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A review of genus *Protapatophysis* Semenov-Tian-Shanskij et Stschegoleva-Barovskaia, 1936 stat. nov. (Coleoptera: Cerambycidae: Apatophyseinae)

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Abstract. *Protapatophysis* Semenov-Tian-Shanskij et Stschegoleva-Barovskaia, 1936 stat. nov. is raised to the genus level from a subgenus of *Apatophysis* Chevrolat, 1860 based on big parallel-sided body in males, strongly developed tarsi pads, closed anterior coxal cavities and approached hind coxae in females; *Protapatophysis* consists of 4 species distributed in high mountains from north-east Afghanistan to Kashmir and Western Himalayas: *P. kashmiriana* (Semenov, 1901), comb. nov., *P. montana* (Gahan, 1906), comb. nov., *P. vartianae* (Heyrovský, 1971), comb. nov. and *P. kabakovi* sp. nov. described from Konar province of Afghanistan. A lectotype is designated for *Apatophysis kashmiriana* Semenov, 1901. The area of *P. vartianae* is widely distributed south- and eastwards to India along south Himalayan slopes.

INTRODUCTION

The present review continues the previous publication. Danilevsky (2008), on the genus *Apatophysis* Chevrolat, 1860.

Protapatophysis Semenov-Tian-Shanskij et Stschegoleva-Barovskaia, 1936 stat. nov. is raised to the genus level from a subgenus of *Apatophysis* Chevrolat, 1860 not only because of its outstanding morphological peculiarities, but also due to the fact that the former *Apatophysis* s. str. was recently generally accepted by Danilevsky (2010) as a group consisting of two subgenera including *Angustephysis* Pic, 1956. All the species of *Protapatophysis* are vicariants. Only two of them (*P. vartianae* and *P. kabakovi*) are known in a number of specimens. Both show a big degree of individual variability inside one population and thus, the real taxonomy status of certain known populations of each species could be specified in the future with new materials collected.

ABBREVIATIONS OF COLLECTIONS

BMNH British Museum of Natural History, London, United Kingdom;
ZIN Zoological Institute of Sankt-Petersburg, Russia;

MD Mikhail Danilevsky, private collection, Moscow, Russia;
SM Sergei Murzin, private collection, Moscow, Russia.

RESULTS

Genus: *Protapatophysis* Semenov-Tian-Shanskij et Stschegoleva-Barovskaia, 1936 stat. nov.

P. kabakovi sp. nov.
P. kashmiriana (Semenov, 1901) comb. nov.
P. montana (Gahan, 1906) comb. nov.
P. vartianae (Heyrovský, 1971) comb. nov.

Protapatophysis Semenov-Tian-Shanskij et Stshegoleva-Barovskaja, 1935 stat. nov.

Apatophysis (*Protapatophysis* Semenov-Tian-Shanskij et Stshegoleva-Barovskaja, 1935: 66, 69, 84, 90); Danilevsky, 2010: 142.

Type species: *Apatophysis kashmiriana* Semenov, 1901 - original designation.

Diagnosis. Body usually big; body length in males: 16.0 mm-24.7 mm; in females (only two females known): 26.5 mm-27.0 mm; body width in males: 5.0 mm-7.5 mm, in females: 8.2-8.3 mm near elytral base or 9.2 mm-9.5 mm - maximal width behind middle; head elongated, about 1.6-1.8 times longer than posterior width with long attenuated mandibles; head in females much shorter; genae about as long as the basal width of 1st antennal joint; eyes very big, coarsely facetted, strongly exposed; the distance between dorsal eye-lobes in males a little more or a little less than the width of 1st antennal joint, the distance between ventral eye lobes always less; in females eyes much smaller; apical joint of maxillary palpi elongated, two or more times longer than wide, in females – shorter, regularly oval; antennae in male always longer than body, extending beyond elytral apices by 1 to 3 joints; in females antennae short, hardly surpassing elytral middle; prothorax in males slightly transverse, in females more transverse; lateral tubercles big, always distinct, often attenuated and long; dorsal pronotal convexities usually low, poorly developed; pronotum with fine, often irregular punctation, with or without distinct scattered big dots, with fine recumbent pubescence, without erect setae; metathorax usually with very dense erect pubescence; episternum of metathorax elongated with sides converging posteriorly; elytra in males long, usually parallel-sided, slightly narrowed before middle; only in a single known male of *P. montana* distinctly narrowed and diverging posteriorly, but this could result from monstrosity; elytra in females rather wide and strongly widened posteriorly, totally covering abdomen; elytral punctation always distinct, usually disappearing in posterior third, but sometimes visible to elytral apex; glabrous areas around punctures absent; elytral pubescence always very fine, with short, fine, recumbent setae, each seta about as long as the size of elytral puncture; wings always well developed; legs without hair brushes, but with very dense recumbent or partly semierect pubescence and scattered erect long setae; 1st joint of posterior tarsi about as long as 2nd and 3rd combined; 3rd joint emarginated to about middle with very narrow long lobes

strongly attenuated, but not sharpened, narrowly rounded, without apical spines; all tarsi with strongly developed pads, without central shining line; anterior coxal cavities closed (or hardly opened); hind coxae in females approached each other, separated by sharpened process of abdominal sternite; abdominal sternites with fine dense recumbent pubescence, with several single semierect posterior setae, without central hair patches of long erect setae.

In species of genus *Apatophysis,* body from moderate size to small, in males usually more or less attenuated posteriorly; pronotal dorsal tubercles usually well developed; elytral pubescence consists of relatively long recumbent setae; pads of all tarsi are represented by two longitudinal portions separated by wide glabrous median line; anterior coxal cavities open, posterior coxae in females considerably separated by wide process of abdominal sternite; in females abdomen strongly exposed beyond elytra.

Distribution. High mountain areas of North-east Afghanistan, North Pakistan and North India.

The records for different China provinces (Gressitt, 1951; Hua, 2002) have not been confirmed by available materials. Several very old specimens with uncertain label "Tibet" can not be surely connected with China territory. The record for Laos (Gressit & Rondon, 1970) most probably concerns a local species of another genus. The record for "USSR" (Hua, 2002) is nonsense.

Bionomy. All the species must be associated with high mountain forests at about 1400-2200 m. Imagoes are active in the night and can be attracted by light in June-July. Larvae are not known, but are most probably associated with moist decaying wood of roots. Females seem to be able to fly; their wings are anyway well developed.

Protapatophysis kashmiriana **(Semenov, 1901) comb. nov.**
(Fig. 1)

Apatophysis kashmiriana Semenov, 1901: 29 (Kashmir: vallis: fl. Sind alt. 7.100-7.600' s.m.); Gahan, 1906: 70 (Kashmir; Panjab; Western Tibet), part.; Aurivillius, 1912: 160 ("Kashmir, Thibet"); Winkler, 1929: 1146; Hua, 2002: 194 ("China: Gansu, Sichuan, Xizang; Russia, Kashmir, Laos")

Apatophysis (*Protapatophysis*) *kashmiriana*: Semenov-Tian-Shanskij & Stshegoleva-Barovskaja, 1935: 66, 84 (Punjab, Western Tibet, Sind river valley, 2165-2315m), part.; Danilevsky, 2010: 142

Centrodera (*Apatophysis*) *kashmiriana,* Gressitt, 1951: 49 ("W China, Kashmir")

Apatophysis (s. str.) *kashmiriana*: Gressit & Rondon, 1970: 26 ("Tibet, Szichuan. Laos").

Type locality. Kashmir, upper level (2165-2315 m) of Indus [=Sind] river valley [near Skardu(?), 35°20'N, 75°33'E] - according to the original description.

The exact occurrence of the type locality is not quite clear from the original publication. The name "Sind" was often used for the Indus River traversing the whole Kashmir area from the West to the East. But the level of the locality (2165-2315 m) allows specifying its position. It can not be situated eastwards 76°E, as here (near Parkutta village 35°08'N, 75°58'E) the level of the river is already about 2340 m. The type locality is most likely to be near Skardu village (35°20'N, 75°33'E), situated at about 2240 m.

Type material. Lectotype (♂) (present designation): with goldish circlet and two labels: 1) [Sind river valley (Kashmir) 7100-7600' 9-10.vi.[18]98, Novitzky leg.][in Russian]; 2) "*Apatophys. kashmiriana* m. ♂ Typ. II.01. A. Semenow det.", (ZIN). Paralectotype (♀): with goldish circlet and two labels: 1) [Sind river valley (Kashmir) 7100-7600' 9-10.vi.[18]98, Novitzky leg.][in Russian]; 2) "*Apatophys. kashmiriana* m. ♀ Typ. II.01. A. Semenow det.", (ZIN).

Diagnosis. Males (only two specimens available: Figs 1a-1b): body length: 20.5 mm (lectotype - just as in the original description) - 23.5 mm; body width: 6.3 mm (lectotype) - 7.2 mm, dark-brown.

Head about 1.6-1.7 times longer than basal width; the distance between dorsal eye lobes a little larger than thickness of 1st antennal joint; the distance between ventral eye lobes a little shorter; genae about as long as the basal width of 1st antennal joint or a little longer; apical joints of maxillary palpi elongated, about 2.0-2.1 times longer than wide; antennae moderately long, extend beyond elytral apices by two apical joints; 1st joint strongly widened apically, about 2.4 times wider than long; 3rd joint short, 2nd and 3rd joined combined shorter than 1st joint, 1st joint about as long as 4th (lectotype) or shorter, and much shorter than 5th, which is about as long as 6th, apical (11th) joint about 1.4-1.5 times longer than 10th; thorax a little transverse, about 1.1-1.2 times shorter than basal width; lateral thoracic spines relatively short, but attenuated, a little sharpened; pronotum with very fine punctation without big dots, with moderately developed sculpture: 5 normal convexities (a pair of lateral and one postmedial) distinct, but not very high, without deep depressions in between, central smooth posterior area absent; elytra about 2.2-2.3 times longer than basal width; with parallel sides, a little constricted behind humeri; elytral costae nearly indistinct; elytral punctation distinct, relatively sparse, becoming sparser posteriorly and disappearing in posterior third; the distance between dots anteriorly usually more than the size of each dot; metathorax with dense erect pubescence; all tarsi with strongly developed pads, without central glabrous line (lectotype) or short glabrous line present near base of 1st tarsal joint in hind tarsi; posterior margins of pygidium and last abdominal sternite truncated, postpygidium widely rounded.

Female (Fig. 1c). Body length: 26.5 mm - just as in the original description (to the abdominal apex) or 25.0 mm - to the elytral apex; body width: 8.23 mm near elytral base or 9.2 mm - maximal width behind middle.

Head about 1.5 times longer than basal width, with shallow depression along vertex; the distance between dorsal eye lobes 2.5 times more than thickness of 1st antennal joint; the distance between ventral eye lobes about 2.7 times more than thickness of 1st antennal joint; genae shorter than thickness of 1st antennal joint; apical joints of maxillary palpi slightly elongated, about 1.4 times longer than wide; antennae short, hardly surpassing elytral middle; 1st antennal joint strongly widened apically, 2.2 times longer than apical width, about as long as 2nd and 3rd combined, and about equal to 5th, 4th joint distinctly shorter than 3rd; apical antennal joint short, about 2.5 times longer than wide; thorax slightly transverse, about 1.1 times shorter than basal width; lateral thoracic tubercles wide and short; pronotum convex, with very dense fine punctation, with fine dense recumbent pubescence, without erect setae; only a pair of posterior convexities distinct with deep transverse depressions before; central smooth posterior area absent; elytra widened after middle; about 2.1 times longer than width at humeri; elytral punctation small and sparse, but distinct, disappearing in posterior third; with very fine recumbent pubescence, each seta about as long as width of a puncture; without erect hairs; all femora without hair brushes; 3rd joint of hind tarsi emarginated to about middle; lobes of 3rd joint of all tarsi rounded; all tarsi ventrally without central shining line, with strongly developed pads; abdominal sternites with very fine, short and dense pubescence; posterior border of last abdominal tergite truncated, last abdominal sternite widely rounded.

Remark. Three *Protapatophysis* specimens (1 ♂, 2 ♀♀) with uncertain labels "Tibet, 93-28" identified as "*Apatophysis kashmiriana*" (BMNH) can not be definitely attributed to this species, and can represent two new species.

One pair has light brown body, prothorax with sharp lateral spines, pronotal with well developed sculpture, with scattered big dots; deep depressions between lateral pronotal convexities are distinct in male and in female; elytra with moderately dense and coarse punctation disappearing in posterior third; postpygidium angulated, which is quite unique in the genus.

Another female (without mouthparts, antennae and legs) is very dark, nearly black, with similar lateral pronotal spines, but head with very deep depression between strongly distant eyes, pronotum with poorly developed sculpture, elytra with sparser punctation, but with very distinct microsculpture.

Distribution (Map: 1)**.** Only one locality is definitely known in Kashmir at the upper level of Indus river valley (2165-2315 m) most probably near Skardu village (35°20'N, 75°33'E) situated at about 2240 m (see above).

Several published records for such Chinese areas as Xinjiang, Gansu and Sychuan (Gressitt, 1951; Hua, 2002) have not been confirmed by available materials. Several very old specimens (BMNH) with uncertain label "Tibet" can not be surely connected with China territory, neither with *P. kashmiriana*. The record from Laos (Gressit & Rondon, 1970) is most likely to concern the local species of another genus. The record for "USSR" (Hua, 2002) is nonsense.

Bionomy. Imagoes were collected early in June.

***Protapatophysis vartianae* (Heyrovský, 1971) comb. nov.**
(Fig. 2)

Apatophysis (*Protapatophysis*) sp. Semenov-Tian-Shanskij et Stshegoleva-Barovskaja, 1935: 86 (Kashmir, Muzaffarabad on Jhelum).

Apatophysis (*Protapatophysis*) *vartianae* Heyrovský, 1971: 81 ("dans la vallée de Gabral, province de Swat, dans le Nord-Ouest du Pakistan, 2100m d'altitude, à 15km au Nord de Kalava"); Danilevsky, 2010: 142.

Type locality. Pakistan, Swat province, Gabral valley, 15 km northwards Kavala, 2100 m, about 35°32'N, 72°23'E - according to the original description.

Material studied: 1 ♂, Pakistan, Kohistan, Swat prov., Miandam, 1800 m, 35°10'N, 72°32'E, 25.June - 5.July 1992, lgt. Z. Weidenhoffer (about 40 km southwards type locality), (MD); 1 ♂, Pakistan, Kohistan, Swat prov., Marghazar, 1300 m, 34°46'N, 72°21'E, 6.July 1992, lgt. Z. Weidenhoffer, (MD); 1 ♂ with two labels: 1) Pakistan, N.W.F.-Prov., Mansehra [distr.], Kaghan Valley, Shogran, [about 34°35'N, 73°27'E], 2400 m, 19.vi.2001, leg. K. Stavin, 2) *Apatophysis modica* Gahan, 1906, S. Murzin det. 2001, (SM); 1 ♂, Pakistan, Kashmir, Himalaya Mts., 30 km N Muree, near Nathia Ghali, Ayubia, [Abbotabad distr., about 33°59'N, 73°23'E], 2600 m, 25-27.vi.1998, leg. Gy. Fábián & B. Herczig, (MD); 1 ♂, Pakistan, [Haripur District] Margalla Hills, Pir Sohawa, 1000 m, 33°49'N, 73°08'E, 21.v.1998, leg. Gy. M. László & G. Ronkay, (MD); 6 ♂♂, 1 ♀ each with 2 labels: 1) India [Pakistan]: / Punjab, / Muree Hills. / Camp Thobba. [about 33°55'N, 73°25'E], 2) H. Roberts Coll. / B.M. 1926-395.; 1 ♂ with one label: [Muzaffarabad on Jhelum ♂ 17.v.12 Avinov's expedition][in Russian] [the date of the specimen published by Semenov-Tian-Shanskij et Stshegoleva-Barovskaja (1935: 86) was "30.v.1912"], (ZIN); 1 ♂ [about same locality?] with 2 labels: 1) Jelum 5000', 2) Bell. 3) Andrewes / Bequest / B.M. 1922-221., (BMNH); 2 ♂♂, each with 2 labels: 1) Kanara [Jhelum river valley?], 2) Andrewes / Bequest. / B.M. 1922-221, (BMNH); 1 ♂ with 2 labels: 1) Chamba 2) *Apatophysis kashmiriana* Sem., (BMNH); 1 ♂, N India, (BMNH).

Diagnosis. Males (Figs 2a-2c), body length: 16.0-24.7 mm, body width at elytral base: 5.0-7.5 mm; usually pale brown.

Head about 1.7 times longer than basal width; the distance between dorsal eye lobes a little larger than thickness of 1st antennal joint or about same; the distance between ventral eye lobes a little less; genae about as long as the basal width of 1st antennal joint; apical joints of maxillary palpi elongated, widened apically, usually more than 2 times longer than wide; antennae long, extending beyond elytral apices by 3 apical joints (holotype or specimens from Nathia Ghali and Margalla Hills) or relatively short extending beyond elytral apices by 1 apical joint (another specimen from Jhelum - Fig. 2c); 1st joint strongly widened apically, apical width often about 2 times more than basal width, from 2.0 to 2.3 times wider than long; 3rd joint short, 2nd and 3rd joined combined a little shorter than 1st joint or equal to it, 1st joint much shorter than 4th, 4th joint much shorter than 5th, which is about as long as 6th, apical (11th) joint about 1.3-1.5 times longer than 10th; thorax a little transverse, about 1.1 times shorter than basal width or about 1.2 times shorter than basal width (specimen from Jhelum river - Fig. 2c, BMNH); lateral thoracic spines usually long, attenuated and sharpened, or short (specimen from Marghazar), or even obtuse and conical (specimen from Chamba); pronotum with very fine partly irregular punctation, usually with or sometimes without scattered big dots, covered by fine recumbent pubescence without erect setae, with moderately developed sculpture: 5 normal convexities (a pair of lateral and one postmedial) distinct, but not very high, without deep depressions in between, central smooth posterior area usually slightly pronounced in the middle of posterior depression (often inside small depression) or absent; elytra from 2.2 to 2.4 times longer than basal width; with parallel sides or a little widened behind middle; elytral costae nearly indistinct; elytral punctation dense and deep, puncture from rather small to much bigger; anteriorly the distance between dots usually about as long or less than the size of each, but sometimes can be several times more than size of each dot; elytral punctation usually disappearing before posterior third, or sometimes in posterior forth, or distinct to the apices - in a single small specimen (16.8mm) with the label "N India"; all tarsi ventrally without central glabrous line, with strongly developed pads, sometimes a distinct groove present along pad middle of the basal joint of posterior tarsus; pygidium and last abdominal sternite usually truncated (as in holotype) or shallowly emarginated, postpygidium rounded.

Female (Fig. 2d). Body length: 27.0 mm (to the abdominal apex) or 25.5 mm - to the elytral apex; body width: 8.3mm near elytral base or 9.5 mm - maximal width behind middle.

Head about 1.2 times longer than basal width, with deep depression along frons and vertex; the distance between dorsal eye lobes 2.2 times more than thickness of 1st antennal joint; the distance between ventral eye lobes about 2.7 times more than thickness of 1st antennal joint; genae longer than thickness of 1st antennal joint; apical joints of maxillary palpi strongly elongated about 2.5 times longer than wide; antennae short, hardly surpassing elytral middle; 1st antennal joint relatively narrow, about 2.4 times longer than apical width, longer than 2nd and 3rd combined and about equal to 5th, 4th joint about as long as 2nd and 3rd combined; apical antennal joint strongly elongated, about 3 times longer than wide; thorax about as long as basal width; lateral thoracic tubercles attenuated, narrow and sharp; pronotum convex, with very dense fine punctation, with fine dense recumbent pubescence, without erect setae; only a pair of posterior convexities slightly pronounced with shallow transverse depressions before; central smooth posterior area absent; elytra widened after middle; about 2.1 times

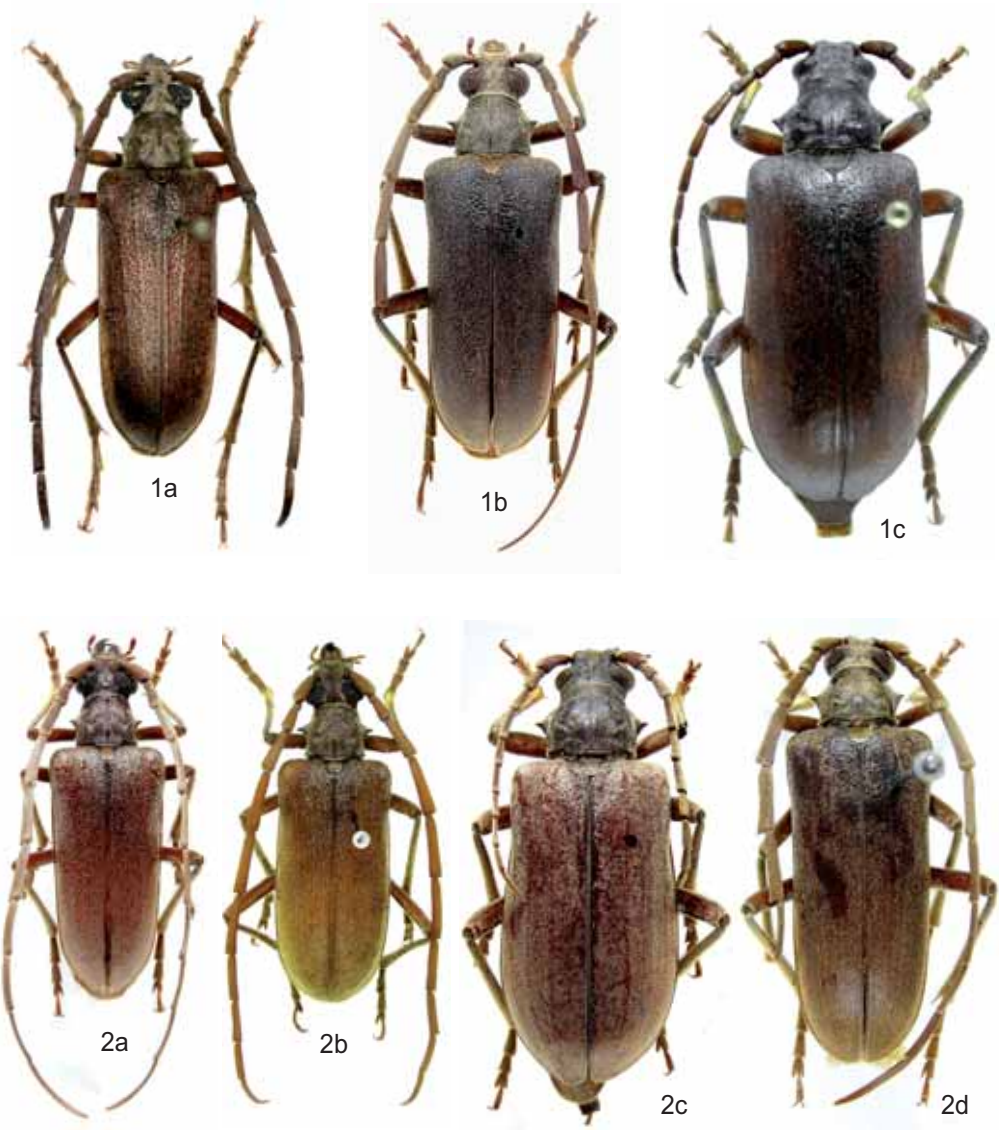
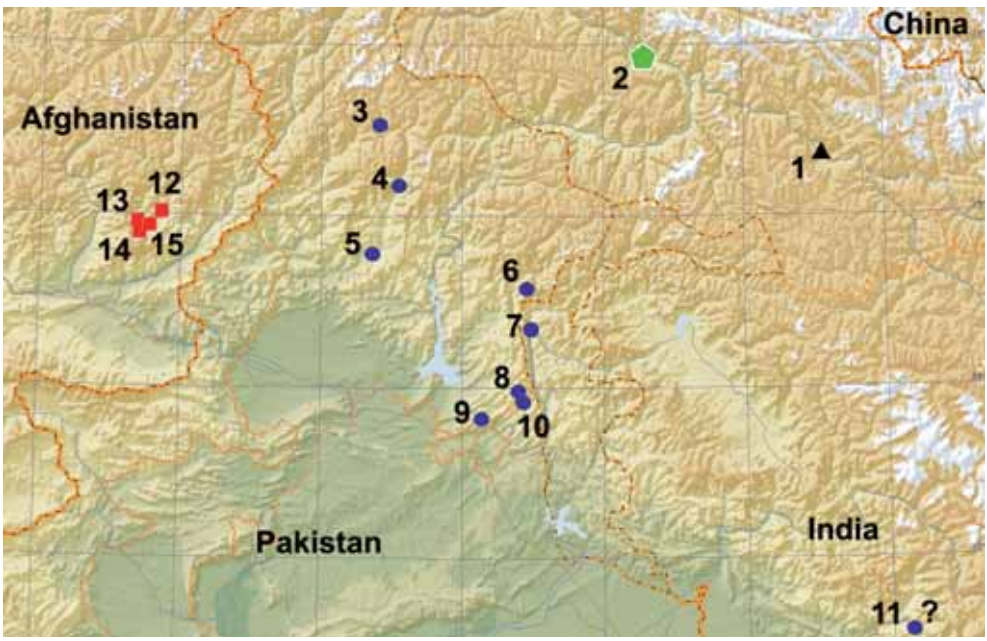


Fig. 1. *P. kashmiriana* (Semenov): a- male, lectotype, Kashmir, Sind river valley, 2165-2315 m.; b- male, Kashmir; c- female, paralectotype, Kashmir, Sind river valley, 2165-2315 m.
Fig. 2. *P. vartianae* (Heyrovský): a- male, Pakistan, Swat Distr., Miandam, 1800 m.; b- male, Azad Kashmir Province, Muzaffarabad, Jhelum River (ZIN); c- male, Jhelum River (BMNH); d- female, Pakistan Rawalpindi District, Muree Hills, Thobba [Topa].
Fig. 3. *P. kabakovi* sp. nov., Afghanistan, Kunar Province: a- male, holotype, SW Pech-Dara, 2000 m.; b- male, paratype, Pech River, 2000 m.
Fig. 4. *P. montana* (Gahan), male, holotype, Gilgit environs.



Map. Distribution of the species of genus *Protapatophysis*
1- *P. kashmiriana*, Kashmir, Sind river valley, 2165-2315 m; 2- *P. montana,* Gilgit environs; 3-11- *P. vartianae*: 3- Swat province, Gabral valley, 2100 m (type locality), 4- Swat prov., Miandam, 1800 m, 5- Swat province, Marghazar, 1300 m, 6- Mansehra District, Kaghan Valley, Shogran, 2400 m, 7- Azad Kashmir Province, Muzaffarabad, Jhelum River, 8- Abbotabad District, 30 km N Muree, near Nathia Ghali, Ayubia, 2600 m; 9- Haripur District, Margalla Hills, 1000 m, 10– Punjab Prov., Rawalpindi District, Muree Hills, Thobba [Topa], 11 - ? "Chamba"; 12-15- *P. kabakovi* sp. nov., Afghanistan, Kunar Province: 12- SW Pech-Dara, 2000 m, 13- W Čapa-Dara, 2100 m, 14- SW Čapa-Dara, 1600 m, 15- Čapa-Dara, 1500 m.

longer than width at humeri; elytral punctation small and sparse, but distinct, disappearing in posterior third; with very fine recumbent pubescence, each seta about as long as width of a puncture; without erect hairs; all tarsi ventrally without central shining line, with strongly developed pads; abdominal sternites with very fine, short and dense pubescence; posterior borders of last abdominal segments widely rounded.

Remark. The species is very close to *P. kashmiriana*, but differs by several small characters: in male pronotal sculpture usually more developed with several scattered big dots (in *P. kashmiriana* - absent), central smooth elongated line usually present, often inside small depression (in *P. kashmiriana* - absent); elytral punctation usually bigger denser and usually disappearing before posterior third (in *P. kashmiriana* - in posterior third).

The differences between two known females are more distinct; in *P. vartianae* body much lighter, pale-brown (in *P. kashmiriana* - dark-brown); central groove between antennal insertions prolonged to vertex very deep; apical joints of maxillary palpi strongly elongated about 2.5 times longer than wide (in *P. kashmiriana* - about 1.4 times); apical antennal joint more elongated; thoracic tubercles much more sharpened; the depressions between lateral pronotal convexities very shallow; elytral punctation deeper and larger.

Distribution. High mountains of North Pakistan (North-West Frontier Province - Khyber Pakhtunkhwa, Punjab Province] and East Kashmir. Swat District: Gabral valley, about 35°32'N, 72°23'E - type locality; Miandam, 35°10'N, 72°32'E - about 40 km southwards type locality; Marghazar, 34°46'N, 72°21'E; Mansehra District, Kaghan Valley, Shogran, 34°35'N, 73°27'E; Abbotabad District, 30 km N Muree, near Nathia Ghali, Ayubia, about 33°59'N, 73°23'E; Haripur District, Margalla Hills, Pir Sohawa, 33°49'N, 73°08'E; Rawalpindi District, Muree Hills, Thobba [Topa], about 33°55'N, 73°25'E; Azad Kashmir Province, Muzaffarabad, Jhelum River [about 34°20'N, 73°28'E]; Chamba [?North India, Himachal Pradesh - 32°33'N, 76°07'E].

Bionomy. The species inhabits high mountain forest areas from about 1000 to 2600 m. Imagoes active from May to July.

***Protapatophysis kabakovi* sp. nov.**

(Fig. 3)

Type locality. Afghanistan, prov. Kunar, SW Pech-Dara, [about 35°00'N, 70°50'E] according to the holotype label.

Type material. Holotype (♂) with two labels: 1) Afghanistan, Nurestan, Awragal, SW Peč-Dara (about 35°00'N, 70°50'E), 2000 m, [na svet], 18.vi.1971, [O. Kabakov] [in Cyrillic], 2) *Apatophysis kashmiriana* Sem.? det. S.Murzin-1978, (ZIN). Paratypes: (1 ♂): with two labels: 1) Afghanistan, Nurestan, Awragal, SW Peč-Dara, 2000 m, [na svet], 18.vi.1971, [O. Kabakov] [in Cyrillic], 2) *Apatophysis kashmiriana* Sem.? det. S.Murzin 1978, (ZIN); (1 ♂): (same locality}, Afghanistan, Nurestan, Awragal, Peč river, 2000 m, 18.vi.1971, O. Kabakov leg., (MD); (1 ♂): Afghanistan, Nurestan, Awragal [Čapa-Dara, 1500 m], 14.vi.1971, O. Kabakov leg., (MD); (1 ♂): Afghan., Nurestan, W Čapa-Dara (about 34°58'N, 70°42'E), 2100 m, 17.vi.1971, Kabakov, (MD); (1 ♂): Afghanistan, Nurestan, SW Čapa-Dara (about 34°53'N, 70°41'E), 1600 m, 18.6.1971, Kabakov (MD); (1 ♂): [Afghanistan, Nurestan, Awragal, SW Peč-Dara (about 34°56'N, 70°46'E), 1400 m, 20.vi.1971, O. Kabakov] [in Cyrillic], (SM).

Diagnosis. Males (females unknown), body length: 17.2-22.0 mm, (in the holotype 21.0 mm), body width at elytral base: 5.4-6.5 mm (in the holotype: 6.4 mm); pale-brown.

Head from 1.6 to 1.8 times longer than basal width; the distance between dorsal eye lobes a little larger than thickness of 1st antennal joint; the distance between ventral eye lobes a little less; genae about as long as the basal width of 1st antennal joint, or considerably shorter; apical joints of maxillary palpi elongated about 2.3 times longer than wide; antennae relatively short, extend beyond elytral apices by one or usually by two apical joints; 1st joint strongly widened apically, from 2.2 (in smallest specimen) to 2.4 times wider than long; 1st joined as long as 2nd and 3rd combined, much shorter than 4th, 4th joint much shorter than 5th, which is about as long as 6th, apical (11th) joint about 1.3 times longer than 10th; thorax a little transverse, about 1.1 times shorter than basal width or about as wide as long; lateral thoracic spines short, obtuse, conical, not attenuated, or short, but distinctly sharpened (in holotype); pronotum with very fine punctation with scattered big dots, covered by fine recumbent pubescence without erect setae, with moderately developed sculpture: 5 normal convexities (a pair of lateral and one postmedial) distinct, but not very high, without deep depressions in between; central smooth posterior area absent or present in form of short shining line (in holotype), or punctation in the middle of posterior convexity is rather sparse; elytra about 2.1-2.3 times longer than basal width, with parallel sides; elytral costae nearly indistinct; elytral punctation dense and deep, anteriorly the distance between dots often about as long as the size of each dot; punctation disappearing in posterior forth; glabrous areas around punctures absent; all tarsi ventrally without central glabrous line, and without distinct groove along middle; pygidium truncated, postpygidium rounded or truncated, last abdominal sternite shallowly emarginated.

Remark. The species strongly differs from *P. kashmiriana* and *P. vartianae* by short, obtuse (never attenuated) lateral thoracic tubercles, which are very similar to thoracic tubercles of *P. montana*, but in *P. montana* elytra are tapering posteriorly.

Distribution. North-east Afghanistan, West of Konar province (Chapa Dara district); lower level of Pech river valley from 1400 m to 2100 m; several localities near Pech-Dara (34°35'N, 70°55'E) and Chapa-Dara (34°57'N, 70°46'E) villages. The distance between marginal localities is only about 20 km.

The labels (in Russian) of specimens from Kabakov's expedition were published (Alexeev et al., 1992) with information on the biotope; see also the corresponding map in http://www.zin.ru/ANIMALIA/COLEOPTERA/rus/buafgmap.htm

Bionomy. The species inhabits mixed forest of "Nurestan" type (Alexeev et al., 1992) with *Juglans, Platanus, Olea, Myrtus, Alnus nepalensis, Acer, Quercus, Fraxinus, Tamarix* and many others. All specimens were attracted to light in June.

***Protapatophysis montana* (Gahan, 1906) comb. nov.**

(Fig. 4)

Apatophysis montana Gahan, 1906: 71 (Western Himalayas, between Gilgit and Nagy); Aurivillius, 1912: 160 ("Himalaya"); Winkler, 1929: 1146.

Apatophysis (*Protapatophysis*) *montana*: Semenov-Tian-Shanskij & Stshegoleva-Barovskaja, 1935: 66, 85; Danilevsky, 2010: 142.

Centrodera (*Apatophysis*) *montana*: Gressitt, 1951: 49 ("Himalaya")

Type locality. Kashmir, Gilgit environs (35°55'N, 74°17'E) - according to the original descriptions: "between Gilgit and Nagy[?]".

Type material. Holotype (♂): with white-red circlet "Type" and two labels: 1) "Between Gilgit and Nagy. 93-13."; 2) "*Apatophys. montana,* Gahan Type", (BMNH).

Diagnosis. A single male (holotype) known: body length: 19.5 mm, body width: 5.5 mm (just as in the original description), pale-brown.

Head about 1.8 times longer than basal width; the distance between dorsal eye lobes a little larger than thickness of 1st antennal joint; the distance between ventral eye lobes a little less; genae about as long as the basal width of 1st antennal joint; apical joints of maxillary palpi elongated about 2 times longer than wide; antennae relatively short, extend beyond elytral apices by one apical joint; 1st joint strongly widened apically, about 2.5 times wider than long; 3rd joint short, 2nd and 3rd joined combined a little shorter than 1st joint, 1st joint much shorter than 4th, 4th joint much shorter than 5th, which is about as long as 6th, apical (11th) joint about 1.3 times longer than 10th; thorax a little transverse, about 1.1 times shorter than basal width; lateral thoracic spines short, obtuse, conical, not attenuated; pronotum with very fine punctation (without big dots), covered by fine recumbent pubescence without erect setae, with moderately developed sculpture: 5 normal convexities (a pair of lateral and one postmedial) distinct, but not very high, without deep depressions in between, central smooth posterior area absent; elytra about 2.5 times longer than basal width, posteriorly diverging along suture, that must be just an individual monstrosity; with sides slightly converging backwards; elytral costae relatively distinct; elytral punctation dense and deep, anteriorly the distance between dots often about as long as the size of each dot; punctation disappearing behind middle; glabrous areas around punctures absent; all tarsi ventrally without central shining line, but with a distinct groove along middle of strongly developed pads; pygidium and last abdominal sternite shallowly emarginated, postpygidium rounded.

Distribution. Only one locality known: Kashmir, Gilgit environs (35°55'N, 74°17'E) - according to the original descriptions: "between Gilgit and Nagy[?]".

Remark. The locality of *P. montana* is situated in about same geographical area as *P. kashmirina* - in Indus river valley with about only 130 km in between. So, the difference between two males could result from individual variability, especially because of slight monstrosity (modified elytra) of the holotype of *A. montana*. Big level of individual variability is typical for the group (see below). It is still better now to accept the different species status of both specimens because of such characters of *A. montana* as: obtuse lateral thoracic tubercles, more elongated elytra, much shorter punctate elytral area, better pronounced elytral carinae; longitudinal grooves along tarsi pads.

A KEY TO *PROTAPATOPHYSIS* SPECIES FOR MALES

1(4) Lateral thoracic tubercles sharpened, spine-like

2(3) Pronotal sculpture usually less developed without big dots, central smooth elongated line absent; elytral punctation usually smaller and sparser, disappearing in posterior third; 20.5-23.5 mm ..... 1. *P. kashmiriana* (Semenov, 1901) comb. nov. (Figs 1a-1b) Kashmir, upper level (2165-2315 m) of Indus [=Sind] river valley [near Skardu(?), 35°20'N, 75°33'E]

3(2) Pronotal sculpture usually more developed with several scattered big dots, central smooth elongated line usually present, often inside small depression; elytral punctation usually bigger denser, and usually disappearing before posterior third; 16.0-24.7 mm ..... 2. *P. vartianae* (Heyrovský, 1971) com. nov. (Figs 2a-2c)North Pakistan: North-West Frontier Province (Khyber Pakhtunkhwa), Punjab Province; East Kashmir and Himalayas.

4(1) Lateral thoracic tubercles obtuse

5(6) Elytra with nearly parallel sides, about 2.1-2.3 times longer than basal width, elytral carinae hardly pronounced; elytral punctation disappearing in posterior fourth; longitudinal grooves along tarsi pads indistinct; 17.2-22.0 mm ..... 3. *P. kabakovi* sp. nov. (Fig. 3) North-east Afghanistan, West of Konar province (Chapa Dara district); lower level of Pech river valley from 1400 m to 2100 m; several localities near Pech-Dara (34°35'N, 70°55'E) and Chapa-Dara (34°57'N, 70°46'E) villages.

6(5) Elytra tapering posteriorly, about 2.5 times longer than basal width, with more considerably pronounced elytral carinae; elytral punctation disappearing behind meddle; longitudinal grooves along tarsi pads distinct; 19.5 mm ..... 4. *P. montana* (Gahan, 1906) comb. nov. (Fig. 4)Kashmir, Gilgit environs, about 35°55'N, 74°17'E

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