

Redescription of male of *Stelis odontopyga* NOSKIEWICZ, 1925 (Hymenoptera, Apoidea, Megachilidae)

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Abstract. *Stelis odontopyga* NOSK. (Megachilidae), its morphology (diagnosis and redescription of male), bionomics and distribution are given.

Key words: *Megachilidae*, *Stelis odontopyga*, redescription.

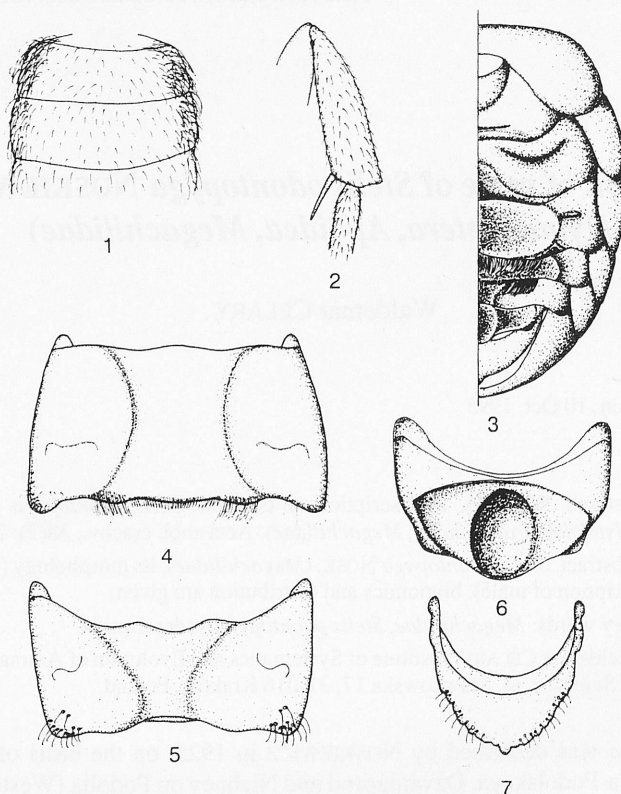
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Stelis odontopyga was described by NOSKIEWICZ in 1925, on the basis of specimens from Zaleshchiki, Melnitsa-Podolskaya, Dzvenerigorod and Nizhnev on Podolia (Western Ukraine), and till now has not been recorded from Polish territory (CELARY 1989). Recently the species was found on Miechów Upland (single locality) and Kraków-Częstochowa Upland (three localities).

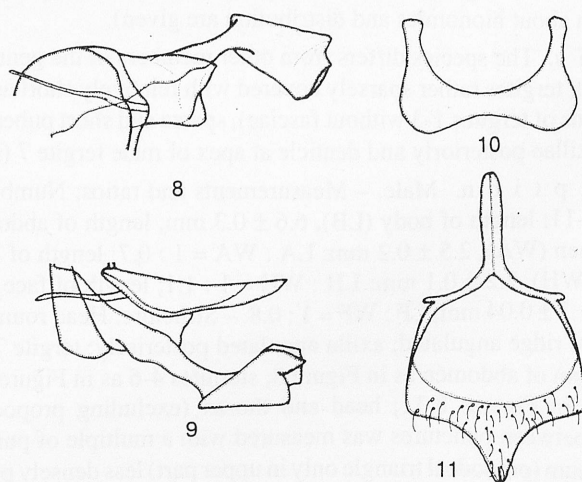
Description of the species given by NOSKIEWICZ (1925) omitted details of structure of male genitalia and sternites 7-8. Although POPOV (1932) fills in the gap, the details are poorly discernible in his drawings. Therefore, diagnosis and redescription of the male are presented below (also all available information about bionomics and distribution are given).

D i a g n o s i s. The species differs from other members of the genus in having completely black integument, tergites rather sparsely covered with relatively short and pale hairs (Fig. 1) (sides of distal margins of tergites 1-3 without fasciae), sparse and short pubescence on hind tibiae (Fig. 2), angulated axillae posteriorly and denticle at apex of male tergite 7 (Fig. 7).

R e d e s c r i p t i o n. Male. – Measurements and ratios: Number of specimens, 13; number of hamuli, 9-11; length of body (LB), 6.6 ± 0.3 mm; length of abdomen (LA), 3.4 ± 0.3 mm; width of abdomen (WA), 2.5 ± 0.2 mm; LA : WA = 1 : 0.7; length of head (LH), 2.0 ± 0.1 mm; width of head (WH), 2.2 ± 0.1 mm; LH : WH = 1 : 1.1; length of face (LF), 1.7 ± 0.1 mm; width of face (WF), 1.3 ± 0.04 mm; LF : WF = 1 : 0.8. – Structure: Head round, its width subequal to length; preoccipital ridge angulated; axilla angulated posteriorly; tergite 7 with small denticle at apex (Fig. 7); bottom of abdomen as in Figure 3; sternites 4-6 as in Figures 4-6; male genitalia and sternites 7-8 as in Figures 8-11; head and thorax (excluding propodeum) very densely punctured (distance between punctures was measured with a multiple of puncture diameters – E 0.5); sides of propodeum (propodeal triangle only in upper part) less densely punctured (E = 0.5-1); tergites of abdomen rather densely punctured (E = 0.3-2). – Coloration: Head, antennae, thorax and abdomen (distal margins of tergites 2-3 and sternites 2-4 sometimes yellow- or reddish-tawny) black; foretibial spurs tawny-yellow, mid- and hind ones black-tawny; distitarsi and claws



Figs 1-7. Some specific characters of *Stelis odontopyga* NOSK. Female: 1 – dorsal view of proximal part of abdomen; 2 – hind tibia. Male: 3 – ventral view of abdomen (left half); 4 – ventral view of fourth sternite; 5 – ventral view of fifth sternite; 6 – ventral view of sixth sternite; 7 – ventral view of seventh tergite.



Figs 8-11. Male genitalia and sternites 7-8 of *Stelis odontopyga* NOSK.: 8 – left half of genital capsule in ventral view; 9 – same in dorsal view; 10 – sternite seventh in dorsal view; 11 – sternite eighth in dorsal view.

reddish-tawny. – Vestiture: Vertex, scutum, scutellum, tarsi and sternites of abdomen yellowish pubescent, remaining parts of body whitish; tergites of abdomen, femora and tibiae (especially hind pair of legs) rather sparsely covered with short hairs, remaining parts of body with distinctly longer pubescence (especially distal margins of sternites 3-4).

B i o n o m y. *Stelis odontopyga* NOSK. is a very rare nest parasite (cuckoo bee), which lays its eggs exclusively in the nests of *Osmia spinulosa* (KIRBY, 1802) (*Megachilidae*). Mature individuals of the cleptoparasite emerge in June and fly till the early days of August (flight season is the same as of its host). The species visits flowers of *Tanacetum vulgare* L. and *Senecio jacobea* L. (NOSKIEWICZ 1925).

D i s t r i b u t i o n. Till now the inquiline was recorded from few sites of Ukraine (NOSKIEWICZ 1925, POPOV 1932), Slovakia, Bohemia, Austria, Southern Germany, Southern Belgium, Switzerland (WARNCKE 1986) as well as Spain, France, Italy, Croatia, Bosnia and Herzegovina, Hungary and Turkey (WARNCKE 1992). The type of distribution indicates that it is Subponto-mediterranean element in the fauna of Europe.

M a t e r i a l e x a m i n e d. (Each locality has coordinates of UTM grid). – Miechów Upland: DA28 Biała Góra Hill, 13 May 1993, 6♂♂, was reared from nest of *Osmia spinulosa* (KBY)(shell of *Cepea vindobonensis* (FER.)), leg. Ł. PRZYBYŁOWICZ. – Kraków-Częstochowa Upland: DA08 Smoleń, 10 June 1992, 3♂♂, on *Senecio jacobea* L., leg. W. CELARY; Żelazko, 11 July 1992, ♀♂, on *Senecio jacobea* L., leg. W. CELARY. DA16 Skała, 16 June 1990, ♂, on *Senecio jacobea* L., leg. W. CELARY. Moreover, specimens of collection of NOSKIEWICZ was studied (the material is kept in Museum of Natural History of Wrocław University) as: Kasowa Góra Mt (near Burshtyn), 5 August 1923, ♂; Dobrovlyany (near Zaleshchiki), 22 July 1924, ♂; Zaleshchiki, July 1932, ♀; ♀, illegible label.

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