

**TRICHOFERUS SAMAI, A NEW SPECIES FROM TURKEY**  
(COLEOPTERA : CERAMBYCIDAE)

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**Abstract**

**Trichoferus samai** *n. sp.* from Turkey is described and compared to related species. Data on its biology is given.

**Keywords**

Taxonomy, biology, Cerambycidae, **Trichoferus samai**, new species, Turkey.

**Résumé.** **Trichoferus samai**, une nouvelle espèce de Turquie (*Coleoptera* : *Cerambycidae*).

**Trichoferus samai** *n. sp.* de Turquie est décrite puis comparée avec les espèces voisines. Les auteurs donnent aussi des informations sur sa biologie.

**Mots-clés**

Taxonomie, biologie, *Cerambycidae*, **Trichoferus samai**, nouvelle espèce, Turquie.

In a faunistic work REJZEK & HOSKOVEC (1999) first reported on a new **Trichoferus** species collected in South-East Turkey. Here, a description of this **Trichoferus** species is given. The newly described species **Trichoferus samai** *n. sp.* is not closely related to any other hitherto described congeners.

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**TRICHOFERUS SAMAI**, *species nova*.

Fig. 1

**HOLOTYPE** (male): SE TURKEY, Nemrut Dağı Mts. 20 km NW of Kâhta, 2.-3.IV.1995, M. Rejzek leg. (in coll. S. Kadlec), Fig. 1 - right.

**ALLOTYPE** (female): the same collection data, M. Rejzek leg. et coll., Fig 1 - left.

**Description of holotype** (male) : length 12.4 mm, width 3.7 mm.

**Integument** uniformly yellow-brown, head and pronotum slightly darker.

**Head** only slightly retracted into pronotum, covered with sparse yellow recumbent pubescence. Several long semi-erect setae present at base of upper and lower eye-lobes and at base of mandibles. Surface of head regularly and coarsely punctured, bearing a deep central frontal furrow. **Eyes** coarsely faceted, on lower eye-lobe covered with short erect setae not longer than diameter of one facet.

**Antennae** reaching beyond second third of elytra. Scape conical, with fine puncturation. Remaining antennal segments flattened (excluding the pedicel), starting from segment 6 strongly flattened. Pubescence of antennae fine, light yellow and recumbent. First 10 antennal segments bearing stronger and darker semi-erect setae on the apical margin. Similar setae are also present on inner surface of first 7 segments, becoming less dense distally. Segment 11 with a well-defined appendix. Length ratio of antennal segments **1** to **11**: 3,0 : 1,0 : 2,13 : 1,8 : 2,6 : 2,6 : 2,86 : 2,47 : 2,6 : 2,47 : 3,0. Segment 4 unusually short.

**Pronotum** on disc only slightly convex, almost regularly rounded at sides, maximum width in third quarter of length, slightly transverse (length : width 1 : 1,15), rimmed apically and basally. Pronotum with fine shallow regular punctures separated by up to their own diameter. Surface of pronotum (including most of punctures) bearing very fine microsculpture resulting in matt finely granular appearance. Pubescence of pronotum sparse and not obscuring its structure, consisting of longer light yellow and completely recumbent hairs ; pubescence becomes denser paramedially, in this area pronotum bearing very shallow impressions. Several long semi-erect setae occur on lateral margin close to base of pronotum.

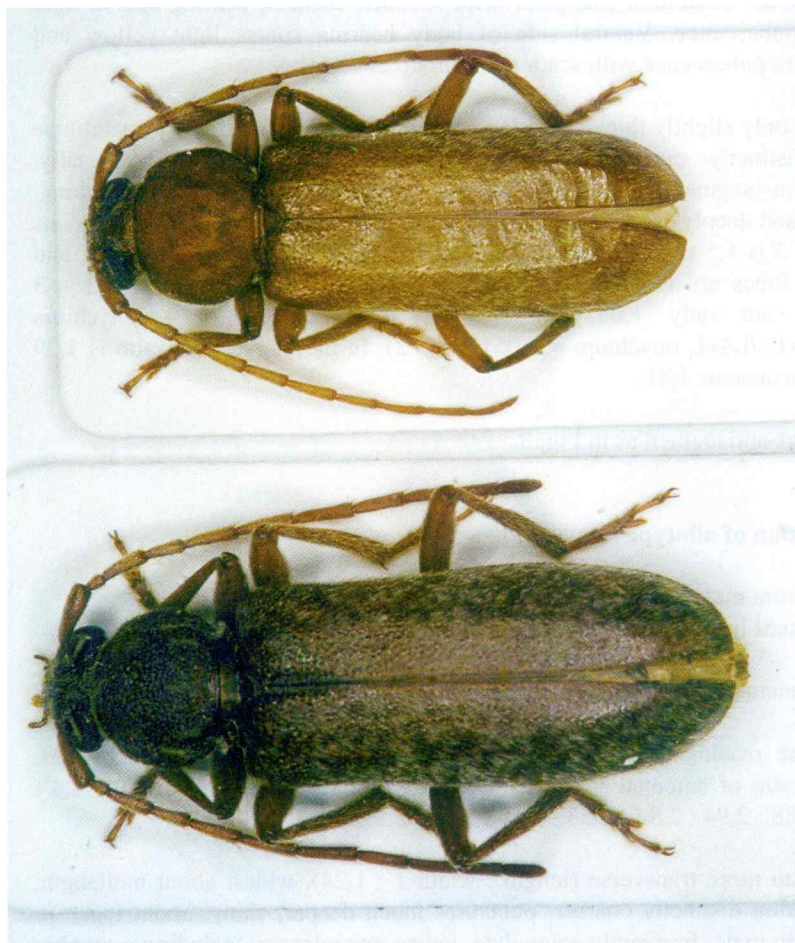


Fig. 1: *Trichoferus samai* n. sp. left – allotype (female) and right – holotype (male).

**Elytra** elongate (2,44 times longer than wide at humeri), widening slightly apically, in lateral view only slightly convex on disc, rounded on apex, bearing shallow impressions in humeral region and at scutellum. Surface of elytra smooth, shiny, finely chagreened, punctures regular, large, and shallow, becoming slightly smaller and denser apically ; on sides of disc puncturation distinctly denser. Pubescence sparse, spotted, only very little covering elytral structure, composed of fine white recumbent hairs and stronger long erect light brown setae. Scutellum triangular with rounded corners, bearing sparse light yellow pubescence. Ventral side of body bearing sparse light yellow and recumbent pubescence with scattered semi-erect setae.

**Femora** only slightly thickened (distinctly flat), mesotibiae slightly, metatibiae more distinctly curved laterally; metatibiae distinctly curved dorsally. Onychium (segment 5) of all tarsi very long, slender, and segment 3 long, parallel and deeply emarginated. This feature is most apparent in protarsus - its segment 3 is 1,5 times longer than segment 2 ( $L3/L2 = 1,5$ ), deeply split, and both its lobes are long and very narrow. In protarsus, segments 1 + 2 + 3 together are only 1,05 times longer than segment 4 + onychium ( $L1+L2+L3/L4+L$  onychium = 1,05), (Fig. 2). In mesotarsus this ratio is 1,29 and in metatarsus 1,31.

**Aedeagus** and tegmen as in Fig. 3.

**Description of allotype** (female) : length 14 mm, width 4,3 mm.

Differs from male as follows :

**Integument** light brown, darker than in male.

**Head** puncturation distinctly coarser, frontal furrow shallower.

**Antennae** reach end of second third of elytra, segment 4 also very short. Length ratio of antennal segments **1** to **11** differ from male: 3,0 : 1,0 : 2,4 : 2,11 : 2,88 : 2,94 : 2,94 : 2,53 : 2,59 : 2,18 : 2,29.

**Pronotum** more transverse (length : width 1 : 1,24), widest about midlength, puncturation distinctly coarser, punctures much deeper, shiny, about twice as large as in male, frequently catenulate, pubescence denser, including a number of long semi-erect setae on entire disc.

**Elytra** less shiny, proportions similar to male. Punctures slightly larger, deeper, and denser, white spotted pubescence thicker than in male.

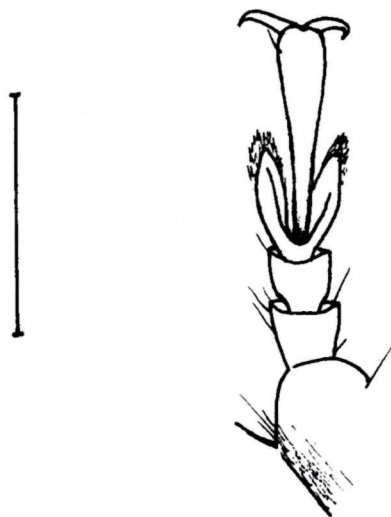


Fig. 2: Protarsus of the holotype (male), scale 1 mm.

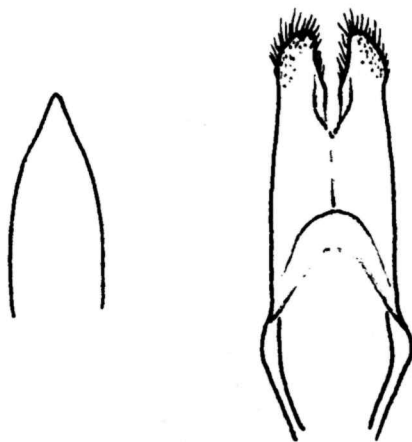


Fig. 3: Apex of aedeagus and tegmen of the holotype.

Only **mesotibiae** slightly curved distally, tarsus similar to male, with very long onychium, segment 3 less parallel.

### **Biology**

The locality of **Trichoferus samai** *n. sp.* is situated on plateaus under the peak region of Nemrut Dağı mountain (1400 - 1800 m) covered with steppe vegetation and sparse shrubs. The biology of **Trichoferus samai** *n. sp.* resembles **Ropalopus ungaricus** (Herbst, 1784) to some extent. About ten early instar larvae of **Trichoferus samai** *n. sp.* were collected under bark of living branches of a shrubby maple (**Acer** *sp.*) species where they fed on phloem creating an irregularly oval area. Later they entered the wood where they constructed the pupal cells. The next year 2 adults appeared. We believe that under natural conditions the development lasts at least two years. It was very difficult to recognise an attacked branch. Only rarely did the larval activity cause splitting of the living bark and sometimes the sap was oozing from these wounds. Bases of the branches were attacked more frequently than their distal part.

### **Name derivation**

The new species is named after our friend Gianfranco Sama, a specialist in Palaearctic Cerambycidae.

### **Differential diagnosis**

**Trichoferus samai** *n. sp.* differs from all known species primarily in the shape and length of the 3rd segment of the tarsi and the onychium. This feature is best developed in protarsi.

In addition to the above mentioned feature the species-groups **sparti** Müller and **fasciculatus** (Faldermann) differ from the new species in pubescence and in having less robust and less convex pronotum, coarser elytral sculpture, and a shorter 4th antennal segment.

The other **Trichoferus** species occurring in Turkey substantially differ from **Trichoferus samai** *n. sp.* Thus, **Trichoferus preissi** Heyden, 1894 is much bigger, with a robust pronotum, integument of a dark brown colour, and elytra with a number of long erect setae. **Trichoferus griseus** (Fabricius, 1792) and **Trichoferus kotschy** Ganglbauer, 1883 differ in the pronotum bearing elevations on the disc. Furthermore, in males of **Trichoferus kotschy** the

antennae are longer than the elytra and the tarsi are built differently. **Trichoferus lunatus** (Szallies, 1994) has an enormously wide pronotum and a characteristic pubescence of elytra.

**Trichoferus sbordoni** Sama, 1982 was described from Alanya (SW Turkey) according to a single female. Judging from the original description this species seems to be related to **Trichoferus samai** *n. sp.* but differs in the presence of a number of long curved setae on the lower eye lobes. Unfortunately, SAMA's (1982) description does not contain a detailed description of the tarsi. Moreover, **Trichoferus sbordonii** is the only Turkish **Trichoferus** of the **fasciculatus** species-group not having long erect setae on the elytra, but instead very short brown setae, thicker and not longer than the basic white pubescence (SAMA, personal communication).

## Discussion

The form of all tarsi, especially protarsi, in both sexes of **Trichoferus samai** *n. sp.* readily separates this species from all known **Trichoferus** species. The very long onychium has not been observed in any other species presently known.

By the form of the tarsi, the **sparti** species-group resembles the newly described species to some extent. However, this group differs from **Trichoferus samai** *n. sp.* in other characteristics. The **sparti** group is characterised by strongly convex and wide pronotum in males, by the characteristic shape of the sclerite of the endophallus, and larval development occurring mostly in living *Fabaceae*, *Cistus*, *Berberis*, *Sarcopoterium* etc. (SAMA, personal communication). Moreover, no species belonging to this particular group has been recorded from Turkey yet. The only exception is a still undetermined **Trichoferus** species recorded from Anamur, South Turkey (SAMA, 1994) and also from West Turkey (SAMA, personal communication). This undetermined species develops in living tissues of its host plant. Sama regards this species as being closely related to **Trichoferus antonioui** Sama, 1994 described from Cyprus (SAMA, 1994).

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