

Article

First record of *Pedicia (Crunobia) pallens* Savchenko, 1978 from France (Diptera, Pediciidae)

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ABSTRACT

Pedicia (Crunobia) pallens Savchenko, 1978, a species of Pediciidae previously known from Central Europe, the Balkan Peninsula and the Caucasus, is recorded from France for the first time, from the department of Val-d'Oise.

Keywords: Faunistics; Palaearctic; Tipulomorpha

Première mention de *Pedicia (Crunobia) pallens* Savchenko, 1978 pour la France (Diptera, Pediciidae)

RÉSUMÉ

Pedicia (Crunobia) pallens Savchenko, 1978, une espèce de Pediciidae connue d'Europe centrale, de la Péninsule balkanique et du Caucase, est signalée pour la première fois de France, dans le département du Val-d'Oise.

Mots-clés : Faunistique ; Paléarctique ; Tipulomorpha

1. Introduction

Within the family Pediciidae Osten-Sacken, 1860, the genus *Pedicia* Latreille, 1809 comprises 63 described species distributed among three subgenera (OOSTERBROEK 2026). In Europe, 21 species of *Pedicia* have been recorded, approximately three-quarters of which belong to the subgenus *Crunobia* Kolenati, 1859. In France, seven species are currently known, including two discovered recently: *Pedicia* (*Amalopsis*) *fusca* Ujvárosi & Balint, 2012 and *Pedicia* (*Crunobia*) *riedeli* (Lackschewitz, 1940) (TILLIER et al. 2020, TILLIER & CLÉVENOT 2023).

Within this genus, *Pedicia* (*Crunobia*) *pallens* Savchenko, 1978 is a widely distributed European species, although its range remains fragmented and still insufficiently documented. It has been

reported from several countries in Central Europe, the Balkan Peninsula and the Caucasus (OOSTERBROEK 2026).

Here we present the first record of this species from France. A distribution map summarising the currently known European localities is also provided (Fig. 3).

2. Material and methods

Field surveys were conducted on 28 and 29 June 2025 as part of the “Inventaires Éclairs” organised by the Regional Biodiversity Agency of Île-de-France in the municipalities of Presles (95504) and Saint-Martin-du-Tertre (95566).

Specimens were collected by both authors and are preserved in ethanol and deposited in the authors' personal collections.



Figure 1. *Pedicia* (*Crunobia*) *pallens* Savchenko, 1978, male. A: habitus. B: terminalia (scale bar: 0.5 mm) (photographs by Pierre Tillier).

Figure 1. *Pedicia* (*Crunobia*) *pallens* Savchenko, 1978, mâle. A : habitus. B : terminalia (barre d'échelle : 0.5 mm) (clichés Pierre Tillier).



Figure 2. Capture site of *Pedicia* (*Crunobia*) *pallens* Savchenko, 1978 within the Moulin Neuf ENS, municipality of Saint-Martin-du-Tertre, Val-d'Oise department (photograph by Pierre Tillier).

Figure 2. Site de collecte de *Pedicia* (*Crunobia*) *pallens* Savchenko, 1978, Espace naturel sensible du Moulin Neuf, commune de Saint-Martin-du-Tertre, département du Val-d'Oise (cliché Pierre Tillier).

The distribution map presented here is based on data available in the entomological literature (KOLCSÁR & KERESZTES 2016, KOLCSÁR & TÖRÖK 2017, SAVCHENKO 1978, SIMOVA-TOŠIĆ 1992, STARÝ 1974, 2006, WIEDEŃSKA 1991, 2025). For Romania, the available records are assigned to the *pallens/zernyi* complex (Keresztes, pers. comm.).

3. Discovery of the species in Val-d'Oise

Material examined

Saint-Martin-du-Tertre (95566), Moulin Neuf Sensitive Natural Area (E.N.S.), 49°05'54.1"N, 2°18'43.1"E, alt. 58 m, 28.vi.2025, 2 ♂♂ (leg. and coll. Julien Bottinelli; leg. and coll. Pierre Tillier) (Fig. 2).

The specimens were collected within the Moulin Neuf Sensitive Natural Area, in the municipality of Saint-Martin-du-Tertre. This E.N.S. is characterised by a high diversity of natural habitats (alder carrs, alder-ash woodlands, large sedge beds, tall-herb communities, calcicolous oak-ash woodlands, reedbeds and willow carrs) and supports plant and animal species of conservation interest. The studied habitat corresponds to a small forest stream flowing over calcareous substrate and bordered by marshy areas (Fig. 2). *Pedicia* (*Crunobia*) *pallens* was initially described by SAVCHENKO (1978) as a subspecies of *Pedicia* (*Crunobia*) *zernyi* (Lackschewitz, 1940), based on differences in thoracic and wing coloration between the two taxa.

In 2006, STARÝ raised this taxon to species rank based on consistent differences in the male

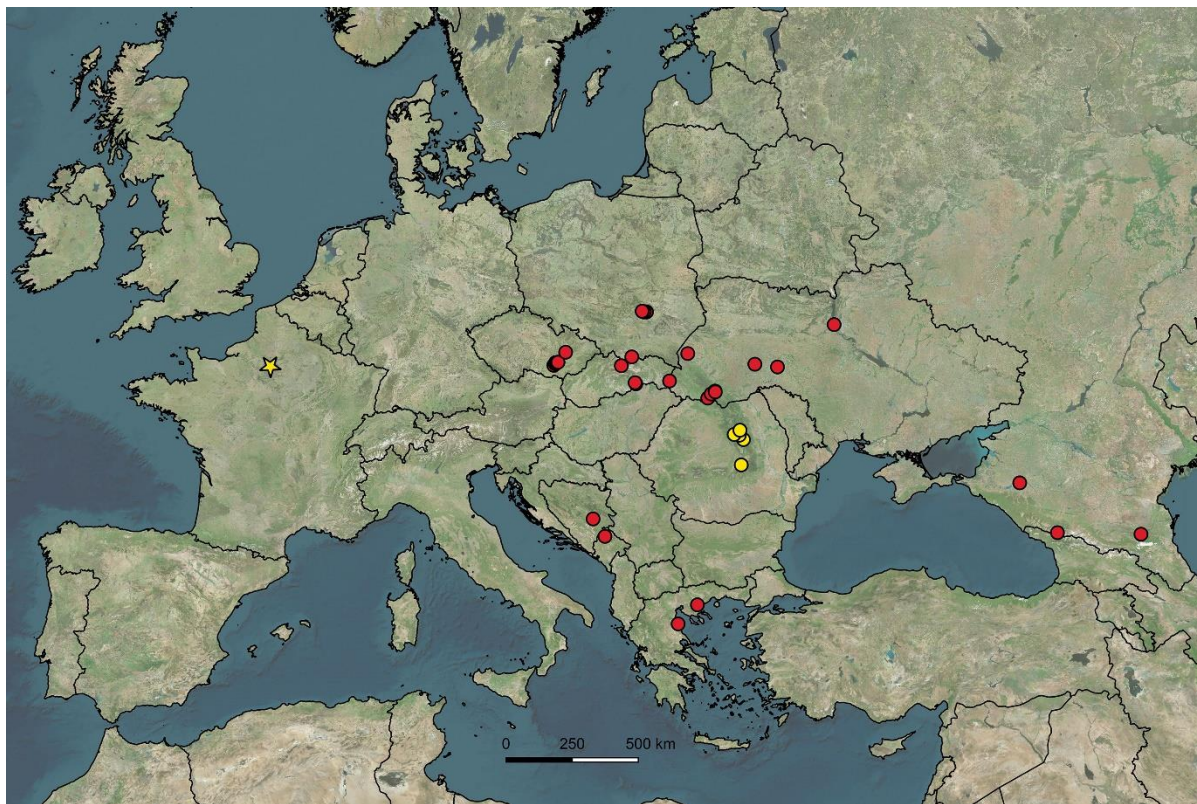


Figure 3. Distribution of *Pedicia (Crunobia) pallens* Savchenko, 1978. Red circles: published records; yellow circles: *pallens/zernyi* complex; yellow star: Val-d'Oise locality, France.

Figure 3. Distribution de *Pedicia (Crunobia) pallens* Savchenko, 1978. Cercles rouges : citations de la littérature ; cercles jaunes : complexe *pallens/zernyi* ; étoile jaune : station de collecte dans le Val-d'Oise, France.

hypopygium, although no illustration was provided.

An identification key to the species of the subgenus *Crunobia* was recently published by DÉNES et al. (2016), separating the two species mainly by differences in the coloration of the prescutum, scutum and wings. This publication also includes a photographic illustration of the hypopygium of *P. (C.) pallens* (but not that of *P. (C.) zernyi*).

The re-examination of certain specimens has led to the invalidation of several previous records, notably those from Romania published by UJVÁROSI & STARÝ (2003), which were found to correspond to *P. (C.) zernyi* (KOLCSÁR et al. 2012). However, preliminary results from ongoing molecular studies suggest the possible existence of several cryptic species within the *zernyi/pallens* complex in Romania (Keresztes,

pers. comm.). Similarly, re-examination of the recent material from Tinos Island (Greece) showed that it actually corresponds to *P. (C.) zernyi* (TILLIER 2024, 2026).

With regard to the two males collected in France, comparison of their habitus and hypopygium (Fig. 1) with photographs of Central European specimens provided by Lujza Keresztes and Levente-Péter Kolcsár enabled a reliable identification.

4. Discussion

P. (C.) pallens was previously known from Bosnia and Herzegovina (SIMOVA-TOŠIĆ 1992), Greece (STARÝ 2006), Hungary (KOLCSÁR & KERESZTES 2016), Montenegro (SIMOVA-TOŠIĆ 1992), Poland (WIEDEŃSKA 1991, 2025), the Czech Republic (STARÝ 1974), Romania (Keresztes pers.

comm.), Russia (SAVCHENKO 1978), Slovakia (STARÝ 1974) and Ukraine (KOLCSÁR & TÖRÖK 2017, SAVCHENKO 1978) (Fig. 3).

The discovery of a locality in France significantly extends its known distribution westwards and highlights a broad European range extending from the Caucasus to Western Europe, with the highest concentration of records occurring in Central Europe (Fig. 3).

Ecologically, the species is associated with humid forests and scrublands situated near streams, springs and marshy areas (UJVÁROSI 2005). The French locality corresponds to a typical habitat for the species (Fig. 2), characterised by a forest watercourse flowing over calcareous substrate and adjacent hygrophilous zones.

In Central Europe and the Caucasus, the vast majority of records have been made between 500 and 1100 m above sea level (KOLCSÁR & TÖRÖK 2017, SAVCHENKO 1978, STARÝ 2006). The species has therefore been regarded by some authors as montane (DÉNES et al. 2016, KOLCSÁR & KERESZTES 2016). In France, however, the Val-d'Oise locality lies at only 58 m elevation. Certain older, poorly documented records also appear to concern lower-altitude localities, notably in Greece and the Caucasus (SAVCHENKO 1978, STARÝ 2006). *P. (C.) pallens* therefore appears to be a predominantly montane species, capable of occurring locally in lowland areas where favourable microhabitat conditions occur (high humidity, relatively cool average temperatures and shaded forest environments).

5. Conclusion

The discovery of this first French locality of *P. (C.) pallens* in Val-d'Oise considerably extends the known distribution of the species and currently represents its western limit record in Europe. Until now, the westernmost locality was situated in the Czech Republic (Fig. 3).

The apparent isolation of this locality raises several biogeographical and taxonomic questions. The collection of additional specimens for

molecular analyses will help clarify the taxonomic status of the French population and assess its degree of differentiation from populations in Central Europe, the Balkans and the Caucasus.

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