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## New taxa and new synonyms among Pterostichinae from Asia (Coleoptera Carabidae)

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### Abstract

The following new taxa, new synonyms and new combinations are proposed: *Tritrichis* ANDREWES, 1937 = *Steropanus* FAIRMAIRE, 1888 (subg. of *Pterostichus*, nec bon. gen.) syn. nov.; *Pterostichus sulcibasis* STRANEO, 1989 = *Tritrichis infissa* ANDREWES, 1937 syn. nov.; *Amolopsa* STRAND, 1936 = *Ethira* ANDREWES, 1936 (subg. of *Pterostichus*, nec bon. gen.) syn. nov.; *Amolopsa kashmirana* STRANEO, 1984 = *Ethira cometes* ANDREWES, 1936 syn. nov.; *Pterostichus heinzianus* nom. nov. pro *P. (Ethira) heinzi* (STRANEO, 1984) nec *P. (Haplomaseus) heinzi* JEDLICKA, 1965; *Pseudethira* subg. nov. ad gen. *Pterostichus* (sp. typ.: *P. letensis*); *Pterostichus (Argutor) ponticus* KIRSCHENHOFER, 1987 = *P. (Falsargutor) ponticus* KIRSCHENHOFER, 1987 comb. nov.; *Pterostichus (Lyperopherus) wellschmiedi* KIRSCHENHOFER, 1985 = *P. (Lyperopherus) subrugosus* STRANEO, 1955 syn. nov.; *Pterostichus (Steropus) sachalinensis* KIRSCHENHOFER, 1985 = *P. (Euryperis) sachalinensis* KIRSCHENHOFER, 1985 comb. nov.; *Pterostichus (Euryperis) seminitens* KIRSCHENHOFER, 1991 = *Omaeus defossus* BATES, 1883 syn. nov.; *Japeris* subg. nov. ad gen. *Pterostichus* (sp. typ.: *P. defossus*); *Pterostichus marinae* MARCILHAC, 1993 = *Pterostichus peilingi* JEDLICKA, 1937 syn. nov.; *Sinoreophilus* subg. nov. ad gen. *Pterostichus* (sp. typ.: *P. potanini*); *Pterostichus freudei* JEDLICKA, 1965 = *Pterostichus potanini* TSCHITSCHERINE, 1888 syn. nov.; *Pterostichus eichingeri* JEDLICKA, 1965 = *Pterostichus potanini* TSCHITSCHERINE, 1888 syn. nov.; *Pterostichus minshanus* JEDLICKA, 1965 = *Pterostichus potanini* TSCHITSCHERINE, 1888 syn. nov.; *Pterostichus kansuensis* JEDLICKA, 1965 = *Pseudotaphoxenus kansuensis* (JEDLICKA, 1965) comb. nov.; *Pterostichus szekessyanus* nom. nov. pro *P. szekessyi* JEDLICKA, 1962 nec *P. szekessyi* JEDLICKA, 1955; *Aristochroodes* MARCILHAC, 1993 gen. bon. nec subg. of *Pterostichus*; *Aristochroodini* trib. nov.

### Zusammenfassung

Folgende neue Taxa, neue Synonyme und neue Kombinationen werden vorgeschlagen: *Tritrichis* ANDREWES, 1937 = *Steropanus* FAIRMAIRE, 1888 (subg. von *Pterostichus*, nec bon. gen.) syn. nov.;

*Pterostichus sulcibasis* STRANEO, 1989 = *Tritrichis infissa* ANDREWES, 1937 syn. nov.; *Amolopsa* STRAND, 1936 = *Ethira* ANDREWES, 1936 (subg. von *Pterostichus*, nec bon. gen.) syn. nov.; *Amolopsa kashmirana* STRANEO, 1984 = *Ethira cometes* ANDREWES, 1936 syn. nov.; *Pterostichus heinzianus* nom. nov. pro *P. (Ethira) heinzi* (STRANEO, 1984) nec *P. (Haplomaseus) heinzi* JEDLICKA, 1965; *Pseudethira* subg. nov. ad gen. *Pterostichus* (sp. typ.: *P. letensis*); *Pterostichus (Argutor) ponticus* KIRSCHENHOFER, 1987 = *P. (Falsargutor) ponticus* KIRSCHENHOFER, 1987 comb. nov.; *Pterostichus (Lyperopherus) wellschmiedi* KIRSCHENHOFER, 1985 = *P. (Lyperopherus) subrugosus* STRANEO, 1955 syn. nov.; *Pterostichus (Steropus) sachalinensis* KIRSCHENHOFER, 1985 = *P. (Euryperis) sachalinensis* KIRSCHENHOFER, 1985 comb. nov.; *Pterostichus (Euryperis) seminatus* KIRSCHENHOFER, 1991 = *Omaseus defossus* BATES, 1883 syn. nov.; *Japeris* subg. nov. ad gen. *Pterostichus* (sp. typ.: *P. defossus*); *Pterostichus marinae* MARCILHAC, 1993 = *Pterostichus peilingi* JEDLICKA, 1937 syn. nov.; *Sinoreophilus* subg. nov. ad gen. *Pterostichus* (sp. typ.: *P. potanini*); *Pterostichus freudei* JEDLICKA, 1965 = *Pterostichus potanini* TSCHITSCHERINE, 1888 syn. nov.; *Pterostichus eichingeri* JEDLICKA, 1965 = *Pterostichus potanini* TSCHITSCHERINE, 1888 syn. nov.; *Pterostichus minshanus* JEDLICKA, 1965 = *Pterostichus potanini* TSCHITSCHERINE, 1888 syn. nov.; *Pterostichus kansuensis* JEDLICKA, 1965 = *Pseudotaphoxenus kansuensis* (JEDLICKA, 1965) comb. nov.; *Pterostichus szekessyanus* nom. nov. pro *P. szekessyi* JEDLICKA, 1962 nec *P. szekessyi* JEDLICKA, 1955; *Aristochroodes* MARCILHAC, 1993 gen. bon. nec subg. of *Pterostichus*; *Aristochroodini* trib. nov.

### Introduction

While studying several species of Pterostichini from Asia, I realized that there are many systematical problems, species wrongly placed and synonymies that had not been noticed up to now. With this note I wish to describe some new taxa of the genus- and family-group, state new synonymies and define the correct subgeneric position of several species.

*Tritrichis* ANDREWES, 1937 = *Steropanus* FAIRMAIRE, 1888 syn. nov., subg. of *Pterostichus*, nec bon. gen.

*Pterostichus sulcibasis* STRANEO, 1989 = *Tritrichis infissa* ANDREWES, 1937 syn. nov.

The systematic position of *Steropanus* FAIRMAIRE, 1888 (type-species: *S. forticornis* FAIRMAIRE, 1888) has always been disputed. FAIRMAIRE (1888) described it shortly and insufficiently; TSCHITSCHERINE in 1896 redescribed it, still as a subgenus of *Feronia*, but some years later (1898) considered it as belonging to his subtribe "Trigonognathides". JEDLICKA (1962) and later ALLEN (1980) treated it shortly, but only on the basis of TSCHITSCHERINE's work, without seeing the single type-specimen or other material of it. Unfortunately, none of these three Authors has been able to study the buccal parts or the genitalia, that only can prove the pertinance of a species to Pterostichini or Molopini. Therefore they could not realize that the description of *Steropanus* perfectly fits that of another genus described later, *Tritrichis* ANDREWES, 1937 (type-species: *T. felix* ANDREWES, 1937).

I could examine the type-specimen of *S. forticornis* (now in the Museum National d'Histoire Naturelle, Paris) and another specimen collected in Yunnan, Dali (fig. 1), verifying the identity of FAIRMAIRE's genus with ANDREWES' one. All the species attributed to *Tritrichis* up to now must be transferred to the subg. *Steropanus*.

The main distinguishing character from *Pterostichus* is the shape of the last labial palpomere, dilated and hatcet-like. Such character had, in the case of *Steropanus*, led TSCHITSCHERINE (1898) and ALLEN (1980) to approach it to *Trigonognatha* (tribe

Molopini). This systematic position is wrong, while that proposed by JEDLICKA (1962) near *Pterostichus* is more correct. My opinion is that it cannot even be maintained as a distinct genus, but must be included in *Pterostichus* as a subgenus. The shape of the aedeagus is the same as in the latter genus, with the ostium placed on the left side (instead of dorsal, as in *Trigonognatha*), and the structure of the last labial palpomere is not unique among Pterostichini, since in the group of *P. davidi* it has a shape intermediate between that of *Steropanus* and that of the "normal" *Pterostichus*. Therefore, since all intermediate forms exist between *Steropanus* and other groups of the big genus *Pterostichus*, I see no reason to keep it separate from the latter genus.

One species described by STRANEO under the name of *P. sulcibasis* STRANEO, 1989 corresponds in all points with *Tritrichis infissa* ANDREWES, 1937, described from the same area (Megalaya is a part of Assam) and therefore falls in synonymy with it.

*Amolopsa* STRAND, 1936 = *Ethira* ANDREWES, 1936 syn. nov., subg. of *Pterostichus*, nec bon gen.

*Amolopsa kashmirana* STRANEO, 1984 = *Ethira cometes* ANDREWES, 1936 syn. nov. *Pterostichus (Ethira) heinzianus* nom. nov. pro *P. heinzi* (STRANEO, 1984) nec *P. heinzi* JEDLICKA, 1965.

STRANEO (1984) partly reconstructed the complex nomenclatural history of this genus: originally described as *Amolops* TSCHITSCHERINE, 1898, it was changed into *Amolopsa* by STRAND in 1936 because it was preoccupied. Some years later ANDREWES (1939), not knowing STRAND's work, changed the name *Amolops* into *Trichomolops*. Unfortunately, there is another genus, forgotten by all Authors, that has priority over *Amolopsa*: it is *Ethira* ANDREWES, 1936, described upon the single species *E. cometes* ANDREWES, 1936, which, in turn, corresponds to the species later redescribed as *Amolopsa kashmirana* STRANEO, 1984. *Ethira* was described in July 1936, *Amolopsa* in December of the same year, so *Ethira* has the priority by 5 months. It is very strange that ANDREWES himself, who in 1936 had described *Ethira*, in 1939 proposed *Trichomolops* as a replacement name, without realizing that it was the very same genus that he had described only three years earlier.

The taxon *Ethira*, recently revised by STRANEO (1984) under the name of *Amolopsa*, is generally considered as a genus, but I think that it should be downgraded to subgenus of *Pterostichus*. In fact, it has only one peculiar character, the occurrence of several supranumerary setae on head, pronotum and elytra, but all the other characters are the same of the other subgenera of *Pterostichus*. In particular, *Ethira* is certainly very close to the *Pterostichus* living in the neighbouring Nepal Himalayas, which up to day have never been included in a given subgenus (vide infra).

The species *Pterostichus (Ethira) heinzi* (STRANEO, 1984) becomes a secondary homonym of *P. (Haplomaseus) heinzi* JEDLICKA, 1965. I therefore propose for it the new name *Pterostichus (Ethira) heinzianus*.

Almost all the species of *Pterostichus* from Nepal Himalayas and neighbouring regions described so far have never been placed convincingly into a given subgenus. The few species described before 1930 had been put by ANDREWES (1937) into *Feronia* s. l., then HABU (1973) described two new species as "*Pterostichus* (subg. ?)". Still later MORVAN (1972) doubtfully includes some of them in the subgenus *Licentius* JEDLICKA, 1962 (Type-species: *mirabilis* JEDLICKA, 1962), since he compared them with "*P. (Licentius) baenningeri*", without realizing that the species treated by JEDLICKA (1962)

after the subgenus *Licentius* were incertae sedis and not to be regarded as belonging to that subgenus. This attribution was strongly, and correctly, rejected by STRANEO (1983) since the type-species of this subgenus is a microphthalmic species from north-eastern China (Manchuria) similar to the eastern mediterranean genus *Speluncarius*. All the species described later were left as incertae sedis within the large genus *Pterostichus*.

Thus, the numerous species from Nepal, Bhutan and Sikkim do not seem to fit within any of the many subgenera of *Pterostichus*. A careful study of these species lead me to realize that their closest relationships must not be sought in China, but in Kashmir, and are with the subgenus *Ethira* (= *Amolopsa*). The two groups share many characters (shape of body, basal impressions of pronotum, structure of aedeagus), with the only difference of the number of long setae on the sides of the body (head, pronotum and elytra).

Therefore, I think it is necessary to erect a new subgenus for the species of this group.

#### *Pseudethira* subg. nov.

Type-species: *Pterostichus letensis* HABU, 1973 (fig. 2).

Diagnostic combination. A subgenus of *Pterostichus* of large size (12-16 mm), with black integuments, sometimes with metallic hue (blue or purple, more seldom green). Two supraorbital setae, one basal and one lateral seta of pronotum. Only one impression on each side of the base of pronotum, a second one is sometimes visible but very short and superficial. Onychium with or without setae. Elytra with at least one setigerous puncture on the third interval, sometimes with two or three, more seldom also with some setigerous punctures on other intervals. Aedeagus with apical blade often hypertrophic, very long and twisted, right paramere usually short, rectilinear and stout, rarely long and thin.

Geographic distribution: India, Nepal, Bhutan.

Species included: *aedeagalis* STRANEO, 1989, *angoarnigi* MORVAN, 1994, *atrox* (ANDREWES, 1937), *balachowskyi* MORVAN, 1972, *bhutanensis* MORVAN, 1978, *brancuccii* STRANEO, 1982, *brevilama* STRANEO, 1989, *bureli* MORVAN, 1994, *delaroueriei* MORVAN, 1994, *championi* ANDREWES, 1926, *deuvei* LASSALLE, 1985, *dolens* (TSCHITSCHERINE, 1900), *dorjulensis* MORVAN, 1978, *elytralis* STRANEO, 1983, *fritzhieki* SCHMIDT, 1994, *gagates* (HOPE, 1831), *gobettii* STRANEO, 1983, *gompanus* STRANEO, 1983, *harmandi* (TSCHITSCHERINE, 1900), *immarginatus* STRANEO, 1977, *janbritoi* MORVAN, 1994, *jumlanus* STRANEO, 1982, *kadoudali* MORVAN, 1981, *keltiekus* MORVAN, 1981, *kleinfeldi* STRANEO, 1982, *letensis* HABU, 1973, *lompokharianus* STRANEO, 1982, *lugi* MORVAN, 1982, *matsumurai* HABU, 1973, *nigroviolaceus* MORVAN, 1978 (= *nepalensis* STRANEO, 1977), *nowitzkii* TSCHITSCHERINE, 1899, *perlamatus* STRANEO, 1989, *pseudodolens* MORVAN, 1978, *pseudoharmandi* MORVAN, 1981, *pseudoplatysma* STRANEO, 1982, *rarenaensis* MORVAN, 1980, *rugibasis* STRANEO, 1982, *tangkosis* MORVAN, 1981, *tukchensis* STRANEO, 1983, *viridellus* STRANEO, 1984 (= *pakistanus* STRANEO nec JEDLICKA), *wittmeri* MORVAN, 1978.

This list is probably incomplete, as I do not know directly two species described by ANDREWES (*atrox* and *exochus*), and therefore prefer not to include them here. At the moment I also do not include the species *jelepuz* ANDREWES, 1932, *poecilmus* (ANDREWES, 1937), *imitatus* MORVAN, 1978 and *migliaccioi* STRANEO, 1982, since the structure of their genitalia is so different from that of the other species that they may belong to different subgenera, provided that they really belong to *Pterostichus*.

*Pterostichus (Argutor) ponticus* KIRSCHENHOFER, 1987 = *P. (Falsargutor) ponticus* KIRSCHENHOFER, 1987 comb. nov.

KIRSCHENHOFER described in 1987 the new species *Pterostichus (Argutor) ponticus* from Northern Turkey (Kolath Dag), whose systematic position is very close to *P. pseudopedius* REITTER, 1887. Unfortunately he had not noticed that a few years earlier KRYZHANOVSKIY & ABDURACHMANOV (1983) had described the new subgenus *Falsargutor* for *P. pseudopedius*. This subgenus, although similar to *Argutor* in general appearance, has the ostium of the aedeagus placed on the left side and therefore belongs to the "true" Pterostichini, close to the subgenus *Oreoplatysma*. *P. ponticus* must therefore be transferred to the subgenus *Falsargutor*.

*Pterostichus (Lyperopherus) wellschmiedi* KIRSCHENHOFER, 1985 = *P. (Lyperopherus) subrugosus* STRANEO, 1955 syn. nov.

In 1985 KIRSCHENHOFER described a *Pterostichus wellschmiedi* from Sachalin. Even though it is said to be different from *P. subrugosus* STRANEO, 1955 from Hokkaido, I examined a long series of specimens from both islands, noting that all the characters mentioned by KIRSCHENHOFER fall within the variability range of the species. Some years earlier, BUDARIN (1976) had revised the subgenus *Lyperopherus*, considering, in my opinion correctly, *P. subrugosus* as a monotypical species living both in Hokkaido and Sachalin.

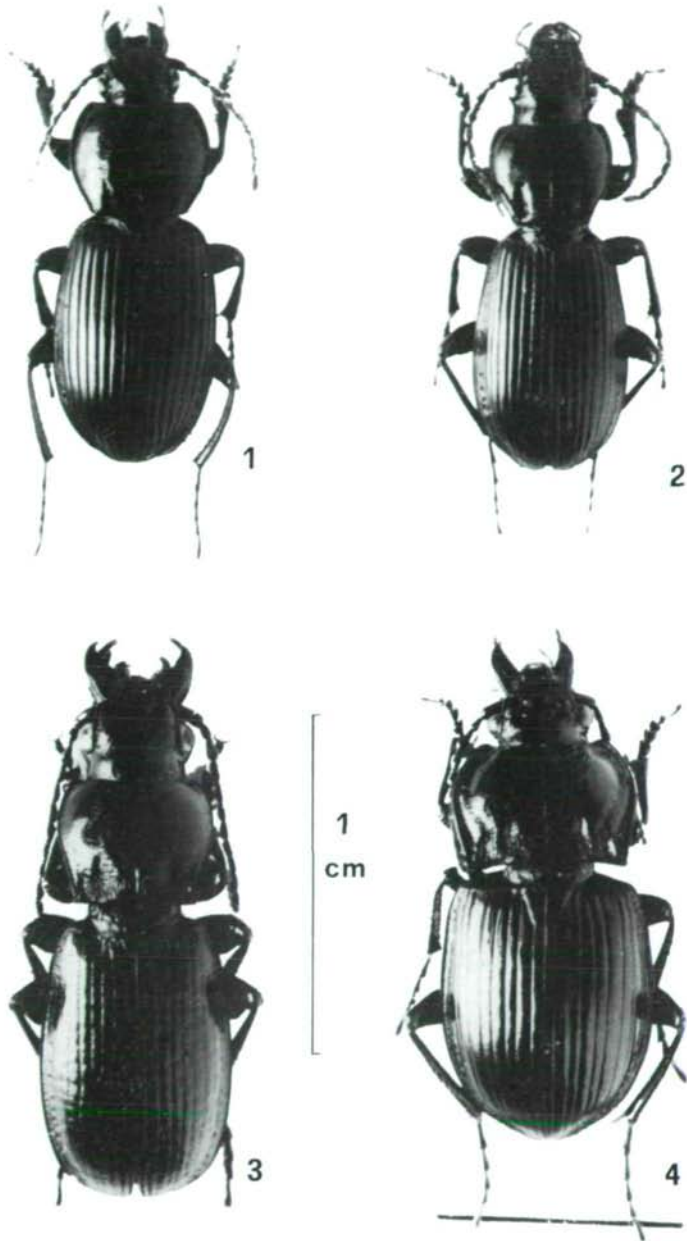
*Pterostichus (Steropus) sachalinensis* KIRSCHENHOFER, 1985 = *Pterostichus (Euryperis) sachalinensis* Kirschenhofe, 1985 comb. nov.

A second *Pterostichus* described by KIRSCHENHOFER in the above mentioned work (1985) is *P. (Steropus) sachalinensis*. In the original description the author noticed the peculiar lack of any sexual structure on the last urosterna of the male. The lack of such structures would in fact be unique within this subgenus, but the structure of the aedeagus clearly shows that this species does not belong to the subg. *Steropus*, but to *Euryperis* MOTSCHOUJSKY, 1850. The rounded pronotum, constant in *Steropus*, is quite common in *Euryperis*, but the shape of the aedeagus allows an easy distinction between the two subgenera. In *Steropus* the aedeagal apex is spoon-shaped and strongly moved to the left side (see e.g. BOUSQUET, 1984), while in *Euryperis* it is straight, sometimes arrow-shaped and the ostium is in almost dorsal position.

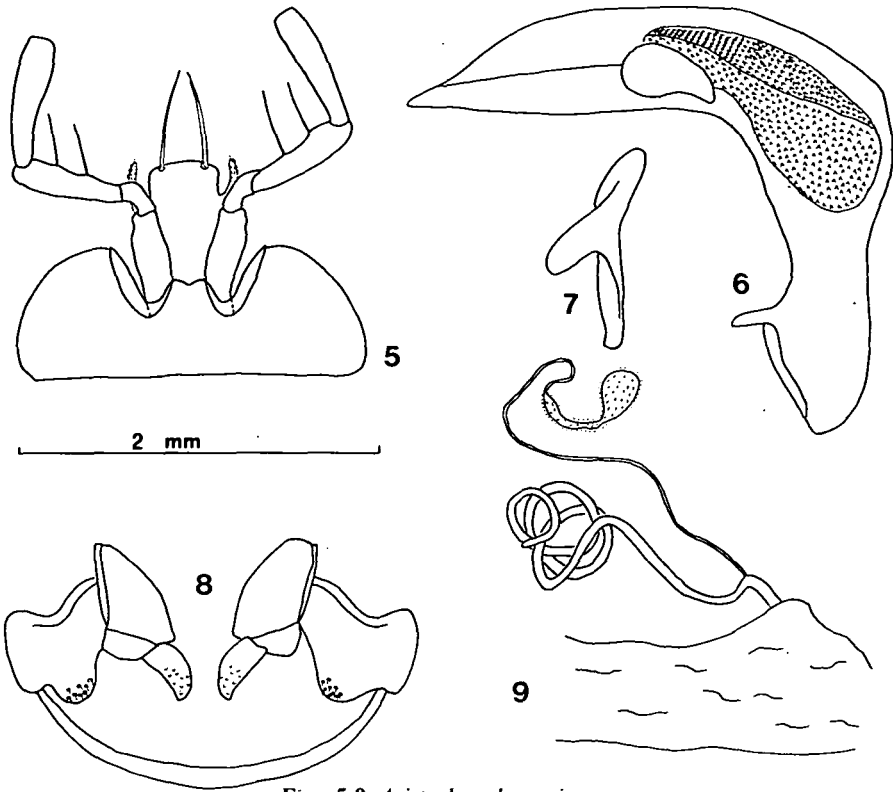
*Pterostichus (Euryperis) seminitens* KIRSCHENHOFER, 1991 = *Omaeus defossus* BATES, 1883 syn. nov.

*Pterostichus defossus* is a Japanese species of difficult systematic placement. Originally described as *Omaeus* (= *Bothriopterus*), it was later moved by JEDLIČKA (1962) to *Euryperis* on the basis of the rounded shape of pronotum. HABU (1981) mentions it as incertae sedis within the genus *Pterostichus*.

Analyzing the typical series by BATES, in Museum National d'Histoire Naturelle, Paris, I could realize that both systematic arrangements are wrong, and that its position is much more isolated. I therefore propose to create for this species a new subgenus. I fix here the Lectotypus upon one of the three specimens of the Museum National d'Histoire Naturelle, Paris. It brings two handwritten labels: "Nikko Japan" and "*Omaeus defossus* BATES".



**Figs. 1-4.** Habitus of:  
*Pterostichus (Steropanus) forticornis* (1), *Pterostichus (Pseudethira) letensis* (2),  
*Pterostichus (Sinoreophilus) potanini* (3), *Aristochroodes reginae* (4).



Figs. 5-9. *Aristochroodes reginae*:

mentum and labium (5), aedeagus in right lateral view (6), right paramere in lateral view (7), female gonocoxites (8), spermathecal complex (9).

The species *Pterostichus (Euryperis) seminitens* KIRSCHENHOFER, 1991, of which I have examined one specimen from the type series, is absolutely indistinguishable from *P. defossus*, therefore I regard it as a junior synonym.

#### *Japeris* subg. nov.

Type-species: *Pterostichus defossus* (BATES, 1883)

Diagnostic combination. A subgenus of *Pterostichus* of relatively small size 8.2 - 9.3 mm), with black integuments, sometimes with faint metallic hue. Head rather small, with two supraorbital setae. Only one impression on each side of the base of pronotum, one basal and one lateral seta. Onychium without setae. Elytra with a number of setigerous punctures on interval three ranging from two to five, sometimes also with some setigerous punctures on other intervals. Epipleurae "crossed". Aedeagus long and slender, with ostium dorsal in position, like in the species of the subgenus *Eurythoracana* STRAND, 1936; apical blade very short and rounded; right paramere rather long and bent at obtuse angle (see figs. in KIRSCHENHOFER 1991).

Its systematic position is, on the basis of the aedeagal structure, in the vicinity of the subgenera *Eurythoracana* STRAND, 1936, *Badistrinus* MOTSCHULSKY, 1865, *Phonias* GOZIS, 1886 and *Argutor* DEJEAN, 1821, but a complete revision of the Eastern pale-arctic *Pterostichus* is required in order to better understand the relationships of all these complex groups.

Geographic distribution: Japan.

Species included: *Pterostichus defossus* (BATES, 1883).

*Pterostichus marinae* MARCILHAC, 1993 = *Pterostichus peilingi* JEDLICKA, 1937 syn. nov.

*P. marinae* MARCILHAC, 1993, described as related to *P. potanini*, does not belong to that group but it is identical with *P. peilingi* JEDLICKA, 1937 from the same region of China (Gansu). Besides the same geographical distribution, JEDLICKA (1962) noted the particular notching on the basal half of the pronotal margins, identical in the holotypus and one paratypus of *P. marinae*, that I have examined in the Museum National d'Histoire Naturelle, Paris. The precise systematic position of *P. peilingi* within the genus is still uncertain, but certainly it is quite far from the group of *P. potanini*, which is here separated in a distinct subgenus (vide infra).

*Pterostichus freudei* JEDLICKA, 1965 = *Pterostichus potanini* TSCHITSCHERINE, 1888 syn. nov.

*Pterostichus eichingeri* JEDLICKA, 1965 = *Pterostichus potanini* TSCHITSCHERINE, 1888 syn. nov.

*Pterostichus minshanus* JEDLICKA, 1965 = *Pterostichus potanini* TSCHITSCHERINE, 1888 syn. nov.

A small group of species from China has always been considered as belonging to the subg. *Oreophilus* CHAUDOIR, 1838 (type-species: *P. multipunctatus* DEJEAN, 1828). This subgeneric attribution is in my opinion completely wrong, since these species strongly differ in many features from those really belonging to *Oreophilus*. Besides this, it is very difficult to accept that a subgenus has a disjunct distribution including only Europe and China. I therefore create for these Chinese species a new subgenus.

Three species from Gansu described by JEDLICKA (1965) in one of his last works (*P. freudei*, *eichingeri* and *minshanus*) are synonyms of *Pterostichus potanini* TSCHITSCHERINE, 1888. I examined the three holotypes, in Zoologischen Staatssammlung München; they all come from the very same locality (Minshan) and correspond perfectly to TSCHITSCHERINE's species, very common in that region of China, I can therefore state the three synonymies.

#### *Sinoreophilus* subg. nov.

Type-species: *Pterostichus potanini* TSCHITSCHERINE, 1888 (fig. 3).

Diagnostic combination. A subgenus of *Pterostichus* of large size (12-16 mm), with black integuments, sometimes with metallic hue. Head very large, with two supraorbital setae. Only one impression on each side of the base of pronotum, one basal and one lateral seta. Onychium without setae. Elytra with a number of setigerous punctures on interval three ranging from two to five, sometimes also with some setigerous punctures on other intervals. Epipleurae not visibly "crossed". Aedeagus long and slender, with apical blade very long, depressed and often pointing upwards (in *Oreophilus* the apical



blade is very short, compressed and always pointing downwards, see e.g. JEANNEL, 1942). Right paramere short and rectilinear, weakly swollen toward apex.

Geographic distribution: Western China: Sichuan, Qinghai, Gansu.

Species included: *P. potanini* TSCHITSCHERINE, 1888, *P. przewalskii* TSCHITSCHERINE, 1888, and *P. validior* TSCHITSCHERINE, 1888.

The three species here listed will probably increase in number when the mountains of China are better explored from the faunistic point of view.

*Pterostichus kansuensis* JEDLICKA, 1965 = *Pseudotaphoxenus kansuensis* (JEDLICKA, 1965) **comb. nov.**

A fourth species of *Pterostichus* described by JEDLICKA (1965) from Gansu as *P. kansuensis* does not belong to this genus, as I already suspected looking at the original drawing. I examined and dissected the holotype in Zoologischen Staatssammlung München (a female according to JEDLICKA, but really a male), discovering that it is a *Pseudotaphoxenus* of the *juvencus*-group (CASALE, 1988) and near *P. niger* (JEDLICKA, 1953).

*Pterostichus szekessyanus* **nom. nov.** pro *P. szekessyi* JEDLICKA, 1962 nec *P. szekessyi* JEDLICKA, 1955.

This species is a primary homonym of *P. (Orthomus) szekessyi* JEDLICKA, 1966, which in turn is most probably a junior synonym of *Orthomus balearicus*. Even though I have not been able to examine the type series of this species and therefore I cannot state its precise systematic position yet, I propose for it the replacement name *P. szekessyanus*.

*Aristochroodes* MARCILHAC, 1993 **gen. bon.**, nec subg. ad gen. *Pterostichus*.

Very recently MARCILHAC (1993) described *Pterostichus (Aristochroodes) reginae*, n. subg. n. sp. I have examined more than 100 specimens from a station very close to the type-locality of the species, realizing that it cannot be maintained as a subgenus of *Pterostichus*. Even though the Author does not even describe the aedeagus of this species but gives only a drawing of it, this structure is very peculiar and not comparable to that of any other *Pterostichus*. The differences in this and other characters are so strong that I think that this genus even cannot fit within the tribe Pterostichini as accepted until today and must be included in a new tribe.

#### **Aristochroodini trib. nov.**

Type-genus: *Aristochroodes* MARCILHAC, 1993, here designated.

This new tribe is close to Pterostichini, but different in the male and female genitalia. The aedeagus (fig. 6) has the ostium completely dorsal and the apex itself is depressed, while in most *Pterostichus* it is cylindrical or compressed; the internal sac is covered with small chitinized scales; the right paramere (fig. 7) is quite long, weakly bent at middle, rounded at apex. The last stylomere (fig. 8) is extremely regressed, small and without spines; the spermatheque (fig. 9) is very long and coiled, not sclerotized, with additional gland small and rounded, connected with a long ductus.

The aedeagal characters are those upon which JEANNEL (1942) has mainly based his subdivision of the subfamily Pterostichinae into tribes. Later it has been discovered

that beyond the structure of aedeagus there are more characters, mainly in the structure of spermathecal complex, separating the Pterostichini from the Poecilini, even though the Molopini still remain in an unclear position (GIACHINO & SClAKY 1991; ORTUÑO, in press).

The main character separating Molopini from Pterostichini is the number of setae on prementum, four in Molopini and two in Pterostichini. *Aristochroodes*, although similar in look to some genera of Molopini, has two setae like in Pterostichini, (fig. 5) but the structure of both male and female genitalia prevent the possibility of assigning the genus to either one or the other tribe.

*Aristochroodes reginae* MARCILHAC, 1993 is very peculiar in the elytral striation (fig. 4), pointed out also in the original description (MARCILHAC 1993), that reminds that of the genus *Aristochroa* TSCHITSCHERINE, 1898. The main difference, not noticed by MARCILHAC, is that in the genus *Aristochroa* the odd intervals are wider than the even ones, while in *Aristochroodes* the even intervals are wider than the odd ones. Among the few other taxa with the same kind of elytral striation, there are some species of *Trigonognatha* (see STRANEO 1991), *Poecilus polychromus* TSCHITSCHERINE, 1888 and *Pterostichus (Anomostichus) anomostriatus* SClAKY (1995). All these species, or groups of species, have the odd intervals wider than the even ones (as in *Aristochroa*), therefore *Aristochroodes* is the only genus in which the elytral striation is heterodynamic in a different way. It is curious, anyway, to notice that all these species live in China, even though they belong to four different tribes (Pterostichini, Molopini and Poecilini, besides Aristochroodini).

Anyway, I would not give this character too big a relevance. Since in other genera, as exposed above, this kind of elytral striation is found in different species with no relation with each other, I prefer to consider it no more than a specific character in this case too. I even expect that in future new species will be found clearly related to *Aristochroodes reginae*, but with a normal, homodynamic elytral striation.

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