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GROSSLY INACCURATE BIODIVERSITY DATA: AN EXAMPLE FROM ITALY
REGARDING BLOWFLIES (INSECTA, DIPTERA, CALLIPHORIDAE)

Riassunto. *Segnalazioni faunistiche fortemente inaccurate: un esempio dall'Italia riguardante i calliforidi (Insecta, Diptera, Calliphoridae).*

Vengono rimosse dalla checklist della fauna italiana dodici specie di Calliphoridae (*Angioneura cyrtoneurina* (Zetterstedt), *Bellardia polita* (Mik), *Bellardia tatrca* (Enderlein), *Lucilia cuprina* (Wiedemann), *Lucilia magnicornis* (Siebke), *Lucilia papuensis* Macquart, *Lucilia pilosa* Baranov, *Lucilia pilosiventris* Kramer, *Lucilia porphyrina* (Walker), *Nesodexia corsicana* Villeneuve, *Trypocalliphora braueri* (Hendel) e *Villeneuviella weissii* Séguy), recentemente segnalate dal ditterologo italiano Gianni Raffone come specie nuove per la fauna Italiana sulla base di esemplari erroneamente identificati. Le sue affermazioni che *Lucilia bufonivora* Moniez e *Lucilia regalis* (Meigen) siano note in Italia sono errate, in quanto basate su errori di identificazione. Analogamente, la sua segnalazione di *Booponus inexpectatus* (Grunin), un parassita obbligatorio del mosco siberiano, in Italia, deriva dall'errata identificazione di un comune muscide olartico. Una verifica del 45% delle specie di Calliphoridae (basata su 141 esemplari), per cui Raffone ha pubblicato segnalazioni per l'Italia, dimostra che tutte le identificazioni sono errate, con l'eccezione di 1-2 esemplari. Raffone si dimostra fortemente incompetente nell'identificazione dei calliforidi e le sue pubblicazioni dovrebbero essere trascurate. Vengono riportate nuove segnalazioni di *Bellardia pubicornis* (Zetterstedt) per l'Italia.

Summary. Twelve species of Calliphoridae, e.g. *Angioneura cyrtoneurina* (Zetterstedt), *Bellardia polita* (Mik), *Bellardia tatrca* (Enderlein), *Lucilia cuprina* (Wiedemann), *Lucilia magnicornis* (Siebke), *Lucilia papuensis* Macquart, *Lucilia pilosa* Baranov, *Lucilia pilosiventris* Kramer, *Lucilia porphyrina* (Walker), *Nesodexia corsicana* Villeneuve, *Trypocalliphora braueri* (Hendel) and *Villeneuviella weissii* Séguy, all recently published by the Italian dipterist Gianni Raffone as species new for the Italian fauna, are deleted from the list of Calliphoridae from Italy, because all the records are based on misidentifications. His claims that *Lucilia bufonivora* Moniez and *Lucilia regalis* (Meigen) are known from Italy, are false, since also based on misidentifications. Similarly, his record of *Booponus inexpectatus* (Grunin), an obligatory skin parasite of the Siberian Musk Deer, from Italy is based on a misidentification of a common Holarctic muscid fly. A check of 45% of the species of Calliphoridae, involving 141 specimens, for which Raffone has published records from Italy, shows that all but 1-2 specimen have been misidentified. Raffone has demonstrated a gross incompetence regarding identification of calliphorid flies, and his publications on Calliphoridae should be disregarded. New records of *Bellardia pubicornis* (Zetterstedt) from Italy are reported.

Keywords: Diptera, Calliphoridae, biodiversity data, faunal lists, Italy, misidentifications, taxonomy

INTRODUCTION

Faunal lists are a common, but sometimes dubious source for data on animal distribution and biodiversity. Lists of this kind are difficult to check for any prepublication reviewer, and their reliability depends crucially on competence, publication record, scientific achievement, and honesty of the author. Here I report the results of a study of a sample of Calliphoridae (Insecta, Diptera) in the collections of the Museo Civico di Storia Naturale di Venezia and Museo Civico di Storia Naturale di Morbegno (Sondrio), already having been published in four faunal lists (RAFFONE, 1993, 2003, 2005, 2006). My interest in these collections derives in part from several quite surprising, even sensational, allegedly new records of Calliphoridae from Italy in these publications, in part also from my own work on the

North European (ROGNES, 1991), European (contribution to Fauna Europaea database, see ROGNES, 2013), Italian (PAPE et al., 1995; ROGNES, 1997, 2011) and Palaearctic (ROGNES, 1998) fauna of Calliphoridae.

I received for examination 131 specimens from the Museo Civico di Storia Naturale di Venezia, and 10 specimens from Museo Civico di Storia Naturale di Morbegno (Sondrio), all previously identified and published by RAFFONE (1993, 2003, 2005, 2006).

This sample, selected for its possibly great impact on the current knowledge of the Italian fauna of Calliphoridae, included about 45% of all the species reported by Raffone. The annotated list below treats the published entries, including references, in double quotation marks in alphabetical sequence. Under “Labels” are cited the text on the labels on the pin of each specimen. In several cases a label was placed in front of, or on the first member, of a row of specimens without these having received their own determination label. The list is arranged in the same sequence as the specimens were placed in the received boxes. Under “Identity” are reported their true identity under the currently valid names, sometimes with a family assignment if not Calliphoridae. More details of the localities can be found in Raffone’s works.

ANNOTATED LIST OF EXAMINED MATERIAL

1. “*Angioneura cyrtoneurina* (Zetterstedt, 1859)” [RAFFONE, 2005: 108]

Two specimens were found under this label. One of them (from Tessera), has been published and, erroneously, is said to belong to a species new for Italy, as follows.

- Labels. (1) Tessera / 21.vi.69; (2) *Angioneura* / *cyrtoneurina* / (Zetterstedt) / det. Raffone G. 2004. Identity. *Melinda viridicyanea* Robineau-Desvoidy, ♂.
- Labels. (1) S. Giuliano (VE) / Mesofilo / 8 - IV- 1968 / Presso Strada. Identity. *Bellardia vulgaris* (Robineau-Desvoidy), ♀.

Note. Both specimens have been misidentified. Both misidentified species are common in Italy (PAPE et al., 1995). *Angioneura cyrtoneurina* has still not been confirmed to occur in Italy.

2. “*Bellardia brevistylata* (Villeneuve, 1926)” [RAFFONE, 2006: 149]

Listed on the basis of the following four specimens, all placed under a label reading “*Melinda brevistylata*”.

- Labels. (1) Cassano Sp. / Merlassolo / 14.vii. 1944 / R. Poletti; (2) *Melinda* / *brevistylata*. Identity. *Neomyia cornicina* (Fabricius) (= *Orthellia caesarion*: Hennig), ♀ [Muscidae].
- Labels. (1) Cassano Sp. / vii. 1944 / R. Poletti. Identity. *Lucilia caesar* (Linnaeus), ♀.
- Labels. (1) Palude del Busatello / Gazzo VR – leg Daccordi / 20.V.82 / trapp. Cromatopica. Identity. *Lucilia silvarum* (Meigen), ♂.
- Labels. (1) Guado s.L. 1300m / 16.VIII.75; (2) Abruzzo-Maiella / leg. G. Osella. Identity. *Neomyia cornicina* (Fabricius) (= *Orthellia caesarion*: Hennig), ♀ [Muscidae].

Note. All the specimens have been misidentified. They are all metallic green, two are very common muscids and two are *Lucilia* species. None belongs to the true *B. brevistylata*, recorded from Sicily, Sardinia and Spain (ROGNES, 2011).

3. “*Bellardia polita* (Mik, 1884)” [RAFFONE, 2006: 149]

Three specimens are listed, erroneously, as belonging to a species new for Italy. They were placed after a label reading “Melinda polita” as follows:

- Labels. (1) Veneto // Garda-VR / 2 / V / 1982 // 1. M. Rizzotti V. Identity. *Lucilia caesar* (Linnaeus), ♀.
- Labels. (1) Cassano-Spinola / Piemonte / 18.vi.1943 / G.B. Moro. Identity. *Neomyia cornicina* (Fabricius) (= *Orthellia caesarion*: Hennig), ♀ [Muscidae].
- Labels. Ponzano / (Treviso) / Burlini. Identity. *Lucilia caesar* (Linnaeus), ♂ (abdomen absent).

Note. All the specimens have been misidentified. All are metallic green like the true *B. polita*, which is still unknown from Italy (PAPE et al., 1995).

4. “*Bellardia pubicornis* (Zetterstedt, 1838)” [RAFFONE, 2005: 106; 2006: 150]

Three specimens were found under this label. On the basis of the specimen from Tessera RAFFONE (2005) claimed *B. pubicornis* to be new for the Italian fauna. This statement was false at the time, because based on a misidentification.

- Labels. (1) Carso triestino / Sistiana Duino; (2) V / 70; (3) *Bellardia pubicornis* (handwritten). Identity. *Calliphora vicina* Robineau-Desvoidy, 1830, ♀.
- Labels. (1) Tessera / 21-VI-69; (2) *Bellardia / pubicornis* (Zetterstedt) / det. Raffone G. 2004. Identity. *Bellardia pandia* (Walker, 1849), ♂. Dissected by K. Rognes 7.10.2013. Genitalia in glycerol in glass micro vial on pin.
- Labels. (1) 59; (2) *Bellardia / pubicornis* (red ink handwriting). Identity. *Aplomyia confinis* (Fallén, 1820), ♂ [Tachinidae].

Note. All the specimens have been misidentified, including a wrong generic assignment and a wrong family assignment. All the three misidentified species are common in Italy (PAPE et al., 1995). *Bellardia pubicornis* has been reported from Italy (ROGNES, 2013) on the basis of two males from Trentino (BZ), Val Zaytal [east of Solda], captured at 2,800 m by P. Cerretti 28 July 2008 (in coll. Cerretti, examined by KR).

5. “*Bellardia tatrlica* (Enderlein, 1933)” [RAFFONE, 2005: 106]

Two specimens were found under this label, recorded erroneously as belonging to a species new for Italy.

- Labels. (1) Lido / 26.V.31; (2) Xerophilophaga / tatrlica / Enderl. ♂ [handwritten] / Dr. Enderlein det. 35 [printed]. Identity. *Bellardia pandia* (Walker), ♂. Base of cerci visible.

- Labels. (1) Mestre / 17.IV.34; (2) Ex coll Soc / Veneziana St Nat; (3) Xerophilophaga / tatica / Enderl. ♂ [handwritten] / Dr. Enderlein det. 35 [printed]. Identity. *Bellardia pandia* (Walker) ♂. Genitalia protruding.

Note. Raffone accepts Enderlein's own identification of these specimens from 1935, in spite of the fact that of the seven specimens that were before Enderlein when he described *tatica* in 1933 (ENDERLEIN, 1933) only the holotype from Rhodes belonged to *tatica*, a species not already known at the time; all the other specimens belonged to other species (SCHUMANN, 1974). In the specimen from Mestre the genitalia are protruding, in the other male the base of the cerci is visible. ROGNES (1991) has figured the genitalia of *B. pandia*, and ROGNES (2002) the genitalia of *B. tatica*, so a misidentification might easily have been avoided. Both specimens belong to *Bellardia pandia*, a common species in northern Italy (PAPE et al., 1995). *Bellardia tatica* does not occur in Italy.

6. “*Booponus inexpectatus* (Grunin, 1947)” [RAFFONE, 2003: 31]

This species is reported by RAFFONE (2003) from Italy even though known (also to Raffone) only from East Siberia, Far East and Mongolia (SCHUMANN, 1986). *Booponus* species are obligatory skin parasites of bovids, cervids and elephants. *B. inexpectatus* (Grunin) larvae develop beneath the skin of the Siberian Musk Deer (*Moschus moschiferus* Linnaeus), mainly of the back. The development of the larvae lasts about 2 months. The fully grown larvae drop to the ground where they pupariate. They hibernate in this stage (ZUMPT, 1965: 79, ROGNES, 1998: 641). The adults are on the wing from mid June to mid July (ZUMPT, 1965). Raffone suggests his record is accidental, the specimen probably having been imported with meat products or cattle, not for a moment suspecting his identification. The specimen has been misidentified and *Booponus inexpectatus* is still unknown from Italy.

- Labels. (1) Morbegno (SO) / Centro Abitato / 18.IV.2002 / leg. Andrea Ruggeri [printed]; (2) *Booponus inexpectatus* / (Grunin) / det. Raffone G 2003 [handwritten; last line printed except year]. Identity. *Thricops diaphanus* (Wiedemann), ♀ [Muscidae].

Note. The species was formerly assigned to the genus *Alloeostylus* Schnabl, now synonymised under *Thricops* Rondani (PONT, 1986). The frontal vitta has a pair of crossed setae. The thorax and abdomen are all yellow. The vein M is straight, there are no meral setae, and the vein R₁ is bare on dorsal side of wing. The mid tibia has a strong posteroventral seta, the hind coxa has some black setulae on posterior surface, the hind tibia has a well developed posterodorsal seta on distal fourth, and the mid and hind legs are yellow (tarsi dark) (fore legs missing). It is a common muscid known from the Nearctic and Palaearctic regions, including Italy (PONT, 1986; GORODKOV et al., 1995).

7. “*Lucilia bufonivora* (Moniez, 1876)” [RAFFONE, 2003: 32; 2005: 107; 2006: 151]

RAFFONE (2003: 32) after having recorded 10 specimens from Morbegno (sotto Arzo) states that the species is not mentioned in the Italian checklist (PAPE et al., 1995) “sebben sia citata da SCHUMANN (1986) e ugualmente da ROGNES (1991) ‘per l’intera Europa (Italia compre-

sa), Nord Africa, Russia asiatica e Cina” [even though it is cited by SCHUMANN (1986) and similarly by ROGNES (1991) “for the entire Europe (Italia included), Nord Africa, Russia asiatica and China”]. Actually none of these sources mentioned Italy explicitly. Raffone seems to have interpreted a rough indication of a distributional area as a detailed country by country record.

RAFFONE (2005: 107) lists 8 additional specimens (from Valle Averno and Mestre). In accordance with his earlier statements, RAFFONE (2006: 151), adding further records, claims that this is a European species already known from all over Italy (“[s]pecie europea già nota di tutta Italia”). The fact is that it has never been reliably recorded from Italy (PAPE et al., 1995, present paper).

All the specimens identified by Raffone as “*Lucilia bufonivora*” in the Venezia museum (27 specimens) and in the Morbegno museum (5 specimens) that I have examined have been misidentified, as indicated below. Thus, *Lucilia bufonivora* is still not recorded from Italy.

- Labels. (1) Valle Averno-VE / 30- V-92 [handwritten]; (2) *Lucilia / bufonivora / Moniez / det. Raffone G. 2003* [handwritten; last line printed, except year]. Identity. *Lucilia illustris* (Meigen), ♀. Note. Subcostal sclerite with small black setulae, a feature unknown in *L. bufonivora*. Coxopleural streak present, T6 with full row of marginal setae.
- Labels. (1) Venezia Mestre / 16.IV.1989 [printed]. Identity. *Lucilia caesar* (Linnaeus), ♂. Note. Subcostal sclerite with small black setulae, a feature unknown in *L. bufonivora*. Genitalia exposed.
- Labels. (1) Venezia Mestre / 16.IV.1989 [printed]. Identity. *Lucilia caesar* (Linnaeus), 5 ♂.
- Labels. (1) Venezia Mestre / 16.IV.1989 [printed]. Identity. *Lucilia ampullacea* Villeneuve, ♀. Very long third antennal segment, small setulae at lower corner of metathoracic spiracle, subcostal sclerite with black setulae, coxopleural streak absent.
- Labels. (1) S. Ginesio (MC) / VIII-76 [handwritten]; (2) *L. bufonivora* [handwritten with red pen]. Identity. *Lucilia caesar* (Linnaeus), ♀. Coxopleural streak present, T6 margin bare for long stretches.
- Labels. (1) S. Ginesio (MC) / VIII-76 [handwritten]. Identity. *Lucilia ampullacea* Villeneuve, ♀. Very long third antennal segment, small setulae at lower corner of metathoracic spiracle, subcostal sclerite with black setulae, coxopleural streak absent.
- Labels. (1) Piedimonte (FI) // m. 500 20/VIII // Leg. G. Campadelli [printed, except date]. Identity. *Lucilia caesar* (Linnaeus), ♂.
- Labels. (1) Carso triestino / presso Sistiana / 10-14 -IX-63 [printed]; (2) *L. bufonivora* [red pen handwriting]. Identity. *Lucilia ampullacea* Villeneuve, ♀.
- Labels. (1) Carso triestino / monte Hermada / 3-VI-65 [printed, except month]; (2) *L. bufonivora* [red pen handwriting]. Identity. *Lucilia caesar* (Linnaeus), ♀.
- Labels. (1) Carso triestino / monte Hermada / 3-VI-65 [printed, except month]. Identity. *Lucilia caesar* (Linnaeus), 2 ♀.
- Labels. (1) SICILIA Palermo / Corleone / S. Giovanni / 13-8-78 - CANA (?) [handwritten]. Identity. *Lucilia sericata* (Meigen), ♂. Note. The specimen is covered by fungal hyphae, but the yellow basicosta, the broad frons and the single anterodorsal seta on mid tibia are clearly visible.

- Labels. (1) CANSigligio-Pian [in Veneto] / Osteria 1000m / 6-7 - IX – 74 / Giordani S... [handwritten; last name illegible]. Identity. *Lucilia caesar* (Linnaeus), ♀.
- Labels. (1) Tortoli – NU / 20-VIII-973 / Carraro leg. [handwritten]. Identity. *Lucilia caesar* (Linnaeus), ♀. T6 margin visible.
- Labels. (1) Leini VIII/ 74 //(TO) // leg. Oselta [printed];]; (2) L. bufonivora [red pen handwriting]. Identity. *Lucilia caesar* (Linnaeus), ♀. Subcostal sclerite with black setulae, coxopleural streak present.
- Labels. (1) VILLAROSA (EN) / P.te 5 Archi / 29-IX.76 PIEROTTI [handwritten]. Identity. *Neomyia cornicina* (Fabricius), ♀ [Muscidae].
Note. 3 postsutural dorsocentral and 1 presutural acrostichal setae.
- Labels. Risorgive fiume / Timavo / 10.III.1998 [printed]; (2) Friuli Ven. Giulia I. / Duino (TS) / Carso Triestino [printed]. Identity. *Lucilia caesar* (Linnaeus), ♀.
- Labels. (1) CARNIA Piano Arta / 18-25-VI-66 / A. Giordani Soika [printed, except last number in year]; (2) bufonivora [red pen handwriting]. Identity. *Eudasyphora cyanella* (Meigen), ♂ [Muscidae].
- Labels. (1) CARNIA Piano Arta / 18-25-VI-66 / A. Giordani Soika [printed, except last number in year]. Identity. *Lucilia caesar* (Linnaeus), ♂.
- Labels. (1) CARNIA Piano Arta / 18-25-VI-66 / A. Giordani Soika [printed, except last number in year]. Identity. *Eudasyphora cyanella* (Meigen), 1 ♂, 3 ♀ [Muscidae].
- Labels. (1) LOMBARDIA – Morbegno (SO) / sotto Arzo, 600m circa / trappola ad intercettazione / 16–25.VIII.2000 L. Ciappone leg. [printed]; (2) *Lucilia* / *bufonivora* Moniez / det. G. RAFFONE, 2003 [handwritten; last line printed except year]. Identity. *Lucilia ampullacea* Villeneuve, 5 ♀.

8. “*Lucilia cuprina* (Wiedemann, 1830)” [RAFFONE, 2006: 151]

I have examined six specimens placed under a label reading “Melinda cuprina”.

- Labels. (1) Torre del lago / (sponda laghetto); (2) Veneto (I) / Montegrotto (PD) / 11.VII.1988; (3) Melinda cuprias [?]. Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) Cavi / Riv. Orientale / VIII.1942 / G.B.Moro; (2) L. cuprina [in red]. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) Cavi / Riv. Orientale / VIII.1942 / G.B.Moro. Identity. *Lucilia sericata* (Meigen), 2 ♂.
- Labels. (1) Reg. Veronese / Quindo... [illegible] / 22 - VI – 76 / leg. G. Osella. Identity. *Lucilia sericata* (Meigen), ♂ and ♀ on separate cards on same pin.
- Labels. (1) Palude del Busatello / Gazzo VR – leg Daccordi / 18.V.82 / trapp. cromatotropica. Identity. *Lucilia caesar* (Linnaeus), ♀.

Note. None of the specimens have been correctly identified. RAFFONE (2006: 151) claims that *L. cuprina* is known only from Veneto in Italy, but the fact is that it has never been recorded from Italy (PAPE et al., 1995). The closest European record is from Spain (ROGNES, 1994).

9. “*Lucilia magnicornis* (Siebke, 1863)” [RAFFONE, 2003: 33; 2006: 152]

This species is listed by RAFFONE (2003) as a species new to Italy, and by RAFFONE (2006) as a European species (“[s]pecie europea”), which, as far as Italy is concerned, allegedly only occurs in Lombardia. This claim was based on two misidentified specimens in Museo Civico di Storia Naturale di Morbegno (in Sondrio). RAFFONE (2003) lists both specimens, but RAFFONE (2006) only one of them. The two specimens in Museo Civico di Storia Naturale di Morbegno are treated below.

- Labels. (1) LOMBARDIA – Morbegno (SO) / sotto Arzo, 600 m circa / trappola ad intercettazione / 16–25.VIII.2000 L. Ciappone leg. [printed]; (2) *Lucilia / magnicornis* (Siebke) / det. G. RAFFONE, 2003 [handwritten; last line printed except year]. Identity. *Lucilia ampullacea* Villeneuve, 1922, 2 ♀, of which one has the ovipositor drawn out.

Note. RAFFONE (2003) mentions that *L. magnicornis* is a species known from “Europa settentrionale e centrale, Siberia [North and Central Europe and Siberia]”, but this is somewhat misleading since the species is known only from mountainous districts in Norway, Sweden, Finland and Poland, the arctic and subarctic parts of Russia (Kola peninsula to Taymyr, Western Sayan mountains), and also from Alaska to Labrador in the Nearctic (ROGNES, 1991). It has never been reported from Italy before (PAPE et al., 1995).

Both specimens have a black basicosta; black setulae on the yellow subcostal sclerite (subcostal sclerite bare in *L. magnicornis*); 2 posterior acrostichal setae (3 posterior acrostichal setae in *L. magnicornis*); 1 presutural intra-alar seta (this seta is absent in *L. magnicornis*); arista with very long rays (short, and almost non-existent in distal part in *L. magnicornis*); no coxopleural streak (in *L. magnicornis* there is a prominent long and thin pale coxopleural streak); a few small setulae at the lower corner adjacent to the lower lid of the metathoracic spiracle (no such setulae in *L. magnicornis*); occiput concave in upper part (strongly convex in *L. magnicornis*); bases of humeral setae on a gently curved line (these setae are in the corner of a right-angled triangle, i.e. on a very broken line in *L. magnicornis*), etc.

10. “*Lucilia papuensis* Macquart, 1843” [RAFFONE, 2006: 152]

This species is listed, erroneously, as a species new for Italy, on the basis of six misidentified specimens placed under a label reading “*Lucilia papuensis*”, as follows.

- Labels. (1) Val Badia La Villa / Prato mesofilo; (2) *Lucilia / papuensis*. Identity. *Pyrellia rapax* (Harris) (= *ignita* Robineau-Desvoidy), ♂ [Muscidae].
- Labels. (1) Val Badia La Villa / Prato mesofilo. Identity. *Pyrellia rapax* (Harris) (= *ignita* Robineau-Desvoidy), 4 ♂ [Muscidae].
- Labels. (1) Corleone (PA) / Sorg. La Noce / viii.80 / Leg. Canzoneri. Identity. *Pyrellia vivida* Robineau-Desvoidy (= *P. cadaverina*: Hennig, not Linnaeus), ♂ [Muscidae].

Note. Raffone states that *L. papuensis* is a Palaearctic species, but does not mention that in the Palaearctic it is only known from Japan and China. It is widespread in the Oriental and Australian and Oceanian Regions (EVENHUIS, 1989), also not mentioned by Raffone.

11. “*Lucilia pilosa* Baranov, 1926” [RAFFONE, 2006: 152]

Published by Raffone on the basis of the five specimens listed below. All were placed under a label reading “*Lucilia pilosa*”.

- Labels. (1) Palude del Busatello / Gazzo VR. Lg. Daccordi / 28.vi.82 / trapp. cromatotropica; (2) *Lucilia* / *pilosa*. Identity. *Lucilia silvarum* (Meigen), ♂.
- Labels. (1) Palude del Busatello / Gazzo VR. Lg. Daccordi / 28.vi.82 / trapp. Cromatotropica. Identity. *Lucilia silvarum* (Meigen), ♂.
- Labels. (1) Palude del Busatello / Gazzo VR. Lg. Daccordi / 27.vii.82 / trapp. cromatotropica. Identity. *Lucilia silvarum* (Meigen), ♂.
- Labels. (1) Palude del Busatello / Gazzo VR. Lg. Daccordi / 27.vii.82 / trapp. cromatotropica. Identity. *Lucilia illustris* (Meigen), ♀.
- Labels. (1) Cassano Sp. / Merlassolo / vii. 1944 / R. Poletti. Identity. *Lucilia richardsi* Collin, ♂.

Note. The name *Lucilia pilosa* Baranov, 1926 has recently been established as a junior synonym of *Lucilia richardsi* Collin, 1926 (ROGNES, 2003) so the last specimen listed above (Cassano Spinola, Piemonte) has been correctly identified. However, RAFFONE (2006) also has an entry for *L. richardsi* Collin in the same paper, so he seems not to have been aware of the synonymy of these names. On this background it is perhaps not entirely justified to report this specimen as correctly identified. The species is distributed all over Italy (PAPE et al., 1995), not only Piemonte and Veneto, as stated by Raffone. All the other identifications are wrong.

12. “*Lucilia pilosiventris* Kramer, 1910” [RAFFONE, 2005: 107; 2006: 152]

On the basis of his identifications of two specimens RAFFONE (2005) claims that this species is new to the Italian fauna (“nuova per l’Italia”). RAFFONE (2006) adds five more specimens. All have been misidentified, as indicated below. The species is still unknown to the Italian fauna.

- Labels. (1) Jesolo - VE / 30.7.57 [handwritten]; (2) *Lucilia* / *pilosiventris* / Kramer / det. Raffone G. 2003 [handwritten, last line printed, except year]. Identity. *Lucilia sericata* (Meigen), ♂. Note. The specimen has 1 anterodorsal seta on mid tibia and a bright yellow basicosta. *L. pilosiventris* has 2-4 anterodorsal setae on mid tibia.
- Labels. (1) MESTRE. / 23.IV.1989. Identity. *Lucilia caesar* (Linnaeus), ♂. Note. The specimen has a brownish black basicosta, a subcostal sclerite with small black setulae, and a strongly swollen epandrium. None of these features occur in *L. pilosiventris*.
- Labels. (1) Carso triestina / Sistiana-Duino [printed]; (2) Ag. 70 [typewriter print]; (3) *L. pilosiventris* [red pen handwriting]. Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) DELTA PO – Rosapineta / retrospiaggia 16-21-IV-72 / M. Levrini [printed]. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) DELTA PO – Rosapineta / retrospiaggia 16-21-IV-72 / M. Levrini [printed]. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) VAL BADIA LA VILLA / - PRATO MESOFILO. Identity. *Pyrellia rapax* (Harris) (= *Pyrellia ignita* Robineau-Desvoidy), ♀ with partly protruding ovipositor [Muscidae].

- Labels. (1) Carnia Paluzza / 18-25-V-67 / A. Giordani Soika [printed, except month and year]. Identity. *Eudasyphora cyanella* (Meigen), ♀ [Muscidae].

13. “*Lucilia porphyrina* (Walker, 1856)” [RAFFONE, 2006: 152]

This species is listed, erroneously, as a species new for Italy, on the basis of ten specimens. Eight of these have been examined in addition to one unpublished specimen, all placed under a label reading “*Lucilia porphyrina*”, as follows.

- Labels. (1) Carnia Paluzza / 18-25.V. 67 / A Giordani Soika; (2) *Lucilia* / *porphyrina*. Identity. *Eudasyphora cyanella* (Meigen), ♀ [Muscidae].
- Labels. (1) 23-31-V-69; (2) Litoral ferrarese / spiaggia Volano / Giordani Soika. Identity. *Lucilia illustris* (Meigen), ♂.
- Labels. (1) Passo del Furlo / Vegetazione / Riva Fiume / 1-VII-1968. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) Delta Po – Rosapineta / 16-21-IV-72 / M. Levrini. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) Delta Po – Rosapineta / 16-21-IV-72 / M. Levrini. Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) Rosolina Mare / Ammophiletum; (2) IV / 65. Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) Sicilia – Palermo / Corleone S. Giovanni / 13.8.78 / leg. Canzoneri. Identity. *Pyrellia vivida* Robineau-Desvoidy (= *P. cadaverina*: Hennig, not Linnaeus), ♂ [Muscidae].
- Labels. (1) Sicilia – Fiumetorto / 24-VI- 41 / A. Giordani Soika. Identity. *Pyrellia vivida* Robineau-Desvoidy (= *P. cadaverina*: Hennig, not Linnaeus), ♀ [Muscidae].
- Labels. 206. Identity. *Neomyia cornicina* (Fabricius) (= *Orthellia caesarion*: Hennig), ♀ [Muscidae].

Note. Raffone states that *L. porphyrina* is a Palaearctic species, but not that in the Palaearctic it is only known from Japan and China. It is widespread in the Oriental and Australian and Oceanian Regions (EVENHUIS, 1989), also not mentioned by Raffone.

14. “*Lucilia regalis* (Meigen, 1826)” [RAFFONE, 1993: 99; 2005: 107; 2006: 152]

All 35 specimens found under this label were misidentified.

- Labels. (1) LAGUNA VENETA / Ricerche lagunari 1944-48 / Staz. terr. N. 356 / Giordani Soika [printed except number] (2) *Lucilia* / *regalis* / (Meigen) / det. Raffone G. 2004 [black handwriting; last line printed, except year]. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) LAGUNA VENETA / Ricerche lagunari 1944-48 / Staz. terr. N. 356 / Giordani Soika [printed except number]. Identity. *Lucilia sericata* (Meigen), 2 ♂.
- Labels. (1) LAGUNA VENETA / Ricerche lagunari 1944-48 / Staz. terr. N. 356 / Giordani Soika [printed except number]. Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) ALBERoni (Ve) / Schoenetum / 14-VI-71 (Lev [?]) [handwritten]. Identity. *Lucilia sericata* (Meigen), ♂.

- Labels. (1) Carso triestino / Sistiana-Duino [e]; (2) Ag.70 [typewriter print]; (3) *L. regalis* [red pen handwriting]. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) CAVI / Riv. *Orientale* / VIII.1942 / G.B. Moro [printed, except date]; (2) *L. regalis* [red pen handwriting]. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) CAVI / Riv. *Orientale* / VIII.1942 / G.B. Moro [printed, except date]. Identity. *Lucilia sericata* (Meigen), 2 ♂.
- Labels. (1) CAVI / Riv. *Orientale* / VIII.1942 / G.B. Moro [printed, except date]. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) CAVI / Riv. *Orientale* / VIII.1942 / G.B. Moro [printed, except date]. Identity. *Lucilia sericata* (Meigen), ♂ (dissected, abdomen on card below label).
Note. Below the label is a card to which the removed abdomen has been glued; below this card is another card to which is glued a plastic plate. The genitalia have been glued to this plate.
- Labels. (1) Palude del Busatello / Gazzo-VE lg. Daccordi / 20.V.82 / trapp. cromatotropica [printed except handwritten date]. Identity. *Lucilia silvarum* (Meigen), ♀. Note. The specimen has 3 postsutural acrostichal setae, a black basicosta, lacks setulae on subcostal sclerite, has a black abdominal T1+2, but lacks strong marginal setae on T3.
- Labels. (1) Portegrandi (VE) / 26.V.1991 / leg. G.Scarpa [printed]; (2) *Lucilia* / *regalis* / (Meigen) / det. Raffone G. 2003 [black handwriting; last line printed, except year]. Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) LITORALE VENETO / Alberoni / 27-V-68 Levrini [printed]; (2) *Prima Ammophila* [printed]. Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) LITORALE VENETO / Alberoni / 10-VI-69 Levrini [printed]; (2) *Spiaggia Schoenetum* [printed]. Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) LITORALE VENETO / Alberoni / 7-IX-70 Levrini [printed, except handwritten date]. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) LAGUNA VENETA / Ricerche lagunari 1944-48 / Staz. terr. N. 1163 / Giordani Soika [printed, except number]. Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) VENEZIA / Marghera / 22.X.46 / A. Giordani Stoika [printed, except lines 2 and 3]. Identity. *Lucilia sericata* (Meigen), 2 ♀.
- Labels. (1) Mestre (VE) / 16.IV.1989 [handwritten]. Identity. *Lucilia caesar* (Meigen), ♂.
- Labels. (1) Venezia Mestre / 16.IV.1989 [printed]. Identity. *Lucilia caesar* (Meigen), 3 ♂.
- Labels. (1) Venezia Mestre / 16.IV.1989 [printed]. Identity. *Lucilia ampullacea* (Villeneuve), ♂. No coxopleural streak, genitalia dissected by KR.
- Labels. (1) S. GIULIANO (VE) / MESOFILO / 16.VIII.1960 [handwritten]. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) RIFUGIO FAUNISTICO WWF / DI VALLE AVERTO-LAGUNA / DI VENEZIA 26-VII-86 / Stazione n. 5 / Leg. [printed, except date and number]. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) Venezia / V.31 [handwritten]. Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) VENEZIA / Alberoni / Marcuzzi 8.38 [printed]. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) S. GIULIANO (VE) / MESOFILO / 9-IV-68 / PRESSO STRADA [handwritten]. Identity. *Lucilia sericata* (Meigen), ♀.

- Labels. (1) Cortina / 11-IX-47 / Levrini [handwritten]; (2) *L. regalis* [red pen handwriting]. Identity. *Lucilia richardsi* Collin, ♀. Note. Mid tibia with several anterodorsal setae, T5 with uniform thin setae, abdomen not very microtrichose.
- Labels. (1) ROSOLINA MARE [printed]; (2) Spiaggia / Ammophiletum [printed]; (3) IV.65 [typewriter print]. Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) Carso triestino / monte Hermada / 3-VI-63 Levrini [printed, except month]. Identity. *Lucilia caesar* (Linnaeus), ♀.
- Labels. (1) Porto Garibaldi [printed]; [reverse side] IX.1957 (handwritten). Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) LOMB. SONDRIO / loc. Castellina / VIII.1979 / leg. P. Diolo [printed]; (2) a card with the dried ovipositor glued to its upper surface; (3) *Lucilia regalis* / (Meigen) / det. G. RAFFONE, '92 [handwritten]. Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) LOMBARDIA – Dazio (SO) / località Civetta 600m circa / 23.IX.1991 Leg. Penati F. [printed]; (2) *Lucilia* (*Lucilia*) / *regalis* (Meigen) / det. Raffone G. 92 [handwritten, last line printed except year]. Identity. *Lucilia sericata* (Meigen), ♀. The specimen has a yellow basicosta, 3 postsutural acrostichal setae and a single anterodorsal seta on the mid tibia.

15. “*Lucilia richardsi* Collin, 1926” [RAFFONE, 2005: 108; 2006: 152-153]

16 specimens were examined. Rows of varying numbers of specimens were placed after a determination label in black ink or red pen handwriting in the following sequence.

- Labels. (1) LAGUNA VENETA / Ricerche lagunari 1944-48 / Staz. terr. N.59 / Giordani Soika [printed, except 59]; (2) 59 [printed]; (3) *Lucilia* / *richardsi* Collin / det. Raffone G. 2004 [handwritten; last line printed, except year]. Identity. *Pyrellia rapax* (Harris) (= *P. ignita* Robineau-Desvoidy), ♀ [Muscidae]. Note. A white anterior thoracic spiracle and a prominent presutural middorsal white dusted stripe, no meral setae.
- Labels. (1) LITORALE VENETO / Alberoni / 17-IV-68 Levrini [printed]; (2) Spiaggia / schoenetum [printed]; (3) *L. richardsi* [red pen handwriting]. Identity. *Lucilia sericata* (Meigen), ♂. Note. The wing with a pale basicosta and mid tibia with a single clearly visible anterodorsal seta.
- Labels. (1) MESTRE (VE) / 10-IV-1980 / L. Bertoli [handwritten]; (2) *Lucilia* / *richardsi* / Collin / det. Raffone G. 2003 [handwritten; last line printed, except year]. Identity. *Phormia regina* (Meigen), ♂.
- Labels. (1) Venezia 8.38 / Cavallino / Marcuzzi leg. [printed]. Identity. *Lucilia sericata* (Meigen), ♀.
- Labels. (1) Carso triestino / monte Hermada / 3-VI – 63 Levrini [printed, except month]; (2) *L. richardsi* [red pen handwriting]. Identity. *Phormia regina* (Meigen), ♀.
- Labels. (1) Caorle – VE / Livenza – 4-VII-91 [pencil handwriting]. Identity. *Lucilia illustris* (Meigen), ♀. Note. Very few setulae on subcostal sclerite.
- Labels. (1) SIRENTE Rocca dimezzo / Prato mesofilo 1-VIII-45 / alcuni saggi / A. Giordani Soika [printed]. Identity. *Neomyia cornicina* (Fabricius), ♂ [Muscidae].
- Labels. (1) Carso triestino / monte Hermada / 3-VI – 63 Levrini [printed, except month]. Identity. *Lucilia sericata* (Meigen), 2 ♀.

- Labels. (1) VOLANO / 8 - V - 71 / MEDICAGO MAR. [handwritten]; (2) *L. richardsi* [red pen handwriting]. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) DELTA PO – Rosapineta / retrospiaggia 16-21-IV-72 / M. Levrini. Identity. *Lucilia sericata* (Meigen), ♂.
- Labels. (1) DELTA PO – Rosapineta / retrospiaggia 16-21-IV-72 / M. Levrini. Identity. *Lucilia illustris* (Meigen), ♂.
- Labels. (1) Carso triestino / monte Hermada / 3-VI – 63 Levrini [printed, except month]. Identity. *Lucilia caesar* (Linnaeus), ♀.
- Labels. (1) Carso triestino / monte Hermada / 3-VI – 63 Levrini [printed, except month]. Identity. *Lucilia richardsi* Collin, ♀. Rather narrow parafrenal plates, yellow basicosta, and shiny abdomen. Both mid legs lost, ovipositor not dissected.
- Labels. (1) Trentino Val di / Tovel TN 1.VIII.91 / Leg. Fattoretto. Identity. *Lucilia caesar* (Linnaeus), ♂.
- Labels. (1) Trentino Val di / Non TN 29.VII.91 / Leg. Fattoretto. Identity. *Chrysosomopsis auratus* (Fallén), ♂ [Tachinidae].

16. “*Nesodexia corsicana* Villeneuve, 1911” [RAFFONE, 2005: 106]

A single specimen is reported erroneously as belonging to a species new for Italy, as follows.

- Labels. (1) Mestre – VE / V.91 / Leg. Raffone; (2) *Nesodexia / corsicana / Villeneuve / det. Raffone G. 2003* [handwritten]. Identity. *Pollenia atramentaria* (Meigen), ♂.

Note. The specimen is a male of *P. atramentaria*, easily recognisable from other *Pollenia* species on the row of thin setulae along the stem vein on the upper side of the wing. *P. atramentaria* is a common species in northern Italy (PAPE et al., 1995). Raffone does not comment on the fact that *N. corsicana* is endemic to Corsica. It is remarkable that he has been unable to recognise the specimen as belonging to the genus *Pollenia*, easily recognisable by the yellow crinkly hairs on the thorax.

17. “*Protocalliphora chrysorrhoea* Meigen, 1826” [RAFFONE, 2006: 150, as “chrysorrhoea”]

Four specimens under this name were examined. All stood under a label fastened to the first specimen listed below. All were misidentified.

- Labels. (1) Carso triestino / monte Hermada / 3-VI-63 Levrini [printed except for month]; (2) *Protocalliphora / chrysorrhoea* [red handwriting]. Identity. *Protophormia terraenovae* (Robineau-Desvoidy), ♀.
- Labels. (1) Carso triestino / monte Hermada / 3-VI-63 Levrini [printed except for month]. Identity. *Protophormia terraenovae* (Robineau-Desvoidy), ♀.
- Labels. (1) Rive But / 12-VI-66 / Zuth [black ink handwriting, last line possibly not correctly interpreted]. Identity. *Bellardia viarum* (Robineau-Desvoidy), ♀.
- Labels. (1) Vallier, m. 1456. Rocca Pietore / 12-14/8/83 leg. D. Apri .. [label torn]. Identity. *Eudasyphora cyanicolor* (Zetterstedt), ♀ [Muscidae].

18. “*Trypocalliphora braueri* (Hendel, 1901)” [RAFFONE, 2006: 150]

This is a species recorded as new to the Italian fauna (“nuova per l’Italia”). The basis for this claim is a single teneral specimen, not fully coloured. It is, apart from the abdomen, glued to a card above the label, the abdomen glued to a card below label, and genitalia are in a pile of Canada-balsam on a plastic sheet below the card carrying the abdomen. It is a misidentification of a very common species.

- Labels. (1) VENETO [printed] / Verona / 23 – 6- 59 [both lines handwritten]; (2) Trypocaliphora / braueri [red handwriting] [this label at lowermost level on pin]. Identity. *Lucilia sericata* (Meigen), ♂.

Note. The stem vein lacks setulae on upper surface of wing, there is a sclerite at the posterior end of suprasquamal ridge carrying a bundle of setae, and the mid tibia (both present) has a single anterodorsal seta.

19. “*Villeneuveiella weissi* (Séguy, 1926)” [RAFFONE, 2005: 103, 105]

This record is based on a single specimen placed behind a handwritten label reading “Villeneuveiella / weissi / Séguy / det. Raffone G 2003”, and recorded, erroneously, as belonging to a species new for Italy.

- Labels. (1) Mestre / 30-V-34; (2) Ex coll Soc / Veneziana St Nat; (3) Villeneuveiella / soror (Rd.) ♀ / dr. Enderlein det. 1935 [handwritten, except last line]. Identity. A small ♀ sarcophagid, possibly *Sarcophaga* (*Myorhina*) *soror* Pape, 1995. It is definitely not *Villeneuveiella weissi* (Séguy, 1926).

Note. Enderlein’s label reads *Villeneuvella* not *Villeneuveiella* [boldface and underlining added by KR]. *Villeneuvella* Enderlein is currently considered a synonym of the subgenus *Myorhina* Robineau-Desvoidy (a senior synonym of *Pierretia* Robineau-Desvoidy) of the genus *Sarcophaga* Meigen (PAPE, 1996: 364). Enderlein’s identification of the ♀ specimen as *soror* Rondani is consistent with the specimen being a ♀ sarcophagid, *Sarcophaga* (*Myorhina*) *soror* being a common Italian species (PAPE et al., 1995). Its valid name is now *Sarcophaga sorror* Pape, 1995 because of secondary homonymy of *soror* Rondani within *Sarcophaga* Meigen. The re-identification of the specimen as *Villeneuveiella weissi* (Séguy) by Raffone is surprising and most likely deriving from a misreading of Enderlein’s label. The genus *Villeneuveiella* includes large, yellow, night-flying species from desert areas in the Palaearctic Region from Algeria to Turkmenistan and Oman (SCHUMANN, 1986; ROGNES, 2002).

LIST OF SPECIES NAMED INCORRECTLY

Below is a list containing all the species erroneously identified by Raffone which I have been able to check.

Calliphoridae

Bellardia pandia (Walker)
Bellardia viarum (Robineau-Desvoidy)
Bellardia vulgaris (Robineau-Desvoidy)
Calliphora vicina Robineau-Desvoidy
Lucilia ampullacea Villeneuve
Lucilia caesar (Linnaeus)
Lucilia illustris (Meigen)
Lucilia richardsi Collin
Lucilia sericata (Meigen)
Lucilia silvarum (Meigen)
Melinda viridicyanea Robineau-Desvoidy
Phormia regina (Meigen)
Pollenia atramentaria (Meigen)
Protophormia terraenovae (Robineau-Desvoidy)

Muscidae

Eudasyphora cyanella (Meigen)
Eudasyphora cyanicolor (Zetterstedt)
Neomyia cornicina (Fabricius)
 (= *Orthellia caesarion*: authors, e.g., Hennig)
Pyrellia rapax (Harris)
 (= *P. ignita* Robineau-Desvoidy)
Pyrellia vivida Robineau-Desvoidy
 (= *P. cadaverina*: Hennig, not Linnaeus)
Thricops diaphanus (Wiedemann)

Sarcophagidae

Sarcophaga (Myorhina) sorror Pape

Tachinidae

Aplomyia confinis (Fallén)
Chrysosomopsis auratus (Fallén)

SUMMARY OF MISIDENTIFICATIONS

Below are listed the species examined by Raffone, followed by the various names (indented) he has assigned to specimens belonging to the actual taxon.

Calliphoridae

Bellardia pandia (Walker)
Bellardia pubicornis (Zetterstedt)
Bellardia tatrca (Enderlein)

Bellardia viarum Robineau-Desvoidy
Protocalliphora chrysorrhoea (Meigen)

Bellardia vulgaris (Robineau-Desvoidy)
Angioneura cyrtoneurina (Zetterstedt)

Calliphora vicina Robineau-Desvoidy
Bellardia pubicornis (Zetterstedt)

Lucilia ampullacea Villeneuve
Lucilia bufonivora Moniez
Lucilia magnicornis (Siebke)
Lucilia regalis (Meigen)

Lucilia caesar (Linnaeus)
Bellardia brevistylata (Villeneuve)
Bellardia polita (Mik)
Lucilia bufonivora Moniez
Lucilia cuprina (Wiedemann)
Lucilia pilosiventris Kramer
Lucilia regalis (Meigen)
Lucilia richardsi Collin

Lucilia illustris (Linnaeus)
Lucilia bufonivora Moniez
Lucilia pilosa Baranov
Lucilia porphyrina (Walker)

Lucilia richardsi Collin
Lucilia pilosa Baranov
Lucilia regalis (Meigen)
Lucilia richardsi Collin

Lucilia sericata (Linnaeus)
Lucilia bufonivora Moniez
Lucilia cuprina (Wiedemann)
Lucilia pilosiventris Kramer
Lucilia porphyrina (Walker)
Lucilia regalis (Meigen)
Lucilia richardsi Collin

Lucilia silvarum (Meigen)
Bellardia brevistylata (Villeneuve)
Lucilia pilosa Baranov
Lucilia regalis (Meigen)

Melinda viridicyanea Robineau-Desvoidy
Angioneura cyrtoneurina (Zetterstedt)

Phormia regina (Meigen)
Lucilia richardsi Collin

Pollenia atramentaria (Linnaeus)
Nesodexia corsicana Villeneuve

Protophormia terraenovae (Robineau-Desvoidy)
Protocalliphora chrysorrhoea (Meigen)

Muscidae

Eudasyphora cyanella (Meigen)
Lucilia bufonivora Moniez
Lucilia pilosiventris Kramer
Lucilia porphyrina (Walker)

Eudasyphora cyanicolor (Zetterstedt)
Protocalliphora chrysorrhoea (Meigen)

Neomyia cornicina (Fabricius) (= *Orthellia caesarion*: authors, e.g., Hennig)
Bellardia brevistylata (Villeneuve)
Bellardia polita (Mik)
Lucilia bufonivora Moniez
Lucilia porphyrina (Walker)
Lucilia richardsi Collin

Pyrellia rapax (Harris)
(= *P. ignita* Robineau-Desvoidy)
Lucilia papuensis Macquart
Lucilia pilosiventris Kramer
Lucilia richardsi Collin

Pyrellia vivida Robineau-Desvoidy
(= *P. cadaverina*: Hennig, not Linnaeus)
Lucilia papuensis Macquart
Lucilia porphyrina (Walker)

Thricops diaphanus (Wiedemann)
Booponus inexpectatus (Grunin, 1947)

Sarcophagidae

Sarcophaga (Myorhina) sorrow Pape, ♀.
Villeneuveiella weissii (Séguy).

Tachinidae

Aplomyia confinis (Fallén)
Bellardia pubicornis (Zetterstedt)

Chrysosomopsis auratus (Fallén), ♂
Lucilia richardsi Collin

DISCUSSION

Raffone has published a much larger number of entries in his faunal lists than the ones I have examined. RAFFONE (1993) listed three entries for Calliphoridae of which one has been checked, RAFFONE (2003) listed nine entries of which three have been checked, RAFFONE (2005) listed 25 entries of calliphorids, nine of which have been checked, whereas RAFFONE (2006) listed 33 entries, of which 14 have been checked (several entries are treated in more than one publication). He has reported on 42 species, of these I have checked his identification of 19, thus about 45%.

According to the results of this study, Raffone has identified at most two specimens of a total of 141 specimens correctly, thus 1,42%. One of them was a male specimen identified as *Lucilia pilosa* Baranov (a junior synonym of *L. richardsi* Collin) among four others assigned erroneously to the same species (RAFFONE, 2006: 152). However, since RAFFONE (2005, 2006) also has an entry for *L. richardsi* Collin, he seems not to have been aware of the synonymy of these names. The other was a ♀ possibly correctly identified by Raffone as *L. richardsi* although both mid legs were lost so the number of anterodorsal setae is unknown and its identity is therefore not quite sure. However, it stood among 15 further specimens (belonging to seven different species, among them even two muscids and one tachinid) given this name which were all misidentified. On this background it is not advisable to report any specimen as correctly identified, therefore a 0% score is a more correct evaluation. One or two correct identifications may be due to chance alone.

On the basis of this low percentage, one can say that Raffone's knowledge of calliphorid fly species is nil, by definition. Therefore, there is good reason to reject all his other entries, not examined, as dubious. It is also interesting to note that all the specimens before him belong to common species in Italy.

Even though he cites ZUMPT (1956) and ROGNES (1991) as having been consulted for his determination work, there is nothing that indicates that he has used these works to his advantage. Rather his misidentifications make it evident that he has understood very little, if anything, about what these monographs convey about the morphology and taxonomy of calliphorid flies. It is a noteworthy fact that he has never described characteristic features of the specimens he has identified to convince a reader of a correct identification.

It is relevant to mention that he not only has assigned numerous specimens to incorrect species and genera, but also to incorrect families. To mention just a few examples: a specimen of the genus *Aplomya* (Tachinidae) was assigned to *Bellardia* (Calliphoridae); specimens of the genus *Eudasyphora* (Muscidae) were assigned to *Lucilia* (Calliphoridae) or to *Protocalliphora* (Calliphoridae); specimens of the genus *Pyrellia* (Muscidae) were also assigned to *Lucilia* (Calliphoridae); a specimen of the genus *Thricops* (Muscidae) was assigned to *Booponus* (Calliphoridae); and a specimen of the genus *Sarcophaga* (Sarcophagidae) was assigned to the genus *Villeneuveiella* (Calliphoridae).

He gives no zoogeographical reservations regarding his remarkable records, such as *Nesodexia corsicana* (endemic to Corsica) from Mestre (Veneto), or the records of East Asian and Australasian species *Lucilia porphyrina* or *L. papuensis*, from Italy. Though he has a few words to say about his record of the East Siberian and Mongolian species *Booponus inexpect-*

tatus in Italy (“puramente accidentale”, “pervenuta forse a seguito di importazioni di carni o bestiame”), he never expresses doubts about his identifications in these cases.

CONCLUSIONS

Raffone’s profound incompetence makes one wonder about the reasons why he writes about Italian blowflies at all. It is a great pity that the Museo Civico di Storia Naturale di Venezia and the Società Entomologica Italiana have become involved in this sad affair by publishing his calliphorid misidentifications. The papers I have examined do not report scientific results and do not further the knowledge of the Italian fauna of this family. Rather, they are vehicles, in the guise of scientific works, for introducing close to 100 percent erroneous records into the scientific literature.

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