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A new species of *Pityokteines* (Coleoptera: Scolytidae) from Turkey

Nový druh rodu *Pityokteines* (Coleoptera: Scolytidae) z Turecka

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Taxonomy, new species, Coleoptera, Scolytidae, Ipini, *Pityokteines*, Palaearctic region, Turkey

Abstract. *Pityokteines marketae* sp. n. from Turkey is described and compared with other Palaearctic species of the genus. The species is monophagous, boring under bark of the trunk of *Abies cilicica*.

The genus *Pityokteines* Fuchs, 1911 is with its nine species widely distributed throughout northern North America (Bright 1976, Bright & Skidmore 1997, Wood 1982, Wood & Bright 1992), in Europe from the Pyrenees to the Caucasus, in Asia in Turkey and in northern Yakutia (Heyden, Reitter & Weise 1906; Krivolutskaya 1996; Pfeffer 1995; Stark 1952). Two other places of its occurrence in Asia are known: Japan - *P. curvidens* (Germar, 1824) (Nobuchi 1974, Winkler 1932) - and Korea - *P. spinidens* (Reitter, 1894) (Winkler 1932). However, the records of the latter two species are disputed, because the original data are from the beginning of this century and have not been confirmed. Only three species - *P. curvidens, P. spinidens* and *P. vorontzowi* (Jakobson, 1895) - were known in the Palaearctic region till now. Their occurrence in Turkey is discussed in the papers of Schimitschek (1944) and Schedl (1959, 1961, 1968).

All known species are oligophagous; main hosts are *Abies* spp., and occasionally they may occur on other conifers (*Larix, Pinus, Picea*). Some species of the genus are potential pests of firs, although their aggressiveness varies from a primary enemy to a secondary invader on dying trees. All species are phloeophagous and polygynous with very distinct morphological differences between the sexes (Pfeffer 1995).

The fourth Palaearctic representative of the genus *Pityokteines marketae* sp. n. was first discovered in 1996 during a field trip to Turkey. Several more specimens were subsequently recognized in an older material deposited in Naturhistorisches Museum, Wien.

All measurements were made on ten specimens of both sexes purportedly chosen to show the entire variability range.

Pityokteines marketae sp. n.

(Figs 1-3)

Description. Dark brown or black, surfaces shining, antennae yellowish light brown, legs brown, vestiture of golden hair. Antennal funicle 5-segmented, club obliquely truncate, two sutures evident on anterior face, none on posterior face, eyes very shallowly emarginate. Pronotum slightly

longer than wide, summit near the middle, anterior area declivous, asperate, with long and rather dense pubescence, posterior area punctured. Scutellum visible, flat and rather large, shining. Elytra weakly striate anteriorly and very deeply so posteriorly, declivity rather deeply excavated, lateral margins armed with three pairs of denticles and several pairs of conical tubercles, denticles larger in males.

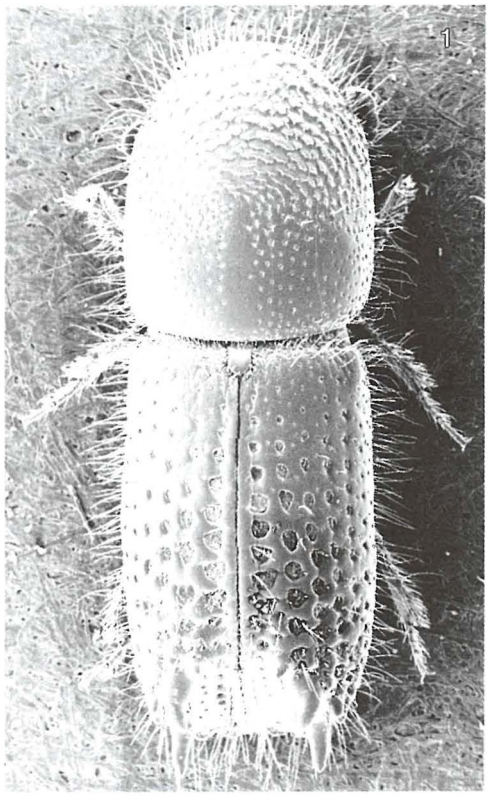
Male (Figs 1, 3). Length 2.7-3.4 mm (3.3 in holotype), 2.40-2.73 times as long as wide (2.64 in holotype); color very dark brown to black.

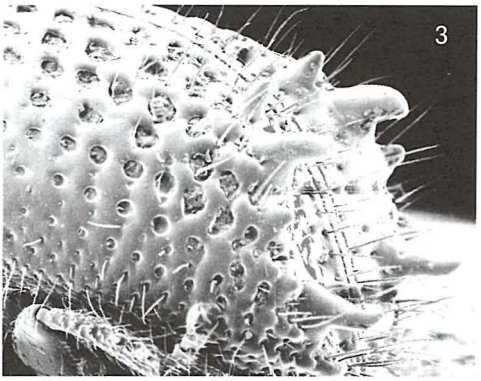
Frons convex, shining; rather coarsely granulate-punctate from epistoma to vertex, sculpture becoming weaker and sparser posteriad; median longitudinal area shining, impunctate, with a remarkable carina, sometimes broken by coarse sculpture; rather sparsely pubescent.

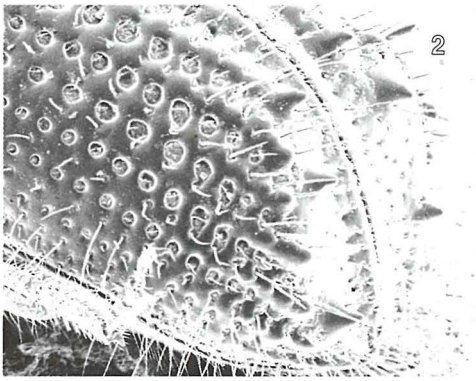
Pronotum 1.03-1.13 times as long as wide (1.10 in holotype); sides almost straight and parallel on basal two-thirds, slightly constricted near middle, broadly rounded in front; summit at middle; anterior slope declivous and rather coarsely asperate; posterior area smooth, shining, with sparse fine punctures, on lateral areas punctures more dense; median and lateral areas of disk impunctate. Vestiture of moderately abundant, fine, rather long hair on anterior slope, and of sparse, rather short hair on posterior area; discal constriction marked by a row of hair.

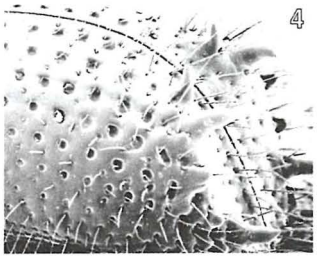
Elytra 1.50-1.64 times as long as wide (1.61 in holotype), 1.30-1.45 times as long as pronotum (1.41 in holotype); sides almost straight and parallel on basal three-fourths, widest in posterior part, broadly rounded behind, with lower declivital spines interrupting outline; striae 1 moderately impressed, punctures of dorsal striae rather small and deep basally, becoming larger and deeper, each irregularly rounded to angled posteriad, lateral striae more regular; interstriae smooth, shining, wider than striae basally, becoming indistinct posteriorly due to strial punctures, interstrial punctures minute, obscure, uniseriate, missing or included in strial punctures posteriorly. Declivity abrupt, very steep, rather broadly, deeply excavated; interstriae 1 weakly elevated, finely, transversely corrugated, lateral areas gradually, strongly elevated, central part of declivity with large, deep, confused, rather sparse punctures; sutural tubercle (denticle 1) at base of declivity erect, directed obliquely dorsad; denticle 2 large, on upper third of declivity in line with interstriae 3, on an elevated wide base, slightly bent ventro-mediad; lateral margin continuing with two conical tubercles, these smaller than denticle 1 and in line with interstriae 4 and 5; denticle 3 on lower third, on elevated wide base as denticle 2, rather long and narrow, as long as denticle 2, moderately sabre-shaped and curved dorsad, apex pointed; subapical margin not elevated into a costa, ornamented with two rather large subtuberculate calluses between denticle 3 and apex; several small remarkable conical tubercles occur laterad of lateral margin of declivity between denticle 2 and costa. Vestiture of moderately abundant, long, strial and interstrial hair, longer at lateral margins and declivity.

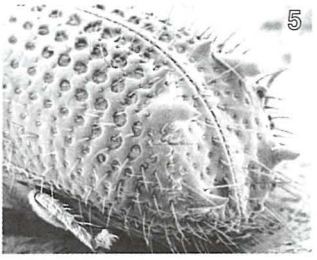
Female (Fig. 2). Length 2.5-3.4 mm (3.3 in allotype), 2.68-2.83 times as long as wide (2.69 in allotype). Similar to male except frons very weakly, broadly convex, minutely, very densely punctured from epistoma to less densely so at vertex, a small, median tubercle on lower half; frons covered by abundant, fine, long hair, similar hair on anterior margin of pronotum; punctures in elytral striae rather smaller compared to male, interstrial punctures visible also in posterior half; elytral declivity less strongly impressed, all three main pairs of denticles less developed, conically shaped, pointed, denticles 2 and 3 displaced from lateral margin mesad; declivital vestiture of more abundant hair.

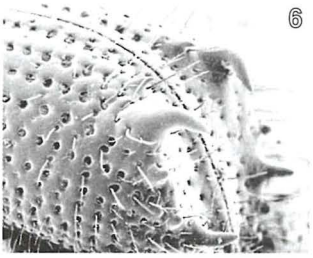












Figs 1-6. 1 - *Pityokteines marketae* sp. n., male, habitus (dorsal view). 2-6 - posterior part of elytra (dorso-latero-caudal view): 2 - *P. marketae* sp. n., female; 3 - *P. marketae* sp. n., male; 4 - *P. curvidens* (Germar), male; 5 - *P. vorontzowi* (Jakobson), male; 6 - *P. spinidens* (Reitter), male.

Obr. 1-6. 1 - *Pityokteines marketae* sp. n., samec, celkový pohled (dorsálně). 2-6 - konec krovek (dorso-latero-kaudálně): 2 - *P. marketae* sp. n., samice; 3 - *P. marketae* sp. n., samec; 4 - *P. curvidens* (Germar), samec; 5 - *P. vorontzowi* (Jakobson), samec; 6 - *P. spinidens* (Reitter), samec.

Type material. Holotype (male): "TR - prov. MERSIN, Camliyayla, 1000-1200 m, 8.-9.vi.1996, M. Knížek lgt." Allotype (female): the same data as the holotype. Paratypes: 47 males, 63 females: the same data as the holotype; 10 males, 30 females: the same data as the holotype, P. Zahradník lgt.; 1 female: the same data as the holotype, J. Vávra lgt.; 6 males, 1 female: "Turkei, Cevizli-Hanaltu bei Manavgat, 17. IX. 1959, Dr. E. Can lgt., *Abies cilicica*", coll. K. E. Schedl in Naturhistorisches Museum, Wien.

Holotype, allotype and 2 paratypes deposited in the collection of National Museum, Prague, 102 paratypes in the author's collection, 10 paratypes in Naturhistorisches Museum, Wien, 4 paratypes in Muséum d'histoire naturelle, Genève, 36 paratypes in coll. P. Zahradník (Praha), 2 paratypes in coll. J. Vávra (Ostrava).

Note. All specimens of *P. marketae* sp. n., found in the Schedl's collection and determined by Schedl as *P. curvidens*, were easily distinguished by their large body size, even though all of these specimens were immature (compared with adult specimens which are nearly black).

Etymology. The new species is dedicated to my wife Markéta, who was enormously helpful in both supporting me during the field trip and gathering specimens. Without her help this paper would never appear.

Differential diagnosis. *P. marketae* sp. n. is morphologically closely related to *P. curvidens* (Germar, 1824) and *P. vorontzowi* (Jakobson, 1895). In males it is distinguished from *P. curvidens* by the shape and direction of denticle 1, directed dorsad in *P. curvidens* (Fig. 4) (the same in females), and from *P. vorontzowi* by the shape of denticle 2 which is straight, thickened and blunt (Fig. 5). In *P. spinidens* (Reitter, 1894) (Fig. 6), the sutural tubercle (denticle 1) is directed caudad (the same in females), denticle 2 is longer, more slender and curved slightly mesad, the strial punctures are much finer, and the interstrial punctures are also visible on the posterior part of elytra compared to *P. marketae* sp. n. In both sexes *P. marketae* sp. n. differs from all species of the genus by its larger body size and the large strial punctures mainly in posterior part of elytra (in *P. vorontzowi* they are the most similar) as well as by the biology.

Biology. Only the host plant and shape of gallery system are known in *P. marketae* sp. n. Galleries are the most similar to those of *P. curvidens* (Wachtl 1895) except rather undulated mother tunnels. The new species is probably monophagous, boring under bark of the trunk of *Abies cilicica*.

Distribution. Turkey.

The specimens from Çamliyayla were collected on logs at the local central depot, where timber is brought from the distance up to 10 km. Because of the supposed monophagy, it is most likely that the distribution of *P. marketae* sp. n. is in Taurus and Antitaurus where the host plant occurs.

ACKNOWLEDGMENTS. Especially, I thank Heinrich Schönmann (Naturhistorisches Museum, Wien) and Ivan Löbl (Muséum d'histoire naturelle, Genève) for the possibility to study the museum material at their disposal, as well as to my colleagues Petr Zahradník (Praha) and Jiří Vávra (Ostrava) for providing me with additional specimens.

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SOUHRN

Holarktický rod *Pityokteines* Fuchs, 1911 je zastoupen šesti druhy v Severní Americe a dalšími třemi v Evropě od Pyrenejí až po Kavkaz, a dále v Malé Asii a severním Jakutsku. Dva z těchto palearktických druhů byly dále zaznamenány na východě Asie, a to v Japonsku - *P. curvidens* (Germar, 1824) a v Koreji - *P. spinidens* (Reitter, 1894). Obě tato místa výskytu jsou nejistá, neboť jde o nálezy z počátku tohoto století, které nikdy poté nebyly potvrzeny.

V oblasti jihozápadního Turecka byl nalezen nový druh tohoto rodu, *P. marketae* sp. n. Od všech ostatních zástupců rodu se odlišuje především velikostí (jde o největší druh v rámci celého rodu) a velmi silně zvětšenými tečkami v rýhách na zadní polovině krovek. Tyto tečky nejsou kulaté, nýbrž mají tvar tří- až pětiúhelníků; díky své velikosti jsou tak sblížené, že mezirýží v zadní polovině krovek jsou redukována na velmi úzký klikatý proužek, čímž jsou drobné tečky mezirýží jakoby vtaženy do velkých rýhových teček. Dále se liší utvářením hlavních tří párů zoubků na konci krovek. V porovnání s ostatními palearktickými zástupci rodu má *P. marketae* sp. n. suturální zoubek namířen šikmo vzhůru, obdobně jako u *P. vorontzowi* (Jakobson, 1895), druhý pár zoubků je podobně utvářen jako u *P. curvidens* a třetí pár je na rozdíl od všech druhů delší, štíhlejší a mírně šavlovitě zahnutý nahoru. Výskyt *P. marketae* sp. n. je možné předpokládat v celém areálu rozšíření jeho živné rostliny *Abies cilicica*, tj. v oblasti Tauru a Antitauru. Podle dosud zjištěných bionomických údajů se jedná o jediného monofágně žijícího zástupce rodu. Požerek tohoto druhu připomíná svým tvarem požerek *P. curvidens*, ale matečné chodby jsou poněkud zvlněné.