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A new species of *Penthicus* Faldermann, 1836 (Coleoptera: Tenebrionidae) from Pakistan with a key to species of the subgenus *Myladion* Reitter, 1887 of the country

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Abstract. A new darkling beetle of the genus *Penthicus* Faldermann, 1836 (Blaptinae: Opatrini) is described from north-western Pakistan (Upper Dir District, Khyber Pakhtunkhwa Province) – *P. superdir* **sp. n.** The new species belongs to the subgenus *Myladion* Reitter, 1887 and most similar to *P. belutschistanicus* (Kaszab, 1961) (described from Ziarat of the Balochistan Province in Pakistan) but differs in the shape of the pronotum (lateral sides of disc almost horizontally flattened) and not angular elytral anterior margin. In total, five species of the genus *Penthicus* are known in Pakistan: *P.* (*Myladion*) *belutschistanicus* (Kaszab, 1961), *P.* (*Myladion*) *waziristanicus* (Kaszab, 1957), *P.* (*Myladion*) *pakistanicus* Nabozhenko et Eshraghi Mofrad, 2025, *P.* (*Myladion*) *superdir* **sp. n.** and *P.* (s. str.) *zhenzhuristi afghanus* (Gridelli, 1954). The first four Pakistani species of *Myladion* are endemic for the country, while the later one is known also from Afghanistan. A key to species of the subgenus *Myladion* from Pakistan is given.

Key words: tenebrionid beetles, Himalaya, Pakistan, *Penthicus*, new species.

Новый вид рода *Penthicus* Faldermann, 1836 (Coleoptera: Tenebrionidae) из Пакистана с определительной таблицей для видов подрода *Myladion* Reitter, 1887 этой страны

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Резюме. Описан новый вид жуков-чернотелок рода *Penthicus* Faldermann, 1836 (Blaptinae: Opatrini) из Северо-Западного Пакистана (округ Верхний Дир, провинция Хайбер-Пахтунхва) – *P. superdir* **sp. n.** Новый вид относится к подроду *Myladion* Reitter, 1887 и наиболее похож на *P. belutschistanicus* (Kaszab, 1961) (описан из Зиарата, провинция Белуджистан, Пакистан), но отличается формой переднеспинки (боковые стороны диска почти горизонтально уплощены) и не угловидным передним краем надкрылий. Всего из Пакистана известно пять видов рода *Penthicus*: *P.* (*Myladion*) *belutschistanicus* (Kaszab, 1961), *P.* (*Myladion*) *waziristanicus* (Kaszab, 1957), *P.* (*Myladion*) *pakistanicus* Nabozhenko et Eshraghi Mofrad, 2025, *P.* (*Myladion*) *superdir* **sp. n.** и *P.* (s. str.) *zhenzhuristi afghanus* (Gridelli, 1954). Четыре первых пакистанских вида *Myladion* являются эндемичными для страны, а последний вид известен также из Афганистана. Дана определительная таблица для определения видов подрода *Myladion* Пакистана.

Ключевые слова: жуки-чернотелки, Гималаи, Пакистан, *Penthicus*, новый вид.

The paper is dedicated to the 95th anniversary of the birth of Gleb Sergeevich Medvedev, one the world's leading specialist in Tenebrionidae and the teacher of the first co-author

The tenebrionid genus *Penthicus* Faldermann, 1836 belongs to the tribe Opatrini of the subfamily Blaptinae [Bouchard et al., 2021]. It is widely distributed in Palaearctic from North Africa to China, Mongolia and south of Eastern Siberia [Iwan, Löbl, 2020] with the highest diversity in Iran and Central Asia [Reichardt, 1936; Medvedev, 1990; Nabozhenko, Eshraghi Mofrad, 2025]. With the exception of older works from the 19th and early 20th century (listed in Nabozhenko and Eshraghi Mofrad [2025]), taxonomic works include several monographs and papers on the Asian and Caucasian members of the genus. Reichardt [1936] revised the Palaearctic species. Bogatchev [1951, 1972] and Medvedev with co-authors [Medvedev, 1964; Medvedev, Nepesova, 1985, 1990] added contribution to the Central Asian species and notes on the subgeneric structure. Kaszab [1960, 1970] revised *Penthicus* from Afghanistan (after the truncated revision of Gridelli [1954]) and described several species from Iran and Pakistan [Kaszab, 1957, 1961, 1969, 1970]. Medvedev [1990] summarized data of the fauna of Mongolia and later for Siberia [Medvedev, 1992] with keys to species for both territories. Iwan and Löbl [2007] designated type specimens for some subgenera of *Penthicus*. Abdurakhmanov and Nabozhenko [2011] reviewed *Penthicus* from plains of southern Russia and the Caucasus.

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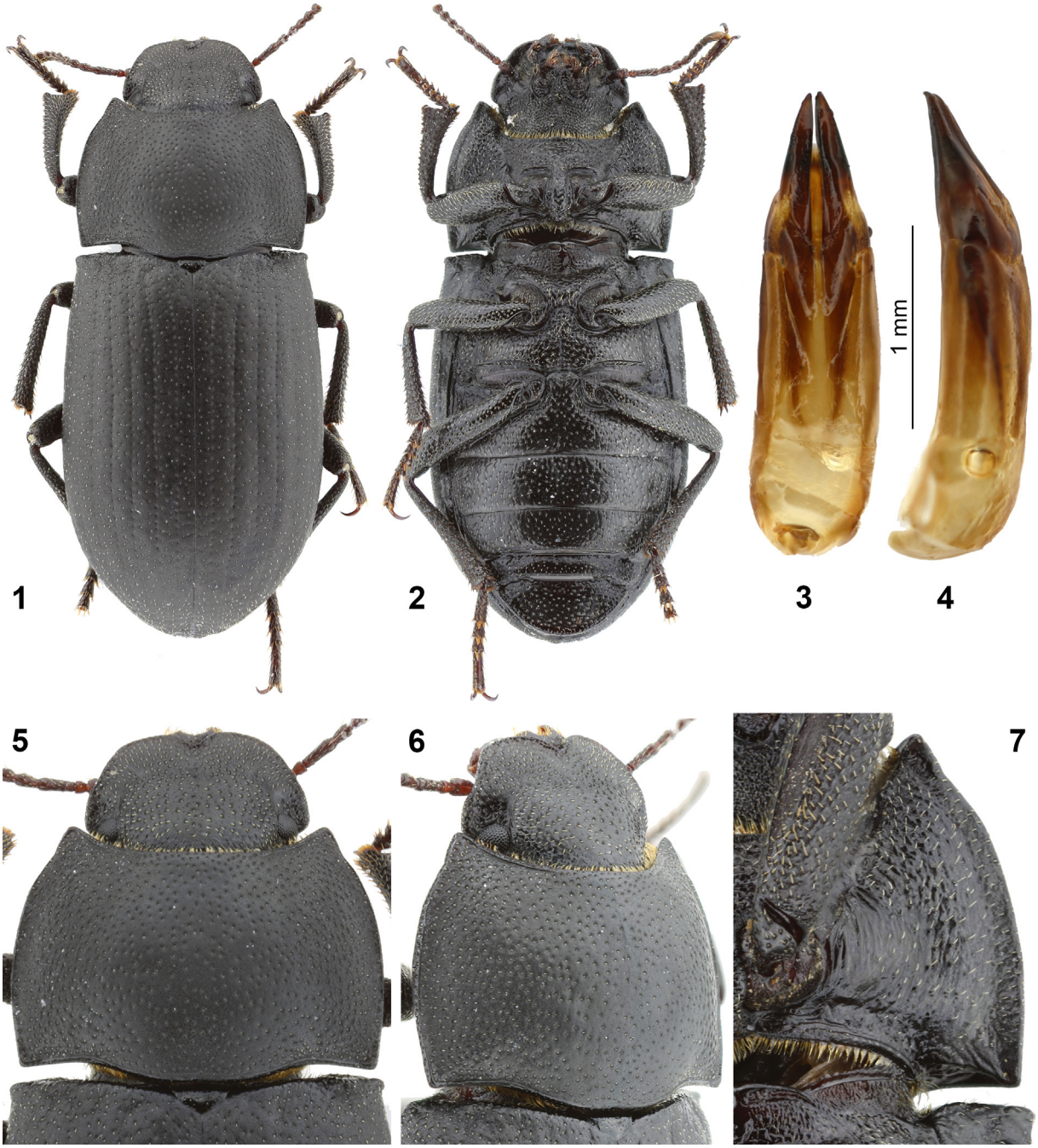
Recently, Nabozhenko and Eshraghi Morfad [2025] reviewed species of *Penthicus* from Iraq, Iran and Pakistan, where one new undescribed species was mentioned as "*Penthicus* sp." from northeast Pakistan (Upper Dir District, Khyber Pakhtunkhwa Province of Pakistan). A photograph of this species was found on the website "Forum Entomologi Italiani" [www.entomologiitaliani.net/forum]. Nabozhenko and Eshraghi Morfad suggested that the species was likely new to science and briefly presented its differences from similar *P. belutschistanicus* (Kaszab, 1961).

Unfortunately, the authors were unable to contact the second co-author of this paper at that time. Now such an opportunity has appeared and we describe mentioned species below. This new species belongs to the subgenus

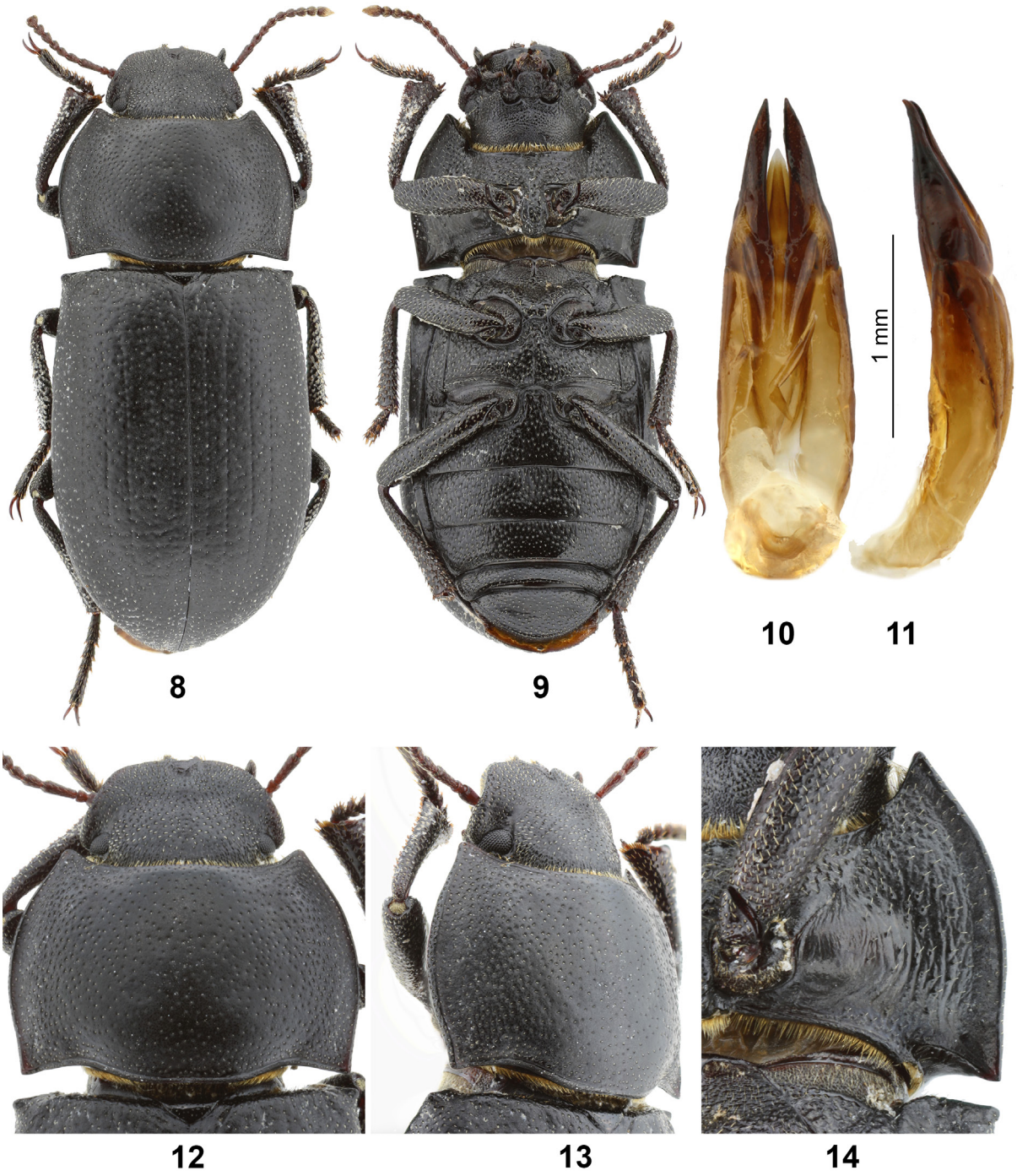


Figs 1–7. *Penthicus superdir* **sp. n.**, male, holotype.

1–2 – habitus: 1 – dorsal view, 2 – ventral view; 3–4 – aedeagus: 3 – ventral view, 4 – lateral view; 5–6 – head and pronotum: 5 – dorsal view, 6 – dorsolateral view; 7 – prohypomeron.

Рис. 1–7. *Penthicus superdir* **sp. n.**, самец, голотип.

1–2 – габитус: 1 – дорсально, 2 – вентрально; 3–4 – эдеагус: 3 – вентрально, 4 – латерально; 5–6 – голова и переднеспинка: 5 – дорсально, 6 – дорсолатерально; 7 – прогипомера.



Figs 8–14. *Penthicus superdir* **sp. n.**, male, paratype.
8–9 – habitus: 8 – dorsal view, 9 – ventral view; 10–11 – aedeagus: 10 – ventral view, 11 – lateral view; 12–13 – head and pronotum: 12 – dorsal view, 13 – dorsolateral view; 14 – prohypomeron.
Рис. 8–14. *Penthicus superdir* **sp. n.**, самец, паратип.
8–9 – габитус: 8 – дорсально, 9 – вентрально; 10–11 – эдеагус: 10 – вентрально, 11 – латерально; 12–13 – голова и переднеспинка: 12 – дорсально, 13 – дорсолатерально; 7 – прогипомера.

Myladion Reitter, 1887, having strongly acute and projected anterolateral angles of the pronotum, coarse, smoothed puncturation of the pronotum and incompletely divided eyes.

In total, five species of the genus *Penthicus* are known from Pakistan. Four of them belong to the subgenus *Myladion* and one to the nominotypical subgenus.

Material and methods

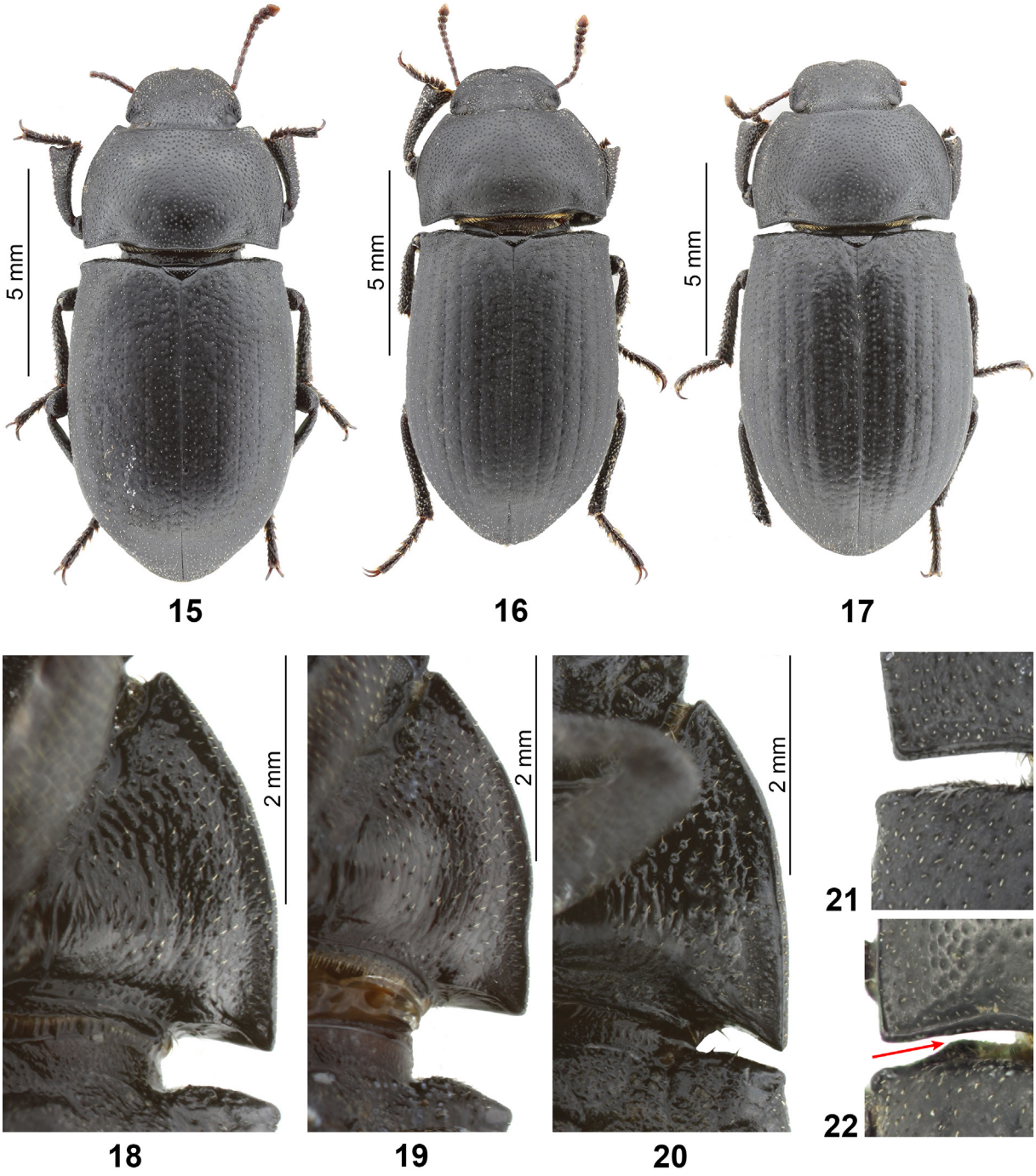
The examined material deposited in the following museums and collection:

HNHM – Hungarian Natural History Museum (Budapest, Hungary);

MNHN – Muséum national d'Histoire naturelle (Paris, France);

PCDG – private collection of David Gonzales (Lachapelle-sous-Aubenas, France).

The images were taken on a photographic station with vertical micrometric movement, equipped with a 6000 K light dome, with a digital reflex camera (Canon EOS 450D) equipped with a macro lens (Canon MP-E 65mm f/2.8 1-5x). The different multi-focal layers were assembled using the software Combine ZP (Alan Hadley, UK) and the post-processing was performed using image manipulation and retouching software (GIMP).



Figs 15–22. Species of the genus *Penthicus*, habitus, details.

15–21 – *P. superdir* **sp. n.** (females); 22 – *P. belutschistanicus* (female, paratype, HNHM); 15–17 – habitus, dorsal view; 18–20 – prohypomeron, the sequence corresponds to the paratypes in Figs 15–17; 21–22 – elytral base (anterior margin of epipleura), arrow shows angular margin.

Рис 15–22. *Penthicus superdir* **sp. n.** и *P. belutschistanicus*, габитус, детали строения.

15–21 – *P. superdir* **sp. n.** (самки); 22 – *P. belutschistanicus* (самка, паратип, HNHM); 15–17 – габитус, дорсально; 18–20 – прогипомерон, последовательность соответствует паратипам на рисунках 15–17; 21–22 – основание надкрылий (передний край эпиплевр), стрелка показывает угловидный край.

Penthicus (*Myladion*) *superdir* **sp. n.**
(Figs 1–21)

Material. Holotype, ♂ (MNHN): "PAKISTAN, EE, Upper Dir 15.VII.2008 Hafiz Akhtar leg. coll. David Gonzales". Paratypes: 2♀ (MNHN), 1♂, 1♀ (PCDG), collected together with the holotype.

Description. Holotype. Body slender, black, opaque, covered with short whitish setae, poorly visible on disc of pronotum and elytra. Body length 13.6 mm.

Head widest across genae. Lateral margins of genae strongly shortly rounded basally and slightly rounded and converging to epistome in apical 3/4. Widest area of genae located at middle level of eyes. Head with double puncturation dorsally: coarsely and moderately sparsely punctured by circular punctures, sparser in middle; each puncture bears short whitish setae (longer than on pronotum and elytra); small non-setose micropuncture between large punctures distinct. Eyes dorsally small, subequal in length and width, with one connected rows of ommatidiae between dorsal and apical portions. Head ventrally with dense granulation in basal area to submentum and sparse coarse setose puncturation around mouthparts laterally and eyes. Antennae short, antennomere 11 wider and 1.5 times as long as 10th one.

Prothorax. Pronotum transverse (1.6 times as wide as long), widest at basal third, 1.65 times as wide as head, strongly narrowed from widest portion to anterior margin and slightly narrowed from widest portion to base, ratio width of pronotum at base, widest portion and anterolateral angles: 25.3 : 26.4 : 18.5. Anterior margin widely evenly emarginated. Lateral margins evenly rounded, but emarginated before anterolateral angles. Base bisinuate, middle portion protruded more than posterolateral angles. Anterolateral angles acute (80°), strongly projected, tip acute, posterolateral angles right (90°), tip distinct. Lateral edges coarsely margined, bead indistinct in the area of emargination, anterior edge margined laterally with widely interrupted bead in middle, base margined only on sides, the most protruded middle portion of base not margined. Disc of pronotum slightly convex, moderately flattened on sides (flattened portion almost horizontal), sparsely punctured by coarse smooth circular punctures (interpuncture spaces near 2–3 times as long as puncture diameter) in middle and much densely and coarsely punctured by smooth, slightly raduliform punctures on sides (puncture diameter slightly longer than interpuncture space); secondary micropuncturation distinct, well visible between large punctures. Prothoracic hypomera convex, lateral sides narrowly flattened. Surface with sparse distinct granules (denser and larger in anterior portion and much sparser and smaller in basal portion) and several smooth longitudinal wrinkles; each granule bears short subrecumbent seta. Prosternum with coarse raduliform granules and recumbent short setae. Prosternal process slightly convex, slightly protruded beyond procoxae, widely margined.

Pterothorax. Elytra elongate, with slightly rounded lateral margins, widest at midlength (1.58 times as long as wide), 1.86 times as wide as head, 1.13 times as wide and 2.6 times as long as pronotum. Elytra distinctly wider at base than base of pronotum. Basal margin of elytra (anterior margin of epipleura) straight, humeral angles acute, strongly projected, tip acute, lateral edge of elytra shortly distinctly emarginated near humeral angles. Puncturation of elytra comparatively coarse and sparse; strial punctures round, little deeper and more distinct than smooth interstrial ones, located in slightly depressed rows, the same size as interstrial punctures; intersrtiae flat. Epipleuron in apical portion (before humeral angles) 1.8 times as wide as metepisternum at widest portion. Ventral side of pterothorax sparsely pubescent with recumbent whitish setae. Mesoventrite coarsely rugose and granulated, mesepisterna with narrow transversely elongate granules and foveae between them. Metaventrite with setose granules on sides and smooth setose raduliform punctures in middle. Metepisterna with small sparse setose granules.

Abdomen. Abdominal ventrites 1–4 sparsely and finely rasp-like granulated (granules directed backward) on sides and punctured medially with finer and sparser raduliform punctures; ventrite 5 with simple sparse and fine raduliform puncturation, margined at apex. Setation of abdomen slightly shorter than on metaventrite. Genitalia and terminalia. Inner sternite VIII and spiculum gastrale were lost after primary preparation. Aedeagus with straight evenly narrowed from base to apex parameres; lateral margins slightly rounded. Apex of each paramera acute. Basal piece near 2 times as long as parameres.

Legs. Legs moderately long, profemora slightly extending body margin, meso- and metafemora more extending (metafemora slightly longer) beyond elytral margin. Protibiae narrow, with almost the same width at apex as widest portion of profemora. Lateral margin of protibiae simple, not obliquely truncated near apex. Protarsomeres short, combined length of tarsomeres 1–2 + half of third protarsomere subequal to apical width of protibia.

Variability. Paratype (male) differs from the holotype in the following characters: lateral margins of pronotum slightly emarginated basally, posterolateral margins slightly more acute (87°), lateral sides of prothorax wider flattened on pronotum and prohypomera, protarsomeres slightly shorter, combined length of first three protarsomeres subequal to apical width of protibia. Aedeagus the same.

Female. Body more robust, femora shorter. Antennomere 11 shorter than in male. Lateral margins of pronotum at anterior portion not margined. All three females (paratypes) have prohypomera narrowly flattened along outer margin, one of the female has lateral margins of pronotum slightly emarginated at basal quarter. Body length 12.3–12.9 mm.

Comparative diagnosis. The species is most similar to *P.* (*Myladion*) *belutschistanicus* in the elytra setated laterally and apically and the shape of genae, widest at middle level of eye. See differences in the key below.

Etymology. The Latin name refers to Upper Dir, the type locality of the new species: "super" is abbreviation from the Latin "superiorum" (Upper) + Dir. Unchangeable arbitrary noun.

A key to *Penthicus* of the subgenus *Myladion* from Pakistan

1. Body dorsally glabrous ..... *P. pakistanicus* Nabozhenko et Eshraghi Mofrad, 2025
– Body dorsally entirely covered with short setae or at least elytra laterally and apically with short recumbent setae 2
2. Genae widely rounded, widest much before anterior margin of eyes. Pronotum and elytra entirely with short setae, which slightly longer than puncture diameter ..... *P. waziristanicus* (Kaszab, 1957)
– Genae slightly rounded, widest at middle level of eyes. Pronotum and elytral disc in middle glabrous, elytra apically and laterally with short setae 3
3. Lateral sides of disc of pronotum flattened, but obliquely sloped to outer margin at basal third. Anterior margin of epipleura (adjacent to base of pronotum) angular in middle (Fig. 22) ..... *P. belutschistanicus*
– Lateral sides of disc of pronotum horizontally flattened. Anterior margin of epipleura (adjacent to base of pronotum) straight or slightly rounded (Fig. 21) .... *P. superdir* **sp. n.**

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