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New or little known *Nomada* Scopoli from Italy (Hymenoptera, Apoidea, Apidae)

Riassunto: *Nomada* d'Italia nuove o poco note (Hymenoptera, Apoidea, Apidae).

Gli autori, nell'esaminare alcune collezioni del genere *Nomada* Scopoli, riscontrano le seguenti novità riguardanti la fauna italiana: *N. furvoides* è nuova per il Lazio; *N. emarginata* è nuova per la Lombardia e il Lazio; *N. corcyraea* è nuova per la Lombardia, il Lazio e la Sardegna; *N. bispinosa*, *N. atroscutellaris* e *N. pectoralis* sono nuove per il Lazio e la Sicilia; *N. rufipes* è nuova per il Lazio e l'Abruzzo; *N. symphyti* è nuova per l'Abruzzo; *N. incisa* e *N. rubiginosa* sono nuove per l'Italia peninsulare; *N. duplex* viene confermata per l'Italia peninsulare e la Sicilia; *N. b. bifasciata* viene confermata per la Sicilia; *N. erythrocephala*, *N. facilis*, *N. piccioliana* e *N. stoeckherti* sono nuove per la Sicilia, *N. posthuma*, *N. pleurosticta*, *N. calimorpha*, *N. fenestrata*, *N. noskiewiczzi*, *N. opaca* e *N. trispinosa* sono nuove per l'Italia.

Abstract: The authors, after examination of some collections of the genus *Nomada* Scopoli, obtain the following novelties regarding the Italian fauna: *N. furvoides* is new for Latium, *N. emarginata* is new for Lombardy and Latium, *N. corcyraea* is new for Lombardy, Latium and Sardinia, *N. bispinosa*, *N. atroscutellaris* and *N. pectoralis* are new for Latium and Sicily, *N. rufipes* is new for Latium and Abruzzo, *N. symphyti* is new for Abruzzo, *N. incisa* and *N. rubiginosa* are new for peninsular Italy, *N. duplex* is confirmed for peninsular Italy and Sicily, *N. b. bifasciata* is confirmed for Sicily; *N. erythrocephala*, *N. facilis*, *N. piccioliana* and *N. stoeckherti* are new for Sicily, *N. posthuma*, *N. pleurosticta*, *N. calimorpha*, *N. fenestrata*, *N. noskiewiczzi*, *N. opaca* and *N. trispinosa* are new for Italy.

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

INTRODUCTION

Data on the genus *Nomada* Scopoli, 1770 from Italy are reported by Schmiedeknecht (1882), De Stefani-Perez (1894, 1895), Schwarz (1962, 1999), Nobile (1990), Pagliano (1994), Comba (2015). It represents a specious genus and consequently it has been divided in species groups (Schmiedeknecht, 1882, Schwarz, 1967, Alexander & Schwarz, 1994). During such long time, many changes have been done in species group arrangement, with new groups being created, some other suppressed and with moving of species from a group to another. Based on the previously mentioned authors, nine of these species groups are presently known for Italy, where the genus represents more than 10% of the Apoidea Anthophila.

MATERIALS AND METHODS

The data of the present study are taken from the Hartig collection (ex Istituto Nazionale di Entomologia), currently housed in the Museo di Zoologia dell'Università di Roma (MZUR), the private collections of Maurizio Mei (Roma) (CMM), Salvatore

Tomarchio (Catania) (CST), as well as personal own collections (CVN and CGFT). This material, as well as data taken from literature, allow the authors to provide a significant improvement to the knowledge of the Italian *Nomada*.

The identification of the material is based mainly on Schmiedeknecht (1882), Stöckert in Schmiedeknecht (1930), Schwarz (1964, 1967, 1981) and Scheuchl (2000). Updated distributional data are taken from the following web-sources: Mitroiu *et al.* (2013), Kuhlmann (2014) and Comba (2015).

RESULTS

Group "armata"

Nomada bispinosa Mocsáry, 1883

Nomada bispinosa Mocsáry, 1883 – Ertek Term-Tud. Koereboel., 13: 64.

DATA FROM LITERATURE: Schwarz, 1962: 220 (Bologna); Pagliano, 1994: 399 (Piemonte, Emilia-Romagna); Comba, 2015 (Piemonte, Emilia-Romagna, Toscana, Campania).

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NEW FINDINGS: Latium: Roma, Pietralata, 4.V.1943, XXI, 1♂, Hartig leg. (MZUR); Roma, Tenuta della Cervelletta, 1-3/V/1998, 1♂, Mei leg.; 9/V/2013, 1♀, Mei leg. Sicily: Etna, Catania, Belpasso, 23.IV.1994, 1♂, Turrisi leg.

New record for both Latium and Sicily.

DISTRIBUTION: Central-South-European-Anatolian.

Nomada corcyraea Schmiedecknecht, 1882

Nomada corcyraea Schmiedecknecht, 1882.– Apid. Europ., 1: 219.

DATA FROM LITERATURE: Pagliano, 1994: 400 (Emilia-Romagna); Comba, 2015 (Emilia-Romagna).

NEW FINDINGS: Lombardy: Brescia, Bedizzole (ex Parco Alpini) 17.III.1992, 1♀, Bodei leg. (CGFT). Latium: Roma, Valle dell'Insugherata 5.VI.1994, 1♀, Mei leg.; Tivoli, M. Catillo, m 400, 27.V.2008, 1♀, Mei & Lo Giudice leg. (CMM). Sardinia: Cagliari, Calasetta, Sa Murta, 28.IV.1976, 1♀, Rombi leg. (CVN); Cagliari, M. Urpinu, 2.VII.1990, 1♀ (CVN).

New for Lombardy, Latium and Sardinia.

DISTRIBUTION: South-European.

Group “*basalis*”

Nomada incisa Schmiedeknecht, 1882

Nomada incisa Schmiedeknecht, 1882.– Apid. Europ., 1: 101.

DATA FROM LITERATURE: De Stefani-Perez, 1894: 101 (Sicilia); Nobile, 1990: 227 (Sicilia); Pagliano, 1994: 404 (Sicilia); Comba, 2015 (Sicilia).

NEW FINDINGS: Tuscany: Pisa, Coltano, 26.V.1935, 1♀, coll. Hartig (MZUR).

New for peninsular Italy.

DISTRIBUTION: N-Mediterranean-Maghrebian (except Iberian Peninsula).

Group “*bifasciata*”

Nomada bifasciata bifasciata Olivier, 1811

Nomada bifasciata Olivier, 1811.– Encycl. Méthod. Insect., 8: 365.

DATA FROM LITERATURE: Pagliano, 1994: 399, sub *Nomada bifasciata lepeletieri* (Piemonte, Basilicata); Comba, 2015, sub *Nomada bifasciata* and *Nomada bifasciata lepeletieri* (Piemonte, Lazio, Basilicata).

NEW FINDINGS: Sicily: Etna, Catania, San Gregorio, Riserva Naturale Immacolatelle-Micio Conti, 15.IV.1991, 2♂, Turrisi leg. (CGFT).

Indicated generically for Sicily through a distributional map by Kuhlmann (2014), without record data. Therefore, our data represent the first confirming the presence of this species in Sicily.

The nominate subspecies has a South-East-European-Anatolian distribution, whereas the other subspecies *N. b. lepeletieri* has a Central-European-Maghrebian distribution.

Nomada duplex Smith, 1854

Nomada duplex Smith, 1854.– Cat. Hym. Ins. Br. Mus.: 244.

DATA FROM LITERATURE: Schwarz, 1999: 170 (Sardegna); Comba, 2015 (Sardegna).

NEW FINDINGS: Latium: Roma (environs) 7-24.III.1941, 1♂, 2♀, Hartig leg. (MZUR); Acilia, 18.III.1941, 1♂, Castellani leg. (MZUR); Tenuta della Cervelletta, 14.III.1999, 1♀, Mei leg. (CMM). Sicily: Enna, Centuripe, 30.III.1985, 1♀ (CVN); Catania, Vizzini, Fiume Vizzini, 5.IV.1992, 1♀ (CGFT); Catania, Paternò, contr. Petulenti, 31.III.1993, 1♂, Turrisi leg. (CGFT).

Indicated generically for peninsular Italy and Sicily through a distributional map by Mitroiu *et al.* (2013), without record data. Therefore, our data represent the first confirming the presence of this species in both peninsular Italy and Sicily.

DISTRIBUTION: W-Mediterranean.

Group “*furva*”

Nomada erythrocephala Morawitz, 1870

Nomada erythrocephala Morawitz, 1870.– Beitr. Bi-enenfauna Russlands, 49: 27.

DATA FROM LITERATURE: Pagliano, 1994: 401 (Lazio); Comba, 2015 (Lazio).

NEW FINDINGS: Sicily: Catania, Paternò, contrada Petulenti 9.V.1993, 2♀, Tomarchio leg. (CST).

New for Sicily.

DISTRIBUTION: South-European-Maghrebian.

Nomada furvoides Stöckert, 1944

Nomada furvoides Stöckert, 1944.– Deutsch Ent. Zeit., 1943: 119.

DATA FROM LITERATURE: Pagliano, 1994 (Piemonte, Emilia-Romagna); Comba, 2015 (Piemonte, Emilia-Romagna).

NEW FINDINGS: Latium: Roma, Roviano (dintorni), m 600, 2.VI.1952, 1♀, Hartig leg. (MZUR); Maccarese, 20.V.1998, 1♀, Mei leg. (CMM).

New for Latium.

DISTRIBUTION: South- European-Anatolian.

Nomada posthuma Blüthgen, 1949

Nomada posthuma Blüthgen, 1949.– Beitr. Tax. Zool., 1: 83.

NEW FINDINGS: Tuscany: Pisa, Casciana Terme, 7.VIII.1965, 1♂ (CVN). Latium: Roma, Portonaccio, 25.IV.1942, 1♂ (MZUR); M. Portella, 27.VIII.1942, 1♂ (C.N.R., Ist. Naz. Biol.) (MZUR); Tenuta della Cervelletta, 21.IV.2000, 1♀, Mei leg. (CMM). Sicily: Catania, Fiume Simeto (between fiume Dittaino e Ponte Impero), 26.IV.1998, 1♀, Turrisi leg. (CGFT). New for Italy.

DISTRIBUTION: Central-South-European.

Group “*integra*”

Nomada facilis Schwarz, 1967

Nomada facilis Schwarz, 1967.– Polskie Pismo ent., 37: 291.

DATA FROM LITERATURE: Pagliano, 1994:401 (Piemonte, Valle d’Aosta, Trentino-Alto Adige, Emilia-Romagna, Abruzzo); Comba, 2015 (Aosta, Piemonte, Veneto, Emilia-Romagna, Umbria, Abruzzo).

NEW FINDINGS: Sicily: Messina, Mounts Nebrodi, Cesarò, m 1250, 17.VI.1981, 1♂, Nobile leg. (CVN); Mount Soro, m 1800, 26.VI.1982, 1♂, Nobile leg. (CVN).

New for Sicily.

DISTRIBUTION: European-Anatolian.

Nomada pleurosticta Herrich-Schäffer, 1839

Nomada pleurosticta Herrich-Schäffer, 1839.– Zeit. Ent. (Germar), 1: 276.

DATA FROM LITERATURE: Nobile, 1990: 236 (Sicilia); Comba, 2015 (Sicilia).

NEW FINDINGS: Latium: Roma, Piano, 7.IX.1937, 1♀ (collez. Caravaglia) (MZUR).

This species is new for Italy, since the record by Nobile (1990) for Sicily is not correct and refers to another species.

DISTRIBUTION: West-Palaeartic (discontinuous in the South-East part of the Mediterranean basin).

Nomada rubiginosa Pérez, 1884

Nomada rubiginosa Pérez, 1884.– Act. Soc. linn. Bordeaux, 37: 372.

DATA FROM LITERATURE: De Stefani-Perez, 1894: 101 (Sicilia); De Stefani-Perez, 1895: 231 (Sicilia); Nobile, 1990: 34 (Sicilia); Pagliano, 1994: 407 (Sicilia); Comba, 2015 (Sicilia).

NEW FINDINGS: Latium: Roma, Valle dell’Insugherata, 10.V.2012, 2♂, Mei leg. (CMM). Sicily: Catania, Paternò, contrada Petulenti, 3.VI.1993, 1♀, Tomarchio leg. (CST).

New for peninsular Italy.

DISTRIBUTION: Mediterranean (discontinuous in the South-East part).

Group “*roberjeotiana*”

Nomada rufipes Fabricius, 1793

Nomada rufipes Fabricius, 1793.– Entom. Syst., 2: 347.

DATA FROM LITERATURE: Schwarz, 1962: 218 (Bologna, Trento); Pagliano, 1994: 407 (Piemonte, Lombardia, Veneto, Liguria, Trentino-Alto Adige, Emilia-Romagna); Comba, 2015 (Piemonte, Liguria, Lombardia, Veneto, Venezia Tridentina, Emilia-Romagna).

NEW FINDINGS: Latium: Roma, Gerano, 14.IX.1941, 1♂, Castellani leg. (MZUR). Abruzzo: L’Aquila, Cansano, Mount Rotella, m 1700, 18.VIII.2000, 1♀, Mei leg. (CMM); Cappadocia, Camporotondo, m 1500, 23-27.VIII.2000, 1♂, 1♀, Mei leg. (CMM).

New for Latium and Abruzzo.

DISTRIBUTION: Palaeartic (excluding colder territories).

Group “*ruficornis*”

Nomada atroscutellaris Strand, 1921

Nomada furva var. *atroscutellaris* Strand, 1921.– Naturgesch., 87A (3): 300.

DATA FROM LITERATURE: Schwarz, 1962: 220 (Bologna); Pagliano, 1994: 399 (Piemonte, Emilia-Romagna); Comba, 2015 (Piemonte, Veneto, Emilia-Romagna).

NEW FINDINGS: Latium: Latina, Littoria, 7.IX.1940, XVIII, 1♂ (C.N.R., Ist. Naz. Biol.) Hartig leg. (MZUR). Sicily: Catania, Paternò, contrada Petulenti, 10.IV.1993, 1♂, 1♀, Tomarchio leg. (CST); Catania, Piana di Catania, contrada Primosole, 18.IV.1998, 1♀, Turrisi leg. (CGFT).

New for Latium and Sicily.

DISTRIBUTION: Central-South-European.

Nomada calimorpha Schmiedeknecht, 1882

Nomada calimorpha Schmiedeknecht, 1882.– Apid. Europ., 1: 33.

NEW FINDINGS: LATIUM, Roma, Palo, 24.V.1940, XVIII, 1♂, Hartig leg. (MZUR).

New for Italy.

DISTRIBUTION: Central-South-European-Anatolian.

Nomada emarginata Morawitz, 1877

Nomada emarginata Morawitz, 1877.– Hor. Soc. Ent. Ross., 14: 108.

DATA FROM LITERATURE: Stöckert in Schmiedeknecht, 1930: 990, 1026 (Trieste); Nobile, 1990: 223 (Trieste, Sicilia); Pagliano, 1994: 401 (Piemonte); Comba, 2015 (Piemonte, Friuli-Venezia Giulia, Sicilia).

NEW FINDINGS: Lombardy: Sondrio, Valmalenco, Lanzada, Vetto m 1000, 15.VII/2.VIII.2007, 1♀, Mei leg. (CMM). Latium: Roma, Anticoli Corrado, m 320, 21.VIII.2012, 1♂, Mei leg. (CMM).

New for Lombardy and Latium.

DISTRIBUTION: Central-South-European-West-Asian.

Nomada fenestrata Lepelletier, 1841

Nomada fenestrata Lepelletier, 1841.– Hist. Nat. Ins.: 2.

NEW FINDINGS: Latium: Roma, Valle dell'Insugherata, 10.III.1994, 1♀, Mei leg. (CMM). Apulia: Bari, Castellana, m 70, 24.X.1948, 1♀, Hartig leg. (MZUR). Sicily: Catania, San Gregorio, Riserva Naturale Immacolatelle-Micio Conti, 1.IV.1986, 1♀, Nobile leg. (CVN).

New for Italy.

DISTRIBUTION: Mediterranean-South-West-Asian.

Nomada noskiewiczzi Schwarz, 1966

Nomada noskiewiczzi Schwarz, 1966.– NachrBl. Bayer Ent., 15: 24.

NEW FINDINGS: Latium: Roma, Percile, 18.VI.1994, 1♂, Mei leg. (CMM).

New for Italy.

DISTRIBUTION: Central-South-European.

Nomada opaca Alfken, 1913

Nomada bifida var. *opaca* Alfken, 1913.– Abh. Naturw. Ver. Bremen, 22: 105.

NEW FINDINGS: Abruzzo: Mount Portella, m 2100, 15.VIII.1942, 1♀, Hartig leg. (MZUR).

New for Italy.

DISTRIBUTION: Euro-Asian (excluding Iberian Peninsula).

Nomada piccioliana Magretti, 1883

Nomada piccioliana Magretti, 1883.– Annls Soc. Ent. Fr., (6) 3: 206.

DATA FROM LITERATURE: Pagliano, 1994: 406 (Piemonte, Toscana); Comba, 2015 (Piemonte, Veneto, Emilia-Romagna, Toscana, Marche, Lazio).

NEW FINDINGS: Tuscany: Firenze, Mount Carnevale 8.VII.2007, 2♀, Mingazzini leg. (CMM). Sicily: Catania, Mount Etna, west, Pineta, m 1600, 3.VIII.1948, 1♀, Hartig leg. (MZUR).

New for Sicily.

DISTRIBUTION: Central-South-European.

Nomada stoeckherti Pittioni, 1951

Nomada stoeckherti Pittioni, 1951.– Ent. NachrBl. Öst. Schw. Ent., 3: 158.

DATA FROM LITERATURE: Comba, 2015 (Abruzzo).

NEW FINDINGS: Sicily: Catania, Etna, Mount Scavo, m 1700 (Bronte) 8.VI.2001, 1♂, Tomarchio leg. (CST).

New for Sicily.

DISTRIBUTION: Central-South-East-European-Anatolian.

Nomada symphyti Stöckert, 1930

Nomada symphyti Stöckert 1930.– In: Schmiedeknecht O., Hymen. Nord-Mitteleurop.: 1012.

DATA FROM LITERATURE: Pagliano, 1994: 408 (Piemonte); Comba, 2015 (Piemonte).

NEW FINDINGS: Abruzzo: L'Aquila, Cappadocia, Camporotondo, m 1540, 1-2.VII.2006, 2♀, Mei leg. (CMM).

New for Abruzzo.

DISTRIBUTION: Central-South-East-European-Anatolian.

Group “*superba*”

Nomada pectoralis Morawitz, 1877

Nomada pectoralis Morawitz, 1877.– Nachtr. Bienenfauna Caucasiens, 444: 101.

DATA FROM LITERATURE: Comba, 2015 (Puglia).

NEW FINDINGS: Latium: Roma, Pomezia, sughereta, 24.VI.2010, 1♀, Mei leg. (CMM). Sicily: Enna, Centuripe, Castelluzzo, m 650, 1♀, 4.VI.1999, Turrisi leg. (CGFT).

New for Latium and Sicily.

DISTRIBUTION: South-European-Maghrebian-Anatolian.

Group “*trispinosa*”

Nomada trispinosa Schmiedeknecht, 1882

Nomada trispinosa Schmiedeknecht, 1882.– Apid. Europ., 1: 121.

NEW FINDINGS: Latium: Roma, Valle dell’Insugherata, 11.V.1997, 1♂, Mei leg. (CMM); Tenuta della Cervel-

letta, 29.IV.1999, 2♂, Mei leg. (CMM). Sicily: Catania, Paternò, contrada Petulenti, 31.III.1993, 1♂, Tomarchio leg. (CST).

New for Italy.

DISTRIBUTION: South-East-European-South-Asian.

ACKNOWLEDGEMENTS

We would thank Maurizio Mei (Roma) and Salvatore Tomarchio (San Gregorio di Catania, Catania), for providing us useful material for this study.

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