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First checklist of halictid bees (Hymenoptera: Apoidea, Anthophila, Halictidae) of Tunisia

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ABSTRACT. The first checklist of halictid bees (Hymenoptera: Halictidae) in Tunisia is established based on available data in the literature. This list contains 114 species belonging to four subfamilies (Halictinae Thomson; Nomiinae Robertson; Nomioidinae Börner; Rophitinae Schenck) and nine genera. The genus *Lasioglossum* Curtis within the subfamily Halictinae is the most diverse with 51 species and subspecies. The highest number of species is reported in the Tunisian south region with 51 species and subspecies. For each species, the global and provincial distribution in Tunisia is given based on the relevant literature. 40 taxa are without specific locality in Tunisia and confirmation of their presence in the country is needed. All reported species from Tunisia are Palearctic and more than 20% of them have an exclusive north African distribution and among them, five species are endemic to Tunisia. This study is an initiative for further research on local wild bee faunas aiming to suggest their conservation strategies.

Key words: Apocrita, distribution, endemic, list, North Africa, sweat bees, wild bees

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INTRODUCTION

Halictidae Thomson, 1869 is a family of wild bees belonging to the superfamily Apoidea and the group of Anthophila. Worldwide this family has more than 3500 species representing so 17.5 % of the total wild bee fauna (Michener, 2007; Michez et al., 2019; Ascher & Pickering, 2023). Historically, the classification of Halictidae has been subjected to many changes, for example, Robertson (1904) considered Nomiinae as a separate family within the family Halictidae and the *Dufourea*, *Halictoides* and *Rophites* constitute the family Dufoureae. Later, Warncke (1977) considered the family Halictidae as a subfamily belonging to the Andrenidae. However, recent works use the classification of Michener (2007) and Danforth et al. (2008) who divided halictid bees into four subfamilies (Halictinae Thomson, 1869; Nomiinae Robertson, 1904; Nomioidinae Börner, 1919; Rophitinae Schenck, 1866). Halictinae is the most species-diversified subfamily, with more than 80% of Halictidae species (Chichoune et al., 2018) distributed throughout all continents, except the tribe Augochlorini, which is recorded only in America.

Members of the family Halictidae are short-tongued and they differ from nearly all wasps in their dependence on pollen collected from flowers as a protein source to feed their larvae. Together with other bee families, they are important for the sustainability of terrestrial ecosystems owing to their critical role in pollination. Indeed, among the 107 global crops important for the world market investigated by Klein and colleagues (Klein et al. 2007), 90 of them are visited by bees, thus underlining bees as the most important group of pollinators. It is then of great interest to study the sexual

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reproduction of angiosperms through the investigation of bees, towards improving the productivity of cultivated crops and maintaining the biodiversity of wild plants.

In Europe, halictids have received much attention, both in faunistic and taxonomic studies, such as the studies done by Pauly (2016a, 2016b, 2016c, 2016d, 2016e), and Pauly and Patiny (2015). Also, Bogush and Straka (2012) reviewed the nomenclature and characteristics of *Sphcodes* bees of central Europe. More recently, Michez et al. (2019) presented a general overview of European wild bees, while Ghisbain et al. (2023) provided an update to the European checklist of wild bees. However, in North African countries, there is a paucity of studies on the wild bee fauna in general, as well as those specifically on the Halictidae family, with discrepancies in the contributions from member countries. In Algeria, for example, studies on wild bees are more advanced than in Tunisia. In fact, in the framework of their works on pollination and pollinators, Algerian researchers have reported new halictid species and confirmed the presence of some others. For instance, Louadi (1999) reported four species and subspecies of *Halictus* and *Lasioglossum* as new for Algerian fauna; Louadi et al. (2007) recorded four species of halictid bees in Constantine; Louadi et al. (2008) established a list containing 60 species of the Halictidae family in eastern Algeria; and recently Chichoune et al. (2018) provided new data on halictid bees in the Batna region of eastern Algeria. Similarly, in Morocco, the monograph about the wild bees of Morocco established by Lhomme et al. (2020) stands as the most famous and recently completed work from a North African country. The monograph included more than 960 wild bee species, from amongst which 144 are halictids of Moroccan fauna.

Contrastingly, in Tunisia, despite their importance in the maintenance of the ecological balance and the conservation of biodiversity, halictids have received little to no attention in faunal and systematic studies. Indeed, most of the records about Tunisian halictids are found in the studies carried out by foreign researchers. The first record of halictid bees in Tunisia was by Pérez (1895), who reported the *Halictus senilis* (Eversmann, 1852) from Sfax in his description of new wild bees from Barbaria. After 1895, some other faunistic studies on Apiformes and Spheciformes related to North Africa followed. For example, Graeffe (1906) and Schulthess (1924) reported for the first time new taxa for Tunisian Apiformes fauna including halictid bees. In the same period, Blüthgen (1923c, 1924c) described three new species of the genus *Lasioglossum* (Curtis, 1833) from Tozeur province of Southern Tunisia. Between 1923 and 1935, Blüthgen reported new records for Tunisian fauna of the *Halictus* and *Lasioglossum* genera in his multiple contributions to the knowledge of Halictidae species in the Palaearctic region. Between 1976 and 2015, in his faunistic and taxonomic studies, Ebmer (1976a, 1976b, 1984, 1985, 2014, 2015) described new species of *Dufourea* which are of Tunisian origin, designated a Tunisian neotype for *Lasioglossum bimaculatum*, and reported new records of the *Halictus* and *Lasioglossum* genera. Also, Warncke (1992) reported some records of the *Sphcodes* genus from Tunisia in his taxonomic revisions of west Palaearctic species. In their monograph on the subfamily *Nomioidinae* in Africa, Pesenko and Pauly (2005) reported some new records of the genus *Ceylactis* and *Nomoioides* from Tunisia.

As can be observed from the foregoing, records of Halictidae in Tunisia are fragmented, and contained in few studies by foreign researchers. Evidently, comprehensive studies on this important fauna are sorely lacking. For this reason, this study is a continuation of the investigation started by Ben Khedher et al. (2022), with the aim of contributing to the knowledge of wild bees in Tunisia. The author's purpose is to examine all available data in the literature for curating a list of the species of the family Halictidae in Tunisia. The present work is an updated list of the family Halictidae, which have been recorded from Tunisia.

MATERIAL AND METHODS

The presented checklist contains valid names, and distribution in Tunisia and the world for each species. References to records from Tunisian provinces (Fig. 1) are given chronologically and provinces are organized alphabetically. General distribution in the world for species is based essentially on Ascher & Pickering (2023), but also studies such as Pauly (2015, 2016a, 2016b, 2016c, 2016d, 2016e, 2017a, 2017b), Pauly and Patiny (2015), and Lhomme et al. (2020) are used. Synonyms of species or subspecies are

provided if available. “no specific locality” is written when the recorded province is not found. Classification of taxa follows Ascher and Pickering (2023). Species and subspecies within genera and subgenera are ordered alphabetically. When available, the depository of types materials of the reported species are given and indicated by acronyms as follows: **EBM** - Private collection of Andreas Werner Ebmer, Linz, Austria; **FUSAG** - Faculté des Sciences Agronomiques de l’Etat, Zoologie Générale, Gembloux, Belgium; **IZK** - Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Krakow, Poland; **MNCN** - Museo Nacional de Ciencias Naturales, Madrid; **MNHN** - Muséum National d’Histoire Naturelle Paris, France; **MNHUB** - Museum für Naturkunde der Humboldt Universität zu Berlin, Germany; **MRSNT** - Museo Regionale di Scienze Naturali di Torino, Turin, Italy; **MZLU** - Lund University, Lund, Sweden; **NHMUK** - Natural History Museum, London, United Kingdom; **NMW** - Naturhistorisches Museum, Wien, Austria; **OUM** - University Museum, Oxford; **OÖLM/PCKW** - Oberösterreichisches Landesmuseum, Linz, Austria/Private collection of Klaus Warncke; **PCA** - Private collection of Alfken; **PCD** - Private collection of Dours; **RBINS** - Royal Belgian Institute of Natural Sciences, Brussels, Belgium; **ZISP** - Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia; **ZMHU** - Zoological Museum, Helsinki University, Helsinki, Finland; **ZMMU** - Zoological Museum, Moscow University, Moscow, Russia; **ZMUK** - Zoological Museum, University of Copenhagen, Copenhagen, Denmark.

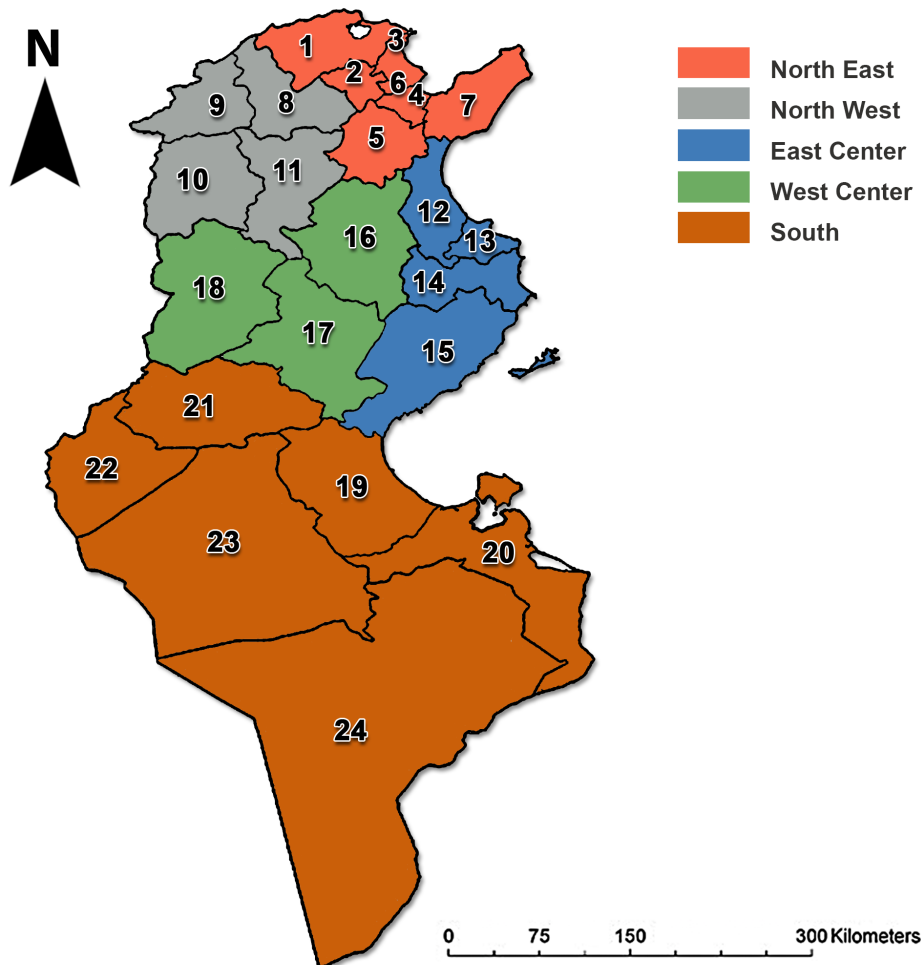


Figure 1. Provinces of Tunisia: **1.** Bizerte; **2.** Mannouba; **3.** Ariana; **4.** Ben Arous; **5.** Zaghouan; **6.** Tunis; **7.** Nabeul; **8.** Beja; **9.** Jendouba; **10.** Le Kef; **11.** Siliana; **12.** Sousse; **13.** Monastir; **14.** Mahdia; **15.** Sfax; **16.** Kairouan; **17.** Sidi Bouzid; **18.** Kasserine; **19.** Gabes; **20.** Medenine; **21.** Gafsa; **22.** Tozeur; **23.** Kebili; **24.** Tataouine.

RESULTS

Taxonomic hierarchy

Class Insecta Linnaeus, 1758

Order Hymenoptera Linnaeus, 1758

Superfamily Apoidea Latreille, 1802

Family Halictidae Thomson, 1869

Subfamily Halictinae Thomson, 1869

Genus *Halictus* Latreille, 1804

***Halictus (Argalictus) senilis* (Eversmann, 1852)**

Hylaeus senilis Eversmann, 1852:38, Lectotype ♀. - ZISP.

Distribution in Tunisia. Sfax (Pérez, 1895), Gafsa, Tozeur (Schulthess, 1924), Gabes (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Afghanistan, Azerbaijan, China, Cyprus, Georgia, Iran, Iraq, Jordan, Kyrgyzstan, Mongolia, Occupied Palestine, Russia, Spain, Turkmenistan, Türkiye, Ukraine, Uzbekistan, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Ascher & Pickering, 2023); Oriental (Pakistan - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Pérez (1895) as *Halictus albarius* Pérez, 1895.

***Halictus (Halictus) brunnescens* (Eversmann, 1852)**

Hylaeus brunnescens Eversmann, 1852:36, Lectotype ♀. - ZISP.

Distribution in Tunisia. Jendouba (Pesenko, 2005).

Global distribution. Palaearctic (Austria, Azerbaijan, Czechoslovakia, France, Georgia, Iran, Hungary, Kazakhstan, Kyrgyzstan, North China, Occupied Palestine, Russia, Spain, Turkmenistan, North Africa: Algeria, Egypt, Morocco, Tunisia - Pauly et al., 2016); Oriental (North India, Pakistan - Pauly et al., 2016).

***Halictus (Halictus) rufipes* (Fabricius, 1793)**

Andrena rufipes Fabricius, 1793:308.

Distribution in Tunisia. Jendouba (Ascher & Pickering, 2023).

Global distribution. North Africa (Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

***Halictus (Hexataenites) fulvipes* (Klug, 1817)**

Hylaeus fulvipes Klug in Germar, 1817:265, Holotype ♂. Neotype. - MNHUB.

Distribution in Tunisia. Kasserine, Nabeul (Schulthess, 1924), Gafsa (Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Canary Islands, France, Italy, Portugal, Spain, North Africa: Algeria, Morocco, Tunisia - Pauly et al., 2016).

***Halictus (Hexataenites) scabiosae* (Rossi, 1790)**

Apis scabiosae Rossi, 1790:105, Holotype ♂.

Distribution in Tunisia. Jendouba (Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (from Morocco to Rhodes and Bosphorus, on the Atlantic part until Belgium and Jersey Island, Türkiye - Pauly et al., 2016).

***Halictus (Monilapis) tetrazonius* (Klug, 1817)**

Hylaeus tetrazonius Klug in Germar, 1817:65, Holotype ♀. - MNHUB.

Distribution in Tunisia. Tunis (Graeffe, 1906), Gafsa (Schulthess, 1924).

Global distribution. Palaearctic (Algeria, Austria, Bulgaria, Croatia, France, Georgia, Iran, Italy, Hungary, Macedonia, Moldova, Occupied Palestine, Romania, Slovenia, Türkiye, Ukraine - Ascher & Pickering, 2023; Tunisia - Graeffe, 1906; Schulthess, 1924).

***Halictus (Mucoreohalictus) indefinitus* Blüthgen, 1923**

Halictus indefinitus Blüthgen, 1923:313, Holotype ♀. - NMW.

Distribution in Tunisia. Gabes (Ebmer, 1976b), no specific locality (Pesenko, 2006).

Global distribution. Palaearctic (China, Iran, Kazakhstan, Mongolia, Tajikistan, Turkmenistan - Ascher & Pickering, 2023; North Africa: Tunisia - Ebmer, 1976b; Pesenko, 2006).

Remarks. This species was recorded from Tunisia by Ebmer (1976b) under the subgenus *Vestitohalictus* Blüthgen, 1961 and by Pesenko (2006) as *Seladonia (Mucoreohalictus) indefinita* (Blüthgen, 1923).

***Halictus (Mucoreohalictus) nigricutis* Warncke, 1975**

Halictus cypricus nigricutis Warncke, 1975:120, Holotype ♀.

Distribution in Tunisia. Tataouine (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Jordan, Iran, Türkiye, North Africa: Tunisia - Ascher & Pickering, 2023).

***Halictus (Mucoreohalictus) pollinosus thevestensis* Pérez, 1903**

Halictus thevestensis Pérez, 1903:42, Holotype ♀. Lectotype. - MNHN.

Distribution in Tunisia. no specific locality (Ebmer, 1988).

Global distribution. Western Palaearctic (North Africa, Morocco to Tunisia - Ebmer, 1988; Pauly, 2016c).

Remarks. This subspecies was recorded from Tunisia by Ebmer (1988) under the subgenus *Vestitohalictus* Blüthgen, 1961.

***Halictus (Patyhalictus) albozonatus* Dours, 1872**

Halictus albozonatus, Dours, 1872:302, Types ♀, ♂. PCD.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. North Africa (Algeria, Tunisia - Ascher & Pickering, 2023).

***Halictus (Patyhalictus) constantinensis* Strand, 1910**

Halictus tetrazonius constantinensis Strand, 1910:215, Holotype ♂. - MNCN.

Distribution in Tunisia. Gafsa, Sfax, Tunis (Blüthgen, 1923b; Schulthess, 1924).

Global distribution. North Africa (Algeria, Morocco - Pauly et al., 2016; Tunisia - Blüthgen, 1923b; Schulthess, 1924).

***Halictus (Patyhalictus) mediterraneus* Strand, 1909**

Halictus mediterraneus Strand, 1909:43, Holotype ♂. - MNHUB.

Distribution in Tunisia. no specific locality (Blüthgen, 1923a).

Global distribution. Western Palaearctic (Italy: Sicily - Pauly et al., 2016; North Africa: Tunisia - Blüthgen, 1923a).

***Halictus (Protohalictus) rubicundus* (Christ, 1791)**

Apis rubicunda Christ, 1791:109, Holotype ♀.

Distribution in Tunisia. no specific locality (Graeffe, 1906; Ascher & Pickering, 2023).

Global distribution. Holarctic (North Africa, Europe, Asia, North America - Pauly et al., 2016; Ascher & Pickering, 2023).

***Halictus (Seladonia) gemmellus* (Pauly, 2015)**

Seladonia gemmella Pauly, 2015:271, Holotype ♂. - RBINS.

Distribution in Tunisia. Gafsa, Sousse (Pauly et al., 2015).

Global distribution. Western Palaearctic (France, Spain, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Pauly et al. (2015) as *Seladonia gemmella* (Pauly, 2015).

***Halictus (Seladonia) gemmeus* Dours, 1872**

Halictus gemmeus Dours, 1872:310, Syntypes ♀, ♂. - IZK.

Distribution in Tunisia. no specific locality (Graeffe, 1906; Blüthgen, 1923c; Ebmer, 2014; Ascher & Pickering, 2023).

Global distribution. West Mediterranean (Pauly, 2016d).

***Halictus (Seladonia) lucidipennis* Smith, 1853**

Halictus lucidipennis Smith, 1853:62, Syntypes ♀, ♂. - NHMUK.

Distribution in Tunisia. Tozeur (Schulthess, 1924).

Global distribution. Palaearctic and Afrotropical (from Cape Verde to Northern Thailand, in Africa South to Kenya; widespread in deserts of old world - Pauly, 2016d).

Remarks. This species was recorded from Tunisia by Schulthess (1924) as *Halictus dives* Pérez, 1895 and by Pesenko (2006) as *Seladonia (Seladonia) lucidipennis* (Smith, 1853).

***Halictus (Seladonia) seladonius* (Fabricius, 1794)**

Apis seladonius Fabricius, 1794:460, Holotype ♀. Lectotype. ZMUK.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Eurasia, from Portugal to Kyrgyzstan - Pauly, 2016d; Tunisia - Ascher & Pickering, 2023).

***Halictus (Seladonia) smaragdulus* Vachal, 1895**

Halictus smaragdulus Vachal, 1895:150, Holotype ♂. - MNCN.

Distribution in Tunisia. Jendouba (Pauly et al., 2015).

Global distribution. Palaearctic (Afghanistan, Austria, Azerbaijan, Bulgaria, Croatia, Czech Republic, France, Germany, Greece, Iran, Italy, Malta, Norway, Portugal, Serbia, Slovakia, Spain, Türkiye, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023); Oriental (India - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Pauly et al. (2015) as *Seladonia smaragdula* (Vachal, 1895).

***Halictus (Vestitohalictus) cupidus* Vachal, 1902**

Halictus cupidus Vachal, 1902:230, Type ♂. - IZK.

Distribution in Tunisia. Gabes (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Iran, Occupied Palestine, Turkmenistan, North Africa: Egypt, Morocco, Tunisia - Lhomme et al., 2020; Ascher & Pickering, 2023).

***Halictus (Vestitohalictus) persephone* Ebmer, 1976**

Halictus persephone Ebmer, 1976:225, Holotype ♂. - EBM.

Distribution in Tunisia. Gabes (Ebmer, 1976b), Jendouba (Ebmer, 2014).

Global distribution. North Africa (Morocco, Tunisia - Pauly, 2016d; Lhomme et al., 2020).

***Halictus (Vestitohalictus) pici pici* Pérez, 1895**

Halictus pici Pérez, 1895:53, Type ♀, Lectotype. - EBM.

Distribution in Tunisia. Gafsa, Tozeur, Tunis (Schulthess, 1924), Tozeur (Ebmer, 2008a), Medenine (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Jordan, Occupied Palestine, Oman, North Africa: Algeria, Egypt, Morocco, Tunisia - Ascher & Pickering, 2023); Afrotropical (Mauritania, United Arab Emirates - Ascher & Pickering, 2023).

Genus *Lasioglossum* Curtis, 1833***Lasioglossum (Dialictus) albovirens* (Pérez, 1895)**

Halictus albovirens Pérez, 1895:52–53, Lectotype ♀, ♂. - EBM.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Iran, Spain, North Africa: Algeria, Morocco, Tunisia - Lhomme et al., 2020; Ascher & Pickering, 2023).

***Lasioglossum (Dialictus) algirum* (Blüthgen, 1923)**

Halictus algirus Blüthgen, 1923:252, Holotype ♀. - PCA.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Afghanistan, Bulgaria, France, Greece, Iran, Italy, Kazakhstan, Kyrgyzstan, Lebanon, Macedonia, Montenegro, Tajikistan, Türkiye, Uzbekistan, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023); Oriental (India, Nepal - Ascher & Pickering, 2023).

***Lasioglossum (Dialictus) aureolum* (Pérez, 1903)**

Halictus aureolus Pérez, 1903:CCXI.

Distribution in Tunisia. Kairouan (Pérez, 1903; Ascher & Pickering, 2023), Tozeur (Blüthgen, 1923c; Ebmer, 2008a), Gafsa, Tozeur (Schulthess, 1924).

Global distribution. Western Palaearctic (France, Portugal, Spain, North Africa: Algeria, Libya, Morocco, Tunisia - Pauly, 2016e; Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Pérez (1903), Blüthgen (1923c) and Schulthess (1924) as *Halictus aureolus* Pérez, 1903.

***Lasioglossum (Dialictus) collopiense* (Pérez, 1903)**

Halictus collopiensis Pérez, 1903:CCXII.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Portugal, Spain, North Africa: Algeria, Morocco, Tunisia - Lhomme et al., 2020).

***Lasioglossum (Dialictus) leptcephalus* (Blüthgen, 1923)**

Halictus leptcephalus Blüthgen, 1923:245, Holotype ♀, Tozeur (Tunisia). - Zurich.

Distribution in Tunisia. Tozeur (Blüthgen, 1923c; Schulthess, 1924), Gabes, Kebili, Tozeur (Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Jordan, Occupied Palestine, North Africa: Egypt, Libya, Tunisia - Ascher & Pickering, 2023).

Remarks. The species was recorded from Tunisia by Blüthgen (1923c) and Schulthess (1924) as *Halictus leptcephalus* (Blüthgen, 1923).

***Lasioglossum (Dialictus) littorale* (Blüthgen, 1923)**

Halictus littoralis Blüthgen, 1923:248, Types ♀, ♂. - NMW.

Distribution in Tunisia. no specific locality (Ebmer, 2014; Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Albania, Bulgaria, Croatia, France, Greece, Italy, Portugal, Romania, Spain, Türkiye, Ukraine, North Africa: Libya, Morocco, Tunisia - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Ebmer (2014) under the subgenus *Evyllaes* Robertson, 1902.

***Lasioglossum (Dialictus) morio* (Fabricius, 1793)**

Hylaeus morio Fabricius, 1793:306.

Distribution in Tunisia. no specific locality (Graeffe, 1906; Ascher & Pickering, 2023).

Global distribution. Palaearctic (Europe, Georgia, Iran, Kazakhstan, Lebanon, Occupied Palestine, Russia, Syria, Türkiye, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Graeffe (1906) as *Halictus morio* Fabricius, 1793.

***Lasioglossum (Evyllaes) aglyphum* (Pérez, 1895)**

Halictus aglyphus Pérez, 1895:53.

Distribution in Tunisia. Tozeur (Blüthgen, 1924a), Gabes, Jendouba, Kebili, Tozeur (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Iran, Italy, Occupied Palestine, North Africa: Algeria, Egypt, Tunisia - Pauly, 2016e; Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Blüthgen (1924a) as *Halictus aglyphus* Pérez, 1895.

***Lasioglossum (Evyllaes) glabriusculum* (Morawitz, 1872)**

Halictus glabriusculus Morawitz, 1872:372, Types ♀, ♂. - Leningrad.

Distribution in Tunisia. Jendouba (Ebmer, 1985), Le Kef (Ascher & Pickering, 2023).

Global distribution. West Palaearctic and north Africa (from Morocco to Tunisia - Pauly, 2016a).

Remarks. There are two subspecies: *L. glabriusculum glabriusculum* (Morawitz, 1872) having a West Palaearctic distribution and *L. glabriusculum ultraparvum* (Cockerell, 1938) having a north African distribution (Pauly, 2016a).

***Lasioglossum (Evyllaes) politum* (Schenck, 1853)**

Hylaeus politus Schenck, 1853:163, Holotype ♀. Lectotype. - Frankfurt.

Distribution in Tunisia. no specific locality (Graeffe, 1906; Ascher & Pickering, 2023).

Global distribution. Palaearctic (Balkans, Belgium, China, Central Asia, France, Georgia, Iran, Iraq, Japan, Jordan, Lebanon, Occupied Palestine, Russia, Southern and Central Europe, Syria, Türkiye, North Africa: Algeria, Egypt, Tunisia - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Graeffe (1906) as *Halictus politus* Schenck, 1853.

***Lasioglossum (Hemihalictus) angusticeps* (Perkins, 1895)**

Halictus angusticeps Perkins, 1895:39, Holotype ♂. - NHMUK.

Distribution in Tunisia. no specific locality (Ebmer, 2014; Ascher & Pickering, 2023).

Global distribution. Palaearctic (Austria, Croatia, England, France, Germany, Iran, Italy, Hungary, Lebanon, Occupied Palestine, Portugal, Romania, Spain, Switzerland, Türkiye, North Africa: Algeria, Morocco, Tunisia - Pauly, 2016a; Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Ebmer (2014) under the subgenus as *Evyllaes* Robertson, 1902.

Lasioglossum (Hemihalictus) asellum* (Pérez, 1895)Halictus asellus* Pérez, 1895:55.**Distribution in Tunisia.** Medenine (Ebmer, 1986), Kairouan, Kasserine, Medenine, Sfax, Sidi Bouzid, Tunis (Ebmer, 2008a), Kairouan (Ascher & Pickering, 2023).**Global distribution.** Western Palaearctic (Spain, North Africa: Libya, Tunisia - Pauly, 2016a).***Lasioglossum (Hemihalictus) brevicorne* (Schenck, 1869)***Halictus brevicornis* Schenck, 1869:310, Type ♂.**Distribution in Tunisia.** Nabeul (Ebmer, 1985).**Global distribution.** Palaearctic (Afghanistan, Austria, Greece, Italy, Hungary, Poland, Russia, Switzerland, Ukraine, North Africa: Algeria, Morocco, Tunisia - Ebmer, 1985).**Remarks.** This species was recorded from Tunisia by Ebmer (1985) under the subgenus *Evyllaesus* Robertson, 1902 and as *Lasioglossum (Evyllaesus) brevicorne aciculatum* (Blüthgen, 1930).***Lasioglossum (Hemihalictus) dichrous* (Blüthgen, 1924)***Halictus dichrous*, Blüthgen, in Schulthess 1924:307, Holotype ♀, Tozeur (Tunisia). - MNHUB.**Distribution in Tunisia.** Tozeur (Blüthgen, 1924a, 1924c), Gabes, Gafsa, Medenine, Sousse, Tozeur (Ebmer, 1986), Gafsa (Ascher & Pickering, 2023).**Global distribution.** Western Palaearctic (Occupied Palestine, North Africa: Algeria, Tunisia - Ascher & Pickering, 2023).**Remarks.** This species was recorded from Tunisia by Blüthgen (Blüthgen, 1924a, 1924c) as *Halictus dichrous* (Blüthgen, 1924) and it was classified by Ebmer (1986) in the subgenus *Evyllaesus* Robertson, 1902.***Lasioglossum (Hemihalictus) griseolum musculum* (Blüthgen, 1924)***Halictus musculus* Blüthgen, 1924:262, Types ♀ Tozeur (Tunisia), ♂, Sfax (Tunisia). - MNHUB.**Distribution in Tunisia.** Sfax, Tozeur (Blüthgen, 1924a, 1924c; Schulthess, 1924).**Global distribution.** North Africa (Morocco, Tunisia - Blüthgen, 1924a, 1924c; Schulthess, 1924; Pauly, 2016a).**Remarks.** This subspecies was recorded from Tunisia by Blüthgen (1924a, 1924c) and by Schulthess (1924) as *Halictus musculus*.***Lasioglossum (Hemihalictus) maurusium* (Blüthgen, 1935)***Halictus maurusius* Blüthgen, 1935:119, Types ♀, ♂. - MNCN.**Distribution in Tunisia.** no specific locality (Blüthgen, 1935; Ascher & Pickering, 2023).**Global distribution.** Western Palaearctic (France, Portugal, Spain, North Africa: Algeria, Morocco, Tunisia - Pauly, 2016a).**Remarks.** This species was recorded by Blüthgen (1935) from Tunisia as *Halictus maurusius* (Blüthgen, 1935).***Lasioglossum (Hemihalictus) minutissimum* (Kirby, 1802)***Melitta minutissima* Kirby, 1802:63, Lectotype. - NHMUK.**Distribution in Tunisia.** Tozeur (Ebmer, 1985), Gabes (Ascher & Pickering, 2023).**Global distribution.** Palaearctic (Cyprus, Europe, Occupied Palestine, Russia, Türkiye, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Ascher & Pickering, 2023); Afrotropical (Yemen - Ascher & Pickering, 2023); Oriental (Pakistan - Ascher & Pickering, 2023).**Remarks.** This species was recorded from Tunisia by Ebmer (1985) under the subgenus *Evyllaesus* Robertson, 1902.

***Lasioglossum (Hemihalictus) nitidiusculum* (Kirby, 1802)**

Melitta nitidiuscula Kirby, 1802:64, Holotype ♂. Lectotype. - NHMUK.

Distribution in Tunisia. no specific locality (Ebmer, 2014; Ascher & Pickering, 2023).

Global distribution. Palaearctic (Central Asia, Cyprus, Europe, Iran, Russia, Türkiye, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Ebmer (2014) under the subgenus as *Evyllaesus* Robertson, 1902.

***Lasioglossum (Hemihalictus) oraniense* (Blüthgen, 1930)**

Halictus oraniensis Blüthgen, 1930:226, Holotype ♀.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. North Africa (Algeria, Morocco, Tunisia - Lhomme et al., 2020).

***Lasioglossum (Hemihalictus) pauperatum* (Brullé, 1832)**

Halictus pauperatus Brullé, 1832:351, Lectotype ♀. - MNHN.

Distribution in Tunisia. no specific locality (Ebmer, 2000, 2014; Ascher & Pickering, 2023).

Global distribution. Palaearctic (Belgium, Bulgaria, Croatia, England, France, Germany, Iran, Montenegro, Netherlands, Russia, Southern Europe, Switzerland, Ukraine, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Ebmer (2000, 2014) under the subgenus *Evyllaesus* Robertson, 1902.

***Lasioglossum (Hemihalictus) pseudoplanulum* (Blüthgen, 1924)**

Halictus pseudoplanulus Blüthgen, 1924:383–386, Types ♀, ♂. - MNCN.

Distribution in Tunisia. Gafsa, Jendouba, Medenine, Sousse, Nabeul, Tozeur, Tunis (Ebmer, 2000, 2014).

Global distribution. Western Palaearctic (France, Portugal, Spain, North Africa: Algeria, Libya, Morocco, Tunisia - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Ebmer (2000) under the subgenus *Evyllaesus* Robertson, 1902.

***Lasioglossum (Hemihalictus) punctatissimum* (Schenck, 1853)**

Hylaeus punctatissimum Schenck, 1853:147, Holotype ♀. Neotype. - Frankfurt.

Distribution in Tunisia. Gafes (Ebmer, 1976b), Gafes, Sfax, Tozeur (Ebmer, 1985), Gafsa, Gafes (Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Morocco, Spain, Tunisia - Ebmer, 1985; Pauly, 2016a).

Remarks. This species was recorded from Tunisia by Ebmer (1976b, 1985) under the subgenus *Evyllaesus* Robertson, 1902. This species has two subspecies: *L. punctatissimum punctatissimum* (Schenck, 1853) having a western Palaearctic distribution and *L. punctatissimum angustifrons* (Vachal, 1892) having a distribution covering North Africa (Morocco, Tunisia) and Spain (Ebmer, 1985; Pauly, 2016a).

***Lasioglossum (Hemihalictus) puncticolle* (Morawitz, 1872)**

Halictus puncticollis Morawitz, 1872:370, Holotype ♀. - NMW.

Distribution in Tunisia. no specific locality (Ebmer, 2014; Ascher & Pickering, 2023).

Global distribution. Palaearctic (Belgium, Bulgaria, Croatia, Cyprus, England, France, Georgia, Iran, Lebanon, Macedonia, Occupied Palestine, Russia, Serbia, Southern and Central Europe, Türkiye, Ukraine, North Africa: Algeria, Tunisia - Ascher & Pickering, 2023).

Remarks. This subspecies was recorded from Tunisia by Ebmer (2014) under the subgenus as *Evyllaesus* Robertson, 1902.

***Lasioglossum (Hemihalictus) pygmaeum patulum* (Vachal, 1905)**

Halictus patulus Vachal in Kohl 1905:239, Type ♀. - MNHUB.

Distribution in Tunisia. Jendouba, Tozeur (Ebmer, 2000, 2014).

Global distribution. Western Palaearctic (Ebmer, 2014).

Remarks. This subspecies was recorded from Tunisia by Ebmer (2000, 2014) under the subgenus as *Evyllaes* Robertson, 1902.

***Lasioglossum (Hemihalictus) strictifrons* (Vachal, 1895)**

Halictus strictifrons Vachal 1895:147, Holotype ♀. - MNHUB.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (France, Italy, Portugal, Spain, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

***Lasioglossum (Hemihalictus) transitorium planulum* (Pérez, 1903)**

Halictus planulus Pérez, 1903:49–50, Lectotype ♀. - MNHN.

Distribution in Tunisia. Tunis (Strand, 1909; Schulthess, 1924; Ebmer, 2000, 2014).

Global distribution. Western Palaearctic (France, Malta, Spain, Switzerland, North Africa: Algeria, Morocco, Tunisia - Ebmer, 2000, 2014; Pauly, 2016a); Afrotropical (Mauritania - Pauly, 2016a).

Remarks. This species was recorded from Tunisia by Strand (1909) as *Halictus tunicola* Strand, 1909 and by Schulthess (1924) as *Halictus planulus* Pérez, 1903.

***Lasioglossum (Hemihalictus) villosulum* (Kirby, 1802)**

Melitta villosula Kirby, 1802:62, Holotype ♂. Lectotype. - NHMUK.

Distribution in Tunisia. Tozeur, Tunis (Schulthess, 1924).

Global distribution. Palaearctic (Afghanistan, Central Asia, China, Europe, Georgia, Iran, Japan, Lebanon, Mongolia, North Korea, Occupied Palestine, Oman, Russia, Türkiye, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Ascher & Pickering, 2023); Afrotropical (Saudi Arabia, United Arab Emirates - Ascher & Pickering, 2023); Oriental (India, Malaysia, Nepal, Pakistan, Taiwan - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Schulthess (1924) as *Halictus villosulus* (Kirby, 1802).

***Lasioglossum (Lasioglossum) bimaculatum* (Dours, 1872)**

Halictus bimaculatus Dours, 1872:349, Syntype. - IZK, Neotype ♀, Fernana (Jendouba, Tunisia). - Biologiezentrum Linz.

Distribution in Tunisia. Jendouba (Ebmer, 2014).

Global distribution. Western Palaearctic (France, Italy, Portugal, Spain, North Africa: Algeria, Morocco, Tunisia - Pauly, 2016b; Ascher & Pickering, 2023).

Remarks. A female from Tunisia was designated by Ebmer (2014), deposited in Biologiezentrum Linz.

***Lasioglossum (Lasioglossum) clavipes* (Dours, 1872)**

Halictus clavipes Dours, 1872:351, Types ♀, ♂. PCD.

Distribution in Tunisia. Tunis (Graeffe, 1906, Schulthess, 1924), Jendouba (Ascher & Pickering, 2023).

Global distribution. North Africa (Algeria, Morocco, Tunisia - Lhomme et al., 2020).

Remarks. This species was recorded by Graeffe (1906) and Schulthess (1924) from Tunisia as *Halictus clavipes* (Dours, 1872).

***Lasioglossum (Lasioglossum) cristula cristula* (Pérez, 1895)**

Halictus cristula Pérez, 1895:54, Lectotype ♀. - MNHN.

Distribution in Tunisia. Jendouba (Ebmer, 2014).

Global distribution. Western Palaearctic (France, Italy, Spain, North Africa: Algeria, Morocco, Tunisia - Pauly, 2016b).

***Lasioglossum (Lasioglossum) femorale* (Saunders, 1908)**

Halictus femorale Saunders, 1908:185, Type ♀. - NHMUK.

Distribution in Tunisia. Kasserine (Ebmer, 1985).

Global distribution. North Africa (Algeria, Morocco, Tunisia - Pauly, 2016b).

***Lasioglossum (Lasioglossum) pallens pallens* (Brullé, 1832)**

Halictus pallens Brullé, 1832:350, Holotype ♀. Lectotype. - MNHN.

Distribution in Tunisia. no specific locality (Ebmer, 2014; Ascher & Pickering, 2023).

Global distribution. Palaearctic (Cyprus, Europe, Iran, Jordan, Kazakhstan, Lebanon, Occupied Palestine, Syria, Türkiye, North Africa: Morocco, Tunisia - Ascher & Pickering, 2023).

***Lasioglossum (Lasioglossum) perclavipes* (Blüthgen, 1934)**

Lucasellus perclavipes Blüthgen, 1934:188, Types ♀, ♂. - MNHUB.

Distribution in Tunisia. no specific locality (Ebmer, 2014; Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Greece, Italy, Portugal, Spain, Türkiye, North Africa: Algeria, Morocco, Tunisia - Pauly, 2016b; Ascher & Pickering, 2023).

***Lasioglossum (Lasioglossum) prasinum* (Smith, 1848)**

Halictus prasinus Smith, 1848:2169, Holotype ♀. Lectotype. - OUM.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Belarus, Belgium, Croatia, Czech Republic, England, Germany, Greece, Italy, Lithuania, Netherlands, Poland, Portugal, Spain, Ukraine, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

***Lasioglossum (Lasioglossum) xanthopus* (Kirby, 1802)**

Melitta xanthopus Kirby, 1802:78, Lectotype ♀. BML.

Distribution in Tunisia. no specific locality (Ebmer 2014; Ascher & Pickering, 2023).

Global distribution. Palaearctic (Central Asia, China, Europe, Iran, Lebanon, Mongolia, Occupied Palestine, Russia, Türkiye, North Africa: Algeria, Libya, Morocco, Tunisia - Ascher & Pickering, 2023); Oriental (Pakistan - Ascher & Pickering, 2023).

***Lasioglossum (Leuchalictus) albocinctum* (Lucas, 1849)**

Halictus albocinctum Lucas, 1849:183, Lectotype. - MNHN.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (France, Germany, Southern Europe, Switzerland, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

***Lasioglossum (Leuchalictus) callizonium* (Pérez, 1895)**

Halictus callizonius Pérez, 1895:54.

Distribution in Tunisia. Gafsa, Tozeur, Tunis (Schulthess, 1924).

Global distribution. Western Palaearctic (France, Malta, Occupied Palestine, North Africa: Algeria, Egypt, Morocco, Tunisia - Ascher & Pickering, 2023); Afrotropical (Saudi Arabia - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Schulthess (1924) as *Halictus callizonius* Pérez, 1895.

***Lasioglossum (Leuchalictus) discum fertoni* (Vachal, 1895)**

Halictus fertoni Vachal, 1895:149, Holotype ♂.

Distribution in Tunisia. no specific locality (Ebmer, 1988).

Global distribution. Western Palaearctic (from Morocco to Tunisia, Spain, Italy, France - Pauly, 2016b).

Remarks. This subspecies was recorded from Tunisia by Ebmer (1988) under the subgenus *Lasioglossum* Curtis, 1833.

***Lasioglossum (Leuchalictus) leucozonium cedri* Ebmer, 1976**

Lasioglossum (Leuchalictus) leucozonium cedri Ebmer, 1976:235, Holotype ♀. - EBM.

Distribution in Tunisia. Jendouba, Nabeul (Ebmer, 1976b).

Global distribution. Western Palaearctic (Greece, Italy, Spain, North Africa: Morocco, Tunisia - Pauly, 2016b).

Remarks. This subspecies was recorded from Tunisia by Ebmer (1976b) under the subgenus *Lasioglossum* s.str Curtis, 1833.

***Lasioglossum (Leuchalictus) majus* (Nylander, 1852)**

Halictus major Nylander, 1852:240, Lectotype. - ZMHU.

Distribution in Tunisia. no specific locality (Ebmer, 1988; Ascher & Pickering, 2023).

Global distribution. Palaearctic (Balkans, Belarus, Central Europe, France, Georgia, Iran, Italy, Lithuania, Netherlands, Russia, Spain, Ukraine - Ascher & Pickering, 2023; Tunisia - Ebmer, 1988).

Remarks. This species was recorded from Tunisia by Ebmer (1988) under the subgenus *Lasioglossum* Curtis, 1833.

***Lasioglossum (Sphecodogastra) articulare* (Pérez, 1895)**

Halictus articularis Pérez, 1895:54, Lectotype ♀. - MNHN.

Distribution in Tunisia. Kebili, Sfax (Blüthgen, 1924b), Gabes (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Jordan, Occupied Palestine, Oman, Spain, North Africa: Algeria, Egypt, Libya, Morocco - Ascher & Pickering, 2023); Afrotropical (United Arab Emirates - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Blüthgen (1924b) as *Halictus Romanettii* Blüthgen, 1923.

***Lasioglossum (Sphecodogastra) capitale* (Pérez, 1903)**

Halictus capitalis Pérez, 1903:48, Lectotype ♀. - MNHN.

Distribution in Tunisia. no specific locality (Blüthgen, 1924b; Ebmer, 1995; Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Portugal, Spain, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Blüthgen (1924b) as *Halictus capitalis* Pérez, 1903 and by Ebmer (1995) under the subgenus *Evyllaesus* Robertson, 1902.

***Lasioglossum (Sphecodogastra) decolor* (Pérez, 1895)**

Halictus decolor Pérez, 1895:54, Lectotype ♀. - MNHN.

Distribution in Tunisia. Gabes, Gafsa, Kairouan, Kebili, Medenine, Sfax, Tataouine (Ebmer, 1995).

Global distribution. North Africa (Algeria, Egypt, Libya, Tunisia - Pauly, 2016a).

Remarks. This species was recorded from Tunisia by Ebmer (1995) under the subgenus *Evyllaesus* Robertson, 1902.

***Lasioglossum (Sphecodogastra) immunitum immunitum* (Vachal, 1895)**

Halictus immunitus Vachal, 1895:148, Type ♀. - MNCN.

Distribution in Tunisia. no specific locality (Ebmer, 1995; Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Italy, Portugal, Spain, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

Remarks. This subspecies was recorded from Tunisia by Ebmer (1995) under the subgenus *Evyllaesus* Robertson, 1902.

***Lasioglossum (Sphecodogastra) interruptum* (Panzer, 1798)**

Hylaeus interruptus Panzer, 1798:554.

Distribution in Tunisia. Gafsa, Nabeul (Schulthess, 1924).

Global distribution. Palaearctic (Armenia, Balkans, France, Georgia, Iran, Lebanon, Russia, Southern and Central Europe, Syria, Türkiye, Ukraine, North Africa: Algeria, Egypt, Morocco, Tunisia - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Schulthess (1924) as *Halictus opacus* Pérez, 1895 and by Louadi (1999) without specific locality as *Lasioglossum (Evyllaesus) interruptum* (Panzer, 1798) form *opacum*.

***Lasioglossum (Sphecodogastra) leucopymatum* (Dalla Torre, 1896)**

Halictus leucopymatum Dalla Torre, 1896:66, nom nov. *H. albitarsis* Morawitz, 1853:246, Lectotype ♀. - ZMMU.

Distribution in Tunisia. Tozeur (Blüthgen, 1924b).

Global distribution. Palaearctic (Afghanistan, Kazakhstan, Occupied Palestine, Turkmenistan, Uzbekistan - Pauly, 2016a; Tunisia - Blüthgen, 1924b).

Remarks. This species was recorded from Tunisia by Blüthgen (1924b) as *Halictus leucopymatum* Dalla Torre, 1896.

***Lasioglossum (Sphecodogastra) malachurum* (Kirby, 1802)**

Melitta malachura Kirby, 1802:67, Holotype ♀. - NHMUK.

Distribution in Tunisia. no specific locality (Graeffe, 1906), Kairouan, Sfax, Tunis (Schulthess, 1924), Bizerte (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Azerbaijan, Balkans, Cyprus, England, France, Georgia, Iran, Iraq, Jordan, Lebanon, Netherlands, Occupied Palestine, Russia, Southern and Central Europe, Syria, Turkmenistan, Türkiye, Ukraine, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Graeffe (1906) and Schulthess (1924) as *Halictus malachurus* Kirby, 1802.

***Lasioglossum (Sphecodogastra) masculum* (Pérez, 1895)**

Halictus masculus, Perez, 1895:55, Lectotype ♀. - MNHN.

Distribution in Tunisia. Tozeur (Blüthgen, 1924b), Gabes, Gafsa, Kebili, Tozeur (Ebmer, 1995).

Global distribution. Palaearctic (Iran, Jordan, Occupied Palestine, Syria, North Africa: Algeria, Egypt, Morocco, Tunisia - Pauly, 2016a).

Remarks. This species was recorded from Tunisia by Blüthgen (1924b) as *Halictus leucopymatum* var. *numidus* Blüthgen, 1924 and by Ebmer (1995) under the subgenus *Evyllaesus* Robertson, 1902.

***Lasioglossum (Sphecodogastra) pauxillum* (Schenck, 1853)**

Hylaeus pauxillus Schenck, 1853:146, Holotype ♀. Lectotype. - Frankfurt.

Distribution in Tunisia. Beja (Ebmer, 1985), Jendouba (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Cyprus, Europe, Georgia, Iran, Jordan, Occupied Palestine, Syria, Turkmenistan, Türkiye, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Ebmer (1985) under the subgenus *Evyllaeus* Robertson, 1902.

***Lasioglossum (Sphecodogastra) subhirtum* (Lepelletier, 1841)**

Halictus subhirtus Lepelletier, 1841:271, Holotype ♀. Lectotype. - MRSNT.

Distribution in Tunisia. Nabeul (Schulthess, 1924), no specific locality (Graeffe 1906; Sonet & Jacob-Remacle, 1987; Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Belgium, France, Germany, Italy, Portugal, Spain, Switzerland, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

Remarks. This species was recorded from Tunisia by Graeffe (1906) and by Schulthess (1924) as *Halictus subhirtus* Lepelletier, 1841.

***Lasioglossum ochraceovittatus* (Dours, 1872)**

Halictus ochraceovittatus Dours, 1872:303, Types ♀, ♂. - PCD.

Distribution in Tunisia. Tunis (Graeffe, 1906).

Global distribution. North Africa (Algeria - Dours, 1872; Tunisia - Graeffe, 1906).

Remarks. This species is recorded from Tunisia by Graeffe (1906) as *Halictus ochraceovittatus* Dours, 1872.

Genus *Sphecodes* Latreille, 1804***Sphecodes albilabris* (Fabricius, 1793)**

Nomada albilabris Fabricius, 1793: 349.

Distribution in Tunisia. no specific locality (Astafurova et al., 2019).

Global distribution. Palaearctic (Azerbaijan, Central Asia, China, Cyprus, Europe, Georgia, Iran, Russia, Türkiye, North Africa: Egypt, Morocco - Ascher & Pickering, 2023; Tunisia - Astafurova et al., 2019); Oriental (India, Nepal - Ascher & Pickering, 2023).

***Sphecodes alternatus* Smith, 1853**

Sphecodes alternatus Smith, 1853:36, Syntypes ♀. - NHMUK.

Distribution in Tunisia. Kairouan, Nabeul, Sfax, Tozeur, Tunis (Schulthess, 1924), Gabes (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Armenia, Austria, Azerbaijan, Balkans, Central Asia, China, Cyprus, France, Georgia, Iran, Hungary, Occupied Palestine, Russia, Slovakia, Slovenia, Southern Europe, Switzerland, Türkiye, Ukraine, North Africa: Algeria, Egypt, Morocco, Tunisia - Ascher & Pickering, 2023).

***Sphecodes atlassa* Warncke, 1992**

Sphecodes geoffrellus atlassa Warncke, 1992:36, Holotype ♀. - Private collection of Gusenleitner.

Distribution in Tunisia. no specific locality (Bogush & Straka, 2012; Ascher & Pickering, 2023).

Global distribution. North Africa (Morocco, Tunisia - Lhomme et al., 2020).

Remarks. This species was recorded from Tunisia by Bogush & Straka (2012) as *Sphecodes geoffrellus* (Kirby, 1802).

***Sphcodes gibbus* (Linnaeus, 1758)**

Sphex gibba Linnaeus, 1758:571, Syntypes ♀. - ZMUK.

Distribution in Tunisia. Tunis (Graeffe, 1906), Sfax (Schulthess, 1924).

Global distribution. Palaearctic (Afghanistan, Armenia, Austria, Azerbaijan, Bulgaria, Central Asia, China, Croatia, Czech Republic, Germany, Greece, Iran, Italy, Jordan, Lebanon, Mongolia, Nordic countries, Occupied Palestine, Romania, Russia, Slovakia, Türkiye, Western and Eastern Europe, North Africa: Algeria, Egypt, Morocco, Tunisia - Ascher & Pickering, 2023), Oriental (India, Pakistan - Ascher & Pickering, 2023).

***Sphcodes hirtellus* Blüthgen, 1923**

Sphcodes hirtellus Blüthgen, 1923:502, Types ♂, ♀. - MNCN.

Distribution in Tunisia. Jendouba (Warncke, 1992).

Global distribution. Western Palaearctic (Portugal, Spain, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Lhomme et al., 2020).

***Sphcodes intermedius* Blüthgen, 1923**

Sphcodes intermedius Blüthgen, 1923:500, Lectotype: ♂. - IZK.

Distribution in Tunisia. Kasserine (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Austria, Greece, Hungary, Iran, Occupied Palestine, Russia, Slovakia, Spain, Turkmenistan, Türkiye, Ukraine, Uzbekistan, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Ascher & Pickering, 2023); Afrotropical (United Arab Emirates - Ascher & Pickering, 2023); Oriental (Pakistan - Ascher & Pickering, 2023).

***Sphcodes longuloides* Blüthgen, 1923**

Sphcodes longuloides Blüthgen, 1923:504, Holotype ♀. - MNCN.

Distribution in Tunisia. Tozeur (Schulthess, 1924), no specific locality (Warncke, 1992; Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Cyprus, Portugal, Spain, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

***Sphcodes longulus* Hagens, 1882**

Sphcodes longulus Hagens, 1882:226, fig. 25, Syntypes ♂.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Armenia, Central Asia, China, Cyprus, Europe, Iran, Japan, Jordan, Occupied Palestine, Russia, Syria, Türkiye, North Africa: Tunisia - Astafurova et al., 2019).

***Sphcodes marginatus* Hagens, 1882**

Sphcodes marginatus Hagens, 1882:223, fig. 18, Syntypes ♂.

Distribution in Tunisia. Gafsa, Tunis (Schulthess, 1924), no specific locality (Warncke, 1992; Bogush & Straka, 2012; Ascher & Pickering, 2023).

Global distribution. Palaearctic (Belarus, Central Europe, Denmark, England, France, Greece, Italy, Latvia, Netherlands, Occupied Palestine, Portugal, Russia, Spain, Ukraine, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Ascher & Pickering, 2023); Afrotropical (United Arab Emirates - Ascher & Pickering, 2023); Oriental (Pakistan - Ascher & Pickering, 2023).

***Sphecodes olivieri* Lepeletier, 1825**

Sphecodes olivieri Lepeletier, 1825:448, Holotype ♂.

Distribution in Tunisia. Tozeur (Schulthess, 1924).

Global distribution. Palaearctic (Armenia, Azerbaijan, Central Asia, China, France, Iran, Italy, Occupied Palestine, Oman, Qatar, Portugal, Russia, Spain, Türkiye, North: Algeria, Egypt, Morocco - Ascher & Pickering, 2023; Tunisia - Schulthess, 1924); Afrotropical (Ethiopia, Saudi Arabia, United Arab Emirates - Ascher & Pickering, 2023); Oriental (Pakistan - Ascher & Pickering, 2023).

***Sphecodes pellucidus* Smith, 1845**

Sphecodes pellucidus Smith, 1845:1014, Syntypes ♂, ♀. - NHMUK.

Distribution in Tunisia. no specific locality (Warncke, 1992; Ascher & Pickering, 2023).

Global distribution. Palaearctic (Armenia, Azerbaijan, China, Europe, Georgia, Iran, Kyrgyzstan, Lebanon, Mongolia, Russia, Syria, Turkmenistan, Türkiye, North Africa: Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

***Sphecodes puncticeps* Thomson, 1870**

Sphecodes puncticeps Thomson, 1870:99, Syntypes ♀, ♂. - MZLU.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Afghanistan, Armenia, Azerbaijan, Cyprus, Europe, Iran, Kazakhstan, Lebanon, Mongolia, Occupied Palestine, Russia, Syria, Tajikistan, Türkiye, Uzbekistan, North Africa: Algeria, Egypt, Morocco, Tunisia - Ascher & Pickering, 2023); Afrotropical (Saudi Arabia - Ascher & Pickering, 2023).

***Sphecodes rubicundus* Hagens, 1875**

Sphecodes rubicundus Hagens, 1875:318, Syntypes ♂, ♀.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Armenia, Azerbaijan, Central and Western Europe, Croatia, Denmark, Greece, Latvia, Occupied Palestine, Portugal, Romania, Russia, Serbia, Spain, Türkiye, Ukraine, North Africa: Egypt, Morocco, Tunisia - Ascher & Pickering, 2023).

***Sphecodes rubripes* Spinola, 1838**

Sphecodes rubripes Spinola, 1838:512, Syntypes ♀. - MRSNT.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Cyprus, Italy, Jordan, Occupied Palestine, Portugal, Spain, North Africa: Algeria, Egypt, Morocco, Tunisia - Lhomme et al., 2020; Ascher & Pickering, 2023).

***Sphecodes ruficrus* (Erichson, 1835)**

Dichroa ruficrus Erichson, 1835:101, Syntypes ♀. - MNHUB.

Distribution in Tunisia. Nabeul (Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Armenia, Central Europe, Croatia, England, France, Greece, Jordan, Occupied Palestine, Portugal, Spain, Türkiye, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Ascher & Pickering, 2023); Oriental (India - Ascher & Pickering, 2023).

***Sphecodes schenckii* Hagens, 1882**

Sphecodes schenckii Hagens, 1882:217, Holotype ♂. - MNHUB.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Armenia, Azerbaijan, Balkans, Central Europe, France, Georgia, Greece, Iran, Italy, Occupied Palestine, Russia, Spain, Syria, Türkiye, Ukraine, Tunisia - Ascher & Pickering, 2023).

Subfamily Nomiinae Robertson, 1904**Genus *Pseudapis* W. F. Kirby, 1900*****Pseudapis (Nomiapis) bispinosa* (Brullé, 1832)**

Nomia bispinosa Brullé, 1832:348, Lectotype ♂. - MNHN.

Distribution in Tunisia. Tunis (Graeffe, 1906), Gafsa, Nabeul, Sfax, Tozeur (Schulthess, 1924), Gabes, Gafsa (Ascher & Pickering, 2023).

Global distribution. Palaearctic (from Morocco and Iberian Peninsula to Central Asia - Pauly, 2015).

Remarks. This species is recorded from Tunisia by Graeffe (1906) and by Schulthess (1924) as *Nomia ruficornis* Spinola, 1838.

***Pseudapis (Pseudapis) nilotica* (Smith, 1875)**

Nomia nilotica Smith, 1875:63, Holotype ♀. - NHMUK.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Afghanistan, Iraq, Iran, Jordan, Kuwait, Lebanon, Syria, Qatar, Occupied Palestine, Oman, Turkmenistan, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Ascher & Pickering, 2023); Afrotropical (Djibouti, Ethiopia, Mali, Mauritania, Niger, Saudi Arabia, Sudan, United Arab Emirates - Ascher & Pickering, 2023); Oriental (Pakistan - Ascher & Pickering, 2023).

***Pseudapis (Nomiapis) rufiventris* (Spinola, 1838)**

Nomia rufiventris Spinola, 1838:513, Lectotype ♀. - MRSNT.

Distribution in Tunisia. Sfax (Warncke, 1976), Medenine (Wood & Le Divelec, 2022).

Global distribution. Western Palaearctic (Italy, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Wood & Le Divelec, 2022).

Remarks. The species was recorded from Tunisia by Wood & Le Divelec (2022) as *Nomiapis rufiventris* (Spinola, 1838) and by Warncke (1976) as *Nomia unidentata albocincta* Lucas 1849.

Subfamily Nomioidinae Börner, 1919**Genus *Ceylalictus* Strand, 1913*****Ceylalictus (Ceylalictus) punjabensis* (Cameron, 1907)**

Ceratina punjabensis Cameron, 1907:1003, Lectotype ♀. NHMUK.

Distribution in Tunisia. Tozeur (Pesenko & Pauly, 2005).

Global distribution. Palaearctic (Afghanistan, Iran, Jordan, Occupied Palestine, Oman, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Ascher & Pickering, 2023; Lhomme et al., 2020); Afrotropical (Cape Verde, Djibouti, Ethiopia, Kenya, Mali, Mauritania, Niger, Saudi Arabia, Senegal, Sudan, United Arab Emirates - Ascher & Pickering, 2023); Oriental (Pakistan - Ascher & Pickering, 2023).

***Ceylalictus (Ceylalictus) variegatus* (Olivier, 1789)**

Apis variegata Olivier, 1789:139, Holotype ♀ (lost).

Distribution in Tunisia. Kairouan, Tunis, Tozeur (Schulthess, 1924), Ben Arous, Gabes, Gafsa, Jendouba, Kairouan, Kasserine, Kébili, Medenine, Sousse, Tozeur (Pesenko & Pauly, 2005).

Global distribution. Palaearctic (North Africa, Southern Europe to Austria in the north, Western Asia to northern China, northern India and Mongolia - Pauly, 2017a); Afrotropical (Burkina Faso, Cameroon, Gambia, Kenya, Senegal - Pauly, 2017a).

Remarks. This species was recorded from Tunisia by Graeffe (1906) as *Nomioides variegatus* Olivier, 1789 and by Schulthess (1924) as *Nomioides variegata* Olivier, 1789.

***Ceylalictus (Meganomioides) desertorum* (Blüthgen, 1925)**

Nomioides karachensis var. *desertorum* Blüthgen, 1925:88, Holotype ♀. - MNHUB.

Distribution in Tunisia. Tozeur (Pesenko & Pauly, 2005).

Global distribution. Western Palaearctic (Jordan, North Africa: Algeria, Egypt, Morocco, Tunisia - Pauly, 2017a).

Genus *Nomioides* Schenck, 1867***Nomioides deceptor* Saunders, 1908**

Nomioides deceptor Saunders, 1908:223. Lectotype ♀, ♂. - NHMUK.

Distribution in Tunisia. Tozeur (Schulthess, 1924), Gabes, Nabeul, Sfax, Sidi Bouzid, Tataouine, Tozeur (Pesenko & Pauly, 2005).

Global distribution. Palaearctic (Jordan, Occupied Palestine, Spain, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Ascher & Pickering, 2023); Afrotropical (Cape Verde, Mauritania, Saudi Arabia, Sudan, United Arab Emirates - Ascher & Pickering, 2023).

Remarks. This species was recorded by Schulthess (1924) as *Nomioides pulchella* (Schenck, 1867).

***Nomioides facilis* (Smith, 1853)**

Halictus facilis Smith, 1853:51, Holotype ♂. - NHMUK.

Distribution in Tunisia. Jendouba, Sousse (Pesenko & Pauly, 2005), Gabes, Gafsa (Ascher & Pickering, 2023).

Global distribution. Palaearctic (Croatia, France, Iran, Macedonia, Occupied Palestine, Romania, Southern Europe, Türkiye, North Africa: Algeria, Morocco, Tunisia - Pauly, 2017b; Ascher & Pickering, 2023); Afrotropical (Yemen - Ascher & Pickering, 2023); Oriental (Pakistan, India - Ascher & Pickering, 2023).

***Nomioides klausi* Pesenko, 1983**

Nomioides (Nomioides) klausi Pesenko, 1983:125, Holotype ♂. - OÖLM / PCKW.

Distribution in Tunisia. Tataouine, Tozeur (Pesenko & Pauly, 2005).

Global distribution. Palaearctic (Azerbaijan, Iran, Jordan, Oman, North Africa: Algeria, Egypt, Tunisia - Pesenko & Pauly, 2005; Ascher & Pickering, 2023); Afrotropical (Mali, Mauritania, Niger, Saudi Arabia, Senegal, United Arab Emirates - Pesenko & Pauly, 2005; Ascher & Pickering, 2023).

***Nomioides longiceps* Blüthgen, 1933**

Nomioides longiceps Blüthgen, 1933:114, Lectotype ♀, ♂. - MNHUB.

Distribution in Tunisia. Medenine, Tozeur (Pesenko & Pauly, 2005).

Global distribution. North Africa (Libya, Tunisia - Pesenko & Pauly, 2005; Pauly, 2017b).

***Nomioides minutissimus maurus* Blüthgen, 1925**

Nomioides maura Blüthgen, 1925:14, Lectotype ♀, ♂. - MNHUB.

Distribution in Tunisia. Gabes, Kairouan, Kasserine, Medenine, Sfax, Tozeur (Pesenko & Pauly, 2005).

Global distribution. North Africa (Algeria, Morocco, Tunisia - Pesenko & Pauly, 2005).

***Nomioides paulyi* Pesenko, 2005**

Nomioides paulyi Pesenko, 2005:196, Holotype ♂. - FUSAG.

Distribution in Tunisia. Medenine, Tataouine (Pesenko & Pauly, 2005).

Global distribution. North Africa (Algeria, Tunisia - Pauly, 2017b; Pesenko & Pauly, 2005).

***Nomioides squamiger* Saunders, 1908**

Nomioides squamiger Saunders, 1908:222, Lectotype ♀, ♂. - NHMUK.

Distribution in Tunisia. Gabes, Gafsa, Kairouan, Kasserine, Sidi Bouzid, Sousse, Tataouine, Tozeur (Pesenko & Pauly, 2005).

Global distribution. Palaearctic (Occupied Palestine, Oman, North Africa: Algeria, Egypt, Morocco, Tunisia - Pauly, 2017b); Afrotropical (Saudi Arabia, Yemen - Pauly, 2017b).

Subfamily Rophitinae Schenck, 1866**Genus *Dufourea* Lepeletier, 1841*****Dufourea brachycephala* (Warncke, 1979)**

Rophites brachycephalus Warncke, 1979:147, Holotype ♂. - OÖLM / PCKW.

Distribution in Tunisia. no specific locality (Ebmer, 1989; Ascher & Pickering, 2023).

Global distribution. North Africa (Algeria, Morocco, Tunisia - Ascher & Pickering, 2023).

***Dufourea chagrina* (Warncke, 1979)**

Rophites chagrinus Warncke, 1979:149, Holotype ♀. - OÖLM / PCKW.

Distribution in Tunisia. Tozeur (Ebmer, 1993).

Global distribution. Western Palaearctic (Occupied Palestine, North Africa: Morocco, Tunisia - Pauly & Patiny, 2015).

***Dufourea desertorides* Ebmer, 1978**

Dufourea desertorum Ebmer, 1976:188, Holotype ♀, Gabes (Tunisia). - EBM.

Distribution in Tunisia. Gabes (Ebmer, 1976a), Gabes, Gafsa, Kebili (Ebmer, 1993), Gabes, Medenine, Tozeur (Ebmer, 2015), Gabes, Tozeur (Ascher & Pickering, 2023).

Global distribution. Tunisia (Pauly & Patiny, 2015). Endemic.

Remarks. This species was recorded from Tunisia by Ebmer (1976a) as *Dufourea desertorum* (Ebmer, 1976).

***Dufourea eremica* Ebmer, 1976**

Dufourea eremica Ebmer, 1976:190, Holotype ♂, Feriana (Kasserine, Tunisia). - EBM.

Distribution in Tunisia. Kasserine (Ebmer, 1976a, 1993; Ascher & Pickering, 2023).

Global distribution. Tunisia (Pauly & Patiny, 2015). Endemic.

***Dufourea josefi* Ebmer, 1993**

Dufourea josefi Ebmer, 1993:17, Holotype ♂, Gabes (Tunisia). - EBM.

Distribution in Tunisia. Gabes (Ebmer, 1993; Ascher & Pickering, 2023).

Global distribution. Tunisia (Pauly & Patiny, 2015). Endemic.

***Dufourea minutissima* Ebmer, 1976**

Dufourea minutissima Ebmer, 1976:194, Holotype ♂, Gabes (Tunisia). - EBM.

Distribution in Tunisia. Gabes (Ebmer, 1976a, 1984, 1993; Ascher & Pickering, 2023).

Global distribution. Tunisia (Pauly & Patiny, 2015). Endemic.

Remarks. This species was recorded from Tunisia by Ebmer (1984, 1993) as *Dufourea (Minutodufourea) minutissima* Ebmer, 1976.

***Dufourea nodicornis* (Warncke, 1979)**

Rophites nodicornis Warncke, 1979:150, Types ♂, ♀. - OÖLM / PCKW.

Distribution in Tunisia. Gabes (Ebmer, 1993, 1984, 1999).

Global distribution. Western Palaearctic (Jordan, Occupied Palestine, Syria, North Africa: Libya, Tunisia - Pauly & Patiny, 2015).

***Dufourea phoenix* Ebmer, 2008**

Dufourea (Dufourea) phoenix Ebmer, 2008:586, Holotype ♀, ♂, Gabes (Tunisia). - EBM.

Distribution in Tunisia. Bizerte, Gabes (Ebmer, 2008b; Ascher & Pickering, 2023).

Global distribution. Tunisia, United Arab Emirates (Ebmer, 2008b; Ascher & Pickering, 2023).

***Dufourea punica* Ebmer, 1976**

Dufourea (Dufourea) punica Ebmer, 1976:184, Holotype ♂, Tunis (Tunisia). - EBM.

Distribution in Tunisia. Jendouba, Tunis (Ebmer, 1976a), Tunis (Warncke, 1979; Ascher & Pickering, 2023), Ben Arous, Tunis (Ebmer, 1999).

Global distribution. Tunisia (Pauly & Patiny, 2015). Endemic

Remarks. This species was recorded from Tunisia by Ebmer (1999) as *Dufourea (Afrodufourea) punica* (Ebmer, 1976), and by Warncke (1979) as *Rophites tunesius* (Warncke, 1979).

***Dufourea similis* Friese, 1898**

Dufourea similis Friese, 1898:306, Types ♀, ♂. - MNHUB.

Distribution in Tunisia. Beja, Jendouba, Kasserine, Nabeul, Tunis, Zaghouan (Ebmer, 1984), Beja, Gafsa, Kairouan, Kasserine, Medenine, Monastir, Sfax, Sidi Bouzid, Sousse, Tunis (Ebmer, 1999), Kasserine (Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Occupied Palestine, Spain, Syria, North Africa: Algeria, Egypt, Libya, Morocco, Tunisia - Pauly & Patiny, 2015); Afrotropical (Saudi Arabia - Pauly & Patiny, 2015).

Genus *Rophites* Spinola, 1808***Rophites (Rophites) algirus algirus* Pérez, 1895**

Rophites algirus Pérez, 1895:60, Types ♀, ♂. - MNHN.

Distribution in Tunisia. Tunis (Schulthess, 1924), Jendouba (Ebmer & Schwammberger, 1986).

Global distribution. Western Palaearctic (Lebanon, Occupied Palestine, North Africa: Algeria, Morocco, Tunisia - Ebmer & Schwammberger, 1986).

Genus *Systropha* Illiger, 1806***Systropha (Systropha) hirsuta* Spinola, 1838**

Systropha hirsuta Spinola, 1839:516, Lectotype ♂. - MRSNT.

Distribution in Tunisia. no specific locality (Ascher & Pickering, 2023).

Global distribution. Western Palaearctic (Egypt, Occupied Palestine, Tunisia - Ascher & Pickering, 2023).

***Systropha (Systropha) pici* Pérez, 1895**

Systropha pici Pérez, 1895:175, Lectotype ♀. - MNHN.

Distribution in Tunisia. no specific locality (Baker, 1996; Ascher & Pickering, 2023).

Global distribution. North Africa (Algeria, Morocco, Tunisia - Lhomme et al., 2020).

DISCUSSION

The Tunisian fauna of Halictid bees is presented by 114 species belonging to nine genera and four subfamilies: Halictinae Thomson, 1869 (77.19%), Nomiinae Robertson, 1904 (2.63%), Nomioidinae Börner, 1919 (8.77%), and Rophitinae Schenck, 1866 (11.40%) (Fig. 2). This fauna is a little lower than Apidae fauna represented by 184 species in 19 genera and three subfamilies in the country (Ben Khedher et al., 2022). Considering 650 species of wild bees occurring in Tunisia Lhomme et al. (2020), this fauna represents more than 17.50 % of the total wild bees in the country. It represents about 32 % of the total European halictid bee fauna (Ghisbain et al., 2023). It is about 80% of the Moroccan fauna

which has 144 species in 12 genera (Lhomme et al., 2020) and it is slightly more diversified compared to Lebanese fauna having only 98 species in eight genera (Boustani et al., 2021). Like the Moroccan fauna, in Tunisia, the genus *Lasioglossum* Curtis, 1833 is the most diverse genus with 51 species followed by *Halictus* Latreille, 1804 and *Sphecodes* Latreille, 1804 with 21 and 16 species respectively. However, 40 wild bees species are without specific locality and their occurrence in Tunisia should be confirmed by new provincial records (Fig. 2). Otherwise, in this study, records of 19 species and subspecies (16.66 %) from Tunisia are reported only from faunistic studies and taxonomic revisions made by various foreigner authors from the world specifically Blüthgen (1923a, 1923b, 1923c, 1924a, 1924b, 1924c), Warncke (1976, 1992), Pesenko (2005), Pesenko and Pauly (2005) and Ebmer (1976a, 1989, 1993). Moreover, 74 species (64.91%) were found in Ascher and Pickering (2023), with or without a specific locality in Tunisia but their occurrence in Tunisia was confirmed by records cited in different examined literature sources. However, 21 species (18.42%) are cited in Ascher and Pickering (2023), but not in other studies made by taxonomists or researchers. For this reason, the validation of their identity and occurrence in Tunisia is needed.

As a regional distribution, the south of Tunisia is the richest in species with 51 species followed by the northeast region with 27 species. Northwest and East center regions have 20 species and only 14 species occur in the west center region (Fig. 6). 30 species were reported in the province of Tozeur located in southern Tunisia as the highest number of species in the country followed by Gabes, Gafsa, Jendouba and Tunis with 23, 21, 20 and 19 species respectively. In 50% of Tunisian provinces, records did not exceed six species and in four provinces (Mannouba, Ariana, Siliana and Mahdia) belonging to different regions, records are absent (Fig. 3). This unequal repartition of species between Tunisian regions and provinces may be explained by the little exploration of these regions and the absence of faunistic studies made by local researchers. Further investigations and entomological surveys can highly increase the number of species in all these regions. Entomological inventories in all Tunisian provinces are highly recommended to estimate not only Halictid species but also all wild bees richness.

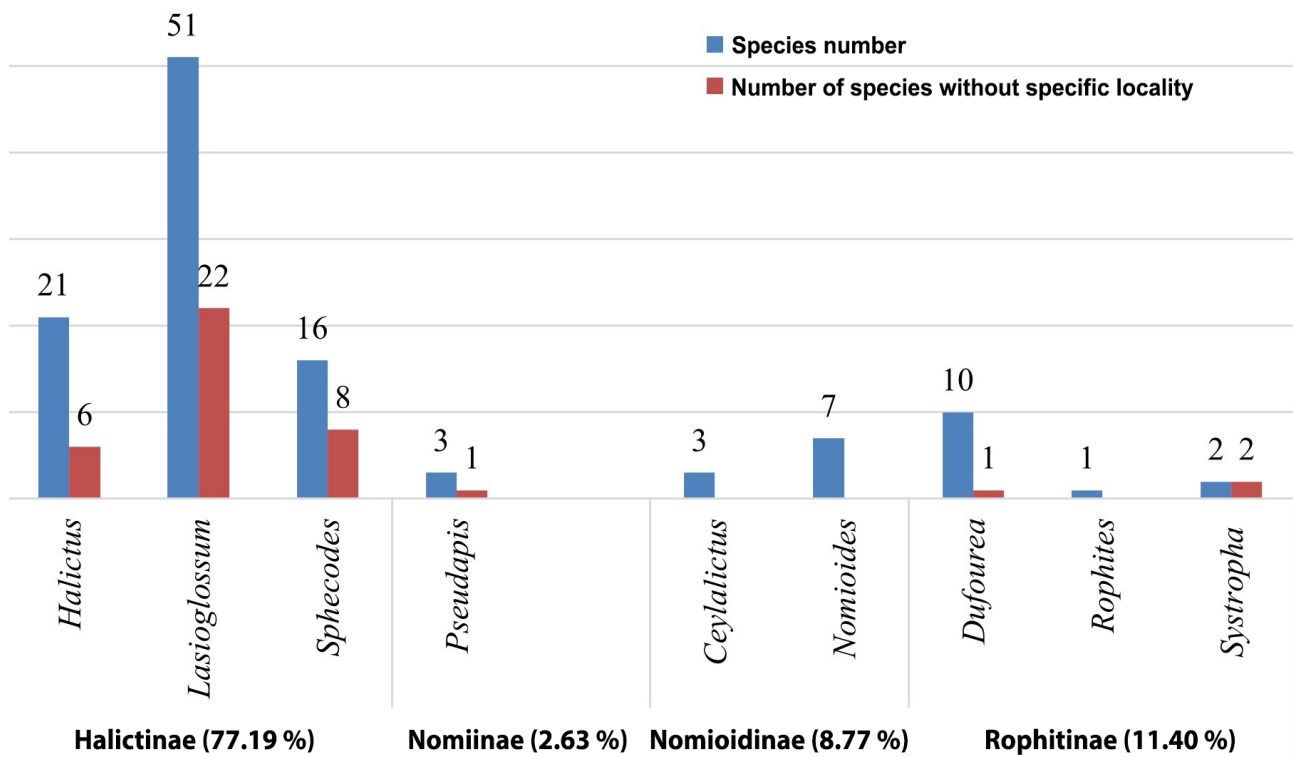


Figure 2. Number of recorded species for the genera Halictidae and species percentage for the subfamilies of Halictidae (Hymenoptera: Apoidea) in Tunisia.

In general zoogeographical distribution, all reported species in Tunisia are Palaearctic species occurring at least in one North African country. In addition to their Palaearctic distribution, 20 and 16 species inhabit the Afrotropical and Oriental regions respectively. One species *H. rubicundus* has a Holarctic distribution reaching the Nearctic region (Fig. 4). The Number of halictid species in Tunisia shared with neighbouring countries is very high with Algeria and Morocco reaching 82 and 84 species respectively but it is at a low level with Egypt and Libya (Fig. 5). More than 20% of recorded species in the country (23 species) have an exclusive north African distribution; among them five species: *Dufourea desertorides*, *D. eremica*, *D. josefi*, *D. minutissima* and *D. punica* are endemic to the local fauna representing so 25% of wild bee species endemic to Tunisia which is estimated by 20 species by Lhomme et al. (2020). On the other hand, 19 species are qualified as near-endemic species occurring in Tunisia and at least in one North African country or Italy which is geographically very close to Tunisia. It is the case of *Halictus mediterranellus* and *Pseudapis rufiventris* present only in North Africa and Italy.

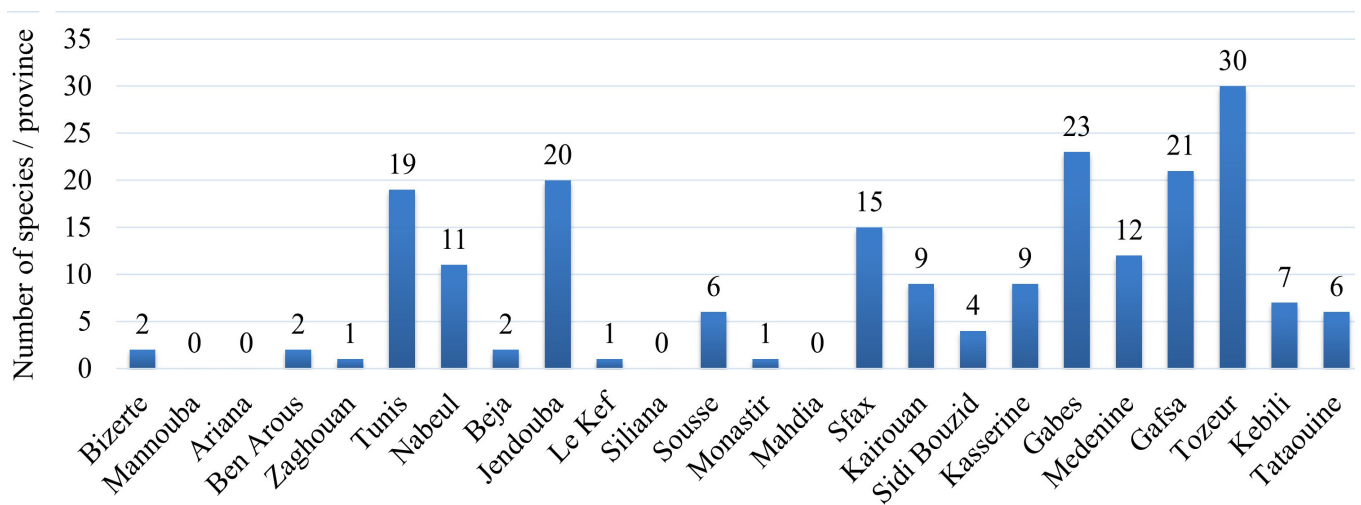


Figure 3. Number of recorded halictid species (Hymenoptera: Apoidea) per Tunisian province.

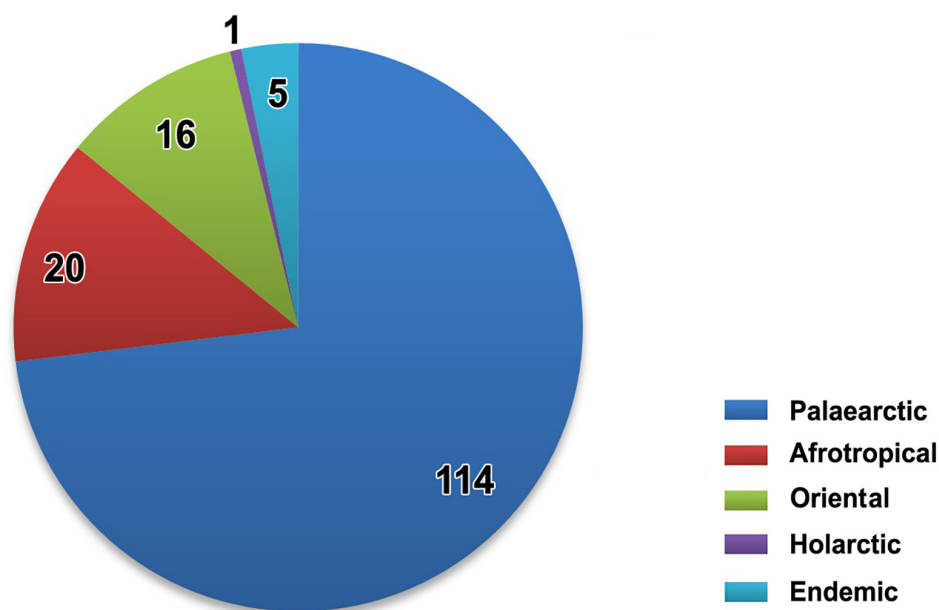


Figure 4. General zoogeographical distribution of the known Halictidae (Hymenoptera: Apoidea) from Tunisia.

Based on materials originating from Tunisia, researchers described new species for science. It is the case of Blüthgen (1923c, 1924c) who described three new species of the genus *Lasioglossum* from southern Tunisia (Tozeur): *L. leptcephalus* (Blüthgen, 1923), *L. dichrous* (Blüthgen, 1924) and *L. griseolum musculum* (Blüthgen, 1924). In the same genus, a neotype female from Northwestern Tunisia (Fernana (Jendouba) for the species *Lasioglossum bimaculatum* (Dours, 1872) was designated by Ebmer (2014).

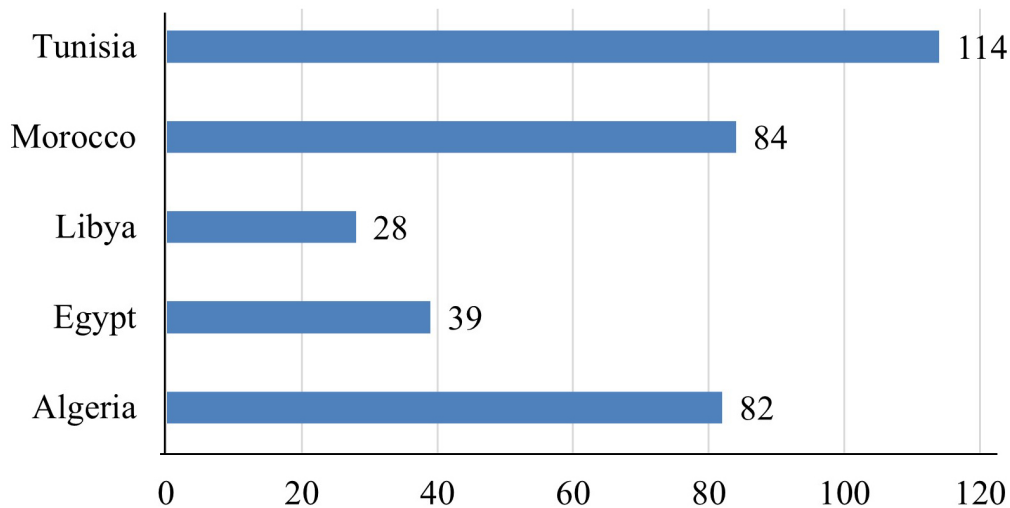


Figure 5. Number of halictid species (Hymenoptera: Apoidea) recorded from Tunisia and shared with North African countries (Algeria, Egypt, Libya and Morocco).

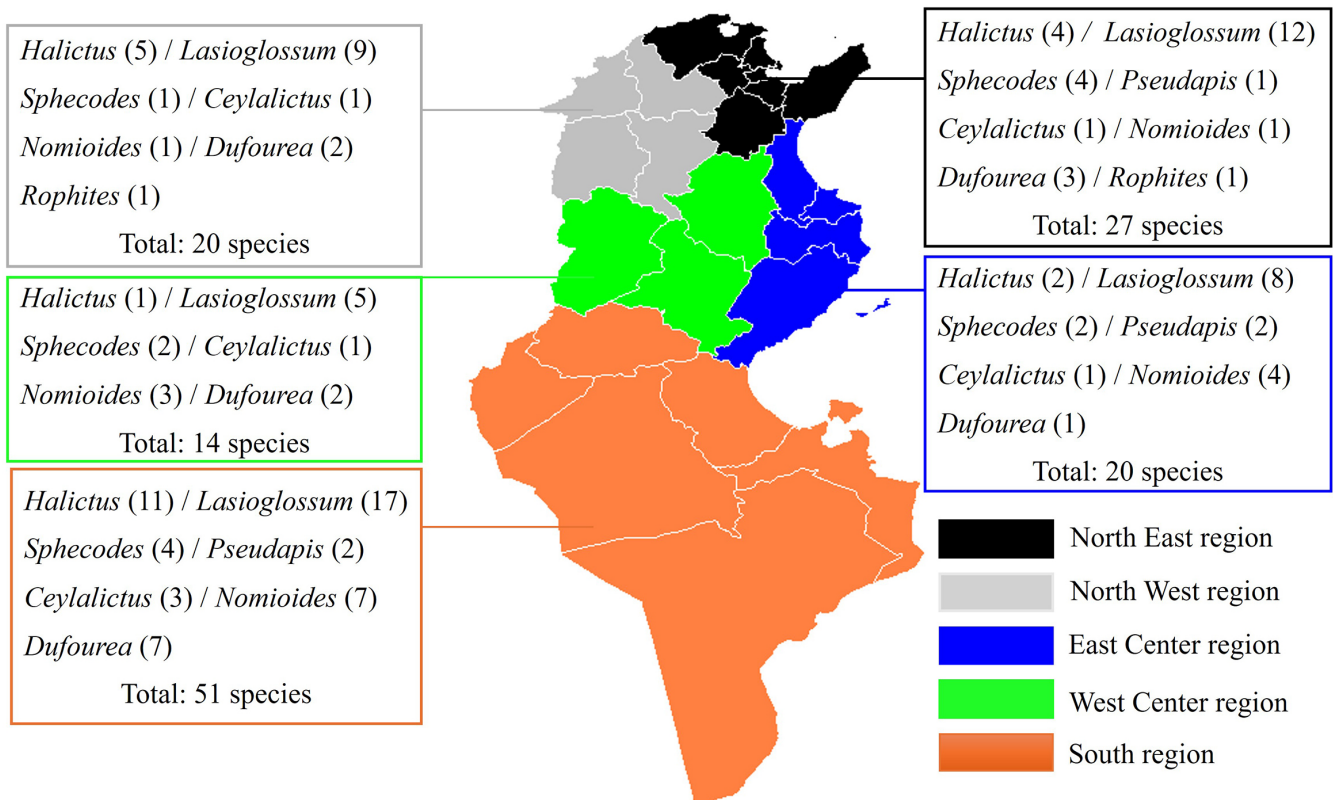


Figure 6. Number of species of halictid bees (Hymenoptera: Halictidae) in Tunisian regions.

Likewise, in his studies of Western Palaearctic *Dufourea* species, Ebmer (1976a, 1993, 2008b) described four new species of *Dufourea* from Gabes: *D. desertorides* Ebmer, 1978 (Holotype female), *D. minutissima* Ebmer, 1976 (Holotype male, allotype female and paratypes), *D. josefi* Ebmer, 1993 (holotype male and paratypes) and *D. phoenix* Ebmer, 2008 (Holotype and paratypes female). In the same genus, two other species *D. eremica* Ebmer, 1976 and *D. punica* Ebmer, 1976 from Kasserine and Tunis provinces respectively were described as new by Ebmer (1976a).

Despite the absence of local wild bee specialists and faunistic studies, and the small geographical size of the country, halictid bees in Tunisia have a rich diversity compared to other north African or Mediterranean countries. This list constitutes one of the other future contributions to the knowledge of wild bees in Tunisia. It can be used by interested local researchers to conduct further actions and research activities to implement preservation and conservation strategies for wild bees in Tunisia.

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The author confirms his contribution in the whole processing steps in the research, preparation and revising of the manuscript. He read and approved the final version of the manuscript.

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ETHICS APPROVAL AND CONSENT TO PARTICIPATE

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CONSENT FOR PUBLICATION

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CONFLICT OF INTERESTS

The author declares that there is no conflict of interest regarding the publication of this paper.

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REFERENCES

- Ascher, J.S. & Pickering, J. (2023) Discover Life bee species guide and world checklist (Hymenoptera: Apoidea: Anthophila). Available online at: http://www.discoverlife.org/mp/20q?guide=Apoidea_species [Accessed 6 March 2023].
- Astafurova, Yu. V., Proshchalykin, M. Yu. & Schwarz, M. (2019) The distribution of the genus *Sphecodes* Latreille (Hymenoptera, Halictidae) of the Arabian Peninsula and surrounding countries with description of the hitherto unknown female of *S. atlanticus* Warncke, 1992 and male of *S. dathei* Schwarz, 2010. *Zookeys*, 872, 13–40. <https://doi.org/10.3897/zookeys.872.35361>
- Baker, D.B. (1996) Notes on some Palaearctic and oriental *Systropha*, with descriptions of new species and a key to the species (Hymenoptera: Apoidea: Halictidae). *Journal of Natural History*, 30 (10), 1527–1547. <https://doi.org/10.1080/00222939600770871>

- Ben Khedher, H., Braham, M. & Chaib, I. (2022) The State of the Art of the Tunisian Apidae (Hymenoptera: Anthophila). *Sociobiology*, 69 (3), e8151. <https://doi.org/10.13102/sociobiology.v69i3.8151>
- Blüthgen, P.A.V. (1923a) Beiträge zur Systematik der Bienengattung *Halictus* Latr. (Hym.). *Konowia*, 2, 123–142.
- Blüthgen, P.A.V. (1923b) Algunos *Halictus* de Marruecos (Hym. Apidae). *Memorias de la Real Sociedad Española de Historia natural*, XII, 251–262.
- Blüthgen, P.A.V. (1923c) Beiträge zur Kenntnis der Bienengattung *Halictus* Latr. *Archiv für Naturgeschichte*, 5, 232–332.
- Blüthgen, P.A.V. (1924a) Beiträge zur Kenntnis der Bienengattung *Halictus* Latr. II.. *Archiv für Naturgeschichte*, 90A (10), 86–136.
- Blüthgen, P.A.V. (1924b) Beiträge zur Systematik der Bienengattung *Halictus* Latr. (Hym.). *Konowia*, 3, 253–284.
- Blüthgen, P.A.V. (1924c) Notas sobre *Halictus* paleárticos (Hymenopt. Apidae). *Boletín de la Real Sociedad Española de Historia natural*, XXIV, 262–266.
- Blüthgen, P.A.V. (1930) *Halictus* Latr. In: Schmiedeknecht O. (ed.) *Die Hymenopteren Nord- und Mittel-Europas*. Fischer Verlag, Jena, pp. 729–767.
- Blüthgen, P.A.V. (1935) Neue paläarktische *Halictus*-Arten. (Hym., Apidae). *Deutsche Entomologische Zeitschrift*, 1935, 111–120. <https://doi.org/10.1002/mmnd.193519350106>
- Bogusch, P. & Straka, J. (2012) Review and identification of the cuckoo bees of central Europe (Hymenoptera: Halictidae: *Sphecodes*). *Zootaxa*, 3311 (1), 1–41. <https://doi.org/10.11646/zootaxa.3311.1.1>
- Boustani, M., Rasmont, P., Dathe, H.H., Ghisbain, G., Kasperek, M., Michez, D., Müller, A., Pauly, A., Risch, S., Straka, J., Terzo, M., Achter, X.V., Wood, T.J. & Nemer, N. (2021). The bees of Lebanon (Hymenoptera: Apoidea: Anthophila). *Zootaxa*, 4976 (1), 1–146. <https://doi.org/10.11646/zootaxa.4976.1.1>
- Chichoune, H., Benachour, K., Louadi, K. & Ortiz-Sánchez, F.J. (2018) Premières données sur les Halictidae (Hymenoptera: Apoidea) de la région de Batna (Est algérien). *Annales de la Société Entomologique de France*, 54 (5), 447–463. <https://doi.org/10.1080/00379271.2018.1507686>
- Danforth, B.N., Eardley, C.D., Packer, L., Walker, K., Pauly, A. & Randrianambinintosa, F.J. (2008) Phylogeny of Halictidae with an emphasis on endemic African Halictinae. *Apidologie*, 39, 86–101. <https://doi.org/10.1051/apido:2008002>
- Dours, M. (1872) Hyménoptères nouveaux du bassin Méditerranéen. *Revue et magasin de Zoologie*, (2) 23, 293–311, 349–359 (*Halictus*), 396–399, 419–434.
- Ebmer, A.W. (1976a) Neue westpaläarktische Halictidae (Dufoureae, Apoidea). *Linzer biologische Beiträge*, 8, 179–203.
- Ebmer, A.W. (1976b) *Halictus* und *Lasioglossum* aus Marokko. *Linzer biologische Beiträge*, 8, 205–266.
- Ebmer, A.W. (1984) Die westpaläarktischen der Gattung *Dufourea* Lapeletier 1841 mit illustrierten Bestimmungstabellen (Insecta: Hymenoptera: Apoidea: Halictidae: Dufoureae). *Senckenbergiana biologische*, 64, 313–379.
- Ebmer, A.W. (1985) *Halictus* und *Lasioglossum* aus Marokko (Hymenoptera, Apoidea, Halictidae). Erster Nachtrag. *Linzer biologische Beiträge*, 17, 271–293.
- Ebmer, A.W. (1986) Die Artgruppe des *Lasioglossum strictifrons* (Vachal 1895) mit einer Bestimmungstabelle der Weibchen (Hymenoptera, Apoidea, Halictidae). *Linzer biologische Beiträge*, 18, 417–443.
- Ebmer, A.W. (1988) Kritische Liste der nicht-parasitischen Halictidae Österreichs mit Berücksichtigung aller mitteleuropäischen Arten (Insecta: Hymenoptera: Apoidea: Halictidae). *Linzer biologische Beiträge*, 20, 527–711.
- Ebmer, A.W. (1989) Die westpaläarktischen Arten der Gattung *Dufourea* Lapeletier 1841 mit illustrierten Bestimmungstabellen (Insecta: Hymenoptera: Apoidea: Halictidae: Dufoureae). Zweiter Nachtrag. *Linzer biologische Beiträge*, 21, 193–210.
- Ebmer, A.W. (1993) Die westpaläarktischen Arten der Gattung *Dufourea* Lapeletier 1841 mit illustrierten Bestimmungstabellen (Insecta: Hymenoptera: Apoidea: Halictidae: Rophitinae). Dritter Nachtrag. *Linzer biologische Beiträge*, 25, 15–42.
- Ebmer, A.W. (1995) Asiatische Halictidae, 3. Die Artengruppe der *Lasioglossum carinate-Eovylaeus* (Insecta: Hymenoptera: Apoidea: Halictidae: Halictinae). *Linzer biologische Beiträge*, 27, 525–652.
- Ebmer, A.W. (1999) Die westpaläarktischen Arten der Gattung *Dufourea* Lapeletier 1841 (Insecta: Hymenoptera: Apoidea: Halictidae: Rophitinae), Vieter Nachtrag. *Linzer biologische Beiträge*, 31, 183–228.
- Ebmer, A.W. (2000) Asiatische Halictidae - 9. Die Artengruppe des *Lasioglossum pauperatum* (Insecta: Hymenoptera: Apoidea: Halictidae: Halictinae). *Linzer biologische Beiträge*, 32, 399–453.

- Ebmer, A.W. (2008a) Neue Taxa der Gattungen *Halictus* Latreille 1804 und *Lasioglossum* Curtis, 1833 (Hymenoptera, Apoidea, Halictidae) aus den Vereinigten Arabischen Emiraten. *Linzer biologische Beiträge*, 40, 551–580.
- Ebmer, A.W. (2008b) Die westpaläarktischen Arten der Gattung *Dufourea* Lepeletier 1841 (Insecta: Hymenoptera: Apoidea: Halictidae: Rophitinae) Fünfter Nachtrag. *Linzer biologische Beiträge*, 40, 581–625.
- Ebmer, A.W. (2014) Die nicht-parasitischen Halictidae der Insel Zypern im Vergleich zu Kreta mit einer Monographie der *Lasioglossum bimaculatum*-Artengruppe und einer Übersicht der *Halictus nicosiae*-Untergruppe (Insecta: Hymenoptera: Apoidea: Halictidae). *Linzer biologische Beiträge*, 46, 291–413.
- Ebmer, A.W. (2015) Die westpaläarktischen Arten der Gattung *Dufourea* Lepeletier 1841 (Insecta: Hymenoptera: Apoidea: Halictidae: Rophitinae) Sechster Nachtrag. *Linzer biologische Beiträge*, 47, 441–448.
- Ebmer, A.W. & Schwammberger, K.H. (1986) Die Bienengattung *Rophites* Spinola 1808 (Insecta: Hymenoptera: Apoidea: Halictidae: Dufoureae). Illustrierte Bestimmungstabellen. *Senckenbergiana biologische*, 66, 271–304.
- Ghisbain, G., Rosa, P., Bogusch, P., Flamino, S., Le Divelec, R., Dorchin, A., Kasperek, M., Kuhlmann, M., Litman, J., Mignot, M., Müller, A., Praz, C., Radchenko, V., Rasmont, P., Risch, S., Roberts, S., Smit, J., Wood, T.J., Michez, D. & Reverté, S. (2023) The new annotated checklist of the wild bees of Europe (Hymenoptera: Anthophila). *Zootaxa*, 5327 (1), 001–147. <https://doi.org/10.11646/zootaxa.5327.1.1>
- Graeffe, E. (1906) Beiträge zur Insektenfauna von Tunis. *Verhandlungen der kaiserlich-königlichen Zoologisch-Botanischen Gesellschaft in Wien*, 56, 446–471.
- Klein, A., Vaissière, B. E., Cane, J. H., Steffan-Dewenter, I., Cunningham, S. A., Kremen, C. & Tscharntke, T. (2007) Importance of pollinators in changing landscapes for world crops. *Proceedings of the Royal Society B, Biological Sciences*, 274, 303–313. <https://doi.org/10.1098/rspb.2006.3721>
- Lhomme, P., Michez, D., Christmann, S., Scheuhl, E., El Abdouni, I., Hamroud, L., Ihsane, O., Sentil, A., Chrif Smaili, M., Schwarz, M., Dather, H.H. Straka, J., Pauly, A., Schmid-Egger, C., Patiny, S., Terzo, M., Müller, A., Praz, C., Risch, S., Kasperek, M., Kuhlmann, M., Wood, T.J., Bogusch, P., Ascher, J. & Rasmont, P. (2020) The wild bees (Hymenoptera: Apoidea) of Morocco. *Zootaxa*, 4892 (1), 1–159. <https://doi.org/10.11646/zootaxa.4892.1.1>
- Louadi, K. (1999) Contribution à la connaissance des genres *Halictus* et *Lasioglossum* de la région Constantine (Algérie) (Hymenoptera, Apoidea, Halictidae). *Bulletin de la Société Entomologique de France*, 104 (2), 141–144. <https://doi.org/10.3406/bsef.1999.16562>
- Louadi, K., Berchi, S. & Benachour, K. (2007) Floral visitation patterns of bees during spring in Constantine, Algeria. *African Entomology*, 15 (1), 209–213. <https://doi.org/10.4001/1021-3589-15.1.209>
- Louadi, K., Terzo, M., Benachour, K., Berchi, S., Aguib, S., Maghni, N. & Benarfa, N. (2008) Les Hyménoptères Apoidea de l'Algérie orientale avec une liste d'espèces et comparaison avec les faunes ouest-palaeartiques. *Bulletin de la Société Entomologique de France*, 113 (4), 459–472. <https://doi.org/10.3406/bsef.2008.3044>
- Michener, C.D. (2007) *The Bees of the World*. Second edition. John Hopkins, Baltimore. 953 p. <https://doi.org/10.56021/9780801885730>
- Michez, D., Rasmont, P., Terzo, M. & Vereecken, N. (2019) *Bees of Europe - Hymenoptera of Europe - 1*. N.A.P., Verrières, Le Buisson. 548 p.
- Pauly, A. (2015) Le genre *Nomiapis* Cockerell 1919. Atlas Hymenoptera. Mons, Gembloux. Available online at: <http://www.atlashymenoptera.net/page.aspx?ID=72> [Accessed 10 December 2023]
- Pauly, A. (2016a) Le genre *Lasioglossum*, sous-genre *Evylaeus* Robertson, 1902, de la région Paléarctique. Atlas Hymenoptera. Mons, Gembloux. Available online at: <http://www.atlashymenoptera.net/page.aspx?ID=95> [Accessed 10 December 2023]
- Pauly, A. (2016b) Le genre *Lasioglossum*, sous-genre *Lasioglossum* Curtis, 1833 en Europe et le Bassin Méditerranéen. Atlas Hymenoptera. Mons, Gembloux. Available online at: <http://www.atlashymenoptera.net/page.aspx?ID=105> [Accessed 10 December 2023]
- Pauly, A. (2016c) Genus *Vestihalictus* Blüthgen, 1961. Atlas Hymenoptera. Mons, Gembloux. Available online at: <http://www.atlashymenoptera.net/page.aspx?id=97> [Accessed 10 December 2023]
- Pauly, A. (2016d) Genus *Seladonia* Robertson, 1918. Atlas Hymenoptera. Mons, Gembloux. Available online at: <http://www.atlashymenoptera.net/page.aspx?ID=67> [Accessed 10 December 2023]
- Pauly, A. (2016e) Les *Dilactus* Robertson, 1902 de la Région Paléarctique. Atlas Hymenoptera. Mons, Gembloux. Available online at: <http://www.atlashymenoptera.net/page.aspx?id=128> [Accessed 10 December 2023]
- Pauly, A. (2017a) The genus *Ceylalictus* Strand, 1913. Atlas Hymenoptera. Mons, Gembloux. Available online at: <http://www.atlashymenoptera.net/page.aspx?ID=94> [Accessed 10 December 2023]

- Pauly, A. (2017b) The genus *Nomioides* Schenck, 1867. Atlas Hymenoptera. Mons, Gembloux. Available online at: <http://www.atlashymenoptera.net/page.aspx?ID=96> [Accessed 10 December 2023]
- Pauly, A. & Patiny, S. (2015) Atlas of the genus *Dufourea* Lepeletier, 1841. Atlas Hymenoptera, Mons, Gembloux. <http://www.zoologie.umh.ac.be/hymenoptera/page.aspx?ID=191> [Accessed 6 March 2023]
- Pauly, A., Devalez, J., Sonet, G., Nagy, Z.T. & Boevé, J.L. (2015) DNA barcoding and male genital morphology reveal five new cryptic species in the West Palearctic bee *Seladonia smaragdula* (Vachal, 1895) (Hymenoptera: Apoidea: Halictidae). *Zootaxa*, 4034 (2), 257–290. <https://doi.org/10.11646/zootaxa.4034.2.2>
- Pauly, A., Pesenko, Y. & Radchenko, V. (2016) Les *Halictus* Latreille, 1804 d'Europe et du Bassin Méditerranéen. Atlas Hymenoptera. Mons, Gembloux. Available online at: <http://www.atlashymenoptera.net/page.aspx?id=70> [Accessed 10 December 2023]
- Pesenko, Y.A. (2005) New data on the taxonomy and distribution of the Palaearctic halictids: genus *Halictus* Latreille (Hymenoptera: Halictidae). *Entomofauna*, 26, 313–348.
- Pesenko, Y.A. (2006) Contributions to the Halictid fauna of the Eastern Palaearctic region: Genus *Seladonia* Robertson (Hymenoptera: Halictidae, Halictinae). *Esakia*, 46, 53–82. <https://doi.org/10.5109/2861>
- Pesenko, Y.A. & Pauly, A. (2005) Monograph of the bees of the subfamily Nomioiinae (Hymenoptera: Halictidae) of Africa (excluding Madagascar). *Annales de la Société entomologique de France*, 41, 129–236. <https://doi.org/10.1080/00379271.2005.10697443>
- Pérez, J. (1895) *Espèces nouvelles de Mellifères de Barbarie. (Diagnoses préliminaires)*. Gounouilhou, Bordeaux. 64 pp.
- Pérez, J. (1903) Donne la suite de ses diagnoses d'espèces nouvelles de Mellifères. *Procès verbaux de la Société Linnéenne de Bordeaux*, 58, 208–212.
- Robertson, C. (1904) Synopsis of Anthophila. *Canadian Entomologist*, 36, 37–43. <https://doi.org/10.4039/Ent3637-2>
- Schulthess, A. (1924) Contribution à la connaissance de la faune des Hyménoptères de l'Afrique du Nord. *Bulletin de la Société d'Histoire Naturelle de l'Afrique du Nord*, 15, 293–320.
- Sonet, M. & Jacob-Remacle, A. (1987) Pollinisation de la légumineuse fourragère *Hedysarum coronarium* L. en Tunisie. *Bulletin des recherches agronomiques de Gembloux*, 22 (11), 19–32.
- Strand, E. (1909) Die paläarktischen *Halictus*-Arten des Kgl. Zoologischen Museums zu Berlin, z. T. nach Bestimmungen von J. D. Alfken. *Archiv für Naturgeschichte*, 75 (1), 1–62.
- Warncke, K. (1976) Zur Systematic und Verbreitung der Bienengattung *Nomia* Latr. in der Westpalärtis und dem turkestanischen Becken (Hymenoptera: Apoidea). *Reichenbachia*, 16, 93–120.
- Warncke, K. (1977) Ideen zum natürlichen System der Bienen. *Mitteilungen der Münchner Entomologischen Gesellschaft*, 67, 39–63.
- Warncke, K. (1979) Beiträge zur Bienenfauna des Iran: 3. Die Gattung *Rophites* Spin., mit einer Revision der westpalaarktischen Arten der Bienengattung *Rophites* Spin. *Bolletino del Museo di Storia Naturale di Venezia*, 30, 111–155.
- Warncke, K. (1992) Die westpalaarktischen Arten der Bienengattung *Sphecodes* Latr. (Hymenoptera, Apoidea, Halictinae). *Bericht der Naturforschenden Gesellschaft Augsburg*, 52, 9–64.
- Wood, T.J. & Le Divelec, R. (2022) Cryptic diversity revealed in a revision of West Palearctic *Nomiapis* and *Systropha* (Hymenoptera: Halictidae). *Diversity*, 14, 1–32. <https://doi.org/10.3390/d14110920>

اولین فهرست زنبورهای خانواده Halictidae (Hymenoptera: Apoidea, Anthophila, Halictidae) تونس

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چکیده: اولین فهرست زنبورهای گرده‌افشان خانواده Halictidae (Hymenoptera: Halictidae) در تونس بر اساس اطلاعات موجود در منابع مختلف تهیه شده است. این لیست شامل ۱۱۴ گونه از چهار زیرخانواده (Halictinae، Lasioglossum Curtis در زیرخانواده Halictinae با ۵۱ گونه و زیرگونه بیشترین تنوع را دارد. بالاترین تعداد گونه در منطقه جنوب تونس با ۵۱ گونه و زیرگونه گزارش شده است. برای هر گونه، توزیع جهانی و استانی در تونس بر اساس منابع مربوطه ذکر شده است. ۴۰ آرایه بدون محل مشخص در تونس وجود دارد و ضروری است برای تأیید حضور آن‌ها در کشور مطالعات بیشتری انجام شود. تمام گونه‌های گزارش شده از تونس در منطقه پالئارکتیک انتشار دارند و بیش از ۲۰ درصد آن‌ها صرفاً در شمال آفریقا پراکنش دارند که از میان آن‌ها، پنج گونه به فقط از تونس گزارش شده‌اند. این مطالعه یک نقطه شروع برای انجام تحقیقات بیشتر در مورد فون زنبورهای گرده‌افشان وحشی محلی و پیشنهاد راهبردهای حفاظتی برای آن‌ها است.

واژگان کلیدی: باریک‌تنه‌داران، انتشار، بوم‌زاد، فهرست، شمال آفریقا، شیرین‌زنبوران، زنبورهای وحشی