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## New or little known Halictidae from Italy (Hymenoptera, Apoidea)

**Riassunto:** *Halictidae d'Italia nuovi o poco noti (Hymenoptera, Apoidea).*

Gli autori, nell'esaminare alcune collezioni di Halictidae, riscontrano le seguenti novità riguardanti la fauna italiana: *Lasioglossum zonulum* Smith è nuovo per il Lazio e la Sardegna, *Sphecodes ferruginatus* Hagens è nuovo per il Molise e la Sardegna, *Lasioglossum laterale* (Brullé) è nuovo per la Toscana e la Sicilia, *L. leucopus* (Kirby) e *L. prasinum* (Smith) sono nuovi per il Lazio e la Sicilia, *Halictus kessleri* Bramson, *Lasioglossum aeratum* (Kirby), *L. brevicorne* (Schenck), *L. breviventre* (Schenck) e *Sphecodes miniatus* Hagens sono nuovi per la Sicilia. Inoltre, forniscono nuovi dati su *Sphecodes combai* Nobile & Turrisi. Infine, osservano che la presenza di *Halictus balearicus* Pérez in territorio italiano richiede conferma.

**Abstract:** The authors, after examination of some collections of Halictidae, obtain the following novelties regarding the Italian fauna: *Lasioglossum zonulum* Smith is new for Latium and Sardinia, *Sphecodes ferruginatus* Hagens is new for Molise and Sardinia, *Lasioglossum laterale* (Brullé) is new for Tuscany and Sicily, *L. leucopus* (Kirby) and *L. prasinum* (Smith) are new for Latium and Sicily, *Halictus kessleri* Bramson, *Lasioglossum aeratum* (Kirby), *L. brevicorne* (Schenck), *L. breviventre* (Schenck) and *Sphecodes miniatus* Hagens are new for Sicily. Moreover, new data regarding *Sphecodes combai* Nobile & Turrisi are provided. Finally, they observe that the presence of *Halictus balearicus* Pérez in Italy needs confirmation.

**Key words:** *Halictidae*, New records, Little known species, Italy.

### INTRODUCTION

The authors, based on the examination of the collection of Halictidae belonging to the Museum of Zoology at the University of Rome "La Sapienza" (MZUR), the Department of Biological, Geological and Environmental Sciences, Zoology Section "Marcello La Greca" of the University of Catania (DSAZ), the private collections of Maurizio Mei (Rome, Italy) (CMM) and Salvatore Tomarchio (Catania, Italy) (CST), as well as personal own collections (CVN and CGFT), provide several novelties regarding the Italian Halictidae.

The identification of the material is based mainly on Blüthgen (1923), Ebmer (1969, 1970, 1971) and Warncke (1992); the systematic account follows Michener (2000). Updated distributional data are taken from the following web-sources: Mitroiu *et al.* (2013), Comba (2014) and Kuhlmann (2014).

### RESULTS

***Halictus (Seladonia) kessleri*** Bramson, 1879  
*Halictus kessleri* Bramson, 1879.- Bull. Soc. Nat. Moscou 54: 286.

*Halictus kessleri*, Moidl, 1922: 80 (Sicilia).

*Halictus kessleri*, Pagliano, 1988: 90 (Friuli-Venezia-Giulia, Emilia-Romagna, Toscana, Lazio, Sardegna).

*Halictus (Seladonia) kessleri*, Comba, 2014 (Piemonte, Friuli-Venezia Giulia, Emilia-Romagna, Toscana, Umbria, Lazio, Calabria, Puglia, Sardegna).

NEW FINDINGS: TUSCANY: Livorno, Isola d'Elba, Porto Ferraio, Enfolia, 30.III-3.IV.2014, 1♀, Mei leg. (CMM); Livorno, Portoferraio, Monte Orello, 18.VIII.2010, 1♂, Forbicioni leg. (CMM); Locality La Casaccia 20.IV.2011, 1♀, Forbicioni leg. (CMM). LATIUM: Roma, Tenuta della Cervelletta, 11.VIII.2012, 1♂, 14♀, Mei leg. (CMM, MZUR).

SARDINIA: Oristano, S. Giovanni di Sinis, 1-20.VII.2012, 1♀, Mei leg. (CMM).

SICILY: Etna, Catania, Gravina di Catania, 10.IV.1989, 1♀, Nobile leg. (DSAZ); Siracusa, Pachino, Riserva Naturale di Vendicari, 15.VII.1989, 1♀, Nobile leg. (DSAZ).

Already known to continental Italy and Sardinia,

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the presence of this species is confirmed for Sicily.  
DISTRIBUTION: Euroasian (excluding colder territories).

***Halictus (Vestitohalictus) balearicus* Pérez, 1903**

*Halictus balearicus* Pérez, 1903.- Proc.-verb. Soc. linn., Bordeaux, 57.

*Halictus balearicus*, Strand, 1909: 4 (Sicilia).

The presence of this species in Italy, although coherent with the general distribution needs confirmation, since it is only based on the old record by Strand (1909).

DISTRIBUTION: SW-European.

***Lasioglossum (Dialictus) aeratum* (Kirby, 1802)**

*Melitta aerata* Kirby, 1802.- Monogr. Apum Angl., 2: 58.

*Lasioglossum aeratum*, Pagliano, 1988: 94 (Piemonte, Lombardia, Emilia-Romagna, Toscana, Marche, Sardegna).

*Lasioglossum (Dialictus) aeratum*, Comba, 2014 (Piemonte, Lombardia, Veneto, Trentino-Alto Adige, Friuli-Venezia Giulia, Emilia-Romagna, Toscana, Marche, Lazio, Molise, Sardegna).

NEW FINDINGS: SICILY: Catania, Etna, Foresta Cubania, 1400 m (Milo) 7.V.1995, 1♂, 1♀, Alicata & Giusso leg. (DSAZ); Etna, Rifugio Galvarina, 1850 m, 2.V.1999, 1♀, Tomarchio leg. (CST).

New for Sicily.

DISTRIBUTION: W-Palaeartic.

***Lasioglossum (Dialictus) leucopus* (Kirby, 1802)**

*Melitta leucopus* Kirby, 1802.- Monogr. apum Angl., 2: 59.

*Lasioglossum leucopus*, Pagliano, 1988: 101 (Piemonte, Valle d'Aosta, Trentino-Alto Adige, Emilia-Romagna, Toscana, Campania).

*Lasioglossum (Dialictus) leucopus*, Comba, 2014 (Valle d'Aosta, Piemonte, Trentino-Alto Adige, Emilia-Romagna, Toscana, Marche, Campania).

NEW FINDINGS: LATIUM: Roma, Tenuta di Castelporziano, Ponte della Focetta, 4.V-15.VI.2008, 6♀, Maltzeff leg. (MZUR).

SICILY: Catania, Etna, Rifugio Galvarina, 1850 m, 2.V.1999, 1♀, Tomarchio leg. (CST).

New for Latium and Sicily.

DISTRIBUTION: W-Palaeartic (discontinuous in the south-eastern part).

***Lasioglossum (Hemihalictus) brevicorne* (Schenck, 1870)**

*Halictus brevicorne* Schenck, 1870.- Jb. Nassau. Ver. Naturk. 21-22 (1867-68): 310.

*Lasioglossum brevicorne*, Pagliano, 1988: 96 (Piemonte, Toscana, Lazio, Campania, Calabria, Sardegna).

*Lasioglossum (Dialictus) brevicorne*, Comba, 2014 (Piemonte, Trentino-Alto Adige, Emilia-Romagna, Toscana, Lazio, Campania, Calabria, Sardegna).

NEW FINDINGS: SICILY: Catania, Etna, Contrada Sclafani, 1400 m (Nicolosi) 29.VIII.1976, 2♂, Costa leg. (DSAZ); Catania, Etna, Foresta Cubania, 1400 m (Milo), 7.VIII.1995, 1♂, Alicata & Giusso leg. (DSAZ). New for Sicily.

DISTRIBUTION: W-Palaeartic-Macaronesian.

***Lasioglossum (Lasioglossum) breviventre* (Schenck, 1853)**

*Hylaeus breviventris* Schenck, 1853.- Jb. Ver. Naturk. Nassau 9: 151.

*Lasioglossum (Lasioglossum) breviventre*, Comba, 2014 (Marche, Umbria).

NEW FINDINGS: SICILY: Etna, Catania, Tremestieri Etneo, 350 m, 12.IV.1993, 1♀ (CGFT).

New for Sicily.

DISTRIBUTION: Central-South-European.

***Lasioglossum (Lasioglossum) laterale* (Brullé, 1832)**

*Halictus lateralis* Brullé, 1832.- Expéd. Scient. Morée 3(1): 349.

*Lasioglossum laterale*, Pagliano, 1988: 100 (Piemonte, Trentino-Alto Adige, Emilia-Romagna, Campania, Calabria, Basilicata).

*Lasioglossum (Lasioglossum) laterale*, Comba, 2014 (Piemonte, Trentino-Alto Adige, Emilia-Romagna, Lazio, Campania, Basilicata, Calabria).

NEW FINDINGS: TUSCANY: Isola d'Elba (Livorno) Monte Perone, Pietra Murata, 31.III.2014, 2♀, Mei leg. (CMM).

LATIUM: Roma, Tenuta di Castelporziano, Grotta Romagnola, 30.VII-3.IX.1998, 1♂, Cerretti leg. (MZUR).

SICILY: Catania, Etna, Contrada Sclafani, 1400 m (Nicolosi) 29.VIII.1976, 1♂, Ronsisvalle leg. (DSAZ); Messina, Monti Nebrodi, Cesarò, 1200 m, 23.V.1981, 4♀, Tullia Zetto Brandmayr leg. (in trappole ad aceto e formalina) (DSAZ).

New for Tuscany and Sicily.

DISTRIBUTION: Central-South-European-Anatolian.

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

*Halictus prasinus* Smith, 1848.- Zoologist 6: 2169.

*Lasioglossum prasinum*, Pagliano, 1988: 106 (Emilia-Romagna, Toscana, Puglia, Sardegna).

*Lasioglossum (Lasioglossum) prasinum*, Comba, 2014 (Veneto, Emilia-Romagna, Toscana, Puglia, Sardegna).

NEW FINDINGS: LATIUM: Roma, Tenuta di Castelporziano, Ponte della Focetta 4.V-15.VI.2008, 2♀, Maltzeff leg. (MZUR); 30.VII-3.IX.1998, 1♀, Cerretti leg. (MZUR).

SARDINIA: Calasetta, 14.XII.1973, 1♀ (CVN).

SICILY: Catania, Etna, Maletto, m 1350, 25.VII.1992, 1♂, Tomarchio leg. (CST).

New for Latium and Sicily.

DISTRIBUTION: W-Mediterranean-Macaronesian (extending to Central Europe).

***Lasioglossum (Leuchalictus) zonulum*** (Smith, 1848)

*Halictus zonulus* Smith, 1848.- Zoologist 6: 2171.

*Lasioglossum zonulum*, Pagliano, 1988: 110 (Piemonte, Veneto, Marche, Friuli-Venezia Giulia, Liguria, Emilia-Romagna, Sicilia).

*Lasioglossum (Lasioglossum) zonulum*, Comba, 2014 (Piemonte, Liguria, Lombardia, Veneto, Trentino-Alto Adige, Friuli-Venezia Giulia, Emilia-Romagna, Marche, Umbria, Campania, Sicilia).

NEW FINDINGS: LATIUM: Roma, Tenuta di Castelporziano, Ponte della Focetta, 30.VII-3.IX.1998, 1♀, Cerretti leg. (MZUR).

SARDINIA: Sassari, Tissi, 23.VI.1950, 1♀ (CVN).

New for Latium and Sardinia.

DISTRIBUTION: Euro-Asian (also present in North America).

***Sphecodes combai*** Nobile & Turrise, 2004

*Sphecodes combai* Nobile & Turrise, 2004.- Entomofauna, 25 (8): 119.

*Sphecodes marginatus*, Schwarz & Gusenleitner, 2012: 75

*Sphecodes combai*, Nobile & Turrise, 2013: 567 (Italia: Lazio).

*Sphecodes combai*, Comba, 2014 (Lazio).

NEW FINDINGS: LATIUM: Roma, Tenuta di Castelporziano, Piscinale delle Farniete 30.VI-3.VII.2008, 2♂, Maltzeff leg. (MZUR).

This species belongs to the genus *Sphecodes* “*pinguiculus* Pérez” group (Nobile & Turrise, 2004, 2013), having the antennal flagellum of males, at least beginning from the third flagellomere, is uniformly covered by short, robust and erect white sensilla, not restricted to a narrow area of flagellomeres, and thus, without the sequence of notch-gibbous areas, as recognized in other *Sphecodes* species groups. The holotype (body length: 4.0 mm) is a second generation specimen, whereas the two additional males (body length: 4.2 and 5.5 mm respectively), are first generation specimens. The two generations, having similar features including those of genital capsule, still show some differences, as following summarized: the antennal flagellum, which is brown ventrally and slightly darker dorsally in the holotype, uniformly light brown in the other males; the mandibles, which are light brown with base darker in the holotype, in the additional males the base is black, instead; the setae of clypeus and face, which are moderately dense in the holotype (cuticle visible beneath), in the additional males are denser (cuticle not visible beneath).

The probable host of this species is *Lasioglossum griseolum* (Morawitz), bivoltine as its parasite, collected with many specimens in the same locality and period.

***Sphecodes ferruginatus*** Hagens, 1882

*Sphecodes ferruginatus* Hagens, 1882.- Dt. Ent. Z. 26: 221.

*Sphecodes ferruginatus*, Pagliano, 1988: 113 (Piemonte, Lombardia, Emilia Romagna).

*Sphecodes ferruginatus*, Warncke, 1992: 50 (Italia settentrionale).

*Sphecodes ferruginatus*, Nobile & Campadelli, 1998: 90 (Italia continentale).

*Sphecodes ferruginatus*, Comba, 2014 (Piemonte, Lombardia, Trentino-Alto Adige, Emilia-Romagna, Campania).

NEW FINDINGS: MOLISE: Isernia, Pescopennataro, Abeti Soprani, 1200 m, 26-27.VII.2012, 3♀, Fanelli, Manocchio, Parisi leg. (MZUR). SARDINIA: Nuoro, Meana, Arascixi, 9.IV.1975, 1♀, Floris leg. (CVN); Cagliari, Iglesias, Colonia Beneck, 636 m, 2-16.V.2006, 1♀, Chessa leg. (MZUR).

New for Molise and Sardinia.

DISTRIBUTION: Eurosibiric-anatolian.

***Sphecodes miniatus* Hagens, 1882**

*Sphecodes miniatus* Hagens, 1882.- Dt. Ent. Z. 26: 223.

*Sphecodes miniatus*, Warncke, 1992: 55 (Italia settentrionale).

*Sphecodes miniatus*, Nobile & Campadelli, 1998: 94 (Italia continentale, Sardegna).

*Sphecodes miniatus*, Comba, 2014 (Trentino-Alto Adige, Emilia-Romagna, Lazio).

NEW FINDINGS: SICILY: Catania, Etna, Contrada Milia, 1250 m, 5.VIII.1999, 1♂, Tomarchio leg. (CST).

New for Sicily.

DISTRIBUTION: European-W-Asian.

## CONCLUSIONS

The new findings of Halictidae reported in the present paper is especially relevant as Sicily is concerned, pointing out the high richness of this bee-family in the Island, and confirming the remarkable interest of its entomofauna; this would suggest to carry out further researches, especially on taxonomy and faunistics of Sicilian Halictidae.

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