

New data on the distribution of some psocid species in French Guiana (Psocodea: Insecta)

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Abstract. This study provides new data on the distribution, habitats, and microhabitats of Psocodea in French Guiana. A total of ten species were recorded, some confirmed from old localities, while others were found in new ones. A brief discussion is included regarding the differences between the two *Tapinella* species: *T. dichromoptera* and *T. montjoliensis*.

Key words: insects, distribution, Amazon region.

Introduction

The study of Psocodea in French Guiana has progressed slowly over the past century, with various authors contributing to the research in the Cayenne area and beyond (Enderlein 1919, Eertmoed 1973, New 1973, Mockford 1965, 1966, 1974, 1993, García-Aldrete 2000). After a 23-year gap, Georgiev (2023a, b) conducted the first detailed study of the species composition, reporting new species for the department and describing a new species. The distribution of psocids in French Guiana remains unclear, and this paper provides some new data on the subject.

Material and Methods

Psocodea were collected from French Guiana by beating the vegetation between 24.02-04.03.2025. The specimens were stored in 95% ethanol. The photos (specimens in glycerin) were taken by a camera Canon PowerShot SX500IS through the eyepiece of a light microscope Optika. The material was deposited at the collection of the author.

Results and Discussion

Ten species were collected from new localities or confirmed from the previously known ones. New data were obtained and on the habitats and microhabitats of the psocids in the area of French Guiana.

Lepidopsocidae

Echmepteryx falco (Badonnel, 1949)

Material examined: 25.02.2025, Remire Town, Sentier Vidal, rainforest, dry leaves, 4°52'01.4"N 52°15'05.9"W, 26 m a. s. l., 3 ♀, beating the vegetation; 28.02.2025, Matoury Town, near the airport, short grass terrain with scattered trees near a building, from fallen nests of Red-rumped Cacique (*Cacicus haemorrhous* (L.)), 4°49'37.5"N 52°21'34.7"W, 14 m a. s. l., 4 ♀, beating the vegetation; 03.03.2025, near Sinnamary River, below the dam wall,

5°03'59.6"N 53°03'01.2"W, 15 m a. s. l., bushes at the edge of rainforest near dirt road, dry leaves of *Heliconia* sp., 1 ♀, beating the vegetation; 03.03.2025, SE of Kourou Town, near the Guatemala road, 5°05'54.2"N 52°34'36.8"W, 8 m, bushes, dry banana (*Musa* sp.) leaves, 1 ♀, beating the vegetation; 04.03.2025, Remire Town, estuary of Mahury River, 4°53'20.5"N 52°15'00.7"W, 21 m a. s. l., edge of rainforest near a road, dry leaves of *Heliconia* sp. and *Musa* sp., 2 ♀, beating the vegetation.

The species was reported for French Guiana without an exact locality by Mockford (1974). Later, Georgiev (2023a) recorded it in the area of Remire-Montjoly Town and Wayki Village. The establishment of the species in different parts of Remire in the present study confirms a previously known locality, while the report from the Guatemala Road area is new. Finding this species in a fallen nest of the Red-rumped Cacique is also previously unreported.

Echmepteryx pallida Smithers, 1965

Material examined: 26.02.2025, Remire Town, Lodges Balourou yard, 4°52'01.4"N 52°15'05.7"W, 20 m a. s. l., small rainforest patch, from dry banana (*Musa* sp.) leaves, 1 ♀, beating the vegetation; 29.02.2025, French Guiana, Remire Town, estuary of Mahury River, 4°51'47.3"N 52°15'21.4"W, 25 m a. s. l., bushes near a road, from dry vegetation, 3 ♀, beating the vegetation; 04.03.2025, Remire Town, estuary of Mahury River, 4°53'20.5"N 52°15'00.7"W, 21 m a. s. l., edge of rainforest near a road, dry leaves of *Heliconia* sp. and *Musa* sp., 1 ♀, beating the vegetation.

The recollection of the species from approximately the same locality, as reported by Georgiev (2023a) as new to the New World, is confirmed. The present publication, for the first time, specifies its microhabitats in French Guiana.

Proentomum personatum Badonnel, 1949

Material examined: 03.03.2025, near Sinnamary River, below the dam wall, 5°03'59.6"N 53°03'01.2"W, 15 m a. s. l., bushes at the edge of rainforest near dirt road, dry leaves of *Heliconia* sp., 1 ♀, beating the vegetation.

The species was reported by Mockford (1974) as occurring in "French Guiana" and by Georgiev (2023a) from Remire-Montjoly. The Sinnamary River area is the second known locality for this species with exact coordinates.

Tapinellidae

Tapinella maculata Mockford & Gurney, 1956

Material examined: 01.03.2025, Remire Town, hill near the estuary of Mahury River, 4°52'02.8"N 52°15'06.7"W, 27 m a. s. l., bushes with scattered banana patches, dry banana (*Musa* sp.) leaves, 1 ♀, beating the vegetation; 03.03.2025, SE of Kourou Town, near the Guatemala road, 5°05'54.2"N 52°34'36.8"W, 8 m a. s. l., bushes, dry banana (*Musa* sp.) leaves, 1 ♀, beating the vegetation.

T. maculata was first reported from the Wayki Village by Georgiev (2023a). The Remire and Kourou areas represent new localities for this species in the department.

Tapinella montjoliensis Georgiev, 2023

Material examined: 28.02.2025, Matury Town, south of Lac des Américains, 4°50'37.0"N 52°21'09.4"W, 25 m a. s. l., rainforest, dry leaves, 1 ♀, beating the vegetation; 04.03.2025, Remire Town, estuary of Mahury River, 4°53'20.5"N 52°15'00.7"W, 21 m a. s. l., edge of rainforest near a road, dry leaves of *Heliconia* sp. and *Musa* sp., 2 ♀, beating the vegetation.

The type locality of *T. montjoliensis* is the Remire-Montjoly area, and it has also been recorded at Wayki Village (Georgiev 2023b). Matury Town represents a new locality for this species.

Remark: This species is very similar to *T. dichromoptera* Badonnel, 1988, described from the island of Guadeloupe, which was not discussed by Georgiev (2023b). However, it differs in its smaller size, compound eye colour, lacinia, and wing shape. In addition, the Guianian species lacks a well-defined dark stripe from the compound eyes to the clypeus (Fig. 1) (Badonnel 1988; Georgiev 2023b).

Ectopsocidae

Ectopsocus ribagai Enderlein, 1906

Material examined: 25.02.2025, Remire Town, Sentier Vidal, 4°52'01.4"N 52°15'05.9"W, 26 m a. s. l., rainforest, dry leaves, 2 ♀, 1 ♂, beating the vegetation; 29.02.2025, French Guiana, Remire Town, estuary of Mahury River, 4°51'47.3"N 52°15'21.4"W, 25 m a. s. l., bushes near a road, from dry vegetation, 1 ♀.

Recollection of the species first reported from French Guiana by Georgiev (2023a).

Ectopsocus thibaudi Badonnel, 1979

Material examined: 26.02.2025, Remire Town, estuary of Mahury River, 4°51'43.2"N 52°15'20.7"W, 7 m a. s. l., coastal scrubs, dry leaves, 2 ♀, 1 ♂, beating the vegetation; 02.03.2025, Remire Town, near the estuary of Mahury River, 4°52'10.6"N 52°14'59.1"W, 18 m a. s. l., rainforest edge near a road, dry vegetation, mainly *Cecropia* sp. leaves, 1 ♀, 2 ♂, beating the vegetation; 04.03.2025, Remire Town, estuary of Mahury River, 4°53'20.5"N 52°15'00.7"W, 21 m a. s. l., edge of rainforest near a road, dry leaves of *Heliconia* sp. and *Musa* sp., 1 ♀, 2 ♂, beating the vegetation.

Reported by Mockford (1993) as occurring in "French Guiana" and by Georgiev (2023a) from Remire-Montjoly. Confirmed in the latter locality with the first data on the microhabitats in the area.

Ectopsocus titschacki Jentsch, 1939

Material examined: 04.03.2025, Remire Town, estuary of Mahury River, 4°53'20.5"N 52°15'00.7"W, 21 m a. s. l., edge of rainforest near a road, dry leaves of *Heliconia* sp. and *Musa* sp., 1 ♀, beating the vegetation.

Known from French Guiana without an exact locality (Mockford 1965). First exact locality of the species in the department.

Peripsocidae

Peripsocus ferrugineus Thornton & Wong, 1968

Material examined: 28.02.2025, Matury Town, south of Lac des Américains, 4°50'37.0"N 52°21'09.4"W, 25 m a. s. l., rainforest, dry leaves, 1 ♀, beating the vegetation.

The only known exact locality is a yard of a lodge at Remire-Montjoly (Georgiev 2023a). The rainforest of the Matury area is a new locality and the first finding of this species in a natural habitat in French Guiana.

Peripsocus pauliani Badonnel, 1949

Material examined: 25.02.2025, Remire Town, Sentier Vidal, 4°52'01.4"N 52°15'05.9"W, 26 m a. s. l., rainforest, dry leaves, 1 ♂, beating the vegetation.

Conformed for the Remire area (Georgiev 2023a) and first record from a rainforest in French Guiana.



Fig. 1. Lateral view of the head of *T. montjoliensis* from the Remire area: banks of Mahury River, collected on 29.07.2023 and reported by Georgiev (2023a). The very weak dark pigmentation is shown by an arrow.

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