasimusina subtribus novum**

9.2.1.1 Genus *Miquasus* KISHII, 1959

Quasimus (Miquasus) KISHII, 1959: 9.

Miquasus (ÔHIRA, 1992: 124).

TYPUS GENERIS

Cryptohypnus luteipes CANDÈZE, 1873.

Miquasus besucheti DOLIN, 2001

Quasimus (Miquasus) besucheti DOLIN, 2001: 137.

TYPE MATERIAL

India: Bengal, Darjeeling, Tiger hill, 2200-2300' m, 13.X.1978, 1 spm., BESUCHET & LÖBL; same district, VI. 1961, 16 spm., leg. G. SCHERER.

NEW MATERIAL

Nepal: Ramechap district, Mohabis Khola, east of Shivalava, 2500-2600 m, 6.-7.V.1997, 3 spm., leg. W. SCHAWALLER.

DISTRIBUTION

India: Darjeeling.

REMARKS

The abovementioned data of new material are the first of this species from Nepal.

***Miquasus cariosus* (DOLIN, 1997a) comb. nov.**

Quasimus (*Miquasus*) *cariosus* DOLIN, 1997a: 152.

TYPE MATERIAL

Nepal: Koshi, Forest north-east of Kuwapani, 2250 m, 24.IV.1984, 36 spm., leg. LÖBL & SMETANA.

DISTRIBUTION

Nepal: Koshi district.

REMARKS

There are no new data of this species known.

***Miquasus convexicollis* (DOLIN, 2001) comb. nov.**

Quasimus (*Miquasus*) *convexicollis* DOLIN, 2001: 139.

TYPE MATERIAL

India: Nilgiri hills, A. K. Downing. Ex. Coll. FLEUTIAUX.

NEW MATERIAL

Nepal: Annapurna, Telbrung Danda, near Gangpokhara, 2700 m, 12.-13.VI.1997, 1 spm., leg. JÄGER; Sankhua Sabha district, Arun valley, Chichila, 1900-2000 m, Quercus forest, bushes near village, 18.-20.VI.1988, 1 spm., leg. J. MARTENS & W. SCHAWALLER; Manaslu mts., 2100 m, Bhara Pokhari, 11.IV.1999, 1 spm., leg. J. SCHMIDT.

DISTRIBUTION

India: Tamil Nadu.

Nepal: Annapurna.

Miquasus dubius* (DOLIN, 2001) comb. nov.Quasimus (Miquasus) dubius* DOLIN, 2001: 138.

TYPE MATERIAL

India: Orissa, Jaiur to Keonjhar district, Daitari, 28.XI.-3.XII.1967, 1 spm., leg. G. TOPAL.

NEW MATERIAL

Nepal: Sankhua Sabha district, Pahakhola cultural land bushes, 30.-31.V.1988, 3 spm., leg. J. MARTENS & W. SCHAWALLER; Kathmandu distr., Sheopuri mts., 2100-2300 m, 25.VI.1988, 1 spm., leg. J. MARTENS & W. SCHAWALLER; Solukhumbu distr., Sanam, 2700-2800 m, 22.-23.V.1007, 1 spm., leg. W. SCHAWALLER; Manaslu mts., east slope, Machhakhola valley, from Gumda to Lapsibot, 1500-1900 m, 23.V.2006, 1 spm., leg. J. SCHMIDT.

DISTRIBUTION

India: Orissa.

Nepal.

REMARKS

The abovementioned data are the first of this species known from Nepal.

Miquasus improvisus* (DOLIN, 2001) comb. nov.Quasimus (Miquasus) improvisus* DOLIN, 2001: 138.

TYPE MATERIAL

India: Kerala, Cardamon H., Valara fall, 450-500 m, 25.IX.1972, 1 spm., leg. BESUCHET, LÖBL & MUSSARD; Madras, Udamalpet, 400 m, 26.IX.1972, 1 spm., leg. BESUCHET, LÖBL & MUSSARD; Maharashtra, Bhaja, 6.VIII.1967, 1 spm., leg. G. TOPAL.

NEW MATERIAL

Nepal: Sankhua sabha district, above Pahakhola, 2600-2800 m, *Quercus samecarpifolia*, *Rhododendron*, 31.V.-3.VI.1988, 3 spm., leg. J. MARTENS

& W. SCHAWALLER; same locality but between Pahakhola and Karmarang, 2300-1800 m, open forest bushes, 4.VI.1988, 2 spm., leg. J. MARTENS & W. SCHAWALLER; Jumla district, Khali-Lagna pass, 3500 m, 16.-17.VI.1998, 5 spm., leg. W. SCHAWALLER.

DISTRIBUTION

India: Karala; Madras; Maharashtra.

Nepal: Sankhua Sabha distr.; Jumla distr.

REMARKS

The abovementioned data of the new material are the first of this species from Nepal.

9.2.1.2 Genus *Quasimus* GOZIS, 1886

Quasimus GOZIS, 1886: 22.

TYPUS GENERIS

Elater minutissimus GERMAR, 1822.

Quasimus abruptus DOLIN, 1997a

Quasimus abruptus DOLIN, 1997a: 144.

TYPE MATERIAL

India: Sikkim, Rangpo, 680 m, 3.VIII.1981, 1 spm., leg. BHAKTA; Himachal Pradesh, Manali, 2000-2300 m, 15.V.1977, 1 spm., leg. WITTMER & BRANCUCCI.

DISTRIBUTION

Himalaya: Sikkim.

REMARKS

There are no new data of this species known.

Quasimus affinis DOLIN, 2001

Quasimus affinis DOLIN, 2001: 135.

TYPE MATERIAL

India: Meghalaya, Garo hills, Nokrek Nat. Park, 9.-17.V.1996, 23 spm., leg. E. JENDEK & O. SAUSA.

DISTRIBUTION

Himalaya: Meghalaya.

REMARKS

There are no new data of this species known.

***Quasimus amriki* (PUNAM, VASU & VATS, 1995) comb. nov.**

Monadicus amriki PUNAM, VASU & VATS, 1995: 364.

MATERIAL

There is no new data known of this species.

DISTRIBUTION

Himalaya: Northwest India.

REMARKS

The type material of this species has not been studied.

***Quasimus bengalicus* DOLIN, 2001**

Quasimus bengalicus DOLIN, 2001: 132.

NEW MATERIAL

Nepal: Jumla district, from Rimi to Chaurikot, 5.VI.1997, 1 spm., leg. A. WEIGEL; same district, 3 km east of Churta, 6.VI.1997, 1 spm., leg. A. WEIGEL.

DISTRIBUTION

Myanmar (type locality).

India: Darjeeling district.

Nepal: Jumla district.

REMARKS

The abovementioned data are the first of this species from Nepal.

***Quasimus brancuccii* DOLIN, 1993a**

Quasimus brancuccii DOLIN, 1993a: 191.

NEW MATERIAL

Nepal: Modi Landrung, 3.-6.VI.1984, 1 spm., leg. C. HOLZSCHUH; Janakpur, Jiri, 1850 m, 2.VI.1980, 1 spm., E. MIGLIACCIO; Janakpur, Tamba-Koshi-Khola, SE Charikot, 900-1200 m, 6.-10.VI.1987, 1 spm., leg. C. HOLZSCHUH (in CPG, det. DOLIN).

DISTRIBUTION

India: Darjeeling, Sikkim districts.
Nepal: Arun valley; Modi Landrung.

REMARKS

The population of the species seem to have a wide-spread distribution in the Himalaya.

***Quasimus colocassius* (VATS & CHAUHAN, 1991) comb. nov.**

Monadicus colocassius VATS & CHAUHAN, 1991: 296.

MATERIAL

The species was described from North-India. The type material was not studied.

DISTRIBUTION

North-India.

REMARKS

There are no new data on this species available.

***Quasimus coolsi* DOLIN, 2001**

Quasimus coolsi DOLIN, 2001: 134.

TYPE MATERIAL

India: Barwai, 38 spm., P. CARDON; Bengale, 1891, 1 spm., leg. CARDON;
India: Konbir, 1891, 2 spm, without collector; Myanmar: Tenasserim, Tamdong, 4000 ft., 1 spm., leg. FRUHSTORFER.

DISTRIBUTION

India: Bengal.

Myanmar: Tenasserim.

REMARKS

There are no new data of this species available.

Quasimus elongatissimus DOLIN, 1993a*Quasimus elongatissimus* DOLIN, 1993a: 188.

TYPE MATERIAL

India: Kashmir, Sonamarg, 2600-2750 m, 17.VII.1976, 1 spm., leg. WITTMER; Gulmarg, 2600-3000 m, 1.-3.VII.1976, 1 spm., leg WITTMER; Pakistan: Swat valley, Matiltan, 2200-2650 m, 15.V.1978, 1 spm., leg. W. WITTMER; Utrot, 2200 m, 10.VI.1978, 4 spm., leg. W. WITTMER.

DISTRIBUTION

India: Kashmir.

REMARKS

There are no new data of this species available.

Quasimus ingridae sp. nov.

(Fig. 52)

TYPE LOCATION

Nepal: Kathmandu valley.

TYPE MATERIAL

Holotype ♀ (CSV): Nepal: Kathmandu valley, Burhanilkhant, 21.VI.1993, leg. R. & I. SCHIMMEL.

Paratype ♀ (CSV): Same data as holotype.

DIAGNOSIS

Holotypus ♂. Suboval, surface of pronotum and elytra slightly and regularly raised, semi-matt, and covered with pileous fine hairs; black, legs blackish-brown, knees yellowish; integument micro-punctured on pronotum and micro reticulate on elytra, pubescence bronze-coloured; dimensions: length: 2.41 mm, width: 0.92 mm.

DESCRIPTION

Head with distant, fine, circular and simple punctures, interstices irregularly, twice to fourth their diameter; pubescence fine, short and directed to apex, and to lateral sides; eyes semi-spherical, little prominent; frons semi-circular, declivous from gena to apex, and separated from clypeus by a complete and distinct boundary carina; last segment of palpus maxillarius dolabriform; mandible falcate and lanceolate apically; labrum protruding, penicillate apically; antennae elongate, slightly serrate from fourth antennomere on, outreaching the posterior angles of pronotum by the length of the half of the last antennomere, their apex are covered with 8–12 conspicuously long and erected trichana; second and third antennomere subcylindrical, second one and a half times as long as wide, third slightly shorter, and both slightly extended apical; fourth to tenth antennomeres slightly longer than third antennomere, but distinctly extended apical, last antennomere oblong-elliptic, subapical bevelled.

Pronotum campaniform, along median line conspicuously shorter than wide at the posterior angles (length-width ratio: 0.78:0.92), slightly and regularly raised on centre, slightly bent laterally, and with a relatively precipitous slope posteriorly; posterior angles of pronotum slightly divergent, and with a distinctly raised carina which is reaching the apex of pronotum; apices of basal angles acute; pronotum without a fovea or mould; punctures of pronotum distant, points circular and fine, interstices irregularly, twice to fifth their diameter, and on the whole surface flat and semi-matt; pubescence declivous from apex, basis and from lateral sides to the centre of pronotum.

Scutellum cuneate, basally straight, and acute apical; surface conspicuously raised, at base, aspirate, and with conspicuous unguulate impression centrally; punctures distant and simple; pubescence fine, and just visible, declivous from basis to apex.

Elytra cuneate and broad, just after basis narrowed to apex; the latter arcuate, without a inner tooth; base of elytra as wide as that of pronotum and slightly depressed at scutellum, shoulders prominent (winged species); elytra without striae but covered with dense and rough, simple punctures, interstices of punctures shiny, irregularly and reduced to wrinkles; pubescence short, and declivous to apex and to lateral sides.

Pro-, meso- and metathorax with distant and fine punctures interstices of points flat and semi-matt; pubescence short and declivous; episternum of prothorax without any punctures and shiny.

Legs elongate, moderately long and thin, tarsomeres up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, third and fourth tarsomeres with apically extended euplantulae, tibia covered with semi-protruding bristly thorns.

Males are unknown.

DIFFERENTIAL DIAGNOSIS

Quasimus ingridae is closely allied to *Q. minutus*, but may be easily distinguished from this species by the larger body, the colour of legs, the campaniform pronotum, and by the larger antennae.

ETYMOLOGY

Named after the dear wife of the first author of this paper INGRID SCHIMMEL, Vinningen discovered the new species, flying in the environment of the Kathmandu valley in the year 1993.

DISTRIBUTION

Nepal: Kathmandu valley.

***Quasimus holzschuhi* DOLIN, 2001**

Quasimus holzschuhi DOLIN, 2001: 133.

NEW MATERIAL

Nepal: Karnali district, Jumla, to Khari Langa, 21.VI.1999, 1 spm., leg. A. WEIGEL.

DISTRIBUTION

India: Kashmir; Darjeeling.

Nepal: Karnali district.

Pakistan.

***Quasimus inopinatus* DOLIN, 2001**

Quasimus inopinatus DOLIN, 2001: 135.

TYPE MATERIAL

India: Meghalaya, Garo hills, Balphakram, Nat. park, 24.-26.V.1996, 1 spm., leg. E. JENDEK & O. SAUSA; India: Darjeeling district, Kalimpong, Durpin, 1300 m, 10.VIII.1985, 1 spm., leg. RAI.

DISTRIBUTION

India: Meghalaya; Darjeeling.

REMARKS

There are no new data of this species available.

***Quasimus interpositus* DOLIN, 1993a**

Quasimus interpositus DOLIN, 1993a: 193.

TYPE MATERIAL

Bhutan: Charee, 16.VIII.1975, 2 spm., leg. D. K. DUKPA.

DISTRIBUTION

Bhutan.

REMARKS

There are no new data of this species available.

***Quasimus malaisei* FLEUTIAUX, 1942**

Quasimus malaisei FLEUTIAUX, 1942: 9.

NEW MATERIAL

Nepal: Dolakha district, Chayarsa, 2000 m, 7.VI.2000, 6 spm., leg. W. SCHAWALLER.

DISTRIBUTION

Myanmar: Kambaiti (type locality).

Thailand: Doi Pui.

Laos: Hua Phan province.

Nepal.

REMARKS

The above published data are the first of *Quasimus malaisei* from Nepal.

***Quasimus meghalayanus* DOLIN, 1993a**

Quasimus meghalayanus DOLIN, 1993a: 181.

TYPE MATERIAL

India: Meghalaya, Shillong, 12.V.1976, 1 spm., leg. WITTMER & BARONI; same place but upper Shillong, 13.V.1976, 3 spm., leg. WITTMER & BARONI; same region but Mawpahlang, 1850 m, 2 spm., 15.V.1976, leg. WITTMER & BARONI; same region but Umtyngar, Cherrapunjee, 16.V.1976, 1 spm., leg. WITTMER & BARONI.

DISTRIBUTION

Bhutan.

India: Meghalaya.

REMARKS

There are no new data of this species available.

Quasimus obovatus* DOLIN, 1993aQuasimus obovatus* DOLIN, 1993a: 183.

NEW MATERIAL

Nepal: Kathmandu valley, Burhanilkhant, 21.V.1993, 5 spm., leg.
R. & I. SCHIMMEL.

DISTRIBUTION

India: Darjeeling; Sikkim; Uttar Pradesh.

Nepal: Kathmandu valley; Godavari.

REMARKS

The population of the species seem to have a wide-spread, but also a restricted distribution in the Himalaya.

Quasimus pyrusus* (VATS & CHAUHAN, 1991) comb. nov.Monadicus pyrusus* VATS & CHAUHAN, 1991: 297.

MATERIAL

The species has been published from North India.

DISTRIBUTION

India.

REMARKS

The type material has not been studied. There is no knowledge on further data of this species.

9.2.1.3 Genus *Yukoana* KISHII, 1959

Yukoana KISHII, 1959: 7.

TYPE SPECIES

Cryptohypnus ellipticus CANDÈZE, 1873.

Yukoana bhutanicus (DOLIN, 1993a) comb. nov.

Quasimus (Yukoana) bhutanicus DOLIN, 1993a: 198.

NEW MATERIAL

Nepal: Bheri province, Dailekh distr., 20 km north of Dailekh, 2400 m, 29.V.1995, 1 spm., leg. M. HARTMANN; Parbat distr., Pun hill at Ghoropani pass, 3050-3100 m, 8.X.1983, 1 spm., leg. LÖBL & SMETANA; Sagarmatha N.P., Syanboche, 3800 m, 14.-19.V.1986, 1 spm., leg. Exp. A. ALBRECHT, O. BISTROM, K. MIKKOLA & A. WIKBERG [in CPG, det. DOLIN as *Quasimus (Miquasus)*]; Lumbini, Jumla Gothichaur to Churta, 2800-3000 m, 30.V.2007, 2 spm., leg. M. HARTMANN.

DISTRIBUTION

Bhutan: Dorjula.

Nepal: Dailekh; Parbat districts.

REMARKS

The above mentioned new material is the first which is recorded from Nepal. The species possess the typical characters of the genus *Yukoana*. The species has been described by DOLIN (1993) as to belong to *Quasimus (Yukoana)*, as the author has taken *Yukoana* as a subgenus of *Quasimus*.

Yukoana kashmirensis (DOLIN, 1993a) comb. nov.

Quasimus (Yukoana) kashmirensis DOLIN, 1993a: 199.

NEW MATERIAL

Nepal: Bagmati province, Yangri ridge, 4350 m, 22.IV.1981, 1 spm., leg. LÖBL & SMETANA; Sagarmatha N.P., Syanboche, 3800 m, 14.-19.V.1986, 1 spm., leg. Exp. A. ALBRECHT, O. BISTROM, K. MIKKOLA & A. WIKBERG [in CPG, det. DOLIN as *Quasimus (Miquasus)*]; Lumbini, Jumla Gothichaur to Churta, 2800-3000 m, 5.VI.2007, 1 spm., leg. M. HARTMANN; same locality but 2850 m, 28.V.2007, 1 spm., leg. M. HARTMANN.

DISTRIBUTION

India: Kashmir.

Nepal: Baghmata district.

REMARKS

The above mentioned new material is the first which is recorded from Nepal. About the transformation of the species into the genus *Yukoana*, see also the remarks for *Yukoana bhutanicus*.

***Yukoana nepalensis* ÔHIRA & BECKER, 1973**

Yukoana nepalensis ÔHIRA & BECKER, 1973: 73.

TYPE MATERIAL

Nepal: 25-30 miles north-northeast of Kathmandu, 13.-19.V.1967, 1 spm., the Canadian Nepal Expedition.

DISTRIBUTION

Nepal: Kathmandu region.

REMARKS

There are no new data available of this species.

***Yukoana tenasserimensis* ÔHIRA, 1970**

Yukoana tenasserimensis ÔHIRA, 1970: 239.

NEW MATERIAL

Nepal: Sankhua Sabha district, Arun valley, between Num and Mure, tree-rich cultural land, 1660-1900 m, 8.VI.1988, 1 spm., J. MARTENS & W. SCHAWALLER; Dolakha district, Chayarsa, 2000 m, 7.VI.2000, 1 spm., leg. W. SCHAWALLER.

DISTRIBUTION

Myanmar: Tenasserim (type locality).

China: Yunnan province.

Malaysia.

REMARKS

The above published data are the first of *Yukoana tenasserimensis* from Nepal.

9.2.2 Subtribe **Wittmeroquasina subtribus novum**9.2.2.1 Genus **Wittmeroquasimus DOLIN, 1993a**

Quasimus (Wittmeroquasimus) DOLIN, 1993a: 195.

Wittmeroquasimus ocellatus (DOLIN, 1993a) comb. nov.

Quasimus (Wittmeroquasimus) ocellatus DOLIN, 1993a: 197.

TYPE MATERIAL

Bhutan: Charee, 16.VIII.1975, 1 spm., leg. D. K. DUKPA.

NEW MATERIAL

Nepal: Ramechhap district, Mohabis Khola, east of Shivalava, 2500-2600 m, 6.-7.V.1997, 7 spm., leg. W. SCHAWALLER; Sankhua Sabha district, Pahakhola, cultural land bushes, 2250 m, 30.-31.V.1988, 2 spm., leg. J. MARTENS & W. SCHAWALLER.

DISTRIBUTION

Himalaya: Bhutan.

China: Yunnan province.

REMARKS

The species is known from Bhutan (type) and has been found in the Chinese province Yunnan. The abovementioned new material is the first of this species published from Nepal.

Wittmeroquasimus paradoxus (DOLIN, 1993a) comb. nov.

Quasimus (Wittmeroquasimus) paradoxus DOLIN, 1993a: 197.

NEW MATERIAL

Nepal: Annapurna mts., near Gangpokhara, 14.-15.VI.1997, 1 spm., leg. JÄGER.

DISTRIBUTION

Himalaya: Nepal.

REMARKS

The above published data is the second ever of this species.

***Wittmeroquasimus parallelus* (SCHWARZ, 1902) comb. nov.**

Hypnoidus parallelus SCHWARZ, 1902: 332.

Yukoana parallelus ÔHIRA & BECKER, 1973: 73).

Quasimus parallelus (DOLIN, 2001): 141.

NEW MATERIAL

Nepal: Baghmati, Sindhupalchok, 2500 m, Sarmatang, 4.VI.1989, 1 spm., leg. C. HOLZSCHUH; Koshi district, Basantapur, 2300 m, 1 spm., leg. M. BRANCUCCI; Karnali-Humla district, 12 km south of Simikot, Raya, 2400 m, 8.VII.2001, 1 spm., leg. A. WEIGEL.

DISTRIBUTION

India: Darjeeling (type locality).

Nepal: Sindhupalchok; Koshi; Karnali-Humla.

Myanmar: Kambaiti (in accordance with FLEUTIAUX, 1942: 9).

China: Yunnan province.

REMARKS

The above published new data are the first of *Wittmeroquasimus parallelus* from Nepal. The species was published by ÔHIRA and BECKER (1973) as *Yukoana*.

***Wittmeroquasimus sausai* (DOLIN, 2001) comb. nov.**

Quasimus sausai DOLIN, 2001: 122.

NEW MATERIAL

Nepal: Myagdi distr., south-slope to Ruyachaur, Duri, 3300-3400 m, 24.VI.1998, 1 spm., leg BERNDT & SCHMIDT.

DISTRIBUTION

India: Meghalaya; Darjeeling; Sikkim.

Nepal: Myagdi district.

REMARKS

The above mentioned new material is the first which is recorded from Nepal. The species possess the typical characters of the genus *Wittmeroquasimus* and is transferred here as a member of this genus.

10. THE SPECIES OF THE TRIBE QUASIMUSINI FROM THE INDIAN AND CEYLONESE SUBREGIONS

10.1 GEOGRAPHICAL AND CHOROLOGICAL REPORT

The check-list of the species of the new tribe Quasimusini from the Indian and Ceylonese subregions, include the fauna of species from Pakistan, India and from Sri Lanka. The fauna from North India is already included in the list of species from Himalaya. A key to the species from India is given by DOLIN (2001).

10.2 DESCRIPTION AND REVIEW OF THE SPECIES OF THE TRIBE QUASIMUSINI FROM THE INDIAN AND CEYLONESE SUBREGIONS

The species of the new tribe Quasimusini from the Indian and Ceylonese subregions introducing in this paper belong to the genera *Miquasus* and *Quasimus*. Together we found five species of the genus *Miquasus* and five of the genus *Quasimus*.

10.2.1 Subtribe **Quasimusina subtribus novum**

10.2.1.1 Genus *Miquasus* KISHII, 1959

Quasimus (*Miquasus*) KISHII, 1959: 9.
Miquasus (OHIRA 1992: 124).

TYPUS GENERIS

Cryptohypnus luteipes CANDÈZE, 1873.

Miquasus convexicollis (DOLIN, 2001) comb. nov.

Quasimus (*Miquasus*) *convexicollis* DOLIN, 2001: 139.

TYPE MATERIAL

India: Nilgiri hills, A. K. Downing. Ex. Coll. FLEUTIAUX.

DISTRIBUTION

India: Tamil Nadu.

Nepal: Annapurna.

Miquasus dubius* (DOLIN, 2001) comb. nov.Quasimus (Miquasus) dubius* DOLIN, 2001: 138.

TYPE MATERIAL

India: Orissa, from Jaipur to Keonjhar district, Daitari, 28.XI.-3.XII.1967,
1 spm., leg. G. TOPAL.

DISTRIBUTION

India: Orissa.

REMARKS

There are no new data of this species known from India known (see also
new data from Nepal).***Miquasus improvisus* (DOLIN, 2001) comb. nov.***Quasimus (Miquasus) improvisus* DOLIN, 2001: 138.

TYPE MATERIAL

India: Kerala, Cardamon H., Valara fall, 450-500 m, 25.IX.1972, 1 spm.,
leg. BESUCHET, LÖBL & MUSSARD; Madras, Udamalpet, 400 m, 26.IX.1972,
1 spm., leg. BESUCHET, LÖBL & MUSSARD; Maharashtra, Bhaja, 6.VIII.1967,
1 spm., leg. G. TOPAL.

DISTRIBUTION

India: Kerala; Madras; Maharashtra.

REMARKS

There are no new data from India known for this species (see also new
data from Nepal).***Miquasus ohirai* (DOLIN, 2001) comb. nov.***Quasimus (Miquasus) ohirai* DOLIN, 2001: 136.

NEW MATERIAL

India: Maharashtra, Pune district, Lonavla Bhushi Dam, 25.IX.2005, 11 spm., leg. (catch) L. BOROWIEC; Same data, but 12.X.2005, 1 spm., leg. (at light) L. BOROWIEC; Same data, but 13.X.2005, 2 spm., leg. (at light) L. BOROWIEC; Same district, but Amba Vall., 16 km south of Lonavla, 27.IX.2005, 2 spm., leg. L. BOROWIEC.

DISTRIBUTION

India: Matheran; Maharashtra.

Miquasus pacholatko (DOLIN, 2001) comb. nov.

Quasimus (*Miquasus*) *pacholatko* DOLIN, 2001: 136.

TYPE MATERIAL

India: Tamil Nadu, 6 km south of Kotagin, 1650 m, 12.-16.V.1997, 1 spm., leg. DEMBICKY & PACHOLATKO; Karnataka, Hassan env., 15.-16.VI.1994, 2 spm., leg. R. SAUR.

DISTRIBUTION

India: Tamil Nadu; Karnataka.

10.2.1.2 Genus *Quasimus* GOZIS, 1886

Quasimus GOZIS, 1886: 22.

TYPUS GENERIS

Elater minutissimus GERMAR, 1822.

Quasimus atomarius (CANDÈZE, 1882)

Cryptohypnus atomarius CANDÈZE, 1882: 74.

Quasimus atomarius (DOLIN 1993a: 186; 2001: 121).

TYPE MATERIAL

India: Darjeeling.

DISTRIBUTION

India: Darjeeling; Uttar Pradesh.
Pakistan.

***Quasimus indicus* DOLIN, 2001**

Quasimus indicus DOLIN, 2001: 133.

TYPE MATERIAL

India: Nilgiri hills, Omduwn, 2 spm., ex coll. FLEUTIAUX.

DISTRIBUTION

India: Nilgiri hills.

REMARKS

There are no new data of this species known.

***Quasimus pakistanicus* DOLIN, 1993a**

Quasimus pakistanicus DOLIN, 1993a: 185.

TYPE MATERIAL

Pakistan: Kawai, Khagan, 1450-1800 m, 26.VI.1977, 2 spm., leg. WITTMER & BRANCUCCI; Swat, Kalam, 2000-2400 m, 13.VI.1978, 1 spm., leg. WITTMER; Minandam, 1800-2300 m, 13.VI.1978, 5 spm., leg. WITTMER; India: Banihal, 2200 m, 2.VII.1980, 1 spm., leg. WITTMER.

DISTRIBUTION

India: Banihal.

Pakistan: Kwai; Swat; Minandam.

REMARKS

There are no new data of this species known.

***Quasimus pauxillus* (SCHWARZ, 1901)**

Hypnoidus pauxillus SCHWARZ, 1901: 31.

Quasimus pauxillus (OHIRA 1971: 207; 1973: 35; DOLIN 1997a: 154).

Quasimus tomentosus (DOLIN, 1993b: 111).

TYPE MATERIAL

Sri Lanka: Bandarawella, without further data.

NEW MATERIAL

Sri Lanka: Sabaragamuwa province, Nonpareil, NE of Belihul-Oya, 1.III.1963, 1 spm.; Central province, Madugoda, 16 mi. E of Kandy, 11.III.1962, 1 spm. (in CPG).

DISTRIBUTION

Sri Lanka.

***Quasimus persimilis* DOLIN, 1993a**

Quasimus persimilis DOLIN, 1993a: 188.

NEW MATERIAL

Nepal: Annapurna mts., Marsyangdi valley, Chamje, 1300-1500 m, 24.VIII.1995, 1 spm., leg. SCHMIDT; Bagmati, Kathmandu, Chaubas, 2200 m, VI.1989, 1 spm., leg. C. HOLZSCHUH (in CPG).

DISTRIBUTION

India: Darjeeling.

Nepal: Annapurna; Lukla; Bumra.

11. THE SPECIES OF THE TRIBE QUASIMUSINI FROM EURASIA

11.1 GEOGRAPHICAL AND CHOROLOGICAL REPORT

The check-list of the species of the new tribe Quasimusini from Eurasia includes the species from Europe and from Tadzhikistan.

11.2 DESCRIPTION AND REVIEW OF THE SPECIES OF THE TRIBE QUASIMUSINI FROM EURASIA

All species of the new tribe Quasimusini from the Malayan introducing in this study belong to the genus *Quasimus*. Together we found three species of the genus *Quasimus*.

11.2.1 Subtribe **Quasimusina subtribus novum**

11.2.1.1 Genus *Quasimus* GOZIS, 1886

Quasimus GOZIS, 1886: 22.

TYPUS GENERIS

Elater minutissimus GERMAR, 1822.

***Quasimus liliputanus* (GERMAR, 1844)**

Cryptohypnus liliputanus GERMAR, 1844: 145.

Quasimus liliputanus (SCHENKLING 1925: 216; PLATIA 1994: 336).

Yukoana liliputana (STIBICK, 1971: 386 (East Africa!)).

MATERIAL

The species has originally been published from Sicilia. New detections of two specimen from Tunis are preserved in CPG and CSV (see also 13.1 A detection of a species of Quasimusini from Africa).

DISTRIBUTION

Italia: Sicily; south Italy.

Africa: Algeria; Tunisia.

***Quasimus minutissimus* (GERMAR, 1822)**

Elater minutissimus GERMAR, 1822: 8.

Cryptohypnus minutissimus (GERMAR, 1844).

Quasimus minutissimus (SCHENKLING 1925).

MATERIAL

The species was published basing on material from Central-South Europe (Germany, France, Italy, Dalmatia).

NEW MATERIAL

Turkey: Antalya, north of Kalan, Dumanli Dagi, cedar-pine forest, pasture, 1200-2230 m, 5.X.2003, 22 spm., leg. V. ASSING.

DISTRIBUTION

Europe.

Asia Minor.

Siberia.

***Quasimus petrimagni* DOLIN & LATIFI, 1997**

Quasimus petrimagni DOLIN & LATIFI, 1997: 83.

MATERIAL

Published basing on material from Tadzhikistan.

DISTRIBUTION

Tadzhikistan.

***Quasimus setosus* BUYSSON, 1914 sp. incertae sedis**

Quasimus setosus BUYSSON, 1914: 42.

MATERIAL

Published basing on material from Turkestan.

DISTRIBUTION

Turkestan.

REMARKS

This species represent the type-species of *Crypnooidus* FLEUTIAUX, 1928. The type material could not been found and studied, but very probably this species belong to the genus *Tropihypnus* or is closely allied to it.

12. THE SPECIES OF THE TRIBE QUASIMUSINI FROM JAPAN AND KOREA

12.1 GEOGRAPHICAL AND CHOROLOGICAL REPORT

The following list of the species of the new tribe Quasimusini is taken from Schenkling catalogue, from various papers of Japanese colleagues (see also 17. References), as well as from an unpublished list of species, described after the catalogue of SCHENKLING (1925). A key to species is provided by KISHII (1987: 110).

12.2 A CHECK-LIST OF THE SPECIES OF THE TRIBE QUASIMUSINI FROM JAPAN AND KOREA

The species of the new tribe Quasimusini from Japan and Korea introducing in the following, belong to the genera *Miquasus*, *Quasimus* and *Yukoana*. Together we list six species of the genus *Miquasus*, 36 of *Quasimus* and nine of *Yukoana*.

12.2.1 Subtribe **Quasimusina subtribus novum**12.2.1.1 Genus *Miquasus* KISHII, 1959

Quasimus subgenus *Miquasus* KISHII, 1959: 9.
Miquasus (ÔHIRA 1992).

TYPUS GENERIS

Cryptohypnus luteipes CANDÈZE, 1873.

Miquasus arimotoi ÔHIRA, 2002

Quasimus arimotoi ÔHIRA, 2002: 483.

DISTRIBUTION

- Japan.

***Miquasus convexipennis* (KISHII, 1982) comb. nov.**

Quasimus (Miquasus) convexipennis KISHII, 1982: 48.

Miquasus convexipennis KISHII 1999: 106.

DISTRIBUTION

Japan.

***Miquasus kai* KISHII, 1994**

Miquasus kai KISHII, 1994: 26.

Quasimus kai KISHII, 1999:106.

DISTRIBUTION

Japan.

***Miquasus luteipes* (CANDÈZE, 1873)**

Cryptohypnus luteipes CANDÈZE, 1873: 15.

Quasimus luteipes (SCHENKLING 1925).

Miquasus sobosanus KISHII, 1970: 54.

Miquasus luteipes ab. *nigripennis* KISHII, 1959: 9.

DISTRIBUTION

Japan.

***Miquasus okhurai* ÔHIRA, 1992**

Miquasus okhurai ÔHIRA, 1992: 123.

DISTRIBUTION

Japan.

***Miquasus tenuis* KISHII, 1994**

Miquasus tenuis KISHII, 1994: 24; 1999: 106.

Quasimus (Miquasus) formosanus (ÔHIRA, 1971: 534).

10.2.1.2 Genus ***Quasimus*** GOZIS, 1886

Quasimus GOZIS, 1886: 22.

TYPUS GENERIS

Elater minutissimus GERMAR, 1822.

***Quasimus babai* KISHII, 1970**

Quasimus babai KISHII, 1970: 26; 1999: 108.

DISTRIBUTION

Japan.

***Quasimus carinicollis* LEWIS, 1894**

Quasimus carinicollis LEWIS, 1894: 188.

DISTRIBUTION

Japan.

***Quasimus chibi* KISHII, 1976b**

Quasimus chibi KISHII, 1976b: 21; 1999: 109.

DISTRIBUTION

Japan.

***Quasimus cordatus* MIWA, 1934**

Quasimus cordatus MIWA, 1934: 254; KISHII 1999: 108.

DISTRIBUTION

Japan.

***Quasimus echigoanus* KISHII, 1976a**

Quasimus echigoanus KISHII, 1976a: 7; 1999: 107.

DISTRIBUTION

Japan.

***Quasimus hiroyoshii* ÔHIRA, 1998**

Quasimus hiroyoshii ÔHIRA, 1998: 373; KISHII 1999: 109.

DISTRIBUTION
Japan.

***Quasimus imasaki* KISHII, 1976**

Quasimus imasaki KISHII, 1976: 22; 1999: 108.

DISTRIBUTION
Japan.

***Quasimus ishigakianus* KISHII, 1976b**

Quasimus ishigakianus KISHII, 1976b: 19; 1999: 109.

DISTRIBUTION
Japan.

***Quasimus issunboushi* KISHII, 1966**

Quasimus issunboushi KISHII, 1966: 10; 1999: 108.

DISTRIBUTION
Japan.

***Quasimus japonicus* KISHII, 1959**

Quasimus japonicus KISHII, 1959: 9; 1999: 107.

DISTRIBUTION
Japan.

***Quasimus kiiensis* KISHII, 1976a**

Quasimus kiiensis KISHII, 1976a: 8; 1999: 108.

DISTRIBUTION
Japan.

***Quasimus kintaroui* KISHII, 1982**

Quasimus kintaroui KISHII, 1982: 50; 1999: 108.

DISTRIBUTION

Japan.

Quasimus korellipticus* HAN, 2000Quasimus korellipticus* HAN, 2000: 38; KISHII 1999: 109.

DISTRIBUTION

Korea.

Quasimus kyotoensis* KISHII, 1966Quasimus kyotoensis* KISHII, 1966: 12; 1999: 107, 108.

DISTRIBUTION

Japan.

Quasimus longulus* KISHII, 1970Quasimus longulus* KISHII, 1970: 70; 1999: 108.

DISTRIBUTION

Japan.

Quasimus miyakonis* KISHII, 1976bQuasimus miyakonis* KISHII, 1976b: 23; 1999: 108.

DISTRIBUTION

Japan.

Quasimus okinawensis* ÔHIRA, 1998Quasimus okinawensis* ÔHIRA, 1998: 375; KISHII 1999: 107.

DISTRIBUTION

Japan.

Quasimus ovalis* (CANDÈZE, 1873)Cryptohypnus ovalis* CANDÈZE, 1873: 11.*Quasimus ovalis* (SCHENKLING 1925: 216; KISHII 1999: 109).

DISTRIBUTION

Japan.

Quasimus ovalioides* KISHII, 1970Quasimus ovalioides* KISHII, 1970: 59; 1999: 106.

DISTRIBUTION

Japan.

Quasimus parvulus* KISHII, 1970Quasimus parvulus* KISHII, 1970: 56; 1999: 109.

DISTRIBUTION

Japan.

Quasimus pseudovalis* KISHII, 1994Quasimus pseudovalis* KISHII, 1994: 29.

DISTRIBUTION

N Korea.

Quasimus ranzanus* KISHII, 1970Quasimus ranzanus* KISHII, 1970: 61; 1999: 108.

DISTRIBUTION

Japan.

Quasimus satoi* ÔHIRA, 1967Quasimus satoi* ÔHIRA, 1967: 43; KISHII 1999: 109.

DISTRIBUTION

Japan.

Quasimus satoi* ssp. *kimurai* KISHII, 1970Quasimus satoi* ssp. *kimurai* KISHII, 1970: 56; 1999: 109.

DISTRIBUTION

Japan.

***Quasimus satoi* ssp. *ogatai* KISHII, 1970**

Quasimus satoi ssp. *kimurai* KISHII, 1970: 56; 1999: 109.

DISTRIBUTION

Japan.

***Quasimus shibatai* KISHII, 1970**

Quasimus shibatai KISHII, 1970: 63; 1999: 107.

Quasimus isaoi KISHII, 1979: 3; 1999: 107.

DISTRIBUTION

Japan.

***Quasimus shibatai* ssp. *matobai* KISHII, 1974**

Quasimus shibatai ssp. *matobai* KISHII, 1974: 4; 1999: 107.

DISTRIBUTION

Japan.

***Quasimus shimabarensis* KISHII, 1979**

Quasimus shimabarensis KISHII, 1979: 3; 1999: 107.

DISTRIBUTION

Japan.

***Quasimus shouichi* KISHII, 1979**

Quasimus shouichi KISHII, 1979: 2.

Quasimus shouichii KISHII, 1980: 85; 1999: 108.

DISTRIBUTION

Japan.

***Quasimus takahashii* MIWA, 1934**

Quasimus takahashii MIWA, 1934: 85; KISHII, 1999: 107.

DISTRIBUTION

Japan.

***Quasimus takakurai* KISHII, 1976a**

Quasimus takakurai KISHII, 1976a: 8; 1999: 106.

DISTRIBUTION

Japan.

***Quasimus tsurugi* KISHII, 1976b**

Quasimus tsurugi KISHII, 1976b: 20; 1999: 107.

DISTRIBUTION

Japan.

***Quasimus tsushimensis* KISHII, 1970**

Quasimus tsushimensis KISHII, 1970: 66; 1999: 107.

DISTRIBUTION

Japan.

***Quasimus uguriensis* KISHII, 1970**

Quasimus uguriensis KISHII, 1970: 68; 1999: 108.

DISTRIBUTION

Japan.

***Quasimus uguriensis* ssp. *heianus* KISHII, 1970**

Quasimus uguriensis ssp. *heianus* KISHII, 1970: 69; 1999: 108.

DISTRIBUTION

Japan.

***Quasimus uguriensis* ssp. *okicola* KISHII, 1970**

Quasimus uguriensis ssp. *okicola* KISHII, 1970: 68; 1999: 108.

DISTRIBUTION

Japan.

***Quasimus yakuensis* KISHII, 1959**

Quasimus japonicus ssp. *yakuensis* KISHII, 1959: 11.

Quasimus yakuensis KISHII, 1999: 107.

DISTRIBUTION

Japan.

***Quasimus yamayai* KISHII, 1985**

Quasimus yamayai KISHII, 1985: 29; 1999: 108.

DISTRIBUTION

Japan.

***Quasimus yasuii* KISHII, 1970**

Quasimus yasuii KISHII, 1970: 60; 1999: 106.

DISTRIBUTION

Japan.

12.2.1.3 Genus ***Yukoana* KISHII, 1959**

Yukoana KISHII, 1959: 7.

TYPE SPECIES

Cryptohypnus ellipticus CANDÈZE, 1873.

***Yukoana angustata* (MIWA, 1927)**

Quasimus angustatus MIWA, 1927: 107; KISHII 1999: 106.

Yukoana angustata (MIWA, 1927); ÔHIRA & SHIRAIISHI 2005: 19-20.

DISTRIBUTION

Japan.

***Yukoana amamiensis* ÔHIRA, 1967**

Yukoana amamiensis ÔHIRA, 1967: 43; KISHII 1999: 110.

DISTRIBUTION

Japan.

Yukoana elliptica* (CANDÈZE, 1873)Cryptohypnus ellipticus* CANDÈZE, 1873: 14.*Quasimus ellipticus* (SCHENKLING 1925: 216).*Quasimus punctatus* MIWA, 1927: 107.*Yukoana elliptica* (KISHII, 1999: 110).

DISTRIBUTION

Japan.

Yukoana elongata* KISHII, 1970Yukoana elongata* KISHII, 1970: 50.*Yukoana elongata* ssp. *amamicola* KISHII, 1970: 50.*Yukoana elongata* ssp. *okinawana* KISHII, 1970: 50.

DISTRIBUTION

Japan.

Yukoana elongata* ssp. *amamicola* KISHII, 1970Yukoana elongata* ssp. *amamicola* KISHII, 1970: 50; 1999: 110.

DISTRIBUTION

Japan.

Yukoana elongata* ssp. *okinawana* KISHII, 1970Yukoana elongata* ssp. *okinawana* KISHII, 1970: 50; 1999: 110.

DISTRIBUTION

Japan.

Yukoana hiramatsui* ÔHIRA, 1978Yukoana hiramatsui* ÔHIRA, 1978: 552; KISHII 1999: 110.

DISTRIBUTION

Japan.

***Yukoana monticola* KISHII, 1961**

Yukoana monticola KISHII, 1961: 33; 1999: 106.

DISTRIBUTION
Japan.

***Yukoana shirozuana* KISHII, 1961**

Yukoana shirozuana KISHII, 1961: 29; 1999: 111.

DISTRIBUTION
Japan.

***Yukoana tamui* KISHII, 1959**

Yukoana tamui KISHII, 1959: 7; 1999: 110.

DISTRIBUTION
Japan.

***Yukoana terukoe* KISHII, 1961**

Yukoana terukoe KISHII, 1961: 32; 1999: 110.

DISTRIBUTION
Japan.

13. THE ZOOGEOGRAPHICAL DISTRIBUTION OF THE SPECIES OF THE TRIBE QUASIMUSINI

13.1 THE GENERAL DISTRIBUTION OF THE SPECIES

The species of the tribe Quasimusini have populations in the Palaearctic and in the Oriental regions.

The Palaearctic populations are distributed in the Euro Siberian and in the Mediterranean subregion including North Africa, in the high mountains of the European Alps, in the Balkan, in the mountains of Asia Minor, in Caucasia, in China and in the high mountains of the Himalaya, as well as in Japan and Korea.

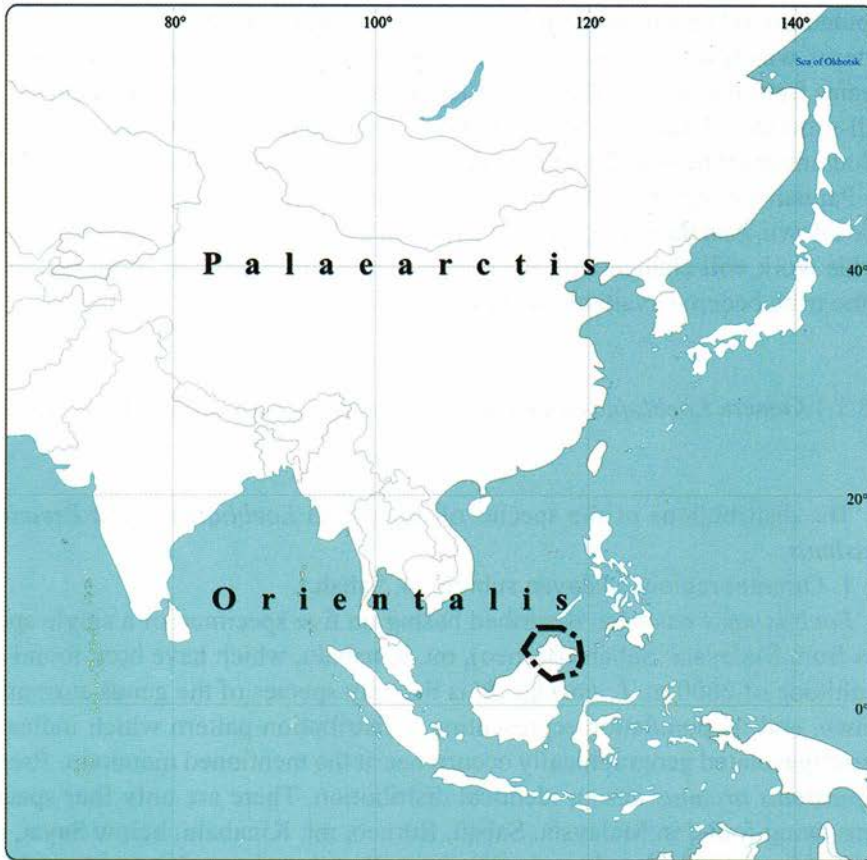
The Oriental populations have distributions in the Indian and Ceylonese subregion, in the Indochinese subregion, in the Malayan subregion, in the Wallacea, and in the Papuan subregion.

There are currently no species known from Micronesia, from Polynesia, from the Marquesas, from Rapa and from the Easter Islands, from the Hawaiian subregion, and from the Seychelles subregion. There are also no species known from the Notogaea, from Neogaea, as well as from the whole Ethiopian region. This shows that the species of Quasimusini have been in the position to spread over the Eurasian and Oriental landmass and the islands of the Sunda Archipelago, from 10° to 140° eastern longitude and from 10° to 60° northern latitude (Greenwich). The geographical distribution patterns of the populations of the genus *Quasimus*, generally is almost identical with that of the whole tribe Quasimusini. Species of the genus *Quasimus* are spreading within the boundary of the populations of the tribe. On the other hand, some of the populations of the groups are strictly geographical isolated: the genera *Loebliquasis* and *Pseudoquasimus* are known from a relatively constricted habitat in Malaysia, where they have been found at mount Kinabalu, Borneo.

The populations of the species, which occurring in South India (the Ceylonese subregion) are geographically isolated too. The population boundaries of the species of Quasimusini in these regions are similar to these we know from many other insect groups of the Indian and Ceylonese subregions. The populations are limited to the south part of India and Sri Lanka. The isolation mechanisms which results from volcanic eruptions at the beginning of the Tertiary epoch separated the populations of North- and South India until today.

A similar spatial pattern as that we know from South-India is also given for the populations which occurring in the Himalaya. But the isolation mechanisms in the Himalayas are correlated with the orogenesis of the high mountains. The Himalayan populations zonating from the colline up to the nival zone.

A relatively homogenous distribution pattern is shown for the populations of the genus *Wittmeroquasimus*. The species of this group are known from Himalaya (Nepal and Bhutan), from China (provinces Hunan and Yunnan) and from Indochina (Laos and Vietnam), and they have distributions in Northern India (Darjeeling, Meghalaya and Sikkim).



Map 1. Dispersions of the *Loebliquasis* and *Pseudoquasimus* species

Other geographically isolated populations are these of the species *Striatoquasimus dolini*, and of *Quasimus divisus* which are the only species known so far from the Papuan subregion. *Striatoquasimus dolini* has been found in Irian

Jaya, near Nabire, *Quasimus divisus* is known from mount Wau, near Kaindi in New Guinea.

The climatology shows the habitats of the species of Quasimusini being in a range of precipitation between 1500-5000 mm, and as to be moist and warm to tropical (i.e. KNAUR 1999).

The altitude in which the specimens of Quasimusini have been found range within 400 m a.s.l. (India: Kerala, Cardamon H., Valara fall, 450-500 m; Madras, Udamalpet, 400 m) up to 4350 m a.s.l. (*Yukoana kashmirensis* in Nepal: Bagmati province, Yangri ridge, 4350 m).

Finally it must be emphasized that the degree of treatment of the various populations of Quasimusini currently is most different, and the zoogeographical patterns which we are known today are accordingly. Only the populations of species from Europe and these from Japan and surrounding islands seem to be well-grounded. Undoubtedly, the fauna of Quasimusini from China, from the Indochinese subregion, from the Malaysian subregion, from the Wallacea, from the Papuan subregion, and from the Indian and Ceylonese subregions are just little known. And therefore, it can be expected that the distribution patterns given in this work will change with the increasing of information as more material of the tribe become available and will be studied in the future.

13.1.1 Genera *Loebliquasis* DOLIN, 1997 and *Pseudoquasimus* DOLIN, 1997 (Map. 1)

The distributions of the species of the genera *Loebliquasis* and *Pseudoquasimus*:

1. Oriental region: Malayan subregion, Sabah.

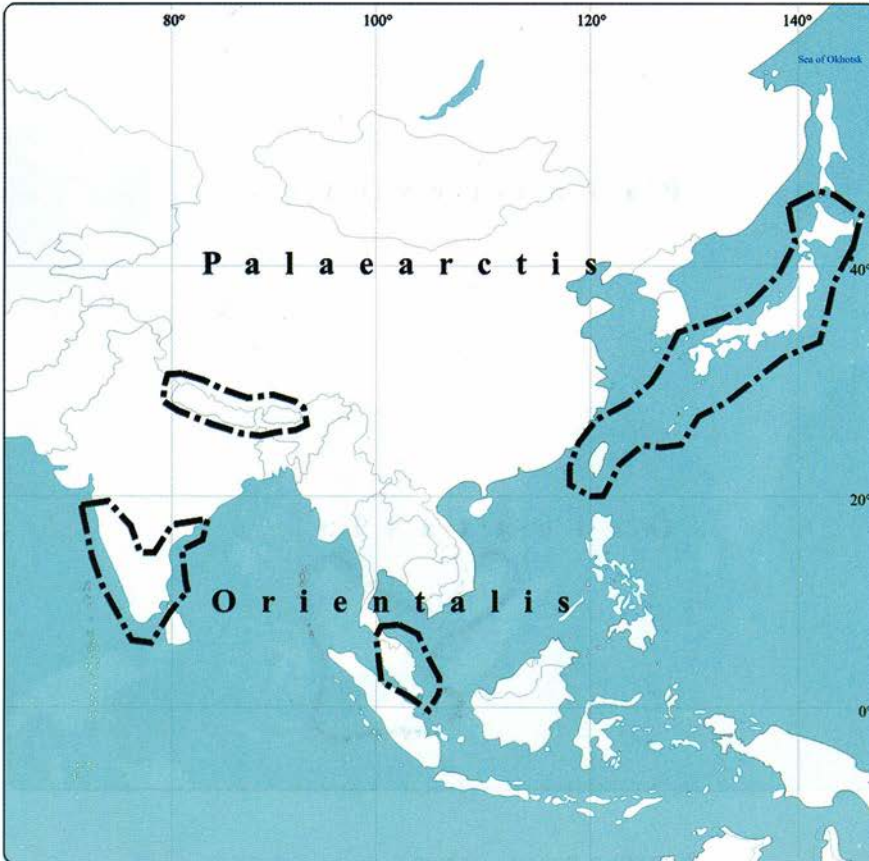
Loebliquasis has been described basing on five specimen of a single species from Malaysia: Sabah (Borneo), mt. Kinabalu, which have been found at an altitude of 2600 m. *L. burkhardti* is the only species of the genus currently known, and its population representing a distribution pattern which indicate a strictly isolated geographically occurrence at the mentioned mountain. *Pseudoquasimus arcanus* has an identical distribution. There are only four specimens being found in Malaysia: Sabah, Borneo, mt. Kinabalu, below Sayat, at an altitude of 3700 m a.s.l., and at the same place but above Gunting Lagadan, at 3400 m a.s.l.

13.1.2 Genus *Miquasus* KISHII, 1959
(Map. 2)

The distributions of the species of the genus *Miquasus*:

1. Palaearctic region: Himalaya and Japan.
2. Oriental region: Ceylonese subregion; Malaysian subregion.

The species of the genus *Miquasus* have four clearly outlined centres of dispersal: the Indian subregion from which five species described so far; the high mountains of the Himalaya with five currently known species of *Miquasus*; the Malayan Peninsula from where one species is known; Japan including the surrounding islands with six species, and Taiwan with two species. The dispersion pattern show the mentioned dispersal centres as conspicuously geographically separated from each other.



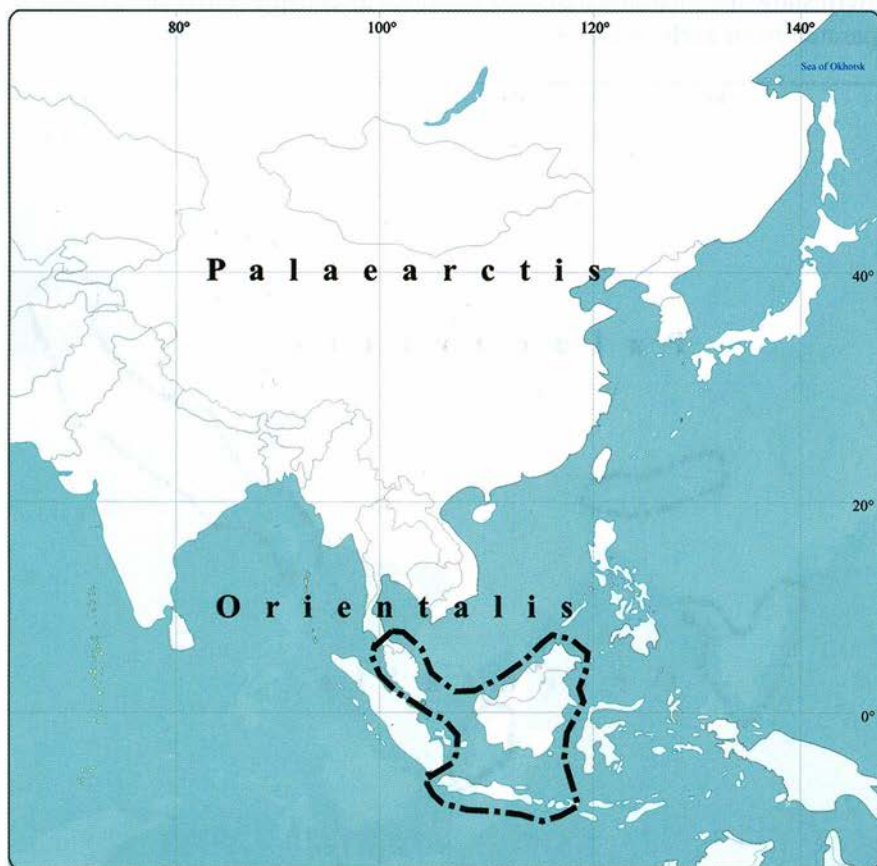
Map 2. Dispersion of the *Miquasus* species

13.1.3 Genus *Paraquasimus* DOLIN, 1997a
(Map. 3)

The distributions of the species of the genus *Paraquasimus*:

1. The oriental region: Malaysian subregion, Borneo, Bali and Java.

There are three species of the genus *Paraquasimus* known so far: one from Malaysia: Sabah (Borneo), mt. Kinabalu, and one each from Indonesia: Bali Peninsula, and from Java, Ijen pl. Nat. Park, where 19 specimen have been collected in an altitude of 1800 m a.s.l. The dispersion patten describes a centre of dispersal which is strictly limited to the Malaysian subregion.



Map 3. Dispersion of the *Paraquasimus* species

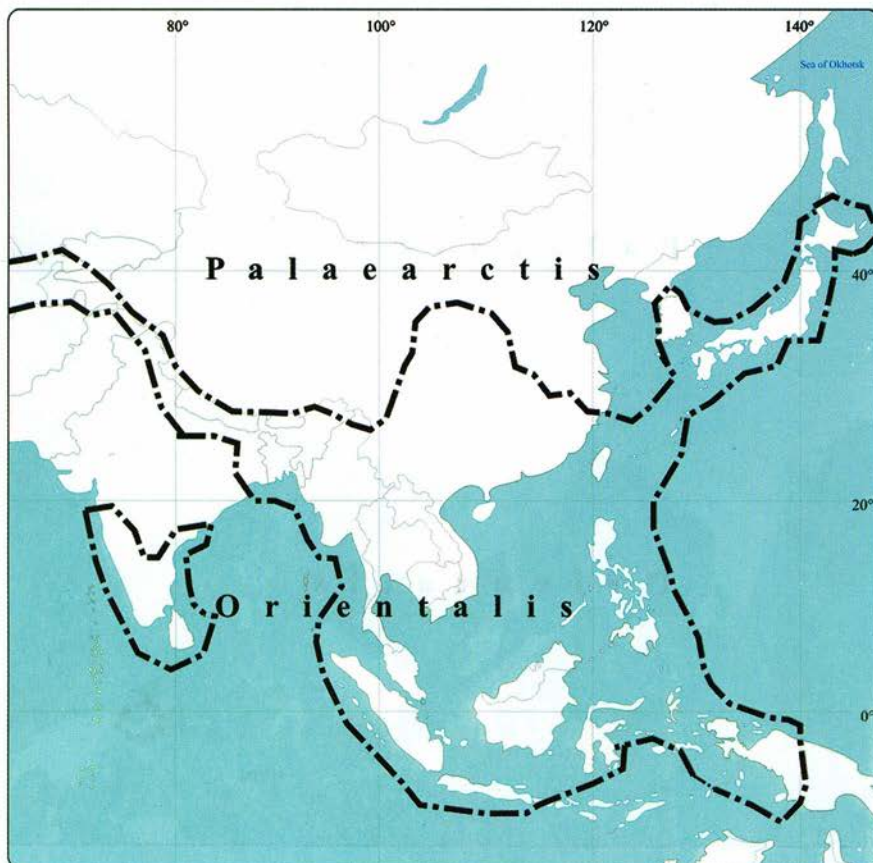
13.1.4 Genus *Quasimus* GOZIS, 1886
(Map. 4)

The dispersions of the species of the genus *Quasimus*:

1. The Palaearctic region: Europe, North Africa, Himalaya, Central China, Korea and Japan.

2. The Oriental region: the Ceylonese and the Indian subregions; the Malayan subregion; the Wallacea; the Papuan subregion; the Indochinese subregion.

The genus *Quasimus* includes an accumulated number of species with a Palaearctic and an Oriental distribution. From the landmass of Eurasia including North Africa, only four species of this genus are known, while 109 are published from Eastern Palaearctic and from the Oriental region. 13 species are known from China, ten from the Indochinese subregion, six species are known



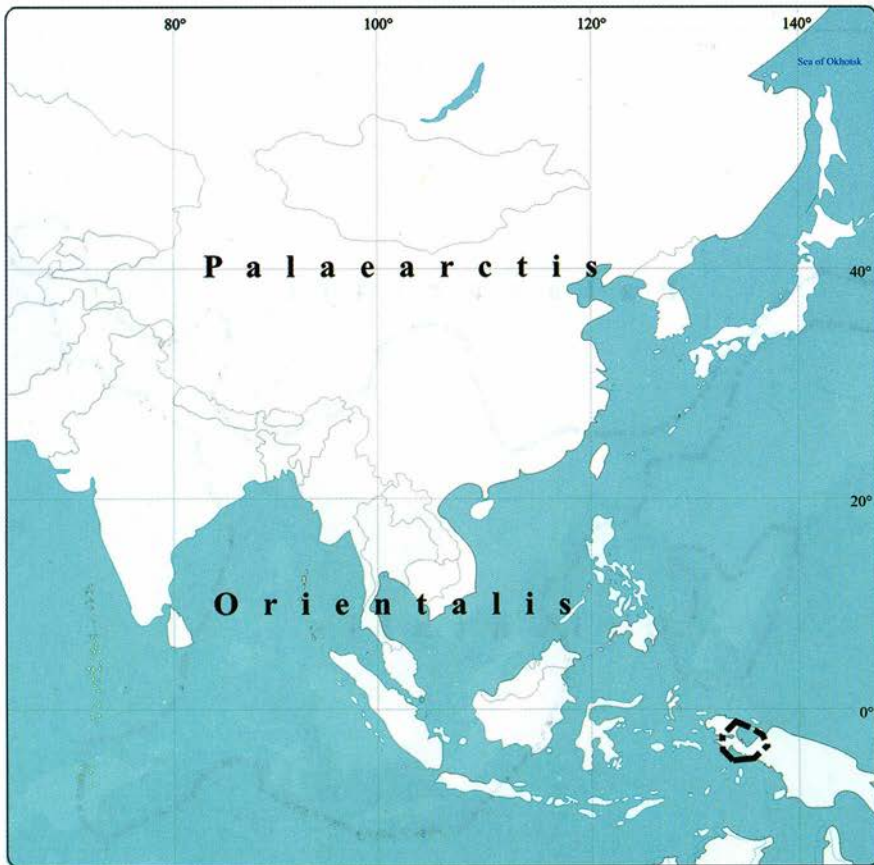
Map 4. Dispersion of the *Quasimus* species

from Taiwan and 20 from the Malaysian subregion. Two species occurring in the Wallacea and only one is known currently from the Papuan subregion. 15 species are known from Himalaya, and five species from the Indian and the Ceylonese subregions. 35 are described from Japan, two from Korea, and four from Eurasia and North Africa. The geographical distributions of the genus *Quasimus* shows the same patterns as these of the whole tribe Quasimusini.

13.1.5 Genus *Striatoquasimus* genus novus
(Map. 5)

The distributions of the genus *Striatoquasimus*:

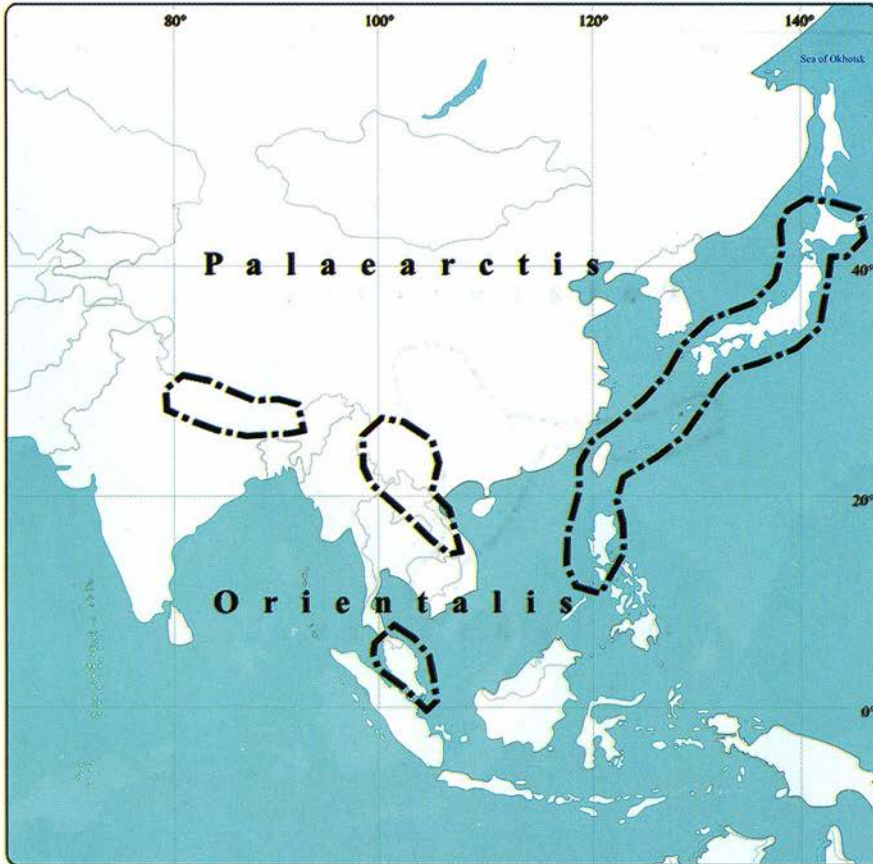
1. The Papuan subregion: Irian Jaya.



Map 5. Dispersion of the *Striatoquasimus* species

The genus *Striatoquasimus* includes a single species off which five specimens have been collected in Indonesia: Irian Jaya, Nabire, at the road from Nabire to Ilaga, of about 750 m a.s.l. *S. dolini* is the first species of the new genus and the second of the whole tribe Quasimusini from New Guinea and Irian Jaya. The distribution patterns show an isolated population. However, this has no meaning currently and it can be changed as soon as new material becomes available.

13.1.6 Genus *Yukoana* KISHII, 1959
(Map. 6)



Map 6. Dispersion of the *Yukoana* species

The distributions of the species of the genus *Yukoana*:

1. Palearctic region: Himalaya and Japan.
2. Oriental region: Indochinese subregion; Malayan subregion.

The genus *Yukoana* represent a group which currently including approximately 20 published species: One of them is known from China, and from the Indochinese subregion, and the population of *Y. tenasserimensis* seem to be wide-spread in these regions; from Taiwan there are four species described and published, and four from continent of the Malayan subregion; five species are known from Himalaya and nine from Japan. The distribution patterns indicate four clearly separated centres of dispersal in the Himalaya, in the Chinese province Yunnan, the Malayan Peninsula, Korea and Japan with surrounding islands, as well as Taiwan and the Philippines.



Map 7. Dispersion of the *Wittmeroquasimus* species

13.1.7 Genus *Wittmeroquasimus* DOLIN, 1993a
(Map. 7)

The distributions of the species of the genus *Wittmeroquasimus*:

1. The Palaearctic region: Himalaya and Central China.
2. The Oriental region: the Indochinese subregion.

The genus *Wittmeroquasimus* shows a homogenous distribution pattern which covers the Himalaya, parts of Central- and South-China and part of the Indochinese subregion. The mentioned landmass can clearly be taken as the centre of dispersal for the species of this group. Currently seven species are known from China; two from the Indochinese subregion, and four from Himalaya.

13.2 A DETECTION OF A SPECIES OF QUASIMUSINI FROM AFRICA

Quasimus liliputanus (GERMAR, 1844)

Cryptohypnus liliputanus GERMAR, 1844: 145.
Quasimus liliputanus (SCHENKLING 1925).

MATERIAL

The species has been originally published from Sicily. A new detection of two specimens of *Q. liliputanus* has been made in Tunis (without further data).

DISTRIBUTION

Italia: Sicily.

Africa: Algeria; Tunisia.

REMARKS

In the collection of the first author of this paper and in CPG there are the two specimens of *Q. liliputanus* (GERMAR, 1844) preserved which has been found in Tunis (no further data). This detection is the second of the genus *Quasimus* ever published from Africa, and the first from Tunisia. The first specimen of *Q. liliputanus* from Africa (Algeria) was published by PLATIA (1994).

DISCUSSION

However, to find a specimen of *Q. liliputanus* in North-western Africa has not been unexpected. The high mountains of the Atlas zoogeographic

belong to the Palaearctic region. Many of Mediterranean species which occur northern of the Mediterranean Sea have habitats in the high mountains of the Atlas too. The detection of the species *Q. liliputanus* in Tunis undoubtedly is correlated with the species population in Sicily, from where this species has been described originally.

The mountains of the Atlas seem to provide similar climate situations as the mentioned northern Mediterranean part and open many niches for species with Mediterranean adaptations. "Der Gesamtcharakter der Fauna ist in höheren Lagen bis 2500 m durchaus mediterran, wobei Arten baetico-mauretanischen Ursprungs vorherrschen" ["The general character of the fauna at an altitude up to 2500 m a.s.l. is Mediterranean, with species of the baeti co-mauretanian origin being predominant"] (FRANZ and BEIER 1970).

Relict habitats of Mediterranean elements are known also from Jebel del Barca and from Hoggar Massive in the Sahara.

At least one group of xylophages Elateridae (species of the genus *Ampe-dus*) has been detected in a part of north-west Africa: Morocco and Algeria. *A. maroccanus* SCHIMMEL, PLATIA & MARTIN, 1992 has been found in Morocco and *A. samai* SCHIMMEL & PLATIA, 1988 was described from Morocco and from Algeria. These species are being bent to a certain condition of wooden substrate. And as this habitat condition is just relicts available in Africa today, the possibilities for these species for active to spreading are relatively constricted. The detections of these species and of *Quasimus liliputaus* in the north-western part of Africa clearly indicate that the former distribution of Palaearctic elements in Africa has been more spaciouly widespread than it is the case today. Today, Palaearctic faunal elements in Africa completely seem to be relicts.

From this perspective the detection of *Q. liliputanus* in Tunis supporting also the theory of the dispersions of Palaearctic populations, and the spreading of Mediterranean faunal elements in North Africa. The abovementioned detections enlarge the patterns of the Palaearctic influence to the whole northern part of north-west Africa.

14. ECOLOGICAL AND CHOROLOGICAL REMARKS

ECOLOGICAL FACTS

There is very little knowledge about the behaviour and the ecological basis of the species of the tribe Quasimusini and only few remarks has been published in the known literature accordingly. DOLIN (1997) made a statement on the locomotion of the species of the genus *Quasimus* and described them as to belong to "... eine Gruppe der schlechtflegenden Kleinkäfer" ["... a group of little beetles to be bad on flying"]. Also DOLIN (1997) made remarks on the circumstances, species of *Paraquasimus*, *Loebliquasis* and *Pseudoquasimus* have been found in Southeast Asia: "... from Gesiebe vom Waldstreu" ["... sieved from forest litter].

However, specimen of the European *Quasimus minutissimus* have been collected by the first author of this paper, sitting on leaves and flowers of hedges, in May 1990, at the environment of Campigna, Italia. In June 1993, the wife of the first author collected two specimen of *Q. ingridae* swarming and sitting in flowers of bloom bushes at noon, in the Kathmandu valley near Burhanilkhant, Nepal. The specimen abruptly left after a short while from the flowers, and disappeared quickly by flying. The days when these specimens have been collected, there was a temperature of approximately 30 degrees Celsius.

A single specimen of *Miquasus convexicollis* has been collected in Nepal: Sankhua Sabha district, in the Arun valley in a quercus forest on bushes near the Chichila village. *Yukoana tenasserimensis* was also found in Nepal: Arun valley, near Num and Mure, in a tree-rich cultural land, and *Miquasus dubius* and *Wittmeroquasimus ocellatus* has been collected in the Sankhua Sabha district of Nepal, near Pahakhola in cultural land with bushes.

CHOROLOGICAL DISTRIBUTIONS

The chorological data given with the collected species classify them as to be adapted to certain altitudinal zones. The following tables show the distributional patterns for the various groups of the tribe Quasimusini, divided in various altitudinal zones: submontane zone (500-1000 m); montage zone (1000-1600 m); sub alpine zone (1600-2000 m); alpine zone (2000-3000 m); nival zone (above 3000 m).

RESULTS FOR *Miquasus*

The collected *Miquasus* species occupy an altitudinal zonation from the sub-montage to the nival zone (*M. improvisus* only). The chorological distribution pattern shows a preference for the sub alpine and alpine zone for the majority of the species.

Tab. 5

Chorological distribution pattern for *Miquasus* divided in altitudinal zones:

Species	Altitudinal zones				
	submontane 500-1000 m	mountain 1000-1600 m	subalpine 1600-2000	alpine 2000-3000 m	nival above 3000 m
<i>besucheti</i>				■	
<i>cariosus</i>				■	
<i>convexicollis</i>			■	■	
<i>dubius</i>				■	
<i>improvisus</i>	■	■	■	■	■
<i>pacholatkoii</i>			■		

Tab. 6

Chorological distribution pattern for *Quasimus* divided in altitudinal zones:

Species	Altitudinal zones				
	submontane 500-1000 m	montane 1000-1600 m	subalpine 1600-2000 m	alpine 2000-3000 m	nival over 3000 m
<i>antennatus</i>	■	■	■		
<i>bosi</i>	■				
<i>carinipennis</i>		■			
<i>exilis</i>			■		
<i>geminus</i>	■	■	■		
<i>horaki</i>		■	■	■	
<i>kubani</i>		■	■	■	
<i>malaisei</i>		■	■		
<i>meghalayanus</i>			■	■	
<i>muangensis</i>		■			
<i>robustus</i>	■				
<i>shaxianensis</i>			■	■	
<i>subovalis</i>	■	■			
<i>unicus</i>		■			
<i>wittmeri</i>					■
<i>yipinglangensis</i>			■	■	■
<i>yunnanus</i>	■	■	■		

Tab. 7

Chorological distribution pattern for *Wittmeroquasimus* divided in altitudinal zones:

Species	Altitudinal zones				
	submontane 500-1000 m	montane 1000-1600 m	subalpine 1600-2000 m	alpine 2000-3000 m	nival over 3000 m
<i>Wittmeroquasimus</i>					
<i>cangshanensis</i>				■	■
<i>claudiae</i>				■	
<i>gaoligongchanus</i>				■	
<i>hubeiensis</i>				■	
<i>laoticus</i>			■		
<i>ocellatus</i>				■	■
<i>parallelus</i>				■	
<i>spinosus</i>			■		
<i>yanmenensis</i>				■	■

Tab. 8

Chorological distribution pattern for *Loebliquasis*, *Paraquasimus*, *Pseudoquasimus*, *Striatoquasimus* and *Yukoana* divided in altitudinal zones:

Species	Altitudinal zones				
	submontane 500-1000 m	montane 1000-1600 m	subalpine 1600-2000 m	alpine 2000-3000 m	nival over 3000 m
<i>Loebliquasis</i>					
<i>burkhardi</i>				■	
<i>Paraquasimus</i>					
<i>flavopodus</i>		■			
<i>javanensis</i>			■		
<i>lamellatus</i>		■			
<i>smetanai</i>				■	
<i>Pseudoquasimus</i>					
<i>arcamus</i>					■
<i>Striatoquasimus</i>					
<i>dolini</i>	■				
<i>Yukoana</i>					
<i>philippinensis</i>		■			
<i>tenasserimensis</i>		■			

RESULTS FOR *QUASIMUS*

The altitudinal zonating of the *Quasimus* group covers the altitudinal zones from the submontane to the nival zone. However, the given diagram shows distribution patterns of the single species to be relatively constricted to not more than three altitudinal zones.

RESULTS FOR *WITTMEROQUASIMUS*

The chorological distribution pattern for the genus *Wittmeroquasimus* shows a constricted occupation of the sub alpine to the nival zone, with a preference to the alpine zone.

RESULTS FOR *LOEBLIQUASIS*, *PARAQUASIMUS*, *PSEUDOQUASIMUS*, *STRIATOQUASIMUS*
AND *YUKOANA*

For the genera *Loebliquasis*, *Paraquasimus*, *Pseudoquasimus*, *Striatoquasimus* and *Yukoana*, there are similar chorological distribution patterns as we know for the genus *Quasimus*. However, *Pseudoquasimus arcanus* currently is known only from the nival zone, and the species of the genus *Yukoana*, *Y. philippinensis* and *Y. tenasserimensis* we know from the montane zone. *Paraquasimus* has a montane and a sub alpine distributional pattern, and *Striatoquasimus* is currently known from the submontane zone only.

DISCUSSION OF THE ECOLOGICAL AND CHOROLOGICAL RESULTS

The abovementioned ecological facts classify the species found at Campigna, Italia and at various localities in Nepal, as such, being in close dependency to bloom bushes.

Apparently, the collected specimens have been attracted by the flowers of bloom bushes which they visited, but they left them suddenly after a short while. This behaviour is known for many other insects too, and can be taken as to be in close correlation to the coevolution of insects and zoophile flowering plants. From this perspective, the specimens are being also in dependency of the blooming period of the bushes from which they were collected and from the sunshine duration, which may be a floral stimulus, and regulating the daily flowering response. The specimens were collected exclusively on hot summer days, and as off the behaviour mentioned above, they seem to be heliotropic.

Considering the climate situation of the species habitats, the altitude zonating from the colline to the nival zone in which the species live, and a moderate to high precipitation between 1500 and 5000 mm per year, the species seem also to be adapted to the relative altitude and being dependent on a certain degree of humidity.

The few facts known about the behaviour of the mentioned species of the tribe Quasimusini classifies them as diurnal, heliotropic and flower visiting, flying insects, which being in dependency of a certain altitudinal zone and a certain degree of humidity of the habitats in which they live.

15. RESULTS

As results of this study we know now 161 species of the new tribe Quasimusini which occur in the Palaearctic and in the Oriental region.

A new tribe of the subfamily Negastrinae NAKANE & KISHII, 1956: Quasimusini, four new subtribes: Loebliquasina, Quasimusina, Striatoquasina and Wittmeroquasina as well as a new genus, *Striatoquasimus* have been established; 23 new species of the new tribe have been described and illustrated: *Paraquasimus flavopodus* sp. nov., *P. javanensis* sp. nov., *P. lamellatus* sp. nov., *Quasimus anjae* sp. nov., *Q. antennatus* sp. nov., *Q. bicoloratus* sp. nov., *Q. bosi* sp. nov., *Q. fujianensis* sp. nov., *Q. ingridae* sp. nov., *Q. hergovitsi* sp. nov., *Q. kubani* sp. nov., *Q. muangensis* sp. nov., *Q. steffenskyi* sp. nov., *Q. yipinglangensis* sp. nov., *Q. yunnanus* sp. nov., *Striatoquasimus dolini* sp. nov., *Wittmeroquasimus cangshanensis* sp. nov., *W. claudiae* sp. nov., *W. gaoligongshanensis* sp. nov., *W. hubeiensis* sp. nov., *W. laoticus* sp. nov., *W. spinosus* sp. nov. and *W. yanmenensis* sp. nov.

For eleven species new name combinations have been proposed: *Quasimus convexicollis* (DOLIN, 2001) comb. nov., *Q. dubius* (DOLIN, 2001) comb. nov., *Q. improvisus* (DOLIN, 2001) comb. nov., *Q. ohirai* (DOLIN, 2001) comb. nov., *Q. pacholatkoii* (DOLIN, 2001) comb. nov., *Wittmeroquasimus ocellatus* (DOLIN, 1993) comb. nov., *W. paradoxus* (DOLIN, 1993) comb. nov., and *W. parallelus* (SCHWARZ, 1902) comb. nov., *W. sausiai* (DOLIN, 2001) comb. nov., *Yukoana bhutanicus* (DOLIN, 1993) comb. nov., *Y. kashmirensis* (DOLIN, 1993a) comb. nov.

One group of species has been introduced with a new systematic status: *Wittmeroquasimus* DOLIN, 1993.

Nine species have been recorded for the first time from China, six from Nepal, as well as one from Thailand and two from Laos.

A key to the genera of the tribe Quasimusini and keys to the species of *Quasimus* and *Wittmeroquasimus* from China and from the continent of the Indochinese subregion are given.

The relevance of characters being important on subfamily and on tribal level are analyzed and discussed. A hypothesis including a diagram of the phylogenetic structure of the tribe Quasimusini is provided. An overview of the systematic position of the new tribe Quasimusini and its accessory subtribes and genera in the regnum animalia is given.

Commendatory lists of species from China, from the Indochinese subregion, from the Malayan subregion, from Wallacea, from the Papuan subregion, from Himalaya, from the Indian and Ceylonese subregion, and from Eurasia, as well as alphabetic check-lists are given for the species from Japan, Korea and from Taiwan.

Overviews of the geographical distributions of the species have been provided. The geographical distribution of the Quasimusini in the Palaearctic and the Oriental regions is illustrated on maps of Southeast Asia.

Ecological and chorological analyses reveals that the species of the tribe Quasimusini are most frequently collected while visiting bushes in bloom in altitudinal zones from the colline to the nival zone. The majority of the species have clear preferences to altitude zonations from the submontane to the alpine zone. Only one species has been found at the colline zone: *Miquasus improvisus*. Two species of *Quasimus*, three species of *Wittmeroquasimus* and *Pseudoquasimus arcanus* have been collected at the nival zone above 3000 m in altitude.

Finally, a second record of specimens of the genus *Quasimus* is published from northern Africa. This record supports the theory of the dispersions of Palaearctic populations, and the spreading of Mediterranean faunal elements into North Africa.

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