



## Description of a new *Andrena* species from Turkey, *Andrena (Notandrena) selcuki* n. sp. (Hymenoptera: Apoidea, Andrenidae)

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This publication is the first in a series of papers containing the descriptions of Turkish *Andrena* species that are new to science. Most of the *Andrena* species found in Turkey were described by Klaus Warncke during the the 1960s and 1970s (Warncke 1966, 1969, 1974, 1975). He described approximately 50% of the *Andrena* species and subspecies known in Turkey. In his paper of 1975, he recorded 294 species from Turkey, but he often regarded closely related taxa as subspecies of a single species. In our opinion, these subspecies represent separate species, and hence, this number needs to be increased. Since Warncke's works, no extensive survey of the *Andrena* of Turkey has been undertaken. However, Gusenleitner (1998) described 9 species from Warncke's andrenid collection, Patiny (1998), Gusenleitner & Schwarz (2000) and Dubitzky (2006) described one species each, and Grünwaldt (in Grünwaldt, Osytshnjuk & Scheuchl 2005) described two species all from Turkey. Because of Turkey's climatic and geographic characteristics and its rich and diverse flora, more than 350 *Andrena* species have evolved and live there. To further assess whether more species occur in Turkey, we initiated an extensive survey on the diversity of pollinator bees in 2005.

An *Andrena* species new to science was found in Central Anatolia of Turkey and is described herein. The location of the collected bee samples is near Tuz Gölü in Konya province. This region has mostly steppe vegetation, but includes cultivated areas of wheat. As the female of this new *Andrena* species has not been found yet, the description of the species is based only on the male.

The subgenus *Notandrena* was introduced by Pérez (1890), and he included 13 species in it. Hedicke (1933) designated *A. nitidiuscula* as the type species and gave a short diagnosis of the subgenus and accepted only 7 species. Warncke (1968) listed 11 palearctic species and synonymized the American subgenus *Gonandrena* Viereck, 1917 with *Notandrena*. LaBerge & Ribble (1972) regarded *Gonandrena* and *Notandrena* as related but distinct subgenera, *Gonandrena* being exclusively nearctic and *Notandrena* exclusively palearctic. Later, LaBerge (1986) listed two species of *Notandrena* occurring in the New World, but his diagnosis of *Notandrena*, based on the two American species, differs from Warncke's diagnosis in some respects. We recognize *Notandrena* in the sense of Warncke.

**Diagnostic characters of *Notandrena* males:** Head broader than long. Glossa short and flattened. Galeal blade short. Mandibles more or less elongate. Clypeus often yellow, sometimes also adjacent parts of the face. Apical margin of the clypeus more or less upturned. Malar space not developed. Genal area broad, 1.5–2 times broader than eye in profile. Posterior margin of genal area with outwardly curved carina, sometimes weak. Pronotum with distinct lateral carina and commonly strong dorsolateral angle. Fore wings with three submarginal cells. Propodeal triangle shagreened, basally often weakly rugose or very finely areolate. Metasoma usually conspicuously punctate. S8 simple, with at most weak preapical thickening on the ventral side. Genitalia simple to moderately complex. Apical part of gonostyli broadened. Penis valves basally distinctly broader than apically (Michener 2000).

*Notandrena* now contains 18 Old World species, 8 of which occur in Turkey.

### *Andrena (Notandrena) selcuki* n. sp.

**Diagnosis:** The body length, pubescence and sculpture of *A. selcuki* n. sp. are very similar to those of *A. chrysoseles* (Kirby, 1802). The lateral margin of the clypeus is almost straight in *A. selcuki* (Fig. 1a), whereas it is slightly arched in *A. chrysoseles* (Fig. 2a). *A. selcuki* differs completely in the structure of the genitalia and sternum 8. Its gonocoxites have distinct dorsal lobes and the apical part of the gonostylus is long with a more or less acute apex (Figs. 1f, 1g). In contrast, in *A. chrysoseles* dorsal lobes to the gonocoxites are lacking and the apical part of the gonostylus is short with