

Belgique. Il est néanmoins trop tôt pour parler de remontée progressive mais un adoucissement du climat pourrait peut-être favoriser l'installation de *Nezara viridula* sur le territoire belge.

Remerciements

Je voudrais tout d'abord remercier M. Yvan BARBIER pour m'avoir confié le matériel de l'Université de Mons-Hainaut pour détermination. Je remercie aussi M. Fr. CHÉROT de m'avoir confié des données de la Faculté de Gembloux ainsi que M. Michel DETHIER pour son aide précieuse, ses nombreux conseils et pour la relecture critique de cet article.

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A new *Pseudobankesia* species from Navarra (Spain): *Pseudobankesia leleupiella* n. sp. (Lepidoptera: Psychidae)*

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Samenvatting

Een nieuwe Pseudobankesia-soort van Navarra (Spanje): Pseudobankesia leleupiella n. sp. (Lepidoptera: Psychidae).

De auteur beschrijft Pseudobankesia leleupiella n.sp. van Navarra (Spanje).

Résumé

Une nouvelle espèce du genre Pseudobankesia de Navarre (Espagne): Pseudobankesia leleupiella n. sp. (Lepidoptera: Psychidae).

L'auteur décrit une nouvelle espèce du genre Pseudobankesia de Navarre (Espagne): Pseudobankesia leleupiella n. sp.

Zusammenfassung

Eine neue Pseudobankesia-art von Navarra (Spanien): Pseudobankesia leleupiella n. sp. (Lepidoptera: Psychidae).

Eine neue Pseudobankesia-art von Navarra (Spanien), Pseudobankesia leleupiella n. sp. wird beschrieben.

Key words: *Pseudobankesia leleupiella* - Spain - new species

In May 1996 an expedition along the Pyrenees was organised to investigate the habitat of *Galemys pyrenaicus* (GEOFFROY, 1811). This rare mammal is known to build its nest only near clear water rivers in undisturbed forests. Gijs Verkerk and I decided to use the distribution map of this

* Received: 11.IX.1996.

animal (according to JUCKWER in NIETHAMMER & KRAPP, 1990), as an indicator for interesting biotopes.

We searched a number of localities along the Pyrenees for invertebrates, to make an examination in cooperation with Dr Narcisse LELEUP and Dr Georges COULON of the "Institut royal des Sciences naturelles de Belgique".

Special attention was given to nidicolous species in mammal or birdnests and in treeholes. To find myrmecophilous species we also examined a number of ant and termite nests in decaying wood and under the bark of dead trees.

On the 17th of May in a locality near the Rio Urrobi (Auritz, Spain, 1000 m) we found some psychid cases in cracks and under the bark of dead or overmature tree trunks. The cases were unknown to us, and though they were hidden and hard to find, we collected a number of them.

Between 9 and 23 June 4 males and 2 females hatched (Fig. 1).

The male genitalia appeared to be typical for the genus *Pseudobankesia* MEIER, 1963. The wing pattern, 5 tarsi on the female (2 to 3 in the genus *Bankesia* TURR, 1899), the structure of the female antennae and the typical, outwardly bent shields of the labial palps on the female exuvia confirmed this determination.



Fig. 1a. Paratype T5 (♀) of *Pseudobankesia leleupiella* n. sp., Auritz, 18/VI/1996.

Fig. 1b. Paratype T2 (♂) of *Pseudobankesia leleupiella* n. sp., Auritz, 11/VI/1996.

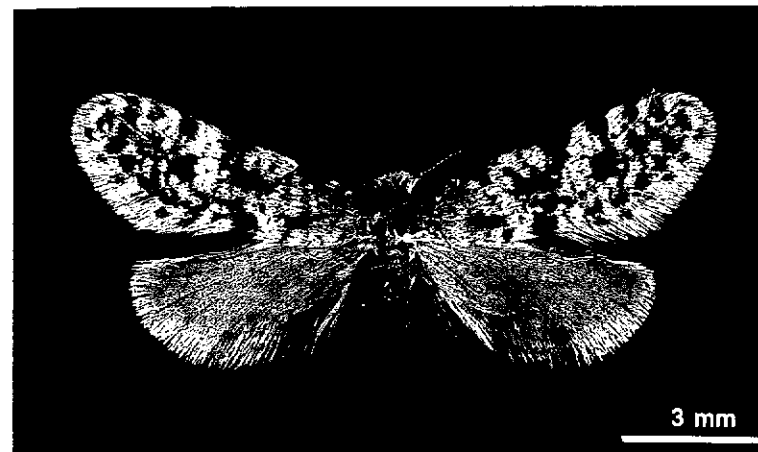


Fig. 2. Holotype T1 (♂) of *Pseudobankesia leleupiella* n. sp., Auritz, 11/V/1996.

The number of species in the genus *Pseudobankesia* was recently brought to 10 by Hättenschwiler who added *P. contractella* HÄTTENSCHWILER, 1994 from the Swiss Alps and *P. casaella* HÄTTENSCHWILER, 1994 from the eastern Pyrenees to the list.

P. casaella, the only known *Pseudobankesia* species from the Pyrenees, was originally described from Soldeu (Andorra) and Mérens/Ariège (France). A male specimen that Nancy MERTENS and I collected on the Col de la Descargue (Oriental Pyrenees, France, 1500 m) (ex p. 27/VI/1983) most probably belongs to this species. *P. casaella* differs clearly from the specimens of Auritz in coloration of the anal tuft of the female and in the shape of the case. *P. casaella* is mainly found on walls and rocks, while the specimens from Auritz occur on tree trunks.

The descriptions of *P. casaella* and four allied species were compared with the material from Auritz, and a number of morphological differences clearly distinguish the Auritz group as a separate species, which is described hereafter.

Etymology:

I dedicate this species to the Belgian entomologist Dr Narcisse LELEUP, specialist in tracing rare invertebrates in unusual habitats.

Pseudobankesia leleupiella sp.n.

The new species is based on the following specimens, all of which are from Spain, Navarra, Auritz, Rio Urrobi, 1000 m, collected by H.A. HENDERICKX on July 17, 1996.

Holotypus: 1 male (Fig. 2) with pupal case and exuviae, ex.p. 11/VI/1996 (red labels), in my collection.



Fig. 3. Head of paratype T6 (♀) of *Pseudobankesia leleupiella* n. sp., Auritz, 21/VI/1996.

Paratypes: 3 males and 2 females, all with pupal case and exuviae. 1 male, T2, ex.p. 11/VI/1996, in the collection of the British Museum (NH), London. 1 male, T3, ex.p. 9/VI/1996, abdomen prep. H220 and 1 female T5, ex.p. 18/VI/1996, both in collection HÄTTENSCHWILER, Uster, Switzerland. 1 male, T4, ex.p. 23/VI/1996 and 1 female T6, ex.p. 21/VI/1996 (head and thorax mounted for scanning electron microscope prep. P108), both in my collection.

MALE: Wingspan 11-12.6 in average 11.9 mm, forewing with scales class 4 (classification according SAUTER, 1956), pale yellowish-grey with dark brown scales scattered over the wing also forming an interrupted band crossing the mid wing from the costa to the analis (Figs 1-2). Hindwing scales class 3-4 light grey. Venation normal, in forewing with 10 veins out of the discoidal cell with an accessory cell, hindwing 6 veins off the discoidal cell. Antenna with approximately 31 segments. First leg with small epiphysis, second with one pair, the third with two pairs of tibial spurs. More particulars and comparison with other species are given in the table (cfr. infra).

The male genitalia are typical for the genus and very similar to the allied species. HÄTTENSCHWILER, 1994 does not notice significant differences in the genital structure between the species of the genus *Pseudobankesia*.

FEMALE: Apterous, pale white with brownish sclerotised plates dorsal and lighter brown plates ventral (Figs 1, 3). Shiny dark brown to grey-

brown anal hair-tuft forming a ring around the abdomen on segment 7. Antenna long with 18 segments. See also table.

CASE: Length 5.7-6.8 average 6.2 mm, width 1.8-2.4 in average 2.0 mm, triangular in cross section, tapered on both ends. The head-hole is in the underside, the rear end is closed by three lobes. The side walls are flat or slightly bent to the outside, covered with sand and especially with lichen and algae, often of different colour. For more details see table.

Table of morphological differences

A table with important morphological characters of 5 *Pseudobankesia* - species is given, in comparison with *P. leleupiella* n. sp. The data for the allied species are according to HÄTTENSCHWILER, 1994.

In the heading of the table abbreviations are used for respectively *Pseudobankesia alpestrilla* (HEINEMANN, 1870), *P. contractella* HÄTTENSCHWILER, 1994, *P. gramatella* (LHOMME, 1937), *P. vernella* (CONSTANT, 1899), *P. casaella* HÄTTENSCHWILER, 1994, and *P. leleupiella* n. sp. The classification of the scales on the forewing is according to SAUTER, 1956.

Male	<i>alpest.</i>	<i>contract.</i>	<i>gramat.</i>	<i>vernel.</i>	<i>casael.</i>	<i>leleup.</i>
wingspan (mm)	11-16.5	11.5-14.5	10-12.5	12.5-13.5	11-12.5	11-12.6
average (mm)	14.5	12.8	11.3	12.0	12.3	11.9
scales of forewing, classification	5-6	4-6	5-6	5-6	4-5	4
scales on head coloration	pale cream	brownish cream	creme-white brownish cream	whitish cream	brown	brown
antennae, number of segments	34-37	28-34	28-35	28-36	28-34	31

Female	<i>alpest.</i>	<i>contract.</i>	<i>gramat.</i>	<i>vernel.</i>	<i>casael.</i>	<i>leleup.</i>
colour of body	pale-yellow	pale-cream	yellowish	pale flesh-coloured	pale-cream	yellowish
length of body without ovopositor (mm)	4.5-5.5	3-4	3-3.5	3-4	3-3.5	3.8-3.9
antennae number of segments	18-24	17-19	18-24	14-20	10-17	18
anal tuft, colour	light grey-brown	light grey-brown	silver-cream	silver-grey	silver	grey-brown to dark-brown
number of tarsi	5	5	5, rarely fused	3 to 5, often fused	5	5
tibia 3, spur	short	short	short	short	long	short
sternite, sclerotising	brownish, strongly split	pale-brown, slightly split	weakly sclerotised, mostly split	weakly sclerotised, brownish	slightly visible	brown, strongly split

Cases	alpest.	contract.	gramat.	vernel.	casael.	leleup.
length (mm)	7-10.5	5-6.5	5-7	5-6.5	4.5-6	5.7-6.8
avrage (mm)	8.6	5.8	6.1	5.6	5.2	6.2
max. width (mm)	2.5-4.3	2.5-4.5	1.5-3	1.7-2.5	2.5-3	1.8-2.4
average (mm)	3.4	3.6	2.1	2.1	2.8	2.0
relation length:width	1.8-3.5	1.4-2.4	2-4.6	2.2-3.3	1.7-2.2	2.8-3.4
average	2.5	1.7	2.9	2.7	1.8	3.0

Allied species

The French *Pseudobankesia gramatella* (LHOMME, 1937) seems to be nearest to the new species. The wingscales on the forewing of the male fall in class 5 to 6, those of *P. leleupiella* n.sp. in class 4 (classification according to SAUTER, 1956). The female differs from *P. leleupiella* n.sp. in colouration of the anal tuft, and in size.

The only other record of *Pseudobankesia* in Spain is a communication of HÄTTENSCHWILER (VIVES MORENO, 1994) about two male specimens from Las Arenas, 400m (Asturias). The specimens were provisionally determined as *P. alpestrella*. HÄTTENSCHWILER (in litt.) mentions that a careful comparison with the new species shows a good correlation in many aspects especially in the pattern of the forewing. The same band of dark scales is present but more pronounced than with the new *P. leleupiella* n. sp., it is practically not interrupted. (This pattern, less pronounced, is known also with some species from *P. vernella* (CONSTANT, 1899) from the French West-Alps). Wing scales class 4-5 (SAUTER, 1956). The width of the cases of the two specimens is approximately 2.5 mm, the upper end of the range known for *P. leleupiella* n. sp., the sides rather bent towards the inside. According to HÄTTENSCHWILER (in litt.) there remains little doubt that these two specimens stand nearer to the new *P. leleupiella* n. sp. than to *P. alpestrella* (HEINEMANN, 1870). The females are unknown and therefore the status remains uncertain until more specimen and both sexes can be compared.

The only other species from the Pyrenees (east side, France and Andorra) is *P. casaella* HÄTTENSCHWILER. This species differs clearly from *P. leleupiella* n. sp. in several characters (cfr. supra).

Distribution

The species has only been found in Auritz, Navarra (Spain) (Fig. 4).

Parasitism

One male specimen of a parasitical Hymenopteran was bred out. According to Dr. Ing. C. VAN ACHTERBERG (in litt.) it belongs to the difficult group of Ichneumonidae-Campopleginae. On a single male specimen the species could not be determined.

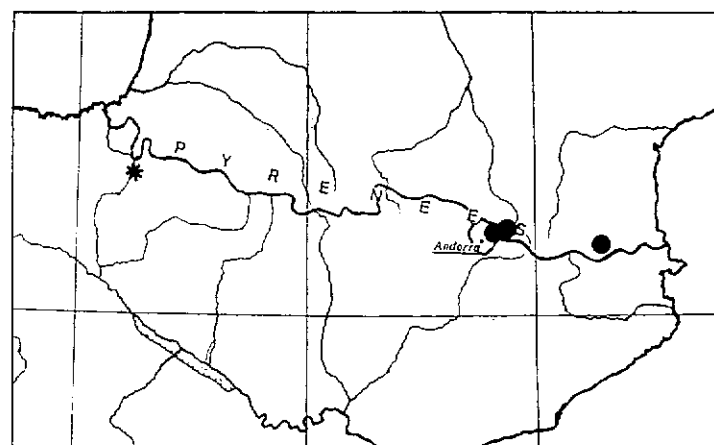


Fig. 4. Distribution of *Pseudobankesia leleupiella* n. sp. (asterisk) and *Pseudobankesia casaella* HÄTTENSCHWILER (black dots) in the Pyrenees.

Acknowledgments

I would like to thank Gijs VERKERK, who accompanied me on the expedition, for his positive support and skill in tracing interesting biotopes and invertebrates. Peter HÄTTENSCHWILER examined the material and gave worthwhile advice. Dr. Ing. C. VAN ACHTERBERG examined the parasite and Willy DE PRINS, Theo GARREVOET and Jan BOSSELAERS corrected the manuscript. I especially wish to thank my friend Dr. Narcisse LELEUP, for his advice and inspiration.

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