

Annotated checklist of the megachilid bees of Corsica (Hymenoptera, Megachilidae)

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Abstract

Corsica stands as one of the largest Mediterranean Islands and has been the exploration ground for renowned entomologists like Charles Ferton. However, no synthesis on Corsican bees has been published so far. To fill this gap in knowledge, we propose an overview of the megachilid bee fauna of the island based on fieldwork, a thorough examination of material housed at the Muséum national d'Histoire naturelle (MNHN, Paris), data compilation from various collections and a comprehensive review of existing literature. We reviewed 5,886 specimens and we extracted 279 additional data from literature sources. These data confirm the presence in Corsica of 91 species of which two are endemic, including *Hoplitis corsaria* (Warncke, 1991) which is elevated to species rank stat. nov. One new synonymy is established: *Megachile lucidifrons* Ferton, **syn. nov.** of *Megachile albocristata* Smith, 1853. The presence in Corsica of 19 species is regarded as dubious or erroneous. Finally, the types of Megachilid bees housed at MNHN and described based on Corsican material are illustrated. Lectotypes are designated for *Megachile sicula* var. *corsica* Benoist, 1935, *Osmia corsica* Ferton, 1901, *Osmia erythrogastra* Ferton, 1905, *Osmia lanosa* Pérez, 1879, and *Osmia lineola* Pérez, 1895.

Keywords

Anthophila, Apoidea, mediterranean islands

Introduction

Bees (Apoidea, Anthophila) are essential pollinators, given their pivotal role in pollinating a wide variety of plants and their high level of specialization and dependence on specific flora for both larval and adult nutrition (Willmer 2011). This diverse group encompasses approximately 20,000 species globally, classified into seven families: Andrenidae, Apidae, Colletidae, Halictidae, Mellitidae, Megachilidae, and Stenotritidae. Notably, bee biodiversity hotspots are concentrated in regions with Mediterranean and xeric climates, including the Mediterranean basin (Orr et al. 2021). Despite their ecological significance, recent efforts in compiling checklists have highlighted a significant knowledge gap regarding bee diversity in Mediterranean islands (e.g. Varnava et al. 2019; Nobile et al. 2021). Particularly, the fauna of the Corsican Island remains largely unexplored.

Spanning 8,722 km², Corsica ranks as the fourth-largest Mediterranean island. Its topography is dominantly shaped by expansive mountain ranges covering much of the land, with the highest peak reaching 2,710 m. The prevailing climate is largely Mediterranean, characterized by hot and arid summers, erratic rainfall patterns, and the potential for intense rain events in autumn and spring. However, at higher elevations, the climate takes on an alpine character, marked by lower temperatures (DREAL 2017). The varied elevation gradients contribute to a diverse range of habitats, encompassing coastal dune grasslands, elevated pine and beech forests, and various maquis or shrub thickets. This mosaic of habitats, coupled with Corsica's prolonged isolation from the mainland, fosters a rich array of fauna and flora, including numerous endemic species (Sabiani 2004).

The main investigations into Corsican wild bees occurred mainly from the late XIXth century to the early XXth century. During this period, Charles Ferton (1856–1921), a military professional stationed at the Bastion of Bonifacio from 1895 until his passing in 1921, published a series of notes and descriptions introducing new species (Ferton 1923). Starting in 1895, C. Ferton devoted considerable time observing and collecting wasps and bees in the Bonifacio area, although he also collected in other parts of the island. His extensive collection, now housed at the Muséum national d'Histoire naturelle (MNHN) in Paris, represents the largest collection of Corsican material. Additionally, C. Ferton published approximately thirty studies and notes on the diversity and behaviour of bees and wasps. Following Ferton's era, few surveys were conducted in Corsica. The literature on Corsican Anthophila is therefore particularly scarce, difficult to access and disjointed, often dealing only with a few isolated taxa. Only a handful of works have undertaken a comprehensive review of certain genera (Rasmont and Adamski 1995: Bumblebees; Terzo et al. 2007: *Ceratina* Latreille, 1802; Liongo Li Enkulu 1988: *Megachile* Latreille, 1802).

In 2016, a research initiative led by C. Villemant, C. Fontaine, and A. Perrard (MNHN) aimed to investigate mimicry in Aculeata communities in Bonifacio. This project marked the beginning of the restoration and examination of Corsican material from Ferton's collection. From 2016 onwards, extensive and collaborative sampling efforts resulted in an additional substantial influx of new data for the island, prompting the need for an updated checklist of Corsican bees, given the absence of synthesis works. For our first contribution to a comprehensive review of Corsican bees, we focused on the Megachilidae. The compilation of 65 publications suggests the presence

of up to 90 taxa in Corsica. Many of these records, however, are questionable or outdated, relying on unclear nomenclature or species concepts. Recognizing the significant disparity between modern and historical taxonomies, a thorough revision of these records was imperative. Based on a bibliographic synthesis and an extensive review of collection material we propose an updated checklist of Corsican Megachilidae.

Material and methods

Study of the collections housed at MNHN

The historical data presented in this article predominantly stem from the examination of Charles Ferton's collection. This material was initially stored in numerous boxes organized by locality and date within a distinct section of the MNHN collection (Fig. 1). It underwent labelling, taxonomic identification to the lowest level (species or subspecies), and digitization of the label data. The Corsican segment of Ferton's collection encompasses over 14,000 Aculeate specimens, including 2,038 Megachilidae specimens, constituting approximately one-third of his entire Aculeate collection. The remaining two-thirds primarily originates from Algeria and Mainland France. Ferton's collection also includes five handwritten books containing field trip details and observations (Figs 2, 3). Only the book for the years 1911–1920 is missing. An important part of his collection is directly linked to these manuscripts. Ferton's practice of annotating page numbers on original locality labels facilitated the connection between detailed observations in the manuscripts and the corresponding specimens in his collection. The final two manuscripts primarily focused on Corsica have been particularly helpful for encoding the data associated to the specimens by offering insights into collecting methods and localities. In addition to Ferton's collection, 337 Megachilidae specimens from Corsica were identified in various parts of the MNHN collections, including those of R. Benoist (material collected between 1920 and 1940), E. G. Dehaut (material collected by G. Bénard between 1909 and 1910), and J. Sichel (material collected in the 1860s without specifying localities). Several other collections, including those of J. Barbier, L. de Berland, J. Casewitz-Weulersse, J. de Gaulle, J. Hamon, S. Kerner-Pillault, A. L. M. Lepeletier de Saint-Fargeau, and H. Nouvel, also contain a limited number of specimens from Corsica.

Recent sampling

The study of historical collections was completed by recent samplings conducted within three different programs by (1) A standardized sampling initiative aimed at exploring bee and wasp communities was undertaken in 2017. Monthly sampling occurred from March to November 2017 in seven localities of Bonifacio explored by C. Ferton, using active netting and bi-weekly pan-trapping following the Westphal protocol (Westphal et al. 2008). The collected material was deposited at MNHN and the collections of the Observatoire Conservatoire des Invertébrés de Corse (OCIC),



Figures 1–3. Collection and catalogue of C. Ferton **1** example of box housing unidentified specimens collected and mounted by C. Ferton **2** manuscript of C. Ferton with morphological notes **3** manuscript detailing observations about the nesting of some Megachilid bees (in red, additional information added by C. Ferton subsequent to the initial black draft).

branch of the Office de l'Environnement de la Corse (OEC). (2) Between 2019 and 2021, bees were collected for two to four weeks per year across the island in the context of the expedition “La Planète Revisitée (Our Planet Revisited)–Corsica 2019–2022,” organized by MNHN. Collection methods included hand nets, pan traps, and Malaise traps. The collected specimens were distributed among one of the authors (RLD), MNHN, and OCIC. A barcoding program initiated during LPR expeditions resulted in the creation of dataset DS-MEGA1, available on BOLD (www.barcodinglife.org),

featuring 89 barcoded specimens representing 51 species. (3) Since 2019, OCIC has undertaken a territorial actions plan for pollinators, including the Corsican Honeybee (Cornuel-Willermoz and Andrei-Ruiz 2021). Over the past three years, this program conducted multiple surveys in 144 localities, encompassing 67 towns, primarily using active netting, supplemented by pan traps and malaise traps. The collected specimens were distributed among one of the authors (ACW), and OCIC.

Additional data gathering

Additional data was also obtained from various sources, including literature review, other collections, and an online forum. The review of the literature was based on 66 published works and provided 279 original data of Corsican Megachilidae, ranging from the short mention '*Corsica*' to the complete data. We also obtained data from J. Mann's collection in the Naturhistorisches Museum, Vienna, data from various museums and private collections thanks to A. Müller, E. Dufrêne, G. Le Goff and P. Vignac. Finally, we used the data from "Le Monde des Insectes" website (<https://insecte.org/>), restricting our research to records with pictures, to confirm the specimen identification.

Conventions of the checklist

We present the resulting data as an annotated checklist in which species are sorted by tribe and by genus. Under each species name are listed the literature records. These mentions include the original name used in the publication, the bibliographic reference, as well as the published localities. Additional comments are presented between square brackets. A question mark means that it was not possible to assign a record with confidence to a species. We used an asterisk (*) to highlight taxa for which Corsican data are reported for the first time in this study.

The original data we compiled for each species comprise the number of examined specimens (sorted by sex, 'NS' is indicated when sex is unknown), the collecting period and the list of municipalities. Detailed records were uploaded online in ten datasets on Cardobs (<https://cardobs.mnhn.fr/>) (IDs: 884FEA17-4810-3B88-E053-5014A8C0FB66, 87FCFAFA-BC57-0572-E053-5014A8C04A0C, 90768076-0CF5-15F2-E053-5014A8C08F4A, A766A82F-BE8D-556D-E053-2614A8C0C12D, BF62B36D-1D84-2F86-E053-3014A8C0EFF8, E4C9E0B0-B16B-04D9-E053-3014A8C043D8, EB611548-937C-63F5-E053-0514A8C02064, EB6380B5-805D-5935-E053-0514A8C08744, EFF30F3C-ACD5-6B6E-E053-0514A8C0121F, EFA34354-3736-7BE7-E053-0514A8C00AD2). They can be consulted and downloaded on the Openobs data portal (<https://openobs.mnhn.fr/>) and MNHN data portal (<https://science.mnhn.fr/>). Special attention is given to type material (last section) for which complete label data are cited. Different labels are separated by a double slash. Additional information on labels is given between square brackets. Sex of the types is provided before the label information.

The specimens examined in this study are summarized in Table 1. To assess the species richness of the island, we compared these data to the checklists of the three largest

Table 1. Numbers of examined specimens by species in decreasing order.

Tribe	Species	N	Tribe	Species	N
Megachilini	<i>Megachile argentata</i>	535	Osmiini	<i>Hoplitis praestans</i>	33
Osmiini	<i>Heriades crenulata</i>	512	Anthidiini	<i>Anthidium cingulatum</i>	29
Osmiini	<i>Osmia caeruleascens</i>	331	Megachilini	<i>Coelioxys inermis</i>	28
Osmiini	<i>Hoplitis corsaria</i>	265	Osmiini	<i>Hoplitis fasciculata</i>	24
Megachilini	<i>Megachile sicula</i>	257	Anthidiini	<i>Icteranthidium laterale</i>	23
Anthidiini	<i>Anthidiellum strigatum</i>	251	Anthidiini	<i>Anthidium florentinum</i>	21
Osmiini	<i>Heriades rubicola</i>	203	Osmiini	<i>Chelostoma rapunculi</i>	21
Osmiini	<i>Hoplitis anthocopoides</i>	186	Osmiini	<i>Osmia emarginata</i>	19
Osmiini	<i>Hoplitis bisulca</i>	167	Megachilini	<i>Megachile ericetorum</i>	18
Osmiini	<i>Osmia niveata</i>	167	Osmiini	<i>Osmia erythrogastra</i>	18
Osmiini	<i>Osmia rufobirta</i>	163	Anthidiini	<i>Pseudoanthidium melanurum</i>	16
Osmiini	<i>Hoplitis bihatata</i>	152	Megachilini	<i>Megachile rotundata</i>	14
Anthidiini	<i>Anthidium taeniatum</i>	142	Osmiini	<i>Hoplitis manicata</i>	14
Anthidiini	<i>Rhodanthidium septemdentatum</i>	117	Lithurgini	<i>Lithurgus chrysurus</i>	13
Osmiini	<i>Osmia ligurica</i>	116	Megachilini	<i>Coelioxys brevis</i>	13
Megachilini	<i>Megachile melanopyga</i>	112	Megachilini	<i>Megachile albocristata</i>	13
Osmiini	<i>Osmia bicornis bicornis</i>	107	Anthidiini	<i>Stelis nasuta</i>	12
Osmiini	<i>Osmia ferruginea</i>	100	Megachilini	<i>Coelioxys conoideus</i>	12
Megachilini	<i>Coelioxys afer</i>	98	Megachilini	<i>Coelioxys mandibularis</i>	12
Megachilini	<i>Megachile centuncularis</i>	89	Osmiini	<i>Osmia nasoproducta</i>	12
Osmiini	<i>Hoplitis adunca</i>	89	Osmiini	<i>Hoplitis tridentata</i>	11
Osmiini	<i>Osmia versicolor</i>	87	Anthidiini	<i>Anthidium oblongatum</i>	9
Osmiini	<i>Hoplitis cristatula</i>	82	Dioxyini	<i>Dioxyx cinctus</i>	9
Osmiini	<i>Osmia latreillei</i>	82	Megachilini	<i>Coelioxys acanthura</i>	8
Megachilini	<i>Megachile albisepta</i>	78	Anthidiini	<i>Stelis signata signata</i>	7
Osmiini	<i>Osmia submicans</i>	67	Megachilini	<i>Megachile deceptoria</i>	7
Osmiini	<i>Hoplitis aff. adunca</i>	61	Anthidiini	<i>Stelis murina</i>	6
Megachilini	<i>Megachile leachella</i>	59	Megachilini	<i>Coelioxys haemorrhoea</i>	6
Osmiini	<i>Hoplitis leucomelana</i>	58	Osmiini	<i>Chelostoma foveolatum</i>	6
Osmiini	<i>Chelostoma distinctum</i>	57	Osmiini	<i>Osmia cornuta cornuta</i>	6
Megachilini	<i>Megachile apicalis</i>	54	Anthidiini	<i>Stelis ornata ornata</i>	4
Osmiini	<i>Osmia signata signata</i>	54	Dioxyini	<i>Aglaoapis tridentata</i>	4
Anthidiini	<i>Anthidium manicatum</i>	52	Anthidiini	<i>Stelis punctulatisima</i>	3
Osmiini	<i>Heriades truncorum</i>	50	Megachilini	<i>Megachile burdigalensis</i>	3
Osmiini	<i>Hoplitis perezii</i>	50	Megachilini	<i>Megachile versicolor</i>	3
Megachilini	<i>Megachile pusilla</i>	49	Anthidiini	<i>Stelis minuta</i>	2
Anthidiini	<i>Stelis breviuscula</i>	47	Lithurgini	<i>Lithurgus cornutus</i>	2
Anthidiini	<i>Pseudoanthidium stigmaticorne</i>	43	Megachilini	<i>Coelioxys obtusus</i>	2
Osmiini	<i>Hoplitis acuticornis</i>	43	Osmiini	<i>Hoplitis ravouxi</i>	2
Osmiini	<i>Osmia aurulenta</i>	38	Osmiini	<i>Osmia melanogaster</i>	2
Osmiini	<i>Osmia scutellaris</i>	38	Anthidiini	<i>Icteranthidium grohmanni</i>	1
Osmiini	<i>Osmia tricornis</i>	37	Megachilini	<i>Coelioxys aurolimbatus</i>	1
Anthidiini	<i>Pseudoanthidium nanum</i>	36	Osmiini	<i>Osmia anceyi</i>	1
Megachilini	<i>Megachile lagopoda</i>	34	Osmiini	<i>Protosmia minutula</i>	1

mediterranean islands in Table 2: Sardinia, Sicily and Cyprus (Comba 2019; Varnava et al. 2020; Nobile et al. 2021; personal communication with Maurizio Cornalba). In order to estimate the completeness of our sampling effort of the Corsican Megachilid fauna, we used the Chao1 and abundance-based coverage estimators (ACE) (Chao 1984; Chao and Lee 1992; Colwell and Coddington 1994).

Table 2. Megachilidae diversity of the four largest Mediterranean islands.

Island	Corsica	Sardinia	Sicily	Cyprus
Size (km ²)	8722	24090	25711	9251
Genera	17	15	17	15
Species	91	91	129	91
Endemic/subendemic species	2(3*)	2(3*)	3	3
<i>Aglaopis</i>	1	1	0	0
<i>Anthidiellum</i>	1	1	1	2
<i>Anthidium</i>	5	3	8	5
<i>Chelostoma</i>	3	1	5	3
<i>Coelioxys</i>	10	8	14	12
<i>Dioxys</i>	1	2	3	2
<i>Eoanthidium</i>	0	0	0	1
<i>Heriades</i>	3	3	4	4
<i>Hoplitis</i>	15	15	19	9
<i>Icterantheidium</i>	2	0	2	2
<i>Lithurgus</i>	2	3	3	2
<i>Megachile</i>	15	18	20	17
<i>Osmia</i>	19	25	32	25
<i>Protosmia</i>	1	0	3	3
<i>Pseudoanthidium</i>	3	3	3	0
<i>Rhodanthidium</i>	2	2	3	1
<i>Stelis</i>	7	4	7	3
<i>Stenoheriades</i>	0	0	1	0
<i>Trachusa</i>	1	2	1	0

* including the undescribed *Hoplitis aff. adunca* mentioned in the present catalogue.

Results and discussion

Our synthesis is based on the examination of 5886 specimens (Table 1) and 279 data from the literature. It confirms the presence in Corsica of 91 species of Megachilidae, belonging to 17 different genera. Among them, twenty species and two genera are newly recorded in Corsica. Modern records are provided for 29 species which were only known from historical records. We could not get modern data for five species and further research is needed to clarify their presence in the island. Finally, the presence in Corsica of 19 species is regarded as dubious or erroneous.

It is noteworthy to highlight that *Megachile sculpturalis* Smith, 1853, an invasive Megachilid bee, has not been recorded in Corsica so far. This species arrived in France in 2008 (Vereecken and Barbier 2009) and is now widespread in a large part of Europe. It was recently found in Elba Island (Italy), only 50 km from Corsica (Ruzzier et al. 2020).

Based on our sample data, we found a Chao1 of 92.6 and an ACE of 92.955. Both estimators suggest that we detected most of the Megachilid species in the explored parts of the island. Additional efforts in the explored part may therefore result in few additional species for the checklist. However, the distribution of the data is uneven (Fig. 4) as Megachilidae data were available for only 131 of the 360 Corsican municipalities. Well-sampled sectors include Bonifacio, due to the Fertton data and the 2017 study, Vivario, and the coastline. These three areas concentrate a large proportion of the data. Under-sampled areas include the northwest (Cap Corse and Castagniccia region) and a

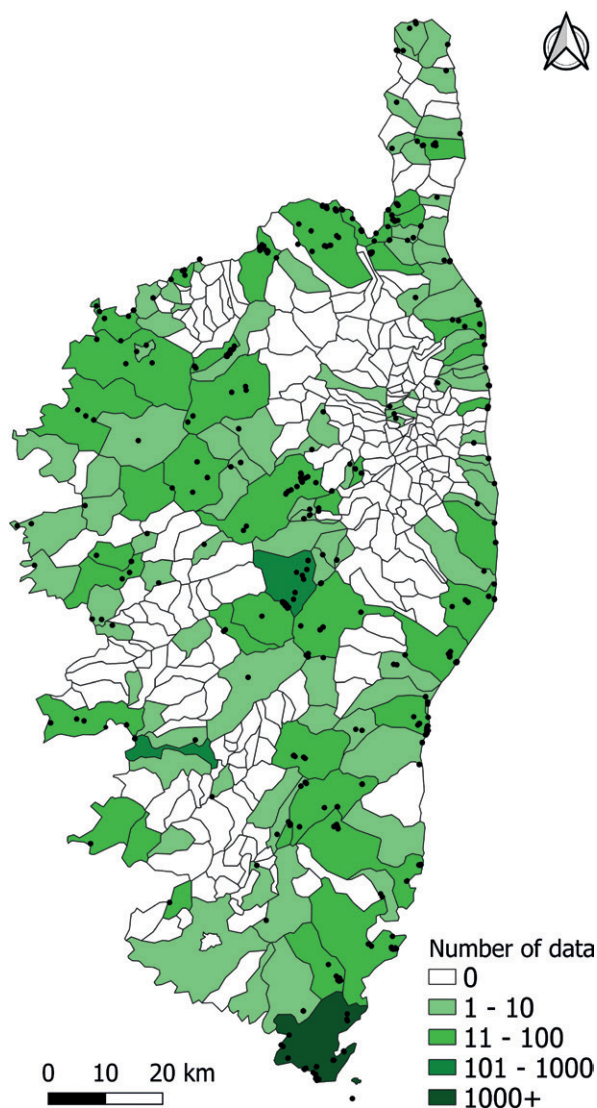


Figure 4. Distribution of the data in the different Corsican municipalities. Black dots are collecting stations with geographical coordinates. Municipalities for which we have imprecise collecting localities are highlighted in green (based on the quantity of data available).

large part of the southwest (Liamone and Taravo regions) probably due to the difficulty to access these rather remote regions. It is therefore possible that a few other species may be found in these areas. As such, the Territorial Actions Plan for wild pollinators defines these sectors as priority targets for more extensive inventories in the coming years.

In comparison to Megachilidae checklists from larger Mediterranean islands, Corsica exhibits notably high species richness (Table 2). Currently, only Sicily surpasses Corsica in Megachilidae diversity. This discrepancy can be attributed to the considerably larger size of Sicily and its proximity to the mainland, facilitating the establishment

of new species from the continent. Conversely, despite being almost 2.76 times larger than Corsica, Sardinia displays a similar species richness. Since Corsica and Sardinia are very close islands, it is not surprising to find a similar diversity. However, their fauna is not entirely overlapping, possibly due to their different geological histories and the different habitats found in the two islands. Notably, mountainous habitats such as alpine grasslands are present in Corsica but not in Sardinia. Additionally, most bees sampling effort in Sardinia seem to have been restricted to the north-western part of the island, with only a few sites which have been recently sampled in the rest of the island (Floris et al. 2000; Quaranta et al. 2004; Nobile et al. 2021). It is therefore likely that this similarity in diversity between Sardinia and Corsica roots from a lack of knowledge on the Megachilidae fauna of the larger island.

Below, we list the species present in Corsica, along with the dubious and erroneous records and the Corsican type material housed at MNHN. This checklist confirmed the expected high diversity of Megachilidae in Corsica and call for similar efforts to address the local diversity of the other bee families.

Checklist of the Corsican Megachilidae

Anthidiini Ashmead, 1899

***Anthidiellum* Cockerell, 1904**

1. *Anthidiellum strigatum strigatum* (Panzer, 1805)

Anthidium strigatum Panzer; Ferton (1901b: 92, 146): Bonifacio.

Anthidiellum strigatum (Panzer); Pagliano (1994: 392): Sotta.

Anthidiellum strigatum (Panzer); Kasperek (2022: 79): Corsica.

Material examined. 78♀, 165♂ & 8NS observed from April to October, between 1895 and 2021 in Albertacce, Aléria, Barbaggio, Asco, Bastelica, Bastia, Biguglia, Bonifacio, Calvi, Canale-di-Verde, Castellare-di-Casinca, Corbara, Corte, Coti-Chiavari, Evisa, Farinole, Figari, Furiani, Ghisonaccia, Ghisoni, Grosseto-Prugna, Lecci, Levie, Linguizzetta, Lucciana, Manso, Mausoléo, Ogliastro, Oletta, Olmi-Cappella, Palasca, Patrimonio, Penta-di-Casinca, Poggio-d'Oletta, Porto-Vecchio, Propriano, Quenza, Rospigliani, Saint-Florent, Santo-Pietro-di-Tenda, Sartène, Sorbollano, Tavera, Valle-di-Campoloro, Ventiseri, Vescovato, Vico, Vivario, Zicavo and Zonza.

***Anthidium* Fabricius, 1804**

2. *Anthidium cingulatum* Latreille, 1809

Anthidium cingulatum Latreille; Nadig and Nadig (1934: 27): Monte d'Oro.

Anthidium cingulatum Latreille; Warncke (1981: 335, Map 29): Corsica.

Anthidium cingulatum Latreille; Kasperek (2022: 93): Corsica.

Material examined. 13♀ & 16♂ observed from May to October between 1900 and 2022 in Balogna, Bocognano, Bonifacio, Corte, Ghisoni, La Porta, Lumio, Mausoléo, Nocario, Palasca, Quenza, Sisco, Talasani, Vivario and Zonza.

3. *Anthidium florentinum* (Fabricius, 1775)*

Material examined. 15♀ & 6♂ observed from June to September between 2002 and 2022 in Ajaccio, Albertacce, Calacuccia, Castellare-di-Casinca, Lucciana, Propriano, Quenza, San-Giuliano, Talasani and Vico.

4. *Anthidium manicatum manicatum* (Linnaeus, 1758)

Anthidium manicatum Linnaeus; Ferton (1909a: 551–552): Bonifacio.

Anthidium manicatum (Linnaeus); Pagliano (1994: 396): Sotta.

Anthidium manicatum (Linnaeus); Kasperek (2022: 106): Corsica.

Anthidium manicatum (Linnaeus); Meunier et al. (2023): Corsica.

Material examined. 29♀ & 23♂ observed from May to October, between 1897 and 2021 in Aléria, Barbaggio, Bastelica, Bonifacio, Calacuccia, Casamaccioli, Castellare-di-Casinca, Corte, Ghisoni, Grosseto-Prugna, Lumio, Mausoléo, Meria, Palasca, Quenza, Santa-Maria-Poggio, Riventosa, Sisco, Tavera, Vivario and Zonza.

5. *Anthidium oblongatum oblongatum* (Illiger, 1806)*

Material examined. 1♀ & 8♂ observed from June to July, between 2019 and 2021 in Bocognano, Casamaccioli, Quenza, Solaro and Zonza.

6. *Anthidium taeniatum* Latreille, 1809*

Material examined. 45♀ & 97♂ observed from May to September, between 1895 and 2021 in Ajaccio, Bonifacio, Linguizzetta, Lucciana, Mausoléo, Patrimonio, Penta-di-Casinca, Prunelli-di-Fiumorbo, Sermano, Soveria, Talasani and Zonza.

Icteranthidium Michener, 1948

7. *Icteranthidium grohmanni* (Spinola, 1838)

Icteranthidium grohmanni (Spinola); Pagliano (1994: 395): Col de Celaccia.

Icteranthidium grohmanni (Spinola); Kasperek (2022: 163): Corsica.

Material examined. 1♂ observed in September 2020 in Tavera.

8. *Icteranthidium laterale laterale* (Latreille, 1809)

Anthidium laterale Latreille; Stöckl (2000: 276): Corsica.

Icteranthidium laterale (Latreille); Kasperek (2022: 165): Corsica.

Material examined. 13♀ & 10♂ observed from July to September, between 1896 and 2022 in Balogna Bonifacio, Ghisoni, Rospigliani, Santo–Pietro–di–Venaco, Tavera, Vico and Vivario.

Pseudoanthidium Friese, 1898

9. *Pseudoanthidium melanurum* (Klug, 1832)

Pseudoanthidium melanurum (Klug); Kasperek (2022: 188): Corsica.

Material examined. 4♀ & 12♂ observed from May to June, between 2017 and 2020 in Borgo, Castellare–di–Casinca, Penta–di–Casinca and Venzolasca.

10. *Pseudoanthidium nanum* (Mocsáry, 1880)

? *Pseudoanthidium lituratum* (Panzer); Pagliano (1994: 398): Bastia.

Pseudoanthidium nanum (Mocsáry); Litman et al. (2021): Ajaccio, Bonifacio, Lecci, Sartène, Zicavo, Albertacce, Corte, Ghisoni, Lozzi, Palasca, Vivario.

Pseudoanthidium nanum (Mocsáry); Kasperek (2022: 191): Corsica.

Material examined. 21♀ & 15♂ observed from May to October, between 1901 and 2022 in Albertacce, Balogna, Bonifacio, Calacuccia, Corte, Coti–Chiavari, Ghisoni, Grosseto–Prugna, Mausoléo, Montegrosso, Palasca, Renno, Sartène, Ventiseri, Vivario and Zicavo.

Remark. *Pseudoanthidium nanum* has long been a challenging species complex before the revision of Litman et al. (2021). Two species of this complex occur in Corsica. It is therefore not possible to assign the record of Pagliano (1994) to one of these two species with confidence. Our data, partially published in Litman et al. (2021), confirmed the presence of this taxon in Corsica.

11. *Pseudoanthidium stigmaticorne* (Dours, 1873)

Anthidium lituratum Latr.; Pérez (1879: 213) [Misidentification]: Corsica.

Anthidium lituratum Latr.; Ferton (1901b: 88): Corsica.

Anthidium lituratum Latr. (= *peregrinum* Costa); Ferton (1909a: 552–553, 575, 578) [Misidentification]: Pianottoli–Caldarello.

Pseudoanthidium scapulare (Latreille); Scheuchl and Willner (2016: 791) [Misinterpretation of the record of Ferton (1909a)]: Corsica.

Pseudoanthidium stigmaticorne (Dours); Litman et al. (2021): Ajaccio, Bonifacio, Pianottoli–Caldarello, Propriano.

Pseudoanthidium stigmaticorne (Mocsáry); Kasperek (2022: 198): Corsica.

Material examined. 19♀ & 24♂ observed from May to September, between 1897 and 2019 in Ajaccio, Bonifacio, Pianottoli–Caldarello and Propriano.

Rhodanthidium Insensee, 1927

12. *Rhodanthidium septemdentatum* (Latreille, 1809)

Anthidium septemdentatum Latreille; Ferton (1909a: 551): Bonifacio.

Anthidium septemdentatum Latreille; Nadig and Nadig (1934: 26): Cap Corse.

Anthidium septemdentatum Latreille; Kudas (1974: 160): Calvi.

Rhodanthidium septemdentatum (Latreille); Kasperek (2022: 223): Corsica.

Material examined. 51♀, 64♂ & 2NS observed from April to July, between 1895 and 2021 in Ajaccio, Bonifacio, Calacuccia, Castellare–di–Casinca, Chisa, Corte, Farinole, Galéria, Grosseto–Prugna, L'Île Rousse, Mausoléo, Palasca, Patrimonio, Pianottoli–Caldarello, Porri, Porto–Vecchio, Santa–Maria–Poggio, Riventosa, Santo–Pietro–di–Tenda, Sotta, Ventiseri, Venzolasca, and Zonza.

13. *Rhodanthidium sticticum* (Fabricius, 1787)

Rhodanthidium sticticum (Fabricius); Kasperek and Lhomme (2019: 44): Porto–Vecchio.

Rhodanthidium sticticum (Fabricius); Kasperek (2022: 228): Corsica.

Remark. There is only one record from 1976 (Kasperek and Lhomme 2019). No modern record is known.

Stelis Panzer, 1806

14. *Stelis breviscula* Nylander, 1841*

Material examined. 19♀ & 28♂ observed from May to October, between 1895 and 2021 in Ajaccio, Asco, Bonifacio, Casaglione, Farinole, Figari, Galeria, Grosseto–Prugna, Ogliastro, Oletta, Olmi–Cappella, Palasca, Patrimonio, Porto–Vecchio, Propriano, Riventosa, Saint–Florent, Santo–Pietro–di–Tenda, Sisco, Sorbollano, Urtaca and Ventiseri.

15. *Stelis minuta* Lepeletier, 1825*

Material examined. 1♀ & 1♂ collected in 1909 in Ghisonaccia and Porto-Vecchio.

Remark. No modern record.

16. *Stelis murina* Pérez, 1884

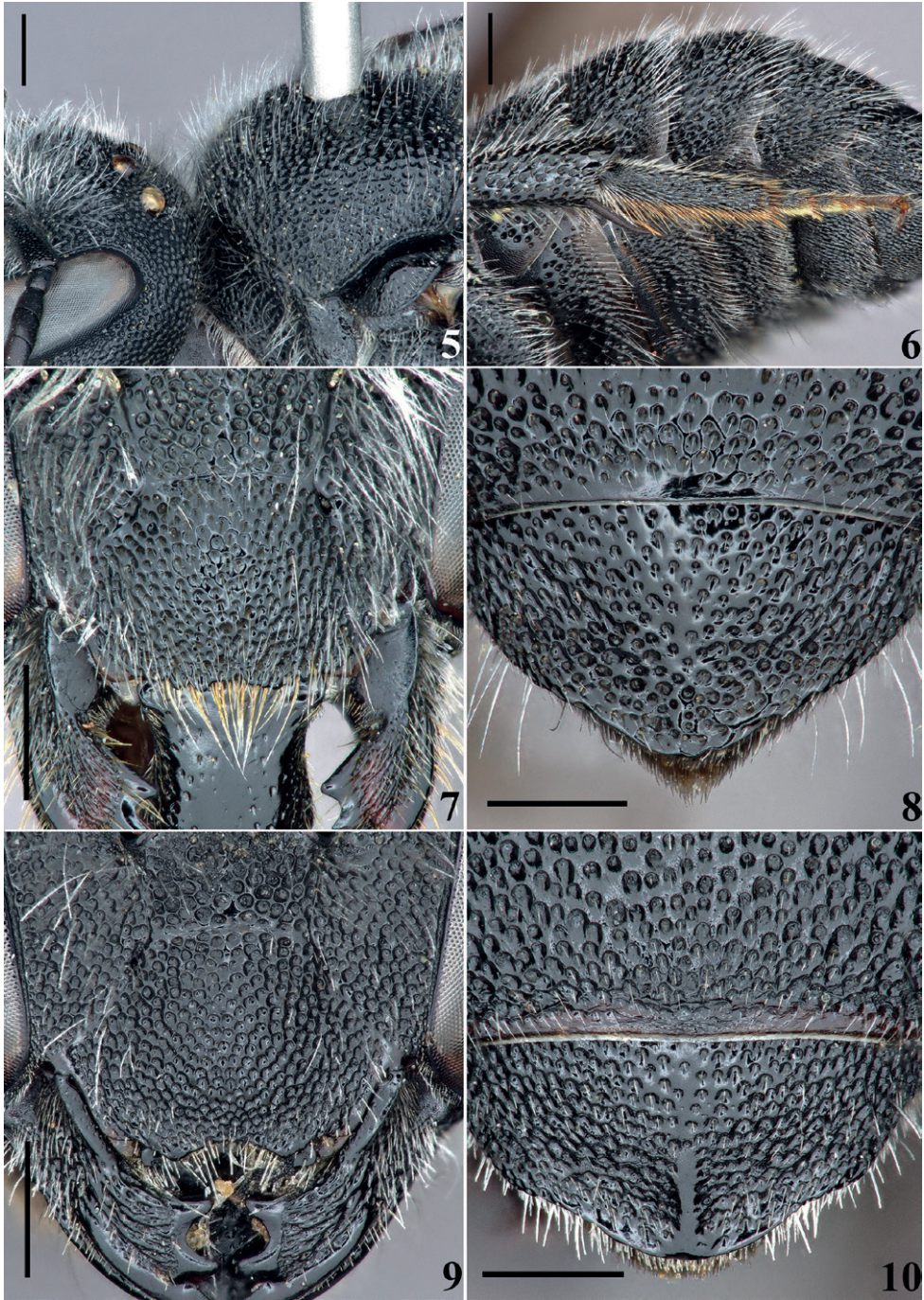
Figs 5–8

Stelis phaeoptera murina Pérez; Warncke (1992b: 356): Corsica.

Stelis phaeoptera (Kirby); Scheuchl and Willner (2016: 835): [quoting Warncke (1992b)].

Material examined. 2♀ & 4♂ observed from June to July, between 2019 and 2021 in Ghisoni, Mausoléo and Sisco.

Remark. Baker (1999) noted that the type material housed at MNHN does not include European specimens but only North African material in contradiction to the original description which also specifies material from France and Spain. The unpublished catalogue of Pérez mentions specimens from Bizerte (Tunisia) and La Chiffa (Algeria). Warncke (1992b) designated one of the females from Bizerte as lectotype. Blüthgen (1930) already noted that the original description of Pérez did not match well with a syntype he examined. As a matter of fact, the modern species concept of *S. murina* (Warncke 1992b; Baker 1999; Aguib et al. 2014; Kasperek 2015) does not match with its lectotype and paralectotypes (coll. Pérez, MNHN). The specimens from Corsica are similar to the types of *S. murina* (including lectotype). Both females and males of *S. murina* are hardly distinguishable from *S. phaeoptera* (Kirby, 1802). They can be distinguished from it by their entirely pure white pilosity (Figs 5, 6) [dirty white to brown in *S. phaeoptera*, notably darker on the vertex and mesoscutum], except on the inferior side of the tarsi where it is dark brown (Fig. 6) [yellow gold in *S. phaeoptera*, see fig. 7 in Aguib et al. 2014] and by their dark brown to black tibial spurs (Fig. 6) [ochreous in *S. phaeoptera*, see fig. 7 in Aguib et al. 2014]. Finally, the barcode generated for the Corsican *S. murina* matches that of Moroccan specimens and is highly divergent from the European sequences of *S. phaeoptera* available in BOLD (Le Divelec and Wood unpublished). A detailed review of this species group is required. Considering that *S. murina* sensu modern authors occurs in Crete (Le Divelec unpublished) and that it matches the original description of *S. murina cretica* Mavromoustakis, 1963, it should most probably be referred to as *S. cretica*. Unfortunately, the types of *S. murina cretica* could not be located in Mavromoustakis collection and are seemingly lost (Santerre pers. comm.). Non-type specimens from Crete identified by Mavromoustakis as *S. murina cretica* are preserved in his collection and are morphologically similar to *S. murina* sensu modern authors. The female of *S. cretica* can be easily distinguished from that of *S. murina* by the widely notched apical margin of the clypeus (Fig. 9) [with straight indentation in *S. murina* (Fig. 7)] and by the conspicu-



Figures 5–10. Comparative illustrations of *Stelis murina* Pérez and *Stelis cretica* Mavromoustakis (= *Stelis murina* sensu modern authors) **5–8** *Stelis murina* (from Corsica) **9, 10** *Stelis cretica* (from Crete) **5** pilosity of vertex and mesonotum **6** hind leg **7, 9** face **8, 10** tergum 6. Scale bars: 0.5 mm.

ous smooth medio-apical ridge on the last tergum (Fig. 10) [uniformly punctate in *S. murina* (Fig. 8)]. The male of *S. cretica* can be recognized by a notch bordered by a pair of teeth in the middle of the fourth sternum posterior margin (see fig. 4 in Aguib et al. 2014) [here with a conspicuous rake in *S. murina*, as in fig. 8 in Aguib et al. 2014].

BOLD process ID. [LPRCW173-19](#) (BIN, [BOLD:AEC2025](#)).

17. *Stelis nasuta* (Latreille, 1809)

Material examined. 6♀ & 6♂ observed from May to June, between 1902 and 2020 in Asco, Bonifacio and Mausoléo.

Remark. The whitish light drawings of Corsican individuals are remarkably reduced if not absent.

18. *Stelis ornatula ornatula* (Klug, 1807)*

Material examined. 2♀ & 2♂ observed from June to July, between 1909 and 2020 in Palasca, Patrimonio, Sorbollano and Vico.

19. *Stelis punctulatissima punctulatissima* (Kirby, 1802)*

Material examined. 2♀ & 1♂ collected in June 2020 in Lucciana.

20. *Stelis signata signata* (Latreille 1809)*

Material examined. 3♀ & 4♂ observed from May to September, between 1974 and 2021 in Galeria, Ghisonaccia, Ghisoni, Manso, Oletta, Rospigliani and Ventiseri.

Trachusa Panzer, 1804

21. *Trachusa byssina* (Panzer, 1798)

Trachusa byssina (Panzer); Kasperek (2022: 238): Corsica.

Remark. There is only one Corsican record (Kasperek 2022).

Dioxyini Cockerell, 1902

Aglaoapis Cameron, 1901*

21. *Aglaoapis tridentata* (Nylander, 1848)*

Material examined. 4♀ observed from June to September, between 2020 and 2021 in Ghisoni.

Remark. The morphology of the Corsican specimens is slightly different than that of the West palearctic specimens. The Corsican population might represent a distinct species. It was only observed in the Mountains where it seems to be very rare.

***Dioxys* Lepeletier & Serville, 1825**

22. *Dioxys cinctus* (Jurine, 1807)

Dioxys cincta Jurine; Friese (1895: 109): Corsica.

Dioxys cinctus (Jurine); Bogusch (2023, Fig. 8): Corsica.

Material examined. 4♀ & 5♂ observed from May to June, between 1902 and 2021 in Bonifacio, Ghisonaccia, Oletta, Porto–Vecchio and Ventiseri.

Lithurgini Newman, 1834

***Lithurgus* Berthold, 1827**

23. *Lithurgus chrysurus* Fonscolombe, 1834

Lithurge chrysura Fonscolombe; Canovai et al. (2000: 78): Corsica.

Material examined. 9♀ & 4♂ observed from June to August, between 2003 and 2022 in Balogna, Canale–di–Verde, Coti–Chiavari, Mausoléo, Noceta, Rutali and Vico.

24. *Lithurgus cornutus fuscipennis* Lepeletier, 1841

Lithurgus cornutus (Fabricius); Dufrêne et al. (2016: 18): Corsica.

Material examined. 2♀ observed from August to September, between 2020 and 2021 in Asco and Tavera.

Megachilini Latreille, 1802

***Coelioxys* Latreille, 1809**

25. *Coelioxys acanthura* (Illiger, 1806)

Coelioxys acanthura (Illiger); Ferton (1901b: 92): Bonifacio.

Coelioxys acanthura (Illiger); Warncke (1992a: 57): Corsica.

Coelioxys acanthura (Illiger); Pagliano (1994: 375): Algajola.

Material examined. 4♀ & 4♂ observed from June to August, between 1898 and 2021 in Bonifacio, Calvi, Coti–Chiavari, Palasca, Prunelli–di–Fiumorbo and Rutali.

26. *Coelioxys afer* Lepeletier, 1841

Coelioxys afer Lepeletier; Pagliano (1994: 375): Bastia.

Material examined. 53♀ & 45♂ observed from April to November, between 1895 and 2021 in Bonifacio, Evisa, Figari, Galeria, Grosseto–Prugna, Oletta, Palasca, Porto–Vecchio, Quenza, Saint–Florent, Santo–Pietro–di–Tenda, Sermano, Soveria, Talasani, Vero, Vescovato, Vivario, Zicavo and Zonza.

27. *Coelioxys aurolimbatus aurolimbatus* Förster, 1853*

Material examined. 1♂ collected in July 2019 in Mausoléo.

Remark. This species is known from only one mountainous station.

28. *Coelioxys brevis* Eversmann, 1852

Coelioxys brevis Eversmann; Warncke (1992a: 53): Serra–di–Ferro, Linguizzetta.

Material examined. 8♀ & 5♂ observed from May to July, between 1972 and 2021 in Aléria, Ghisonaccia, Linguizzetta, Palasca, Solaro, Tallone and Ventiseri.

29. *Coelioxys conoideus* (Illiger, 1806)*

Material examined. 3♀ & 9♂ observed from July to September, between 1897 and 2019 in Cozzano, Mausoléo and Vivario.

Remark. This species has only been collected in mountains.

30. *Coelioxys echinatus* Förster, 1853

Coelioxys rufocaudatus Smith; Nadig and Nadig (1934: 62): Cap Corse.

Coelioxys echinata Förster; Warncke (1992a: 62): Corsica.

Remark. We could not confirm the occurrence of *C. echinatus* in Corsica. This species has been recorded twice in the past. It is unlikely to be confused with any other species, but we cannot exclude a confusion with *C. brevis*. We believe these records to be accurate for now.

31. *Coelioxys haemorrhhoa haemorrhhoa* Förster, 1853

Coelioxys haemorrhhoa Förster; Le Divelec and Dufrêne (2020: 6): Bonifacio.

Material examined. 3♀ & 3♂ observed from the end of May to September, between 1895 and 2017 in Bonifacio and Venzolasca.

32. *Coelioxys inermis* (Kirby, 1802)

Coelioxys acuminata Nylander; Ferton (1909a: 551): Bonifacio.

Coelioxys inermis (Kirby); Warncke (1992a: 65): Corsica.

Material examined. 10♀ & 18♂ observed from May to November, between 1896 and 2022 in Ajaccio, Asco, Balogna, Bonifacio, Corte, Evisa, Poggio-di-Venaco, Rospigliani, Vivario and Zonza.

33. *Coelioxys mandibularis* Nylander, 1848*

Material examined. 7♀ & 5♂ observed from May to October, between 2009 and 2021 in Bonifacio, Ghisonaccia, Levie, Mausoléo, Moncale, Olmi-Cappella, Palasca and Quenza.

34. *Coelioxys obtusus* Pérez, 1884*

Material examined. 1♀ & 1♂ observed in July 2019 in Palasca.

Megachile Latreille, 1802

35. *Megachile albisecta* (Klug, 1817)

Megachile sericans Fonscolombe; Ferton (1901b: 90–92, 145): Bonifacio.

Megachile albisecta Klug in Germar; Benoist (1940: 47): Corsica.

Creightonella albisecta (Klug); Liongo Li Enkulu (1988, Map 19): Corsica.

Creightonella albisecta (Klug); Pagliano (1994: 370): Sotta.

Material examined. 34♀ & 44♂ observed from June to September, between 1896 and 2022 in Balogna, Bonifacio, Coti-Chiavari, Ghisoni, Manso, Omessa, Palasca, Patrimonio, Piana, Propriano, Rospigliani, Rutali, Serra-di-Ferro and Vico.

36. *Megachile albocristata* Smith, 1853

Figs 39–42

Megachile (Chalicodoma) lucidifrons sp. nov.; Ferton (1905: 57–58): Bonifacio.

Megachile (Chalicodoma) lucidifrons Ferton; Ferton (1909b: 407): Bonifacio.

Chalicodoma albocristata Smith; Liongo Li Enkulu (1988, Map 20): Cap Corse.

Chalicodoma lucidifrons Ferton; Liongo Li Enkulu (1988, Map 44) [quoting Ferton (1905)].

Material examined. 9♀ & 4♂ observed from June to July, between 2019 and 2022 in Asco, Mausoléo, Santo-Pietro-di-Venaco, Sermano and Sisco.

Ecology. The ecology of *Megachile albocristata* is poorly known. The specimens were all observed in mountainous regions, specifically on sun-exposed rocky slopes covered with scrub vegetation (Fig. 11). These habitats featured prominent fractured rock formations and scree slopes where numerous individuals were observed in flight. During our investigations, we chanced upon a concealed nest beneath a boulder, situated within a cavity (Fig. 12). The layer (Fig. 13) covering the cells of the nest consist of a composite material comprising vegetable paste and ground gravels that the female takes great care to calibrate. The nesting behavior of *M. albocristata* appears to closely resemble that of *M. lefebvrei*, as detailed by Ferton (1909a: 544–547). It has been observed by Ferton on *Teucrium maritimum* (Lamiaceae). We observed this species visiting flowers of *Teucrium* in Mausoléo.

Remark. In Corsica, *M. albocristata* was previously known from only one uncertain historical record (Liongo Li Enkulu 1988). Our observations thus confirm the presence of this taxon in Corsica.

37. *Megachile apicalis* Spinola, 1808

Megachile apicalis Spinola; Ferton (1909a: 550): Bonifacio.

Megachile apicalis Spinola; Nadig and Nadig (1934: 26): Cap Corse.

Megachile apicalis Spinola; Liongo Li Enkulu (1988, Map 23): Corsica.

Material examined. 39♀ & 15♂ observed from from June to September, between 1895 and 2022 in Balogna, Bonifacio, Canale-di-Verde, Corte, Lucciana, Mausoléo, Oletta, Palasca, Patrimonio, Propriano, Rutali, Sartène and Vico.

48. *Megachile argentata schmiedeknechti* Costa, 1884

Figs 47–49

Megachile xanthopyga sp. nov.; Pérez (1895: 25).

Megachile xanthopyga Pérez; Ferton (1897: 48): Bonifacio.

Megachile xanthopyga Pérez; Ferton (1909a: 550): Bonifacio.

Megachile schmiedeknechti Costa; Nadig and Nadig (1934: 26): Cap Corse.

Megachile schmiedeknechti Costa; Benoist (1940: 65): Bonifacio, Vivario.

Megachile schmiedeknechti Costa; Rebmann (1968: 30): Corsica.

Megachile schmiedeknechti Costa; Kusdas (1974: 160): Calvi.

Megachile pilidens Alfken; Liongo Li Enkulu (1988, Map 54): Corsica.

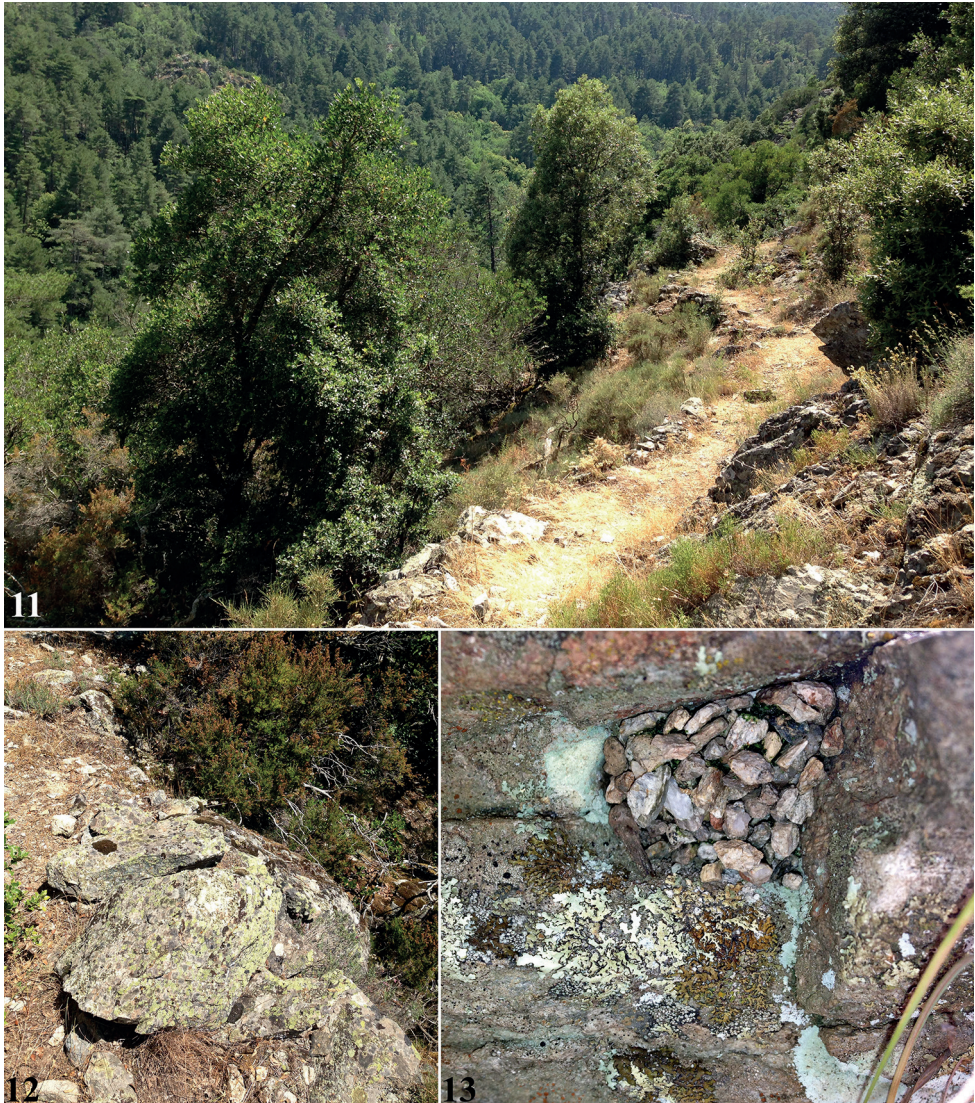
Megachile schmiedeknechti Costa; Liongo Li Enkulu (1988, Map 57): Corsica.

Megachile pilidens Alfken; Pagliano (1994: 373): Venzolasca.

Megachile schmiedeknechti Costa; Pagliano (1994: 374): Golfe de Liscia.

Megachile argentata schmiedeknechti Costa; Praz and Bénon (2023: 170): Corsica.

Material examined. 299♀, 234♂ & 2NS observed from April to October, between 1895 and 2022 in Ajaccio, Albertacce, Aléria, Asco, Balogna, Bastelica, Biguglia, Bonifacio,



Figures 11–13. Nesting site of *Megachile albocristata* **11** adret covered with sparse Oak wood (*Quercus ilex*) in the Tartagine valley (Mausoléo) **12** boulder sheltering a nest of *Megachile albocristata* **13** nest of *Megachile albocristata*.

Canale-di-Verde, Castellare-di-Casinca, Centuri, Conca, Coti-Chiavari, Evisa, Farinole, Figari, Ghisonaccia, Ghisoni, Grosseto-Prugna, La Porta, Lecci, Levie, Linguizzetta, Luciana, Mausoléo, Nocario, Noceta, Oletta, Palasca, Patrimonio, Penta-di-Casinca, Piana, Poggio-d'Oletta, Porto-Vecchio, Propriano, Quenza, Riventosa, Saint-Florent, Santo-Pietro-di-Tenda, Sartène, Sermano, Serra-di-Ferro, Sisco, Solaro, Sorbollano, Soveria, Talasani, Tavera, Ventiseri, Venzolasca, Vescovato, Vico, Vivario, Zicavo and Zonza.

Remark. This taxon has been recently relegated to the status of a subspecies of *Megachile argentata* (Fabricius, 1793) (Praz and Bénon 2023). This subspecies occurs

in West Mediterranean islands such as Corsica, Sardinia, and Malta (Praz and Bénon 2023). Notably, both *M. a. argentata* (formerly identified as *M. pilidens*, now recognized as a synonym of *M. argentata*) and *M. a. schmiedeknechti* have been documented in Corsica (Liongo Li Enkulu 1988; Pagliano 1994). However, the distinction of these two taxa primarily relies on the colour of their pilosity which might pose challenge in discerning between old, discoloured specimens, particularly in males. Upon scrutinizing numerous specimens, we believe that the Corsican records of *M. pilidens* (= *M. a. argentata*) refer to *M. a. schmiedeknechti*.

38. *Megachile burdigalensis* Benoist, 1940*

Material examined. 1♀ & 2♂ observed from June to September, in 2020 in Bastelica, Oletta and Patrimonio.

39. *Megachile centuncularis centuncularis* (Linnaeus, 1758)

Megachile centuncularis Linnaeus; Ferton (1909a: 551): Bonifacio.

Megachile centuncularis (Linnaeus); Liongo Li Enkulu (1988, Map 27): Corsica.

Material examined. 58♀ & 31♂ observed from April to November, between 1895 and 2022 in Ajaccio, Balogna, Bonifacio, Corscia, Evisa, Ghisoni, Grosseto–Prugna, La Porta, Mausoléo, Oletta, Orto, Ota, Palasca, Porto–Vecchio, Riventosa, Rospigliani, San–Martino–di–Lota, Santo–Pietro–di–Venaco, Serra–di–Fiumorbo, Serra–di–Scopamène, Sisco, Sorbollano, Vivario and Zonza.

40. *Megachile deceptor* Pérez, 1890

Megachile deceptor Pérez; Liongo Li Enkulu (1988, Map 30): Cap Corse.

Material examined. 4♀ & 3♂ observed from May to July, between 2020 and 2021 in Ghisonaccia, Saint–Florent, Santo–Pietro–di–Tenda and Serra–di–Fiumorbo.

Remark. The species was only known from one historical data (Liongo li Enkulu 1988). Our observations thus confirm the presence of this taxon in Corsica.

41. *Megachile ericetorum* Lepeletier, 1841

Chalicodoma ericetorum (Lepeletier); Liongo Li Enkulu (1988, Map 32): Corsica.

Chalicodoma ericetorum melaleuca Zanden ssp. nov.; Zanden (1989: 72): Algajola.

Chalicodoma ericetorum (Lepeletier); Canovai et al. (2000: 78): Corsica.

Megachile ericetorum melaleuca Zanden; Le Goff (2004: 10): Vivario.

Material examined. 8♀ & 10♂ observed from May to September, between 1897 and 2021 in Ajaccio, Albertacce, Barrettali, Corte, Mausoléo, Riventosa, Sermano and Vivario.

Remark. The Corsican populations were assigned to the subspecies *M. ericetorum melaleuca* (Zanden, 1989) which is characterized by a pure white pilosity (dirty white to yellowish in the nominative subspecies). This subspecies has been synonymised with *M. ericetorum* by Praz and Dorchin (2018).

42. *Megachile lagopoda lagopoda* (Linnaeus, 1760)

Megachile lagopoda (Linnaeus); Liongo Li Enkulu (1988, Map 38): Corsica.

Megachile lagopoda (Linnaeus); Pagliano (1994: 372): Col de Celaccia.

Material examined. 13♀ & 21♂ observed from July to September, between 1896 and 2021 in Corscia, Ghisoni, Mausoléo, Piana, Quenza, Renno, Tavera, Vivario and Zicavo.

43. *Megachile leachella* Curtis, 1828

Figs 35–37

Megachile argentata var. *fossoria* Ferton, var. nov.; Ferton (1909a: 550): Bonifacio, Propriano.

Megachile dorsalis Pérez; Alfken (1923: 8): Corsica.

Megachile argentata Fabricius; Nadig and Nadig (1934: 26): Golfe de Sagone.

Megachile argentata var. *fossoria* Ferton; Benoist (1940: 66): Bonifacio, Vivario.

Megachile fossoria Ferton; Liongo Li Enkulu (1988, Map 35) [quoting Ferton (1909a)].

Megachile leachella Curtis; Liongo Li Enkulu (1988, Map 40): Corsica.

Megachile leachella Curtis; Pagliano (1994: 372): Bastia.

Megachile leachella Curtis; Meunier et al. (2023): Ajaccio.

Megachile leachella Curtis; Praz and Bénon (2023, supplementary material): Aléria, Borgo, Ghisonaccia.

Material examined. 30♀ & 29♂ observed from May to September, between 1897 and 2021 in Bonifacio, Calenzana, Cervione, Corbara, Farinole, Ghisonaccia, Grosseto–Prugna, Linguizzetta, Palasca, Penta-di-Casinca, Propriano, Santo-Pietro-di-Tenda, Solaro, Talasani, Tallone, Ventiseri, Vico and Zonza.

Remark. Schwarz and Gusenleitner (2011) delineated several forms of *M. leachella*. In the context of France, two distinct forms can be recognized: the variety *dorsalis* Pérez, 1880, prevalent in Southern France, and the variety *fossoria* Ferton, 1905, found in Corsica. Baker (in Liongo Li Enkulu 1988) proposed considering *M. fossoria* as a valid species. Nevertheless, the extensive variability exhibited by *M. leachella* across its entire distribution range complicates the clear demarcation of taxa. Praz and Bénon (2023) thus maintained the synonymy of this taxon with *M. leachella*.

44. *Megachile melanopyga melanopyga* Costa, 1863

Megachile melanopyga Costa; Benoist (1931, 63): Corsica.

Megachile melanopyga Costa; Liongo Li Enkulu (1988, Map 47): Corsica.

Megachile melanopyga Costa; Ebmer (1997: 52): Tavignano.

Material examined. 68♀ & 44♂ observed from April to November, between 1895 and 2022 in Ajaccio, Aléria, Balogna, Bastelica, Bocognano, Bonifacio, Calenzana, Castellare-di-Casinca, Coti-Chiavari, Croce, Ghisonaccia, Ghisoni, Grosseto-Prugna, Linguizzetta, Manso, Mausoléo, Moncale, Nocario, Oletta, Olmi-Cappella, Palasca, Patrimonio, Piana, Porto-Vecchio, Quenza, Santo-Pietro-di-Tenda, Sartène, Sorbollano, Sotta, Talasani, Tavera, Ventiseri, Vivario and Zonza.

46. *Megachile pusilla* Pérez, 1884

Megachile pusilla Pérez; Ferton (1909a: 543): Bonifacio.

Megachile variscopa Pérez; Benoist (1940: 68): Corsica.

Megachile atratula Rebmann; Liongo Li Enkulu (1988, Map 24): Corsica.

Megachile albohirta (Brullé); Ornos et al. (2007: 121) [Misinterpretation]: Corsica.

Material examined. 29♀ & 20♂ observed from May to October, between 1895 and 2021 in Biguglia, Bonifacio, L'Île Rousse, Lucciana, Palasca, Poggio-d'Oletta, Propriano, Saint-Florent, Santo-Pietro-di-Tenda, Talasani and Ventiseri.

47. *Megachile rotundata* (Fabricius, 1793)

Megachile rotundata (Fabricius); Pagliano (1994: 374): Col de Celaccia.

Material examined. 6♀ & 8♂ observed from May to July, between 2002 and 2021 in Bonifacio, Coti-Chiavari, Grosseto-Prugna, Olmi-Cappella, Palasca and Ventiseri.

49. *Megachile sicula corsica* Benoist, 1935

Figs 43–45

Megachile sicula var. *perezi* Lichtenstein; Friese (1899: 39, 176): Corsica.

Megachile sicula Rossi; Ferton (1909a: 550): Bonifacio.

Megachile perezi Lichtenstein; Ferton (1909a: 550): Bonifacio.

Megachile perezi Lichtenstein; Friese (1911: 212): Corsica.

Megachile sicula f. *corsica* Benoist var. nov.; Benoist (1935: 103).

Chalicodoma sicula var. *corsica* Benoist; Benoist (1940: 45): Bonifacio.

Chalicodoma sicula Rossi; Kusdas (1974: 160): Calvi.

Chalicodoma corsica Benoist; Liongo Li Enkulu (1988, Map 29): Corsica.

Chalicodoma sicula Rossi; Liongo Li Enkulu (1988: 87, Map 62): Corsica.

Chalicodoma sicula perezi Lichtenstein; Liongo Li Enkulu (1988, Map 64): Corsica.

Chalicodoma sicula Rossi; Bürgis (1995: 27): Calvi.

Material examined. 187♀, 69♂ & 1NS observed from March to August, between 1855 and 2021 in Ajaccio, Albertacce, Aléria, Asco, Bonifacio, Corte, Evisa, Farinole, Galéria, Mausoléo, Porto-Vecchio, Saint-Florent, Santo-Pietro-di-Tenda, Serra-di-Ferro, Solaro, Sotta, Ventiseri, Vivario and Zonza.

Remark. Following Tklačů's suggestions, Liongo Li Enkulu (1988) formally recognized the Corso-Sardinian variety as a distinct species. Subsequently, Rasmont et al. (1995) and Ornosa et al. (2007) adhered to this classification, designating *C. corsica* as a valid species. This taxonomic distinction lacks substantive morphological or molecular justifications, with only variations in the coloration of pilosity and integument being established (Benoist 1935, 1940). It is acknowledged that considerable variability exists in coloration and pilosity among several species within the *Chalicodoma* subgenus. In light of these considerations, we currently regard *C. corsica* as a subspecies of *M. sicula*. It is noteworthy that the CO1 sequence from a Corsican specimen stands isolated in comparison to the sequences available on BOLD for *M. sicula*, displaying a notable divergence from other clusters. A more comprehensive investigation is imperative to ascertain the precise taxonomic status of this Corsican taxon concerning other subspecies of *M. sicula*.

50. *Megachile versicolor* Smith, 1844

Megachile versicolor Smith; Liongo Li Enkulu (1988, Map 65): Corsica.

Megachile versicolor Smith; Pagliano (1994: 374): Bastia.

Material examined. 3♂ observed from May to June, between 2003 and 2017 in Oletta and Vivario.

Osmini Newman, 1834

Chelostoma Latreille, 1809*

51. *Chelostoma distinctum* Stöckhert, 1929*

Material examined. 25♀ & 32♂ observed from March to June, between 1906 and 2021 in Ajaccio, Bastelicaccia, Cauro, Evisa, Ghisonaccia, Grosseto–Prugna, Lozzi, Murzo, Pianottoli–Caldarello, Poggio–di–Venaco, Santo–Pietro–di–Tenda, Sorbollano, Sermano, Sotta, Venzolasca, Zigliara and Zonza.

Remark. The morphology of the Corsican specimens is slightly different than that of the other European specimens. The Corsican population might represent a distinct species.

52. *Chelostoma foveolatum* Schletterer, 1889*

Material examined. 6♀ observed in June 2003 in Grosseto–Prugna.

53. *Chelostoma rapunculi* Lepeletier, 1841*

Material examined. 9♀ & 12♂ observed from May to July, between 1897 and 2021 in Afa, Asco, Cateri, Corbara, Evisa, Grosseto–Prugna, Mausoléo, Olmi–Cappella, Quenza, Santa–Maria–Poggio, Sermano, Sorbollano, Vivario, Zigliara and Zonza.

Heriades* Spinola, 1808*54. *Heriades crenulata* Nylander, 1856**

Heriades crenulata Nylander; Benoist (1931: 132): Corsica.

Eriades crenulatus Nylander; Kusdas (1974: 160): Calvi.

Heriades crenulata Nylander; Pagliano (1994: 379): Bastia.

Heriades crenulata Nylander; Marchal and Chardonnet (2001: 203): Serra-di-Fiumorbo.

Material examined. 247♀ & 265♂ observed from May to the beginning of November, between 1855 and 2021 in Ajaccio, Asco, Aullène, Bonifacio, Calenzana, Calvi, Cargèse, Corbara, Coti-Chiavari, Ersa, Farinole, Figari, Galéria, Ghisonaccia, Ghisoni, Grosseto-Prugna, Lecci, Linguizzetta, Mausoléo, Meria, Moncale, Oletta, Ota, Palasca, Patrimonio, Penta-di-Casinca, Piana, Poggio-di-Venaco, Poggio-d'Oletta, Porto-Vecchio, Propriano, Quenza, Saint-Florent, San-Martino-di-Lota, Santo-Pietro-di-Tenda, Serra-di-Ferro, Serra-di-Scopamène, Serriera, Sisco, Sorbollano, Sotta, Tavera, Ventiseri, Vivario and Zonza.

55. *Heriades rubicola* Pérez, 1890

Heriades rubicola Pérez; Benoist (1931: 132): Corsica.

Heriades rubicola Pérez; Pagliano (1994: 379): Venzolasca.

Material examined. 115♀ & 88♂ observed from May to October, between 1895 and 2021 in Aléria, Bonifacio, Calvi, Casaglione, Corbara, Ghisonaccia, Linguizzetta, Lumio, Moncale, Morosaglia, Ogliastro, Oletta, Palasca, Patrimonio, Penta-di-Casinca, Pietracorbara, Poggio-di-Venaco, Porto-Vecchio, Propriano, Saint-Florent, Santa-Maria-Poggio, Santo-Pietro-di-Tenda, Serra-di-Ferro, Talasani, Sisco, Venaco and Ventiseri.

56. *Heriades truncorum* (Linnaeus, 1758)

Heriades truncorum Linnaeus; Ferton (1901b: 93, 143): Propriano, Vivario.

Examined material. 30♀ & 20♂ observed from June to August, between 1896 and 2019 in Asco, Bonifacio, Evisa, Ghisoni, Mausoléo, Riventosa, Propriano, Serra-di-Ferro, Serra-di-Scopamène, Sorbollano, Vivario and Zicavo.

Hoplitis* Klug, 1807*57. *Hoplitis acuticornis* (Dufour & Perris, 1840)**

Osmia acuticornis Dufour & Perris; Benoist (1931: 41): Corsica.

Material examined. 31♀ & 12♂ observed from April to July, between 1895 and 2021 in Asco, Bonifacio, Borgo, Corte, Evisa, Mausoléo, Santo–Pietro–di–Venaco, Ventiseri, Vivario, Zicavo and Zonza.

Remark. The morphology of the Corsican specimens is slightly different than that of the other European specimens. The Corsican population might represent a distinct species.

58. *Hoplitis aff. adunca* (Panzer, 1798)*

Material examined. 23♀ & 38♂ observed from May to June, between 1895 and 1907 in Bonifacio, Porto–Vecchio and Propriano.

Remark. This species will be described soon (Le Divelec in prep.). It seems to be restricted to Southern Corsica and Sardinia. No modern record is known for Corsica.

59. *Hoplitis adunca* (Panzer, 1798)

Osmia adunca Panzer; Radoszkowski (1887: 288): Corsica.

Osmia adunca Panzer; Benoist (1931: 36): Corsica.

Osmia morawitzi Pérez; Benoist (1931: 36) [Misidentification]: Corsica.

? *Osmia benoisti* Alfken; Warncke (1992: 115) [probably quoting Benoist (1931)]: Corsica.

Material examined. 44♀ & 45♂ observed from April to August, between 1895 and 2021 in Aléria, Bonifacio, Cervione, Corbara, Corte, Galeria, Ghisonaccia, Grosseto–Prugna, Lucciana, Oletta, Piana, Poggio–di–Venaco, Saint–Florent, Santo–Pietro–di–Tenda, Tallone, Ventiseri, Venzolasca, Vico, Vivario and Zonza.

60. *Hoplitis anthocopoides* (Schenck, 1853)

Hoplitis anthocopoides Schenck; Scheuchl and Willner (2016: 435) [quoting Müller (2022a)].

Hoplitis anthocopoides Schenck; Müller (2022a): Corsica.

Material examined. 104 ♀ & 82♂ observed from May to August, between 1895 and 2021 in Ajaccio, Aléria, Aregno, Bonifacio, Borgo, Calvi, Casaglione, Centuri, Cervione, Corbara, Corscia, Corte, Ersu, Ghisonaccia, Grosseto–Prugna, L'Île Rousse, Lucciana, Lumio, Oletta, Palasca, Piana, Poggio–di–Venaco, Propriano, Santo–Pietro–di–Tenda, Serra–di–Ferro, Sotta, Ventiseri, Vico, Vivario and Zonza.

61. *Hoplitis bihamata* (Costa, 1885)

Figs 51–53

Osmia corsica Fertion sp. nov.; Fertion (1901a: 61–63): Bonifacio, Monte Renoso.

Osmia corsica Fertion; Benoist (1931: 36): Corsica.

Osmia corsica Fertion; Nadig and Nadig (1934: 26): Monte d'Oro.

Osmia corsica Ferton; Stanek (1969: 28): Corsica.

Osmia marchali Pérez; Warncke (1992c: 109) [misidentification]: Col de Verde.

Material examined. 83♀ & 69♂ from April to September, between 1898 and 2021 in Asco, Barrettali, Bocognano, Bonifacio, Calvi, Casaglione, Corte, Evisa, Ghisoni, Mausoléo, Olcani, Patrimonio, Porto-Vecchio, Quenza, Santo-Pietro-di-Tenda, Serra-di-Scopamène, Sisco, Vivario and Zonza.

Remark. Corso-sardinian endemic.

62. *Hoplitis bisulca* (Gerstäcker, 1869)

Figs 59–61

Osmia lanosa Pérez; Ferton (1897: 42): Bonifacio.

Osmia lanosa Pérez; Ferton (1901b: 88–89): Bonifacio.

Osmia lanosa Pérez; Ferton (1905: 58–59): Bonifacio.

Osmia lanosa Pérez; Ferton (1909a: 538): Bonifacio.

Osmia bisulca Gerstäcker; Benoist (1931: 33): Corsica.

Material examined. 97♀ & 70♂ observed from May to August, between 1895 and 2021 in Bonifacio, Canale-di-Verde, Patrimonio and Zonza.

63. *Hoplitis corsaria* (Warncke, 1991), *stat. nov.*

Osmia crenulata Morawitz; Morawitz (1871: 208): Corsica.

Osmia crenulata Morawitz; Schmiedeknecht (1885–1886: 161): Corsica.

Osmia crenulata Morawitz; Dücke (1900: 171): Corsica.

Osmia crenulata Morawitz; Ferton (1901a: 63): Bonifacio.

Osmia crenulata Morawitz; Benoist (1931: 35): Corsica.

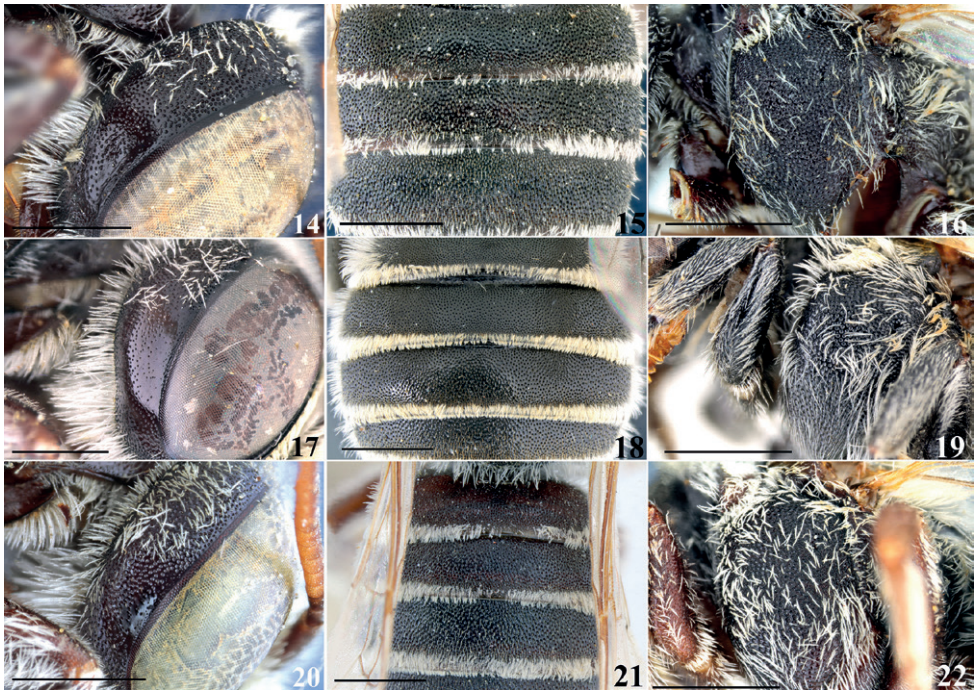
Osmia annulata corsaria Warncke ssp. nov.; Warncke (1991a: 734): Ajaccio.

Osmia annulata corsaria Warncke; Le Goff (2010: 7): Grosseto-Prugna.

Type material examined. Holotype: Corse 15-6-1981 [15.VI.1981] Ajaccio leg. Perraudin // Holotypus *Osmia annulata corsaria* War // Holotypus // ♂ // Coll. K. Warncke O. Ö. Landesmuseum Linz/Austria-egg.93. [Examined on pictures: <https://www.europeana.eu/fr>].

Material examined. 151♀ & 114♂ observed from May to July, between 1895 and 2021 in Ajaccio, Aléria, Aullène, Bonifacio, Canale-di-Verde, Coggia, Corbara, Ghisonaccia, Grosseto-Prugna, Lumio, Oletta, Palasca, Porto-Vecchio, Propriano, Sartène, Serra-di-Ferro, Sollacaro, Ventiseri, Venzolasca, Vico, Vivario and Zonza.

Remark. Old European records of *Osmia crenulata* (Morawitz, 1871) refer to *H. annulata* (Latreille, 1811) and not specifically to the East Mediterranean *H. annulata crenulata*. Corsican records only refer to *H. annulata corsaria*. *Hoplitis annulata* is a species complex. The morphology of the Corsican endemic *H. a. corsaria*, especially that of the



Figures 14–22. Comparative illustrations of *H. corsaria* (Warncke) and *H. annulata* (Latreille) **14–16** *H. annulata annulata* (Latreille) (from Spain) **17–19** *H. corsaria* (Warncke) (from Corsica) **20–22** *H. annulata crenulata* (Morawitz) (from Greece) **14, 17, 20** gena of male **15, 18, 21** gaster of female (**15** terga 2–4 **18** terga 1–4 **21** terga 1–3) **16, 19, 22** mesepisternum. Scale bars: 1 mm.

male, is remarkably distinct from that of the two other subspecies (Table 3). Plus, the CO1 sequences of the Corsican specimens are significantly diverging (around 3.7%) from the Iberian sequences of *H. annulata* published on BOLD. For these reasons, we consider *H. corsaria* to be a distinct species. The nominative subspecies and *H. a. crenulata* might also represent distinct species as they are morphologically different and have distinct nesting behaviour (Le Goff, 2010). However, the morphological differences are tenuous and without the examination of an extensive material or molecular evidence we cannot exclude intraspecific variability. *Hoplitis corsaria* is only known from Corsica to date.

BOLD process ID. [LPRCW186-19](#), [LPRCW187-19](#), [LPRCI1815-21](#), [LPRCI1824-21](#), [LPRCI1968-21](#) (BIN, [BOLD:AEC2169](#)).

64. *Hoplitis cristatula* (van der Zanden, 1990)

Osmia cristata Fonscolombe; Fertion (1897: 42): Bonifacio.

Osmia cristata Fonscolombe; Fertion (1901b: 88): Bonifacio.

Osmia cristata Fonscolombe; Fertion (1909a: 538): Bonifacio.

Osmia cristata Fonscolombe; Benoist (1931: 34): Corsica.

Material examined. 48♀ & 34♂ observed from May to July, between 1895 and 2021 in Ajaccio, Aléria, Bonifacio, Calenzana, Casamaccioli, Coggia, Farinole, Grosseto–Prugna, L’Île Rousse, Ogliastro, Oletta, Santa–Maria–Poggio, Santo–Pietro–di–Tenda, Serra–di–Ferro, Vivario and Zonza.

Table 3. Main morphological differences between *H. corsaria* and *H. annulata*.

Features	<i>H. corsaria</i>	<i>H. a. annulata</i>	<i>H. a. crenulata</i>
Gena punctuation	♀: Gena with shallow punctuation, more sparsely spaced by uneven interspaces that can reach the diameter of one puncture. ♂: Gena with remarkably minute and sparse punctuation, its lower half with large and almost impunctate area near outer orbit (Fig. 17).	♀: Gena with coarse and dense subcontiguous punctuation, with narrow linear interspaces. ♂: Gena with coarse subcontiguous punctuation, its lower half uniformly punctate, at most with a small impunctate area (Fig. 14).	♀: Gena with coarse and dense subcontiguous punctuation, with narrow linear interspaces. ♂: Gena with coarse subcontiguous punctuation, its lower half densely punctate, at most with a small impunctate area (Fig. 20).
Vertex length	Around two times the diameter of posterior ocellus	Around two times the diameter of posterior ocellus	More than two times the diameter of posterior ocellus
Mesepisternum punctuation	Punctuation sparse, punctures separated by conspicuous flat interspaces (dense around scrobal area) (Fig. 19).	Punctuation subcontiguous, mostly with linear to carina-shaped interspaces (Fig. 16).	Punctuation subcontiguous, mostly with carina-shaped interspaces (Fig. 22).
Metasoma	Punctuation of terga 2–4 fine and remarkably sparse (most interspaces > 1–2 puncture diameters) with conspicuous micropunctuation in-between, tegument smooth and shiny (Fig. 18).	Punctuation of terga 2–4 denser (interspace ≤ 1 puncture diameter) and somewhat coarser so the segment appears matte, micropunctuation hardly distinct, tegument of terga smooth, at most slightly shagreened basally (Fig. 15).	Punctuation of terga 2–4 denser (interspace ≤ 1 puncture diameter) and coarser so the segment appears matte, micropunctuation hardly distinct, tegument of terga shagreened, at least basally (Fig. 21).

65. *Hoplitis fasciculata* (Alfken, 1934)

Figs 23–28

Hoplitis fasciculata (Alfken); Müller (2022a): Corsica.

Material examined. 13♀ & 11♂ observed from June to July, between 1899 and 2021 in Bonifacio, Propriano, Prunelli–di–Fiumorbo and Rutali.

Remark. The generic Corsican record of *H. fasciculata* mentioned on the website of Müller (2022a) comes from our records that are here published for the first time. Corsica represents the western limit of the distribution of this species. The female is easily distinguishable from other *Anthocopa* Lepeletier & Serville, 1825 by the white scopa (Fig. 23), the crenulate clypeus free margin (saw-edged) (Fig. 25) and the rugose areolate sculpture of the scutum (Fig. 27). The male can be recognized by the conspicuously bilobed tergum 7 (Fig. 28), the bidentate mandibule (Fig. 26). Its last sternum has a rounded apical margin and is apically depressed with a smooth and shiny area at the end of which is a small tubercle bearing a tuft of backwardly directed setae (Fig. 28).



Figures 23–28. *Hoplitis fasciculata* (Alfken) **23, 25, 27** female **24, 26, 28** male **23, 24** habitus in lateral view **25, 26** head in front view **27** habitus in dorsal view **28** gaster in ventral view. Scale bars: 1 mm

66. *Hoplitis leucomelana* (Kirby, 1802)

Osmia leucomelana Kirby; Warncke (1991b: 716): Ajaccio.

Hoplitis leucomelana (Kirby); Pagliano (1994: 383): Col de Celaccia.

Hoplitis leucomelana Kirby; Le Goff (2004: 11): Vivario.

Material examined. 33♀ & 25♂ observed from June to September, between 1896 and 2020 in Albertacce, Aullène, Biguglia, Bonifacio, Calacuccia, Casamaccioli, Coti–Chiavari, Evisa, Grosseto–Prugna, Oletta, Patrimonio, Piana, Sermano, Serra–di–Ferro, Serra–di–Fiumorbo, Sisco, Sorbollano, Tavera, Venaco, Vico, Vivario, Zigliara and Zonza.

67. *Hoplitis manicata* (Morice, 1901)

Hoplitis manicata Morice; Le Goff (2004: 19): Vivario (2B).

Material examined. 9♀ & 5♂ observed in June 2002 and 2003 in Vivario.

Remark. In Corsica, this species is only known from one station in the mountains of Vivario (Le Goff 2004). Corsica represents the western limit of the distribution of this species.

68. *Hoplitis perezii* (Ferton, 1895)

Osmia perezii Ferton; Ferton (1897: 42–43): Bonifacio.

Osmia perezii Ferton; Ferton (1901b: 89–90): Bonifacio.

Osmia perezii Ferton; Ferton (1909a: 538): Bonifacio.

Osmia perezii Ferton; Benoist (1931: 35): Corsica.

Anthocopa perezii (Ferton); Tkalců (1969: 330): Bonifacio.

Material examined. 31♀ & 19♂ observed from May to July, between 1895 and 2021 in Bonifacio, Casamaccioli, Corte, Grosseto–Prugna and Sermano.

69. *Hoplitis praestans* (Morawitz, 1893)

Figs 63–66

Osmia praestans Morawitz; Ducke (1900: 110): Corsica.

Osmia lineola Pérez; Ferton (1901a: 63): Corsica.

Osmia praestans Morawitz; Friese (1911: 80): Corsica.

Osmia praestans Morawitz; Benoist (1931: 42): Corsica.

Osmia praestans Morawitz; Kusdas (1974: 160): Calvi.

Osmia praestans Morawitz; Warncke (1991b: 734): Calvi.

Material examined. 13♀ & 20♂ observed from May to July, between 1855 and 2021 in Bonifacio, Calvi, Ghisonaccia, Ghisoni, Linguizzetta, Mausoléo, Pianottoli-Caldarello, Ventiseri, Vivario and Zonza.

70. *Hoplitis ravouxi* (Pérez, 1902)

Hoplitis ravouxi (Pérez); Müller (2022a): Corsica.

Hoplitis loti Morawitz; Le Goff (2004: 11) [Misidentification]: Vivario.

Material examined. 1♀ observed in June 2003 in Vivario & 1♂ in May 2011 in Balogna.

71. *Hoplitis tridentata* (Dufour & Perris, 1840)

Osmia mocsaryi Friese; Duche (1900: 154) [Misinterpretation]: Corsica.

Osmia mocsaryi Friese; Friese (1911: 92) [quoting Duche (1900)]: Corsica.

Osmia mocsaryi Friese; Benoist (1931: 38) [quoting Duche (1900)]: Corsica.

Material examined. 5♀ & 6♂ observed from May to June, between 1897 and 2021 in Borgo, Lucciana, Oletta, Sermano, Vescovato and Vivario.

Remark. This species has been recorded from Corsica under the name of *O. mocsaryi*, a species with which *H. tridentata* was regularly confused in the past (see below).

Osmia Panzer, 1806

72. *Osmia anceyi* Pérez, 1879

Osmia anceyi Pérez; Müller (2018: 312): Verghia.

Material examined. 1♀ collected in June 2001 in Coti-Chiavari.

73. *Osmia aurulenta* (Panzer, 1799)

Osmia aurulenta (Panzer); Müller (2022a): Corsica.

Material examined. 33♀ & 5♂ observed from April to July, between 1897 and 2021 in Barbaggio, Bocognano, Ghisoni, Grosseto–Prugna, Lozzi, Lucciana, Palasca, Riventosa, Sartène, Sermano, Vico and Vivario.

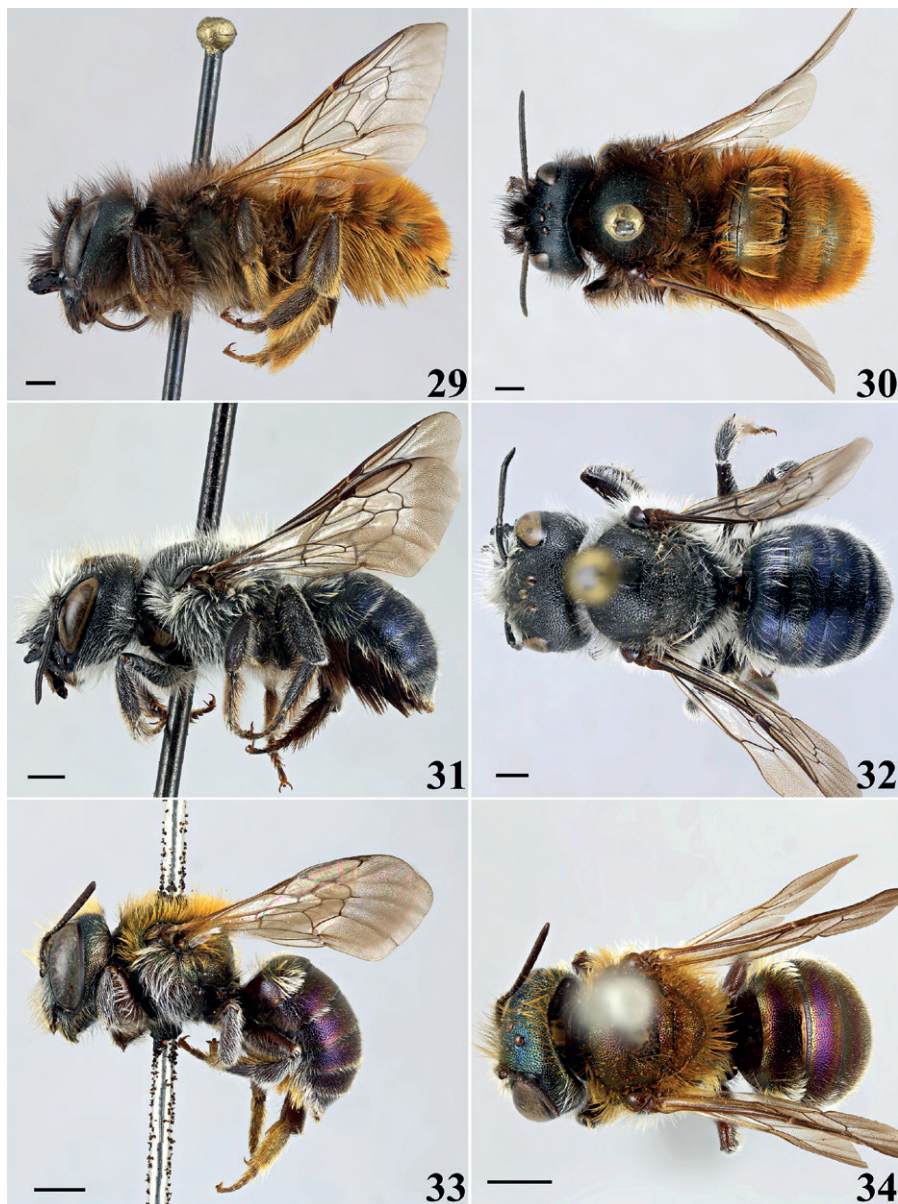
74. *Osmia bicornis bicornis* (Linnaeus, 1758)

Figs 29, 30

Osmia bicornis Latr.; Ferton (1911: 368): Bonifacio.

Osmia rufa rufa (Linnaeus); Peters (1977: 291): Ajaccio, Bastia, Calvi, Corte, Nonza, Monte d'Oro, Porto-Vecchio, Saint-Florent, Santo-Pietro-di-Venaco, Sari-Solenzara, Vivario.

Osmia bicornis globosa (Scopoli); Ungricht et al. (2008: 177): Corsica.



Figures 29–34. Remarkable variety of Corsican *Osmia* **29, 30** *Osmia bicornis bicornis* (Linnaeus) **31, 32** *Osmia latreillei iberoafricana* Peters **33, 34** *Osmia versicolor corrusca* Erichson **29, 31, 32** lateral view **30, 32, 34** dorsal view. Scale bars: 1 mm.

Material examined. 60♀ & 47♂ observed from March to June, between 1897 and 2021 in Bocognano, Bonifacio, Calacuccia, Casaglione, Corte, Ghisonaccia, Riventosa, Porto–Vecchio, Quenza, Serra–di–Ferro, Serra–di–Scopamène, Sollacaro, Sotta, Ventiseri, Vico, Vivario and Zonza.

75. *Osmia caerulea* *caerulea* Linnaeus, 1758

Osmia aenea (Linnaeus); Ferton (1897: 40): Bonifacio.

Osmia cyanea (Fabricius); Ferton (1905: 93): Bonifacio.

Osmia aenea (Linnaeus); Ferton (1911: 368): Bonifacio.

Material examined. 222♀ & 109♂ observed from March to September, between 1855 and 2021 in Ajaccio, Albitreccia, Aléria, Asco, Aullène, Balogna, Biguglia, Bocognano, Bonifacio, Calenzana, Casaglione, Casamaccioli, Casanova, Centuri, Coggia, Corbara, Coti–Chiavari, Cozzano, Evisa, Farinole, Furiani, Galéria, Ghisonaccia, Ghisoni, Grosseto–Prugna, Linguizzetta, Lozzi, Lucciana, Mausoléo, Oletta, Olmi–Cappella, Palasca, Palneca, Patrimonio, Penta–di–Casinca, Pianottoli–Caldarello, Poggio–di–Venaco, Porto–Vecchio, Propriano, Prunelli–di–Fiumorbo, Quenza, Riventosa, Rogliano, Rutali, Saint–Florent, Santa–Maria–Poggio, Santo–Pietro–di–Tenda, Serra–di–Ferro, Serra–di–Fiumorbo, Sisco, Sorbollano, Sorbo–Ocagnano, Sotta, Tala-sani, Ventiseri, Vescovato, Vico, Vivario, Zicavo and Zonza.

76. *Osmia cornuta* *cornuta* (Latreille, 1805)

Osmia cornuta (Latreille); Peters (1977: 337): Corsica.

Material examined. 3♀ & 3♂ observed from March to June, between 1976 and 2021 in Borgo, Grosseto–Prugna, Riventosa and Sotta.

77. *Osmia emarginata* *emarginata* Lepeletier, 1841

Osmia emarginata Lepeletier; Ferton (1901b: 85, 89): Evisa, Vivario.

Osmia emarginata emarginata Lepeletier; Tkalcù (1971: 224): Monte d’Oro, Vivario.

Osmia emarginata emarginata Lepeletier; Peters (1977: 310): Quenza, Rutali, Vivario.

Material examined. 12♀ & 7♂ observed from May to July, between 1897 and 2021 in Corte, Evisa, Lozzi, Serra–di–Ferro, Vivario, Zicavo and Zonza.

78. *Osmia erythrogastra* Ferton, 1905

Figs 55–57

Osmia erythrogastra Ferton sp. nov.; Ferton (1905: 57): Bonifacio.

Osmia erythrogastra Ferton; Ferton (1909b: 407): Bonifacio.

Osmia erythrogastra Ferton; Benoist (1931: 33): Bonifacio.

Osmia erythrogastra Ferton; Müller (2020: 230): Bastia.

Material examined. 10♀ & 8♂ observed from May to August, between 1904 and 1964 in Bastia and Bonifacio.

Remark. No modern records.

79. *Osmia ferruginea* Latreille, 1811

Osmia igneopurpurea Costa; Ferton (1897: 39): Bonifacio.

Osmia ferruginea Lep.; Ferton (1899: 72): Bonifacio.

Osmia ferruginea Latreille; Ducke (1900: 212): Corsica.

Osmia ferruginea Lep.; Ferton (1901a: 65): Corsica.

Osmia ferruginea Lep.; Ferton (1901b: 143): Bonifacio.

Osmia ferruginea Lep.; Ferton (1905: 89–93): Bonifacio.

Osmia ferruginea Lep.; Ferton (1909a: 575, 577): Bonifacio.

Osmia ferruginea var. *igneopurpurea* Costa; Benoist (1931: 32): Corsica.

Osmia ferruginea igneopurpurea Costa stat. nov.; Warncke (1992d: 109): Corsica.

Material examined. 65♀ & 35♂ observed from March to June, between 1855 and 2020 in Barbaggio and Bonifacio.

Remark. The subspecies *igneopurpurea* Costa, 1882, has been documented in Corsica, Sardinia, Sicily, and Malta (Warncke 1992d). This subspecies is characterized by a dark scopa and dark hairs on the hind tibia. However, Corsican specimens exhibit significant variability, ranging from typical characteristics of the nominative subspecies to those of the subspecies *igneopurpurea*. The presence of numerous intermediate specimens further complicates the differentiation between subspecies. Given this variability, we suggest considering both dark and light hairy Corsican specimens of *O. ferruginea* as part of a single taxon. The subspecies *igneopurpurea* may just be a synonym of *Osmia ferruginea*.

80. *Osmia latreillei* (Spinola, 1806)

Figs 31, 32

Osmia latreillei (Spinola); Ducke (1900: 236): Corsica.

Osmia latreillei Lep.; Ferton (1905: 59, 93): Bonifacio.

Osmia latreillei (Spinola); Benoist (1931: 30): Corsica.

Osmia latreillei iberoafricana Peters; Tkalců (1975b: 184): Corsica.

Osmia latreillei latreillei (Spinola); Ungricht et al. (2008: 153): Corsica.

Material examined. 35♀ & 47♂ observed from March to June, between 1895 and 2021 in Ajaccio, Bonifacio, Corte, Ghisonaccia and Riventosa.

Remark. Tkalců (1975b) assigned the Corso-Sardinian populations to the subspecies *iberoafricana*. However, the situation remains unclear as he noted that these

populations exhibit intermediate characteristics, with some specimens closely resembling the nominate subspecies found in mainland France and Italy. Müller (2022a) argues that a subspecies rank is unjustified and proposes its synonymy with *O. latreillei*.

81. *Osmia ligurica* Morawitz, 1868

Osmia ligurica Morawitz; Kudas (1974: 160): Calvi.

Material examined. 76♀ & 40♂ observed from May to August, between 1895 and 2021 in Albertacce, Aléria, Asco, Barbaggio, Bonifacio, Calacuccia, Castellare-di-Mercurio, Corte, Ghisonaccia, Grosseto-Prugna, Lumio, Mausoléo, Moncale, Oletta, Palasca, Patrimonio, Pianottoli-Caldarello, Porto-Vecchio, Propriano, Santo-Pietro-di-Tenda, Sermano, Serra-di-Ferro, Sisco, Sotta, Venaco, Ventiseri, Vivario and Zonza.

82. *Osmia melanogaster melanogaster* Spinola, 1808

Osmia notata (Fabricius); Benoist (1931: 28) [Misinterpretation, see Tkalcu 1975a]: Corsica.

Material examined. 2♂ collected in Ajaccio during the XIXth century (J. Pérez coll.).

Remark. No modern records.

83. *Osmia nasoproducta* Ferton, 1909

Figs 68–70

Osmia nasoproducta Ferton sp. nov.; (Ferton 1909b: 406–407): Bonifacio.

Material examined. 8♀ & 4♂ observed from March to June, between 1902 and 2017 in Bonifacio.

Remark. It is a rare and poorly known species. Its male was recently described (Le Goff 2016). The original description (Ferton 1909b) represented the only Corsican record until now.

84. *Osmia niveata* (Fabricius, 1804)

Osmia fulviventris var. *albiscopa* Alfken; Benoist (1931: 29): Corsica.

Osmia fulviventris Panzer; Kudas (1974: 160): Calvi.

Osmia fulviventris niveata (Fabricius): Tkalcu (1975a: 307): Bastia, Porto-Vecchio, Ville-di-Pietrabugno.

Material examined. 114♀ & 53♂ observed from March to July, between 1896 and 2021 in Altagène, Bonifacio, Calenzana, Calvi, Centuri, Coggia, Corbara, Ersu, Grosseto-Prugna, Lozzi, Manso, Mausoléo, Olcani, Oletta, Osani, Palasca, Patrimonio,

Pianottoli-Caldarello, Poggio-di-Venaco, Porto-Vecchio, Prunelli-di-Fiumorbo, Quenza, Riventosa, Santo-Pietro-di-Tenda, Serra-di-Ferro, Sorbo-Ocagnano, Sotta, Venzolasca, Vivario and Zonza.

Remark. Corsican females, characterized by a pure white scopa, were previously considered a distinct subspecies named *O. niveata albiscopa*. However, the males are not distinguishable, and the barcode of Corsican specimens cannot be distinguished from other European counterparts. This suggests that the light hairy insular population is conspecific with mainland populations.

85. *Osmia rufohirta* Latreille, 1811

Osmia rufohirta Latreille; Ferton (1897: 37–39): Bonifacio.

Osmia rufohirta Latreille; Ferton (1899: 70–72): Bonifacio.

Osmia fossoria Pérez; Ducke (1900: 127) [Misinterpretation]: Corsica.

Osmia rufohirta Latreille; Ferton (1901b: 89, 145): Bonifacio.

Osmia rufohirta Latreille; Ferton (1905: 62, 83–95): Bonifacio.

Osmia rufohirta Latreille; Ferton (1909a: 579–580): Bonifacio.

Osmia rufohirta Latreille; Ferton (1911: 381–382): Bonifacio.

Osmia rufohirta Latreille; Benoist (1931: 40): Corsica.

Material examined. 101♀ & 62♂ observed from March to the beginning of July, between 1893 and 2021 in Bonifacio, Corte, Farinole, Patrimonio, Sermano and Vivario.

86. *Osmia scutellaris* Morawitz, 1868

Osmia scutellaris Morawitz; Le Goff (2004: 11): Vivario.

Osmia scutellaris Morawitz; Müller (2018: 320): Zonza.

Material examined. 19♀ & 19♂ observed from May to the beginning of July, between 1973 and 2021 in Bonifacio, Calacuccia, Casaglione, Grosseto-Prugna, Oletta, Palasca, Riventosa, Porto-Vecchio, Quenza, Santo-Pietro-di-Tenda, Sermano, Sotta, Vivario and Zonza.

87. *Osmia signata signata* Erichson, 1835

Osmia vidua Gerstäcker; Ferton (1897: 40–42): Bonifacio.

Osmia vidua Gerstäcker; Ferton (1901a: 64): Bonifacio.

Osmia vidua Gerstäcker; Benoist (1931: 27): Corsica.

Material examined. 34♀ & 20♂ observed from May to August, between 1895 and 2021 in Ajaccio, Bonifacio, Calenzana, Calvi, Coti-Chiavari, Grosseto-Prugna, Mausoléo, Olcani, Patrimonio, Porto-Vecchio, Propriano, Prunelli-di-Fiumorbo, Sartène, Serra-di-Ferro, Sollacaro and Sotta.

88. *Osmia submicans submicans* Morawitz, 1870

Osmia submicans submicans Morawitz; Tkalcù (1977: 94): Bonifacio.

Osmia submicans Morawitz; Zanden (1991: 65): Ajaccio, Saint–Florent.

Material examined. 51♀ & 16♂ observed from March to July, between 1898 and 2021 in Bonifacio, Galéria, Ghisonaccia, Ghisoni, Mausoléo, Muracciole, Oletta, Olmi–Cappella, Palasca, Riventosa, Porto–Vecchio, Sotta, Ventiseri, Vivario and Zonza.

89. *Osmia tricornis* Latreille, 1811

Osmia tricornis Latreille; Ferton (1901b: 97): Bonifacio.

Osmia tricornis Latreille; Ferton (1911: 368): Bonifacio.

Osmia tricornis Latreille; Benoist (1931: 23): Corsica.

Osmia tricornis Latreille; Kusdas (1974: 160): Calvi.

Osmia tricornis Latreille; Peters (1977: 337): Corsica.

Material examined. 12♀ & 25♂ observed from March to April, between 1896 and 2021 in Bonifacio, Calenzana, Corte and Santo–Pietro–di–Tenda.

90. *Osmia versicolor corrusca* Erichson, 1835

Figs 33, 34

Osmia versicolor Latreille; Ferton (1905: 85): Bonifacio.

Osmia versicolor Latreille; Kusdas (1974: 160): Calvi.

Osmia versicolor corrusca Erichson stat.nov.; Zanden (1984: 183): Bonifacio.

Material examined. 72♀ & 15♂ observed from February to the beginning of July, between 1895 and 2020 in Barbaggio, Bonifacio, Ghisonaccia and Patrimonio.

Remark. *Osmia v. corrusca* is allegedly restricted to Corsica, the Balearic Islands, the Iberian Peninsula and to North Africa (Warncke 1992d).

Protosmia Ducke, 1900*

91. *Protosmia minutula* (Pérez, 1896)*

Material examined. 1♂ observed in July 2019 in Mausoléo.

Dubious records

The Corsican records of *Megachile marginata* Smith, 1853 (as *Megachile picicornis* Morawitz), *M. pyrenaea* Pérez, 1890), *M. pyrenaica* Lepeletier, 1841 published by Liongo Li Enkulu (1988) could not be confirmed and are likely to be mistakes. The Corsican

record of *H. claviventris* (Thomson, 1872) published by Warncke (1988) most probably refers to *H. leucomelana*, a very common species in Corsica which is morphologically very similar. Finally, the presence of *O. notata* in Corsica is documented by Nadig and Nadig (1934) and Warncke (1988) who probably quoted the previous authors. These records most probably refer to the closely related *O. signata*, a common species in Corsica.

Erroneous records

Hoplitis benoisti (Alfken, 1935)

Osmia morawitzi Pérez; Benoist (1931: 36): Corsica.

Osmia benoisti Alfken; Warncke (1992: 115): Corsica.

Remark. The specimens reported by Benoist (1931) are preserved in his collection and belong to *H. adunca*. The Corsican record of Warncke (1992) is either a quotation of Benoist (1931) or refer to the new species, *H. aff. adunca*.

Hoplitis loti (Morawitz, 1867)

Osmia loti Morawitz; Ferton (1901a: 64): Bonifacio.

Hoplitis loti Morawitz; Le Goff (2004: 11) [= *H. ravouxi* (Pérez), Le Goff pers. comm.].

Remark. No such specimen has been located in Ferton's collection. It is a mountainous species, unlikely to occur in Bonifacio.

Hoplitis marchali (Pérez, 1902)

Osmia marchali Pérez; Warncke (1992c: 109): Col de Verde.

Remark. The specimen reported by Warncke (1992c) is preserved in his collection and belong to *H. bihamata*. *Hoplitis marchali* is present in the south of the Iberian Peninsula, North Africa, and Sicily (Warncke 1992c; Baldock et al. 2018).

Hoplitis mocsaryi (Friese, 1895)

Osmia mocsaryi Friese; Dücke (1900: 154): Corsica.

Remark. Despite significant samplings in Corsica, no specimen of *H. mocsaryi* were observed. The specimen(s) originally recorded from Corsica could not be located. The original record of Dücke (1900) was quoted by many authors (e.g. Friese 1911; Benoist 1931; Moczar 1958; Pagliano 1994; Rasmont et al. 1995, 2017; Ornos et al. 2007; Scheuchl and Willner 2016). However, Friese, Dücke and Benoist misinterpreted the identity of the female of *H. mocsaryi* which they confused with *H. tridentata*. The

female of *H. mocsaryi* was actually described for the first time by Noskiewicz (1934). According to Noskiewicz (1934), Ducke also misidentified many males. Therefore, it seems more likely that *H. mocsaryi* was confused with *H. tridentata*.

***Megachile albohirta* (Brullé, 1839)**

Megachile albohirta (Brullé); Ornosa et al. (2007: 121) [Misinterpretation]: Corsica.

Remark. The Corsican record of *Megachile albohirta* in Ornosa et al. (2007) is a mistake that probably comes from a misinterpretation of the Corsican record of *M. variscopa* Pérez, 1895 by Benoist (1940). Following Tkalců (1993), Ornosa et al. (2007) considered *M. variscopa* as a junior synonym of *M. albohirta*. However, they are two distinct species (Gonzalez et al. 2010; Praz 2017). *Megachile albohirta* is restricted to North Africa and Canary Islands (Brullé 1839; Nadig and Nadig 1933; Tkalců 1993) while *M. pusilla* (senior synonym of *M. variscopa*, see Praz and Bénon 2023) occurs in Western Europe (Soltani et al. 2017).

***Megachile lefebvrei* Lepeletier, 1841**

Megachile lefebvrei Lepeletier; Ferton (1920: 336): Bonifacio.

Chalicodoma lefebvrei lefebvrei Lepeletier; Tkalců (1975b: 187): Corsica.

Remark. No Corsican specimen was collected or examined during this study. *M. lefebvrei*, was vaguely reported from Corsica by Tkalců (1975b) who cites the dark form *M. lefebvrei lefebvrei*. Since no material was presented by the author, this could either be an error in the text or based on the paper of Ferton (1920). Ferton (1920) mentions an observation of *M. lefebvrei* in Bonifacio on July 31, 1915. However, only one Hymenoptera collected in 1915 is in his collection, suggesting that Ferton likely ceased his regular field trips in Corsica from 1915 onwards. Additionally, the date of observation seems unlikely. Upon comparing Ferton (1920) with the corresponding specimens in his collection, it becomes evident that he frequently switched the years 1915 and 1914. This discrepancy is not surprising, considering Ferton's passing during the preparation of the publication, leading to an incomplete revision of the draft. Finally, the entire publication focuses on Ferton's collecting activities in Algeria and occasionally in Provence. It appears more plausible to us that the specimen was observed in Nemours, where Ferton was definitely present in July 1914 and where the nominative form of *M. lefebvrei* is known to occur. In his box from the year 1914, a female of *M. lefebvrei* from Nemours is present with a label referring to his lost manuscript, where he had evidently recorded the observations reported in his publication.

***Megachile sicula sicula* (Rossi, 1792) and *Megachile s. perezi* Lichtenstein, 1880**

Megachile sicula var. *perezi* Lichtenstein; Friese (1899: 39, 176): Corsica.

Megachile sicula Rossi; Ferton (1909a: 550): Bonifacio.

Megachile perezii Lichtenstein; Ferton (1909a: 550): Bonifacio.

Megachile perezii Lichtenstein; Friese (1911: 212): Corsica.

Chalicodoma sicula Rossi; Liongo Li Enkulu (1988, p.87, Map 62): Corsica.

Chalicodoma sicula perezii Lichtenstein; Liongo Li Enkulu (1988, Map 64): Corsica.

Remark. Both *M. sicula* and *M. perezii* are mentioned in Corsica by Ferton and Friese. The record of *M. perezii* is a mistake as no specimen of *M. s. perezii* has been found in Ferton's collection. Liongo Li Enkulu (1988) also notes Corsican records for *C. corsica*, along with instances of *C. sicula sicula* (Rossi, 1792) and *C. s. perezii* (Lichtenstein, 1880). These two taxa are very close to *C. s. corsica* and are prone to confusion, particularly among males with highly variable pilosity. We believe that all these records exclusively pertain to *C. s. corsica*, which is the sole taxon we have observed on the island.

***Osmia caerulescens cyanea* (Fabricius, 1793)**

Osmia cyanea (Fabricius); Ferton (1905: 93): Bonifacio.

Remark. Ferton labelled his specimens of *O. caerulescens* with the name *cyanea*. The mention of *Osmia caerulescens cyanea* (Fabricius, 1793) is erroneous. This subspecies is strictly North African (Tkalců 1970).

***Osmia cyanoxantha* Pérez, 1879**

Osmia cyanoxantha Pérez; Benoist (1931: 31): Corsica.

Remark. No specimen of *O. cyanoxantha* has been located in MNHN collections. We believe that the record of Benoist resulted from a misidentification.

***Osmia kohllei* Ducke, 1899**

Osmia kohllei Ducke; Ferton (1905: 59) [Misinterpretation, see Peters (1977)]: Bonifacio.

Remark. No such specimen is in Ferton's collection. The Corsican record has moreover been invalidated by Peters (1977) who consider this species to be restricted to southern Italy and Sicily. It also occurs in Malta according to Müller (2022a).

***Osmia lhotelleriei* Pérez, 1887**

Osmia fossoria Pérez; Ducke (1900: 127) [Misinterpretation]: Corsica.

Remark. *Osmia fossoria* Pérez, junior synonym of *O. lhotelleriei*, is restricted to North Africa and Levant (Müller 2022). The record of Ducke (1900) refers to *O. rufohirta*.

Types of Megachilid bees described from Corsica and housed at MNHN

Megachile argentata var. *fossoria* Ferton, 1909

Figs 35–38

Megachile argentata var. *fossoria* Ferton, 1909a: p.550. Corsica: Bonifacio, Propriano (Lectotype designated by Schwarz and Gusenleitner (2011), MNHN).

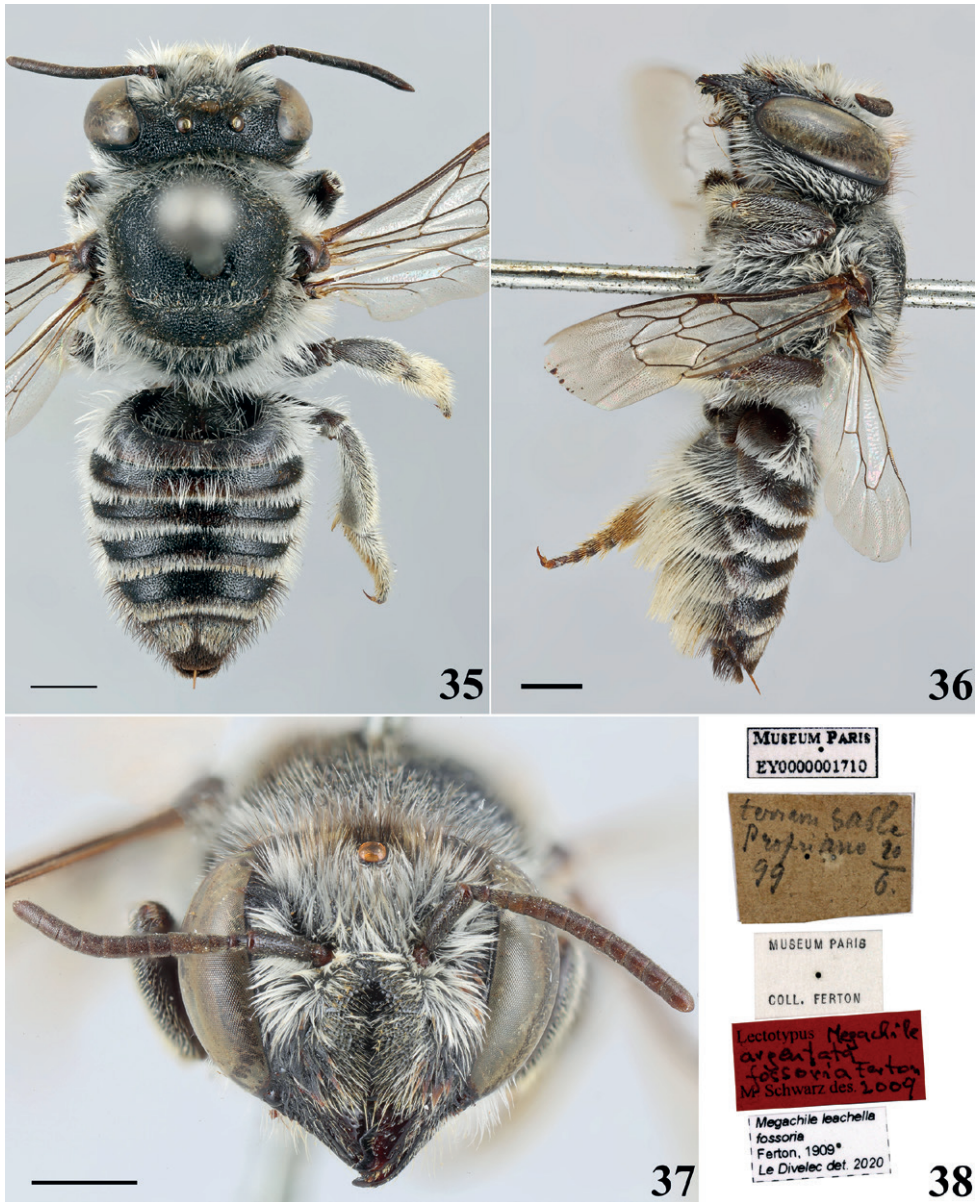
Type material examined. *Lectotype*: ♀, MNHN Paris EY0000001710 // Terrain sable Propriano 20/6 99 [20.VI.1899] // Museum Paris Coll. Ferton // *Lectotypus Megachile argentata fossoria* Ferton M. Schwarz des. 2009 // = *Megachile leachella fossoria* Ferton, 1909 Le Divelec det. 2020; *Paralectotypes*: ♀, MNHN Paris EY0000001711 // Bonifacio 4/6 99 [04.VI.1899] dans nid page 286 *Megachile* // Museum Paris Coll. Ferton // *Paralectotypus Megachile argentata fossoria* Ferton M. Schwarz des. 2009 // = *Megachile leachella fossoria* Ferton, 1909 Le Divelec det. 2020; ♀, MNHN Paris EY0000001712 // Bonifacio 18/7 97 [18.VII.1897] dans nid trou sable feuilles collées-miel liquide œuf baignant page 190 *argentata* // Museum Paris Coll. Ferton // *Paralectotypus Megachile argentata fossoria* Ferton M. Schwarz des. 2009 // = *Megachile leachella fossoria* Ferton, 1909 Le Divelec det. 2020.

Current status. *Megachile* (*Eutricharaea*) *leachella* Curtis, 1828.

Megachile lucidifrons Ferton, 1905

Megachile (*Chalicodoma*) *lucidifrons* Ferton, 1905: p.57, ♀. Corsica: Bonifacio (Type lost).

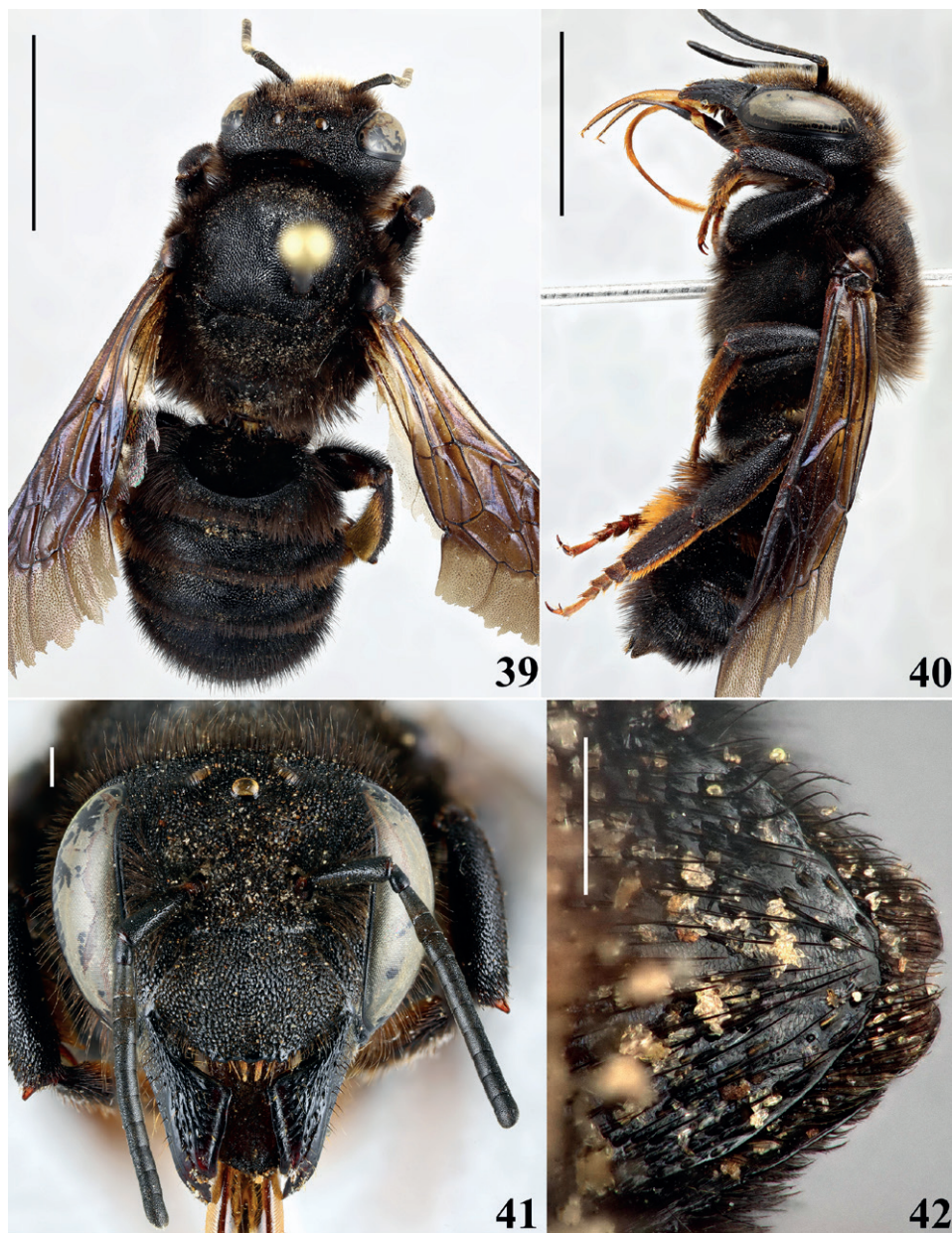
Remark. *Megachile lucidifrons* has been consistently listed in the works on French *Megachile* (Benoist 1935, 1940; Liongo Li Enkulu 1988; Rasmont et al. 1995) despite its uncertain identity (Ghisbain et al. 2023). It was described based on a single worn female from Bonifacio and belongs to the *lefebvrei* species-group (Benoist 1935). The holotype was last examined by Benoist (1940) but despite exhaustive research in MNHN collections and consultation of the loan logs, its whereabouts remain unknown. In a correspondence with B. Tkalců, who sought to borrow the holotype, J. Kelner-Pillault (former curator of the Hymenoptera collections) mentioned her inability to locate it. The type is also not present in B. Tkalců's collection (M. Schwarz, pers. comm.) and can be considered lost. A series of entirely black individuals of *Megachile* belonging to the *lefebvrei* species-group and matching the descriptions of Ferton (1905) and Benoist (1935) were collected in Corsica (Figs 39–42). No morphological differences were observed between these specimens and *M. albocristata*. Aside from the darker pilosity, the sculpture of the tegument, sterna, and genitalia is similar. The colour of the pilosity is highly variable in this subgenus



Figures 35–38. Lectotype of *Megachile argentata* var. *fossoria* Ferton **35** dorsal view **36** lateral view **37** head in front view **38** labels. Scale bars: 1 mm.

and cannot be relied upon for species differentiation. Consequently, we propose considering *M. lucidifrons* as a new junior synonym for *M. albocristata*.

Current status. – *Megachile* (*Chalicodoma*) *albocristata* Smith, 1853.

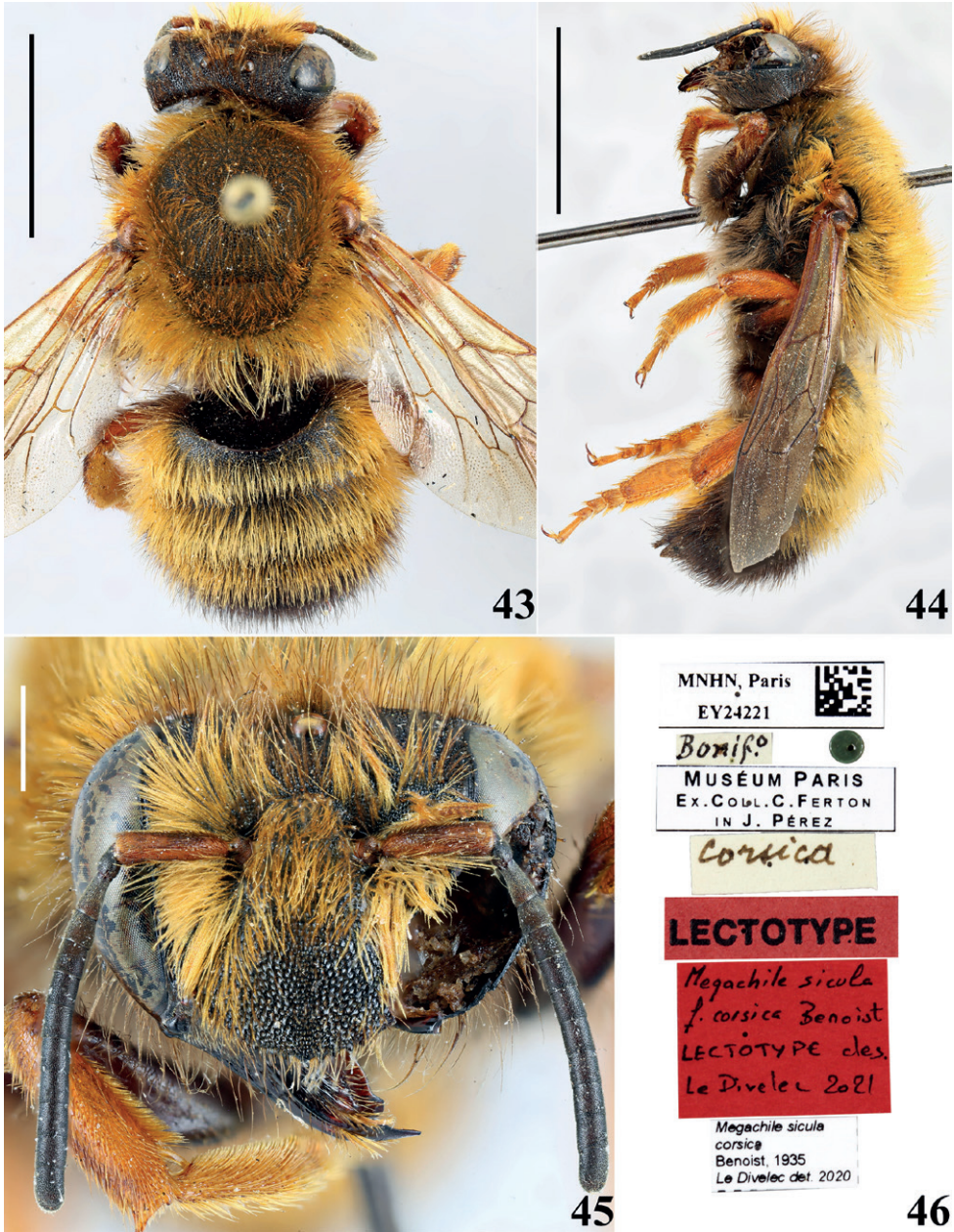


Figures 39–42. *Megachile albocristata* Smith (Corsica, Mausoléo) **39** dorsal view **40** lateral view **41** head in front view **42** sternum 6. Black Scale bars: 5 mm. White Scale bars: 0.5 mm.

***Megachile sicula* var. *corsica* Benoist, 1935**

Figs 43–46

Megachile sicula f. *corsica* Benoist, 1935: p.103. Locality not indicated (Lectotype here designated, MNHN).



Figures 43–46. Lectotype of *Megachile sicula* var. *corsica* Benoist **43** dorsal view **44** lateral view **45** head in front view **46** labels. Black Scale bars: 5 mm. White Scale bars: 1 mm.

Type material examined. *Lectotype*: ♀, MNHN, Paris EY24221 // Bonif^o [Bonifacio, Pérez's handwriting] // Muséum Paris Ex. Coll. C. Ferton in J. Pérez // *corsica* [Benoist's handwriting] // Lectotype // *Megachile sicula* f. *corsica* Benoist Lectotype des. Le Divelec 2021 // = *Megachile sicula corsica* Benoist, 1935 Le Divelec det. 2020; *Paralectotype*:

♂, MNHN, Paris EY24164 // Bonif^o [Bonifacio, Pérez's handwriting] // Ex. Coll. J. Pérez MNHN // Paralectotype // *Megachile sicula* f. *corsica* Benoist Paralectotype des. Le Divelec 2021 // = *Megachile sicula corsica* Benoist, 1935 Le Divelec det. 2020.

Remark. Benoist (1935) did not specify a locality in the original description but the taxon's name suggests it originates from Corsica. Benoist (1940) clarified the distribution of this taxon, indicating it is found in Bonifacio. Within Benoist's reference collection, there is a female and a male from Bonifacio, both labelled as "*corsica*" by Benoist himself. These specimens were acquired by Benoist from Pérez's collection, who, in turn, received them from C. Ferton. Other *M. sicula corsica* specimens in Benoist's collection originate from Ajaccio or Vivario. Notably, three specimens of Benoist's collection, borrowed by B. Tkalcù in 1965, have not been returned according to the loans log. However, they could not be located in Tkalcù's collection (M. Schwarz pers. comm.). Consequently, we designate the female from Bonifacio, labelled by Benoist, as the lectotype. Despite partial damage to the left eye, left mandible, and left leg from pests, the female is in overall good condition and perfectly matches the original description. The associated male from Bonifacio is chosen as paralectotype.

Current status. *Megachile* (*Chalicodoma*) *sicula corsica* Benoist, 1935.

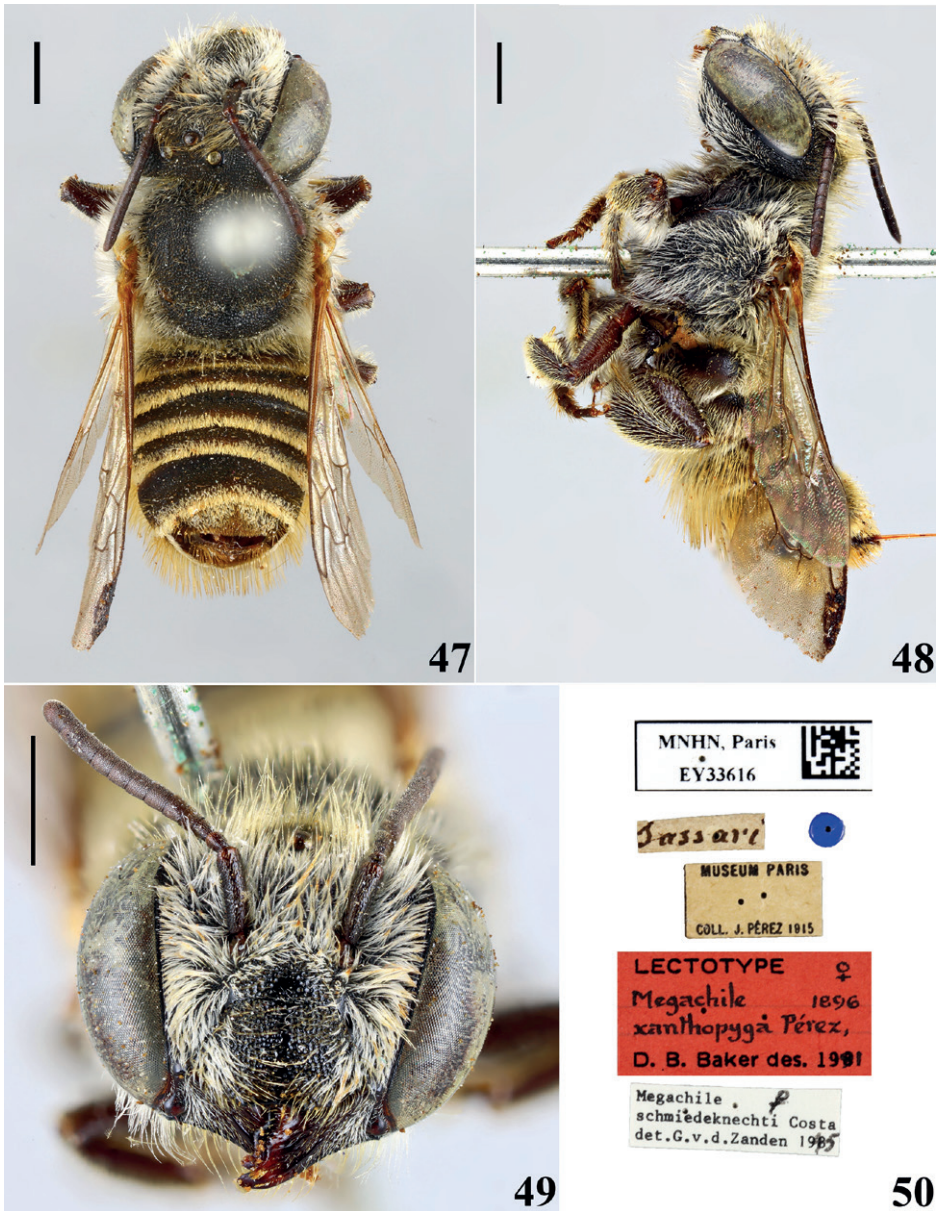
Megachile xanthopyga Pérez, 1895

Figs 47–50

Megachile xanthopyga Pérez, 1895: p.25, ♀♂. Locality not indicated (Lectotype designated by Praz and Bénon (2023), MNHN).

Type material examined. Lectotype: ♀, MNHN, Paris EY33616 // Sassari [Pérez's handwriting] // dark blue circle [May] // Museum Paris Coll. J. Pérez 1915 // Lectotype ♀ *Megachile xanthopyga* Pérez, 1896 D. B. Baker des. 1991 // *Megachile schmiedeknechti* Costa det. G. v. d. Zanden 1995; **Paralectotypes:** ♀, MNHN, Paris EY33617 // Sassari [Pérez's handwriting] // Museum Paris Coll. J. Pérez 1915 // Paralectotype ♀ *Megachile xanthopyga* Pér., 1896 D. B. Baker des. 1991 // *Megachile schmiedeknechti* Costa det. G. v. d. Zanden 1995; ♀, MNHN, Paris EY33618 // Sassari [Pérez's handwriting] // Museum Paris Coll. J. Pérez 1915 // Paralectotype ♀ *Megachile xanthopyga* Pér., 1896 D. B. Baker des. 1991 // *Megachile schmiedeknechti* Costa det. G. v. d. Zanden 1995; ♀, MNHN, Paris EY23891 // Bonifacio 15/8 [15.VIII., Ferton's label partly cut out] // Museum Paris Coll. J. Pérez 1915 // Paralectotype // *Megachile xanthopyga* J.P. Paralectotype des. Le Divelec 2021 // *Megachile schmiedeknechti* Costa det. G. v. d. Zanden 1995; ♀, MNHN, Paris EY23892 // Bonifacio 10/8 [10.VIII., Ferton's label partly cut out] // Museum Paris Coll. J. Pérez 1915 // Paralectotype // *Megachile xanthopyga* J.P. Paralectotype des. Le Divelec 2021 // *Megachile schmiedeknechti* Costa det. G. v. d. Zanden 1995; ♂, MNHN, Paris EY23894 // Bonifacio 30/7 [30.VII., Ferton's label partly cut out] // Museum Paris Coll. J. Pérez 1915 // Paralectotype // *Megachile xanthopyga* J.P. Le Divelec des. 2021.

Remark. No locality is specified in the original description. Pérez, in his original manuscript under *M. xanthopyga* (catalogue number 1732), mentions "Bonifacio, Sas-



Figures 47–50. Lectotype of *Megachile xanthopyga* Pérez **47** dorsal view **48** lateral view **49** head in front view **50** labels. Scale bars: 1 mm.

sari, ♀ mai-août, ♂ mai-juillet” (<https://science.mnhn.fr/catalogue/ey-bib-perez1/>). Praz and Bénon (2023) accepted and designated the Sardinian lectotype, along with two paralectotypes of *M. xanthopyga* labelled by D. Baker in 1991. Additionally, we have labelled as paralectotypes the three other specimens present under the *xanthopyga* head label in Pérez’s collection.

Current status. *Megachile (Eutricharaea) argentata schmiedeknechti* Costa, 1884.

***Osmia corsica* Ferton, 1901**

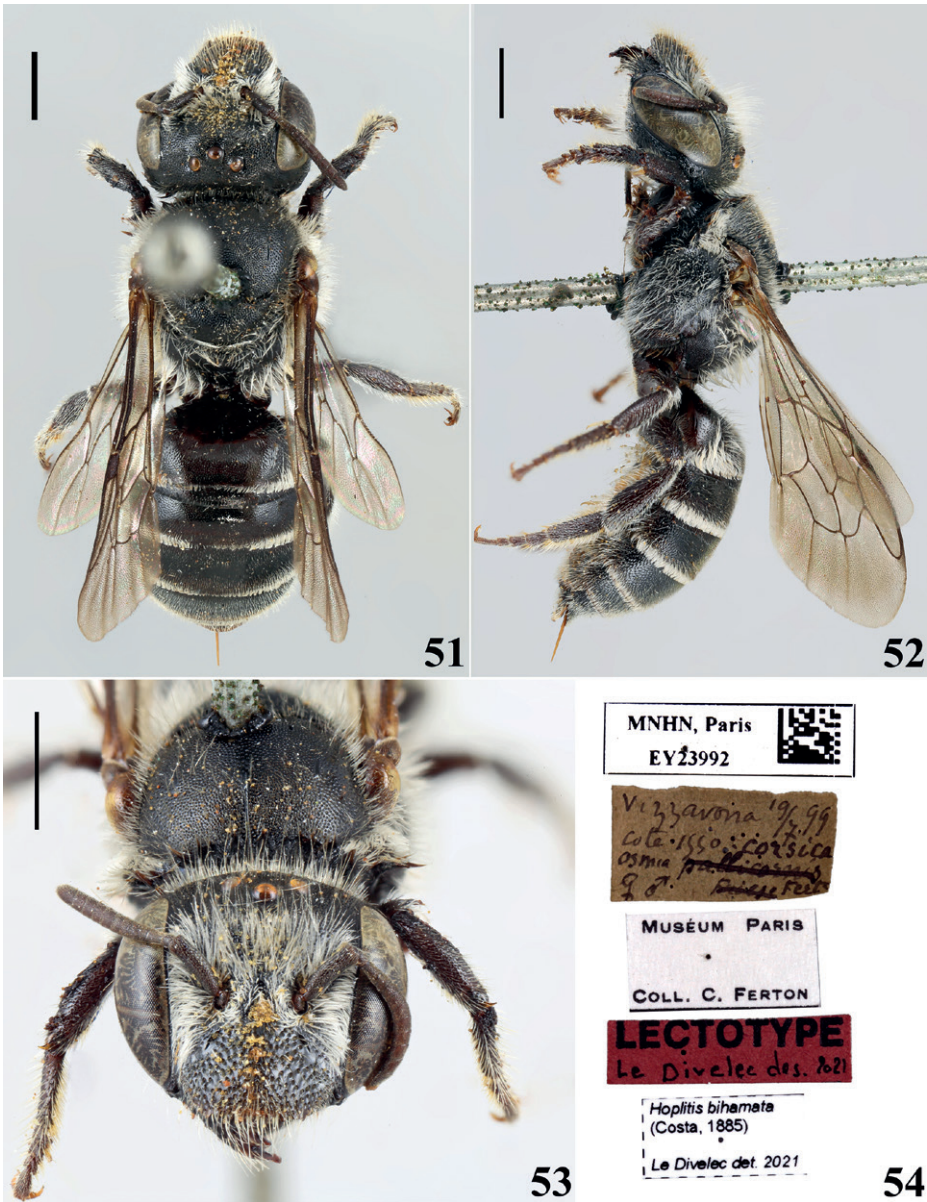
Figs 51–54

Osmia corsica Ferton, 1901: p.61, ♀♂. Corsica: Bonifacio, Monte Renoso (Lectotype here designated, MNHN).

Type material examined. Lectotype: ♀, MNHN, Paris EY23992 // Vizzavona 19/7 99 [19.VII.1899] cote 1550 [altitude] *Osmia corsica* Fert ♀♂ [the mention “*pallicornis* Friese” crossed out] // Muséum Paris Coll. C. Ferton // Lectotype Le Divelec des. 2021 // *Hoplitis bihamata* (Costa, 1885) Le Divelec det. 2021; **Paralectotypes:** ♀, MNHN, Paris EY23964 // Bonifacio 24/6 1900 [24.VI.1900] *corsica* Ferton ♀ // Muséum Paris Coll. C. Ferton // Paralectotype vdZ-1987 // Paralectotype valide Le Divelec 2021 // *Hoplitis bihamata* (Costa det. G. v. d. Zanden 1987 // *Hoplitis bihamata* (Costa, 1885) Le Divelec det. 2021; ♀, MNHN, Paris EY23968 // *Osmia corsica* Ferton ♀ Trinité (Bonifacio) 24/6 1900 [24.VI.1900] // Muséum Paris Coll. J. Vachal 1911 // Ex. Coll. C. Ferton // Paralectotype vdZ-1986 // Paralectotype valide Le Divelec 2021 // *Hoplitis bihamata* (Costa det. G. v. d. Zanden 1986 // *Hoplitis bihamata* (Costa, 1885) Le Divelec det. 2021; ♂, MNHN, Paris EY23972 // Vizzavona 19/7 1899 [19.VII.1899] cote 1550 [altitude] *Osmia corsica* ♂ // Muséum Paris Coll. C. Ferton // Paralectotype // *Osmia corsica* Ferton Paralectotype des. Le Divelec 2021 // *Hoplitis bihamata* (Costa, 1885) Le Divelec det. 2021; ♂, MNHN, Paris EY23982 // Bonifacio (Trinité) 17/6 00 [17.VI.1900] ♂ *corsica* [the mention “*pallicornis*” crossed out] // Muséum Paris Coll. C. Ferton // Paralectotype // *Osmia corsica* Fert. Paralectotype des. Le Divelec 2021 // *Hoplitis bihamata* (Costa, 1885) Le Divelec det. 2021; ♀, MNHN, Paris EY23994 // Fermant nid 19/7 99 [19.VII.1899] Vizzavona 1550 [altitude] *Osmia corsica* Fert. [the mention “*pallicornis* Friese” crossed out, four legs glued on the label] // Muséum Paris Coll. C. Ferton // Paralectotype // *Osmia corsica* Ferton Paralectotype des. Le Divelec 2021 // *Hoplitis bihamata* (Costa, 1885) Le Divelec det. 2021; ♀, MNHN, Paris EY23999 // Muséum Paris Bonifacio (Trinité) 17-6-1900 [17.VI.1900] Coll. C. Ferton // Paralectotype // *Osmia corsica* Ferton Paralectotype des. Le Divelec 2021 // *Hoplitis bihamata* (Costa, 1885) Le Divelec det. 2021; ♀, MNHN, Paris EY24001 // Muséum Paris Bonifacio (Trinité) 17-6-1900 [17.VI.1900] Coll. C. Ferton // Paralectotype // *Osmia corsica* Ferton Paralectotype des. Le Divelec 2021 // *Hoplitis bihamata* (Costa, 1885) Le Divelec det. 2021; ♀, MNHN, Paris EY24002 // Muséum Paris Bonifacio (Trinité) 17-6-1900 [17.VI.1900] Coll. C. Ferton // Paralectotype // *Osmia corsica* Ferton Paralectotype des. Le Divelec 2021 // *Hoplitis bihamata* (Costa, 1885) Le Divelec det. 2021.

Remark. An unpublished lectotype and some paralectotypes were labelled by G. v. d. Zanden in the eighties. He randomly selected specimens of *H. bihamata* in Ferton’s collection. Therefore, his lectotype is not part of the type series and cannot be accepted. We have designated one female in good condition as lectotype and selected 8 specimens collected by C. Ferton in the granitic part of Bonifacio (e.g. La Trinité) and in the Monte Renoso as paralectotypes, in accordance with the original description information.

Current status. *Hoplitis* (*Hoplitis*) *bihamata* (Costa, 1885).



Figures 51–54. Lectotype of *Osmia corsica* Ferton **51** dorsal view **52** lateral view **53** head in front view **54** labels. Scale bars: 1 mm.

Osmia erythrogastra Ferton, 1905

Figs 55–58

Osmia erythrogastra Ferton, 1905: p.57, ♀♂. Corsica: Bonifacio, Santa-Manza (Lectotype here designated, MNHN).



Figures 55–58. Lectotype of *Osmia erythrogastra* Ferton **55** dorsal view **56** lateral view **57** head in front view **58** labels. Scale bars: 1 mm.

Type material examined. Lectotype: ♂, Museum Paris EY0000002285 // Bonifacio 26/6 04 [26.VI.1904] *erythrogastra* Ferton ♂ // Museum Paris Corse Bonifacio C. Ferton 1902 // Lectotype Le Divelec des. // *Os. Erythrogastra* Ferton, 1905 Lectotype des. Le Divelec 2021 // *Osmia erythrogastra* Ferton, 1905 Le Divelec det. 2021;

Paralectotypes: ♀, Museum Paris EY0000002284 // Bonifacio 26/6 04 [26.VI.1904] *erythrogastra* Ferton ♀ // Museum Paris Corse Bonifacio C. Ferton 1902 // *Anthocopa erythrogastra* (Ferton) ♀ det. G. v. d. Zanden 1987 // Paralectotype // *Os. Erythrogastra* Ferton, 1905 Paralectotype des. Le Divelec 2021 // *Osmia erythrogastra* Ferton, 1905 Le Divelec det. 2021; ♂, MNHN, Paris EY23930 // Bonifacio 26/6 04 [26.VI.1904] // Museum Paris Corse Bonifacio C. Ferton 1902 // Paralectotype // *Os. Erythrogastra* Ferton, 1905 Paralectotype des. Le Divelec 2021 // *Osmia erythrogastra* Ferton, 1905 Le Divelec det. 2021.

Remark. Ferton described this species based on four females and six males collected in the granitic area of Santa Manza on the June 26, 1904. Only two males and one female of this type series have been located. We designate as lectotype one male in good condition and bearing an original label.

Current status. *Osmia* (*Erythrosmia*) *erythrogastra* Ferton, 1905.

***Osmia lanosa* Pérez, 1879**

Figs 59–62

Osmia lanosa Pérez, 1879: p.194, ♀. Algeria and Southern France (Lectotype here designated, MNHN).

Type material examined. Lectotype: ♀, MNHN, Paris EY33613 // M'pèl' [Montpellier] // green disc [June] // 1850 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 // Lectotype Le Divelec des. 2021 // *Osmia lanosa* Pérez Le Divelec des. 2021 // *Hoplitis bisulca* (Gerstäcker, 1869) Le Divelec det. 2021; **Paralectotypes:** ♀, MNHN, Paris EY24179 // Bonifacio [cut out Ferton's label] // green disc [June] // 1850 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 // Paralectotype // *Osmia lanosa* Pérez Paralectotype des. Le Divelec des. 2021 // *Hoplitis bisulca* (Gerstäcker, 1869) Le Divelec det. 2021; ♀, MNHN, Paris EY24180 // Bonifacio [cut out Ferton's label] // green disc [June] // 1850 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 // Paralectotype // *Osmia lanosa* Pérez Paralectotype des. Le Divelec des. 2021 // *Hoplitis bisulca* (Gerstäcker, 1869) Le Divelec det. 2021; ♀, MNHN, Paris EY33605 // Alg. [Algeria] // 1850 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 // Paralectotype // *Osmia lanosa* Pérez Paralectotype des. Le Divelec des. 2021; ♀, MNHN, Paris EY33606 // Marsr^{le} [Marseille] // 1850 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 // Paralectotype // *Osmia lanosa* Pérez Paralectotype des. Le Divelec des. 2021 // *Hoplitis bisulca* (Gerstäcker, 1869) Le Divelec det. 2021; ♀, MNHN, Paris EY33607 // Marsr^{le} [Marseille] // 1850 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 // Paralectotype // *Osmia lanosa* Pérez Paralectotype des. Le Divelec des. 2021 // *Hoplitis bisulca* (Gerstäcker, 1869) Le Divelec det. 2021; ♀, MNHN, Paris EY33608 // Marsr^{le} [Marseille] // 1850 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 // Paralectotype // *Osmia lanosa* Pérez Paralectotype des. Le Divelec des. 2021 // *Hoplitis bisulca* (Gerstäcker, 1869) Le Divelec det. 2021; ♀, MNHN, Paris EY33609 // Marsr^{le} [Marseille] // green disc [June] // 1850 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 //



Figures 59–62. Lectotype of *Osmia lanosa* Pérez **59** dorsal view **60** lateral view **61** head in front view **62** labels. Scale bars: 1 mm.

Paralectotype // *Osmia lanosa* Pérez Paralectotype des. Le Divelec des. 2021 // *Hoplitis bisulca* (Gerstäcker, 1869) Le Divelec det. 2021; ♀, MNHN, Paris EY33610 // Marsr^{le} [Marseille] // 1850 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 //

Paralectotype // *Osmia lanosa* Pérez Paralectotype des. Le Divelec des. 2021 // *Hoplitis bisulca* (Gerstäcker, 1869) Le Divelec det. 2021; ♀, MNHN, Paris EY33611 // Marsr^{le} [Marseille] // 1850 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 // Paralectotype // *Osmia lanosa* Pérez Paralectotype des. Le Divelec des. 2021 // *Hoplitis bisulca* (Gerstäcker, 1869) Le Divelec det. 2021; ♀, MNHN, Paris EY33612 // Marsr.^{le} [Marseille] // green disc [June] // 1850 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 // Paralectotype // *Osmia lanosa* Pérez Paralectotype des. Le Divelec des. 2021 // *Hoplitis bisulca* (Gerstäcker, 1869) Le Divelec det. 2021.

Remark. More information about the type localities can be found in Pérez's manuscript catalogue (<https://science.mnhn.fr/catalogue/ey-bib-perez1/>): “Connue dans le midi oriental de la France et en Barbarie, en Corse, en Espagne. Montpellier. Marseille. Bonifacio. Barcelone. Vole en juin”. In accordance with this information, we have selected the lectotype and 11 paralectotypes among the specimens under the *lanosa* head label in Pérez's collection. The female lectotype here designated is in good condition and matches with the current species concept of *H. bisulca*.

Current status. *Hoplitis (Anthocopa) bisulca* (Gerstäcker, 1869).

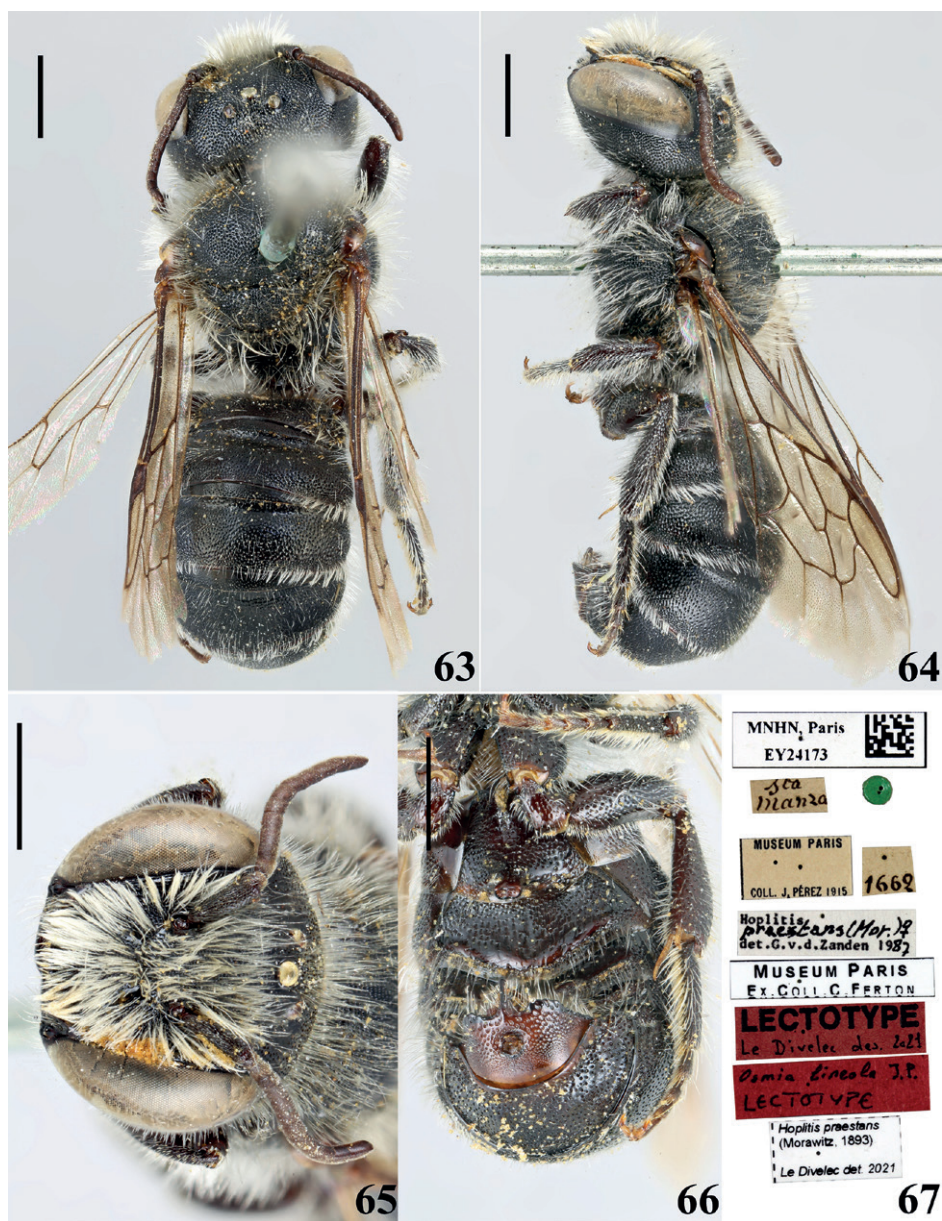
Osmia lineola Pérez, 1895

Figs 63–67

Osmia lineola Pérez, 1895: p.16, ♀♂. Locality not indicated (Lectotype here designated, MNHN).

Type material examined. Lectotype: ♂, MNHN, Paris EY24173 // S^{ta}Manza [Bonifacio, Santa-Manza] // green disc [June] // 1662 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 // Museum Paris Ex. Coll. C. Ferton // Lectotype Le Divelec des. 2021 // *Osmia lineola* J.P. Lectotype // *Hoplitis praestans* (Mor.) ♀ det. G. v. d. Zanden 1987 // *Hoplitis praestans* (Morawitz, 1893) Le Divelec det. 2021; **Paralectotypes:** ♀, MNHN, Paris EY24172 // Bonif.^o [Bonifacio] // green disc [June] // 1662 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 // Museum Paris Ex. Coll. C. Ferton // Paralectotype // *Osmia lineola* J.P. Paralectotype des. Le Divelec 2021 // *Hoplitis praestans* Mor. ♀ det. G. v. d. Zanden 1986 // *Hoplitis praestans* (Morawitz, 1893) Le Divelec det. 2021; ♂, MNHN, Paris EY33604 // Mars^{le} [Marseille] // 439 // 1662 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 // Paralectotype // *Osmia lineola* J.P. Paralectotype des. Le Divelec 2021 // *Hoplitis praestans* Mor. ♂ det. G. v. d. Zanden 1986 // *Hoplitis praestans* (Morawitz, 1893) Le Divelec det. 2021; ♀, MNHN, Paris EY33614 // Tibériade // *modesta* Ab. Tib. N°467 // 1662 [Pérez's catalogue number] // Museum Paris Coll. J. Pérez 1915 // Paralectotype // *Osmia lineola* J.P. Paralectotype des. Le Divelec 2021 // *Hoplitis praestans* (Mor.) ♀ det. G. v. d. Zanden 1986 // *Hoplitis praestans* (Morawitz, 1893) Le Divelec det. 2021.

Remark. Additional details regarding the type localities can be accessed in Pérez's manuscript catalogue (<https://science.mnhn.fr/catalogue/ey-bib-perez1/>): “♀ Tibéria-de (Abeille de Perrin). ♀ Bonifacio, Juin (Ferton), butinant sur le *Centaurea suaveolens*



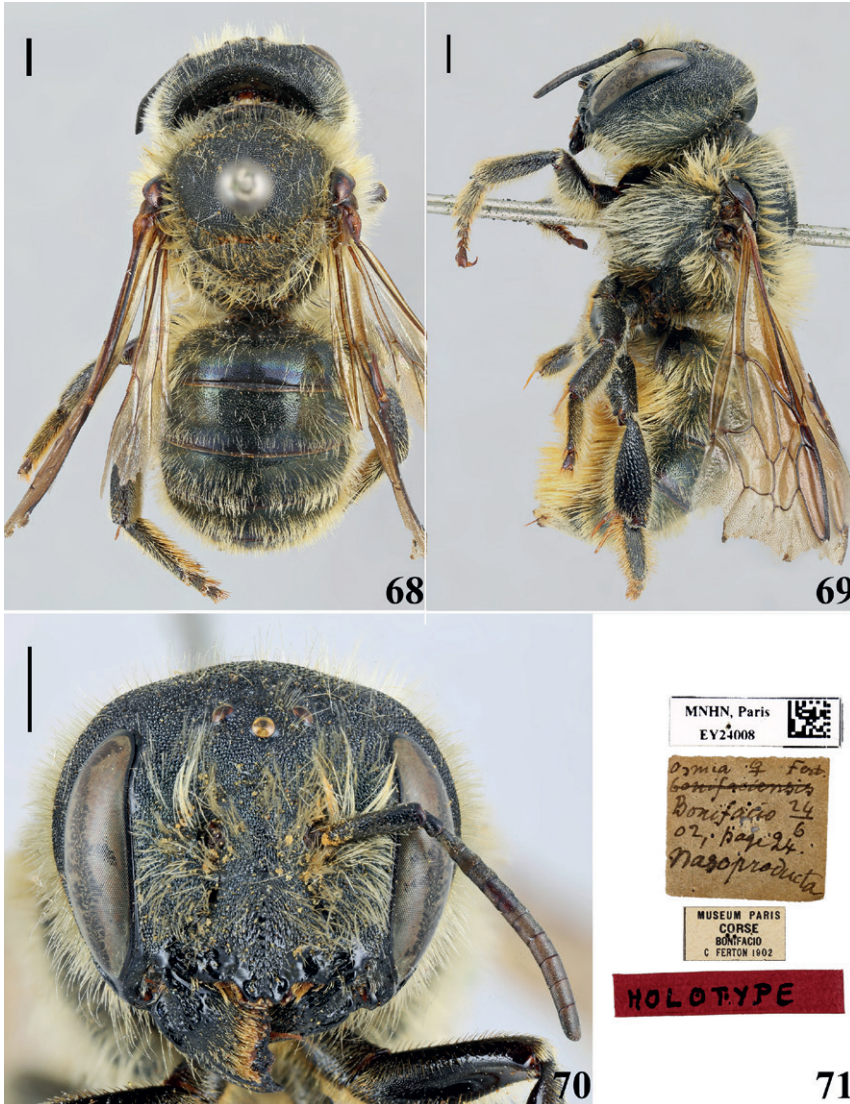
Figures 63–67. Lectotype of *Osmia lineola* Pérez **63** dorsal view **64** lateral view **65** head in front view **66** gaster in ventral view **67** labels. Scale bars: 1 mm.

(Ferton). ♂ Marseille et Corse (Santa-Manza)”. Within Pérez’s collection, only four specimens are located under the “*lineola*” head label, with two originating from Corsica (Ferton leg.). These specimens align with both the manuscript information and the original description. The male from Corsica in the best condition is designated as the lectotype, while the three remaining individuals are labelled as paralectotypes.

Current status. *Hoplitis (Alcidamea) praestans* (Morawitz, 1893).

***Osmia nasoproducta* Ferton, 1909**

Figs 68–71

Osmia nasoproducta Ferton, 1909b: p.406, ♀. Corsica: Bonifacio (Holotype, MNHN).**Type material examined. Holotype:** ♀, MNHN, Paris EY24008 // *Osmia* ♀ Fert. [the mention “*bonifaciensis*” crossed out] Bonifacio 24/06 02 [24.VI.1902], page 24 *nasoproducta* // Museum Paris Corse Bonifacio C. Ferton 1902 // Holotype.**Current status.** *Osmia* (*Helicosmia*) *nasoproducta* (Ferton, 1909).

Figures 68–71. Lectotype of *Osmia nasoproducta* Ferton **68** dorsal view **69** lateral view **70** head in front view **71** labels. Scale bars: 1 mm.

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