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The distribution of the Calliphoridae in Argentina (Diptera)

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■ **ABSTRACT**. This paper deals with the distribution and specific richness of Calliphoridae in Argentina. The species treated are: *Calliphora nigribasis* Macquart, *Calliphora vicina* Robineau-Desvoidy, *Cochliomyia hominivorax* (Coquerel), *Cochliomyia macellaria* (Fabricius), *Compsomyiops fulvicrura* (Robineau-Desvoidy), *Compsomyiops verena* (Walker), *Chlorobrachycoma versicolor* (Bigot), *Chloroprocta idioidea* (Robineau-Desvoidy), *Chrysomya albiceps* (Wiedemann), *Chrysomya chloropyga* (Wiedemann), *Chrysomya megacephala* (Fabricius), *Hemilucilia segmentaria* (Fabricius), *Hemilucilia semidiaphana* (Rondani), *Hemilucilia souzalopesi* Mello, *Neta chilensis* (Walker), *Paralucilia fulvinota* (Bigot), *Paralucilia pseudolyrcea* (Mello), *Phaenicia cluvia* (Walker), *Phaenicia cuprina* (Wiedemann), *Phaenicia eximia* (Wiedemann), *Phaenicia peruviana* (Robineau-Desvoidy), *Phaenicia sericata* (Meigen), *Protophormia terraenovae* (Robineau-Desvoidy), *Sarconesia chlorogaster* (Wiedemann) and *Sarconesiopsis magellanica* (Le Guillou). Seventy three new localities from Argentina are given.

KEY WORDS. Calliphoridae. Distribution. New localities. Argentina.

■ **RESUMEN. La distribución de las Calliphoridae en la Argentina (Diptera).** Se da a conocer la distribución y la riqueza específica de las Calliphoridae en la Argentina. Se señalan las siguientes especies: *Calliphora nigribasis* Macquart, *Calliphora vicina* Robineau-Desvoidy, *Cochliomyia hominivorax* (Coquerel), *Cochliomyia macellaria* (Fabricius), *Compsomyiops fulvicrura* (Robineau-Desvoidy), *Compsomyiops verena* (Walker), *Chlorobrachycoma versicolor* (Bigot), *Chloroprocta idioidea* (Robineau-Desvoidy), *Chrysomya albiceps* (Wiedemann), *Chrysomya chloropyga* (Wiedemann), *Chrysomya megacephala* (Fabricius), *Hemilucilia segmentaria* (Fabricius), *Hemilucilia semidiaphana* (Rondani), *Hemilucilia souzalopesi* Mello, *Neta chilensis* (Walker), *Paralucilia fulvinota* (Bigot), *Paralucilia pseudolyrcea* (Mello), *Phaenicia cluvia* (Walker), *Phaenicia cuprina* (Wiedemann), *Phaenicia eximia* (Wiedemann), *Phaenicia peruviana* (Robineau-Desvoidy), *Phaenicia sericata* (Meigen), *Protophormia terraenovae* (Robineau-Desvoidy), *Sarconesia chlorogaster* (Wiedemann) y *Sarconesiopsis magellanica* (Le Guillou). Se aportan setenta y tres nuevas localidades para la Argentina.

PALABRAS CLAVE. Calliphoridae. Distribución. Nuevas localidades. Argentina.

INTRODUCTION

Four decades ago only seven species of Calliphoridae were detected in Argentina: five in Santa Fe province, three in Formosa province, two in Jujuy province and only one in Buenos Aires, Catamarca, Chaco, Corrientes, Mendoza, Misiones, Neuquén, Río Negro, San Luis, Santa Cruz, Santiago del Estero, Tierra del Fuego and Tucumán provinces (García 1959).

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The revision of Calliphoridae (Mariluis,1982) increased the number of species per province: eight in Buenos Aires province, seven in Córdoba, Entre Ríos and Río Negro provinces, six in Santa Cruz province, five in Tucumán province, four in Corrientes province, three in Misiones province and one in Chubut, Neuquén and Tierra del Fuego provinces, increasing the number of species to twelve. Lately, the richness increased due to the record of other neotropical species (Mariluis 1981, 1982, 1983, 1989, Mariluis & Peris 1984, Mariluis & Schnack 1985/86, 1989, 1996, 2002, Mariluis & Avalos 1987/85, Mariluis *et al*. 1990, 1994a, 1994b, 1999, Peris & Mariluis 1990, Schnack *et al*. 1990, 1995, 1998, Schnack & Mariluis 1995, Oliva 1997, González Mora *et al*. 1998, Centeno 1998, Costamagna 2002, Costamagna *et al*. 2002, and Rossi *et al*. 2002). Besides, three species of *Chrysomya* Robineau–Desvoidy of Etiopian, Palaearctic, Oriental and Australian distribution were detected (Mariluis 1981, 1983), as well as the recent introduction by maritime route of one species of *Protophormia* Townsend from the Holarctic Region (Mariluis 1999).

At present the Calliphoridae are represented in Argentina by twelve genera and twenty five species belonging to three subfamilies, Calliphorinae, Chrysomyinae and Toxotarsinae. The aim of this paper is to update the knowledge of the distribution of Calliphoridae in Argentina.

MATERIAL AND METHODS

Geographic distribution was estimated from materials pertaining to the Servicio de Vectores, ANLIS "Dr. Carlos G. Malbrán", specimens collected by the authors, and from the information mentioned in the following papers: García (1959), Palma (1973), Mariluis (1980a y b, 1981, 1982, 1983, 1989), Mariluis & Peris (1984), Mariluis & Schnack (1985/86, 1989, 1996, 2002), Mariluis & Avalos (1987/85), Mariluis *et al*. (1990, 1994a and b, 1999), Peris & Mariluis (1990), Schnack *et al*. (1990, 1995, 1998), Schnack & Mariluis (1995), Oliva (1997), González Mora *et al*. (1998), Centeno (1998), Costamagna (2002), Costamagna *et al*. (2002), and Rossi *et al*. (2002).

When the name of the locality is not mentioned, only the province name is given. The species identification was made following the keys provided by Mariluis (1993 and 2002), Rossi *et al*.(2002), and Mariluis & Schnack (2002). Biographical nomenclature refers to Cabrera & Willink (1973).

RESULTS

The following twenty five species were identified in Argentina: *Calliphora nigribasis* Macquart, *Calliphora vicina* Robineau–Desvoidy, *Cochliomyia hominivorax* (Coquerel), *Cochliomyia macellaria* (Fabricius), *Compsomyiops fulvicrura* (Robineau–Desvoidy), *Compsomyiops verena* (Walker), *Chlorobrachycoma versicolor* (Bigot), *Chloroprocta idioidea* (Robineau–Desvoidy), *Chrysomya albiceps* (Wiedemann), *Chrysomya chloropyga* (Wiedemann), *Chrysomya megacephala* (Fabricius), *Hemilucilia segmentaria* (Fabricius), *Hemilucilia semidiaphana* (Rondani), *Hemilucilia souzalopesi* Mello, *Neta chilensis* (Walker), *Paralucilia fulvinota* (Bigot), *Paralucilia pseudolyrcea* (Mello), *Phaenicia cluvia* (Walker), *Phaenicia cuprina* (Wiedemann), *Phaenicia eximia* (Wiedemann), *Phaenicia peruviana* (Robineau–Desvoidy), *Phaenicia sericata* (Meigen), *Protophormia terraenovae* (Robineau–Desvoidy), *Sarconesia chlorogaster* (Wiedemann), and *Sarconesiopsis magellanica* (Le Guillou).

The province distribution and the specific richness are showed in Table 1. The scarce data available for Catamarca, Formosa, La Pampa, San Luis and S. del Estero provinces can be due to the small amount of samples. There are no data for La Rioja and San Juan provinces, and the low species abundance in Tierra del Fuego province is due to a higher latitude (Schnack *et al*.1998 and Mariluis *et al*. 1999).

SUBFAMILIA CALLIPHORINAE

Calliphora nigribasis Macquart

Distribution: Neotropic.

Distribution in Argentina: Buenos Aires (Llavallol and Villa Elisa), **Córdoba** (Capilla del Monte, 1500 m a. s. l., **new locality** and Pampa de Achala, 2000 m a. s. l.), and **Tucumán** (Hualinchay, 1700 m a. s. l.) (Figure 1).

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Table 1: Distribution and specific richness of the Calliphoridae in each Argentina province.

	Buenos Aires and city	Catamarca	Córdoba	Corrientes	Chaco	Chubut	Entre Ríos	Formosa	Jujuy	La Pampa	La Rioja	Mendoza	Misiones	Neuquén	Río Negro	Salta	San Juan	San Luis	Santa Cruz	Santa Fe	S. del Estero	T. del Fuego and South Atlantic Is.	Tucumán
C. nigribasis	●		●																				●
C. vicina	●		●			●	●					●		●	●				●			●	●
C. hominivorax	●		●	●	●				●				●							●			
C. macellaria	●		●	●	●		●	●					●		●	●		●	●	●	●		●
C. fulvicrura	●	●	●	●		●	●					●		●	●	●			●	●		●	●
C. verena		●	●						●							●							●
C. versicolor	●					●			●			●		●	●				●			●	
C. idioidea													●										
C. albiceps	●		●				●		●				●		●	●				●			●
C. chloropyga	●		●	●	●		●		●				●		●	●							●
C. megacephala	●												●							●			
H. segmentaria				●									●										
H. semidiaphana													●										
H. souzalopesi													●										
N. chilensis						●								●	●								
P. fulvinota													●										
P. pseudolyrcea	●	●		●			●		●				●			●							●
P. cluvia	●		●	●	●		●		●				●		●	●			●	●			●
P. cuprina	●						●									●							
P. eximia	●			●									●										
P. peruviana																●							●
P. sericata	●		●	●	●	●	●					●			●	●			●	●		●	●
P. terraenovae																			●			●	
S. chlorogaster	●		●			●	●		●	●		●			●			●	●	●			●
S. magellanica			●			●			●			●		●	●	●			●				●

Calliphora vicina Robineau–Desvoidy

Distribution: Australasian, Holarctic, Neotropic, and Oriental.

Distribution in Argentina: Buenos Aires (Adrogué, Avellaneda, Bahía Blanca, Buenos Aires, Llavallol, Olivos **new locality** , San Miguel, and Villa Elisa), **Chubut** (Comodoro Rivadavia, Esquel, Huemules **new locality**, Los Alerces Nat. Park., Río Senguer **new locality**, and Sarmiento **new locality**), **Córdoba**, **Entre Ríos** (Concepción del Uruguay and Concordia), **Mendoza** (Potrerillos **new locality**), **Neuquén** (Junín de los Andes **new locality**, Neuquén **new locality,** and Isla Victoria), **Río Negro** (Bariloche, El Bolsón, Gral Roca, and Nahuel Huapi Nat. Park.), **Santa Cruz** (Ea. La Matilde, El Calafate, El Portezuelo **new locality**, Los Glaciares Nat. Park., Pto. San Julián **new locality**, Pto. Santa Cruz, and Río Gallegos), **Tierra del Fuego and South Atlantic Is.** (Fagnano Lake **new locality**, Port Stanley, Río Grande, Tierra del Fuego Nat. Park. and Ushuaia), and **Tucumán** (Figure 2).

Phaenicia cluvia (Walker)

Distribution: Nearctic and Neotropic.

Distribution in Argentina: Buenos Aires (Adrogué **new locality**, Llavallol, San Miguel, Villa Elisa, and Zárate **new locality**), **Chaco** (Re-

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sistencia **new locality**), **Córdoba** (Capilla del Monte, 1500 m a. s. l. **new locality**, Córdoba, and La Para), **Corrientes** (Nueva Valencia), **Entre Ríos** (Villa Paranacito **new locality** and Salto Grande), **Jujuy** (S. S. de Jujuy, 1259 m a. s. l.), **Misiones** (Pto. Libertad **new locality**, Caraguatai **new locality**, 2 de Mayo, Pto. Esperanza, Pto.Iguazú, and San Pedro **new locality**), **Río Negro** (Choele Choel, Nahuel Huapi Nat. Park., and Pomona), **Salta** (Rosario de Lerma), **Santa Cruz** (El Calafate), **Santa Fe** (Villa Ana **new locality**), and **Tucumán** (Burruyacu, 620 m a. s. l. **new locality**, El Cajón, 620 m a. s. l., and San Pedro de Colalao,1190 m a. s. l.) (Figure 3).

Phaenicia cuprina (Wiedemann)

Distribution: Subtropical and tropical areas of the planet.

Distribution in Argentina: Buenos Aires (Llavallol), **Entre Ríos** (Palmar), and **Salta** (Alturas de Amblayo, 3600 m a. s. l.) (Figure 4).

Phaenicia eximia (Wiedemann)

Distribution: Nearctic and Neotropic.

Distribution in Argentina: Buenos Aires (Avellaneda, Berisso, and Villa Elisa), **Corrientes** (Ituzaingó), and **Misiones** (Pto. Esperanza and Pto. Iguazú) (Figure 5).

Phaenicia peruviana (Robineau–Desvoidy)

Distribution: Neotropic.

Distribution in Argentina: Salta (Camino de Cornisa, km 1643, 1800 m a. s. l.) and **Tucumán** (Hualinchay, 1700 m a. s. l., El Cajón, 620 m a. s. l., and San Pedro de Colalao, 1190 m a. s. l.) (Figure 5).

Phaenicia sericata (Meigen)

Distribution: Australasian, Etiopic, Holarctic, Neotropic, and Oriental.

Distribution in Argentina: Buenos Aires (Avellaneda, Bahía Blanca, Berisso, Burzaco, Chapadmalal, Llavallol, Mar del Plata **new locality**, San Miguel, Villa Elisa, and Zárate **new locality**), **Chaco** (Resistencia), **Chubut** (Esquel, Los Alerces Nat. Park., and Sarmiento **new locality**), **Córdoba** (Capilla del Monte, 1500 m a. s. l. **new locality,** Guanaco Muerto, and La Para), **Corrientes** (Ituzaingó), **Entre Ríos** (Salto Grande), **Mendoza** (Potrerillos, 1386 m a. s. l. **new locality**), **Río Negro** (Bariloche, Gral. Roca **new locality**, Nahuel Huapi Nat. Park., San Antonio Oeste, and Viedma), **Salta** (Rosario de Lerma), **Santa Cruz** (Ea. El Negro, El Calafate, and Los Glaciares Nat. Park.), **Santa Fe** (Rosario), **Tierra del Fuego and South Atlantic Is.** (Río Grande and Ushuaia), and **Tucumán** (Figure 6).

SUBFAMILIA CHRYSOMYINAE

Cochliomyia hominivorax
(Coquerel)

Distribution: Nearctic and Neotropic.

Distribution in Argentina: Buenos Aires (Bahía Blanca, Buenos Aires, Llavallol, San Isidro **new locality,** and Villa Elisa), **Chaco** (Villa Ángela **new locality**), **Córdoba** (Agua de Oro, Capilla del Monte, 1500 m a. s. l. **new locality,** and La Para), **Corrientes** (Bella Vista), **Formosa** (El Bagual **new locality**), **Jujuy** (La Mendieta), **Misiones** (Pto. Iguazú), and **Santa Fe** (Rafaela) (Figure 7).

Cochliomyia macellaria (Fabricius)

Distribution: Nearctic and Neotropic.

Distribution in Argentina: Buenos Aires (Adrogué, Avellaneda, Bahía Blanca, Berisso, Chapadmalal, Laprida, Llavallol, Mar del Plata, Moreno, Punta Lara **new locality**, San Miguel, and Villa Elisa), **Chaco** (Charadai **new locality** and Resistencia **new locality**), **Córdoba** (Capilla del Monte, 1500 m a. s. l. **new locality**, Guanaco Muerto, La Para, and Pampa de Achala, 2000 m a. s. l.), **Corrientes** (Corrientes **new locality**, Garruchos **new locality**, and Ituzaingó), **Entre Ríos** (Villa Paranacito **new locality** and Salto Grande), **Formosa** (El Coatí), **Misiones** (Barra Yacui **new locality**, Pto. Libertad **new locality**, Posadas **new locality**, Pto. Esperanza, and Pto. Iguazú), **Río Negro** (Fortín Uno, San Antonio Oeste, and Viedma), **Salta** (Tartagal **new locality**), **San Luis** (La Toma **new locality**), **Santa Cruz** (Ea. El Negro), **Santa Fe** (Rosario **new locality** and San Guillermo **new locality**), **Santiago del Estero** (La Victoria **new locality**), and **Tucumán** (Concepción **new locality**, Río Salí **new locality**, and Tucumán) (Figure 8).

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Compsomyiops fulvicrura
(Robineau–Desvoidy)

Distribution: Neotropic.

Distribution in Argentina: Buenos Aires (Adrogué, Avellaneda, Bahía Blanca, Buenos Aires, Bulogne, Ezeiza, Ing. Otamendi **new locality**, M. Juárez, Laprida, Llavallol, Mar del Plata, Pereira Iraola, Punta Lara, San Miguel, and Villa Elisa), **Catamarca** (El Sancho and Los Nacimientos de Abajo), **Chubut** (C. Rivadavia, El Tordillo, Esquel, Futalaufquen, Gaiman **new locality**, Garayalde **new locality**, Los Alerces Nat. Park., and Rawson **new locality**), **Córdoba** (Capilla del Monte, 1500 m a. s. l. **new locality**, Copina, and Pampa de Achala, 2000 m a. s. l.), **Corrientes** (Corrientes **new locality** and Nueva Valencia), **Entre Ríos** (Concordia, Mocoretá, Palmar, and Salto Grande), **Mendoza** (Potrerillos, 1386 m a. s. l.), **Neuquén** (Isla Victoria, L. Villarino, Quetrihue, and Villa La Angostura), **Río Negro** (Bajo Cordova, Bariloche, Choele Choel, Co. Catedral, Fortín Uno, Gral. Roca, Guillermo Lake, Gutiérrez Lake, Nahuel Huapi Nat. Park., Pomona, Pto. Blest, Río Colorado, San Antonio Oeste, and Viedma), **Salta** (Alturas de Amblayo, 3600 m a. s. l.; El Maray, 2000 m a. s. l.; Ing. Maury, 2000 m a. s. l., and Tastil, 3000 m a. s. l.), **Santa Cruz** (Ea. El Negro, Ea. La Matilde, El Calafate, Argentino Lake, Piedra Buena, Pto. Santa Cruz, Punta Quilla, and Río Gallegos), **Santa Fe** (Rosario), **Tierra del Fuego and South Atlantic Is.** (Fagnano Lake **new locality**), and **Tucumán** (Hualinchay, 1700 m a. s. l.) (Figure 9).

Compsomyiops verena (Walker)

Distribution: Neotropic.

Distribution in Argentina: Catamarca (El Suncho), **Córdoba** (Pampa de Achala, 2000 m a. s. l), **Jujuy** (Calilegua, 1200 m a. s. l. and Route 3 to Valle Grande), **Salta** (Alturas de Amblayo, 3600 m a. s. l.; El Maray, 2000 m a. s. l., and La Gotera, 1500 m a. s. l.), and **Tucumán** (Hualinchay, 1700 m a. s. l.) (Figure 10).

Chrysomya albiceps (Wiedemann)

Distribution: Australasian, Holarctic, Neotropic, and Oriental.

Distribution in Argentina: Buenos Aires (Avellaneda, Bahía Blanca, Berisso, Chapadmalal, Llavallol, and Villa Elisa), **Córdoba** (Capilla del Monte, 1500 m a. s. l., **new locality**; Córdoba **new locality**, and Pampa de Achala, 2000 m a. s. l **new locality**), **Misiones** (2 de Mayo, Pto. Esperanza, and Pto. Iguazú), **Río Negro** (Viedma), **Salta** (Tartagal), **Santa Fe** (Rafaela **new locality**), and **Tucumán** (Hualinchay, 1700 m a. s. l. and San Pedro de Colalao, 1190 m a. s. l.) (Figure 11).

Chrysomya chloropyga (Wiedemann)

Distribution: Etiopic and Neotropic.

Distribution in Argentina: Buenos Aires (Bahía Blanca and Villa Elisa), **Chaco** (Impenetrable and Nueva Pompeya), **Córdoba** (Córdoba **new locality**), **Corrientes** (Ituzaingó), **Entre Ríos** (Barra del Mocoretá), **Jujuy** (Calilegua, 1200 m a. s. l.), **Misiones** (2 de Mayo, Pto. Esperanza, and Pto. Iguazú), **Río Negro** (Viedma), **Salta** (Tartagal), and **Tucumán** (Hualinchay, 1700 m a. s. l. and San Pedro de Colalao, 1190 m a. s. l.) (Figure 12).

Chrysomya megacephala (Fabricius)

Distribution: Australasian, Nearctic, Neotropic, and Oriental.

Distribution in Argentina: Buenos Aires (Avellaneda, Bahía Blanca, Berisso, Burzaco **new locality**, San Miguel, and Villa Elisa), **Misiones** (Pto. Iguazú), and **Santa Fe** (Rafaela **new locality**) (Figure 13).

Hemilucilia segmentaria (Fabricius)

Distribution: Neotropic.

Distribution in Argentina: Misiones (2 de Mayo, Pto. Esperanza, and Pto. Iguazú), and **Corrientes** (Figure 14).

Hemilucilia semidiaphana (Rondani)

Distribution: Neotropic.

Distribution in Argentina: Misiones (2 de Mayo, Pto. Esperanza, and Pto. Iguazú) (Figure 14).

Hemilucilia souzalopesi Mello

Distribution: Neotopic.

Distribution in Argentina: Misiones (Pto. Esperanza and Pto. Iguazú) (Figure 15).

Paralucilia fulvinota (Bigot)

Distribution: Neotropic.

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Distribution in Argentina: Misiones (2 de Mayo, Pto. Esperanza, and Pto. Iguazú) (Figure 14).

Paralucilia pseudolyrcea (Mello)

Distribution: Neotropic.

Distribution in Argentina: Buenos Aires (Llavallol), **Catamarca** (La Rinconada), **Corrientes** (Ituzaingó), **Entre Ríos** (Concordia, Barra del Mocoretá, and Salto Grande), **Jujuy** (Calilegua, 1200 m a. s. l., Route 3 to Valle Grande, and El Talar), **Misiones** (2 de Mayo, Pto. Esperanza, and Pto.Iguazú), **Salta** (Camino de Cornisa km 1643, 1800 m a. s. l., La Gotera, 1500 m a. s. l., and Tartagal), and **Tucumán** (El Cajón, 620 m a. s. l., Hualinchay, 1700 m a. s. l., and San Pedro de Colalao, 1190 m a. s. l.) (Figure 16).

Protophormia terraenovae (Robineau–Desvoidy)

Distribution: Holarctic and Neotropic

Distribution in Argentina: Santa Cruz (Río Gallegos) and **Tierra del Fuego and South Atlantic Is.** (Port Stanley and Río Grande) (Figure 15).

SUBFAMILIA TOXOTARSINAE

Chlorobrachycoma versicolor (Bigot)

Distribution: Neotropic.

Distribution in Argentina: Buenos Aires (Sarandi **new locality**), **Chubut** (Esquel), **Jujuy** (Abra Pampa, 3484 m a. s. l. and San Salvador de Jujuy, 1259 m a. s. l.), **Mendoza** (Lago Diamante, 3300 m a. s. l.), **Neuquén** (San Martín de Los Andes), **Río Negro** (Bariloche and Nahuel Huapi Nat. Park.), **Santa Cruz** (Portezuelo and Pto.San Julián), and **Tierra del Fuego and South Atlantic Is.** (Fagnano Lake and Río Grande) (Figure 17).

Chloroprocta idioidea (Robineau–Desvoidy)

Distribution: Nearctic and Neotropic.

Distribution in Argentina: Misiones (Pto. Iguazú) (Figure 17).

Neta chilensis (Walker)

Distribution: Neotropic.

Distribution in Argentina: Chubut (Futalaufquen), **Neuquén** (Pucará), and **Río Negro** (Bariloche, El Bolsón, Gutiérrez Lake, and Nahuel Huapi Nat. Park.) (Figure 15).

Sarconesia chlorogaster (Wiedemann)

Distribution: Neotropic.

Distribution in Argentina: Buenos Aires (Adrogué, Avellaneda, Bahía Blanca, Berisso, Buenos Aires, Chapadmalal, La Plata, Laprida, Llavallol, Luján, Marcos Paz, Mar del Plata, Moreno, Quilmes, Ringuelet, San Miguel, Sierra de la Ventana, and Villa Elisa), **Chubut** (C. Rivadavia **new locality**), **Córdoba** (Capilla del Monte, 1500 m a. s. l., **new locality**; La Para, and San Javier **new locality**), **Entre Ríos** (Concepción and Salto Grande), **Formosa**, **Jujuy** (Chaupi Rodeo), **La Pampa** (Santa Rosa **new locality**), **Mendoza** (Potrerillos, 1386 m a. s. l. **new locality**), **Río Negro** (Gral. Roca **new locality**, Nahuel Huapi Nat. Park., Paso Cordova **new locality**, Pomona, and Viedma), **San Luis** (La Toma **new locality**), **Santa Cruz** (Ea. El Negro, Pto. Santa Cruz, and Río Gallegos), **Santa Fe** (Florencia, Mc Kinlay **new locality**, and Rosario), and **Tucumán** (S. M. de Tucumán) (Figure 18).

Sarconesiopsis magellanica (Le Guillou)

Distribution: Neotropic.

Distribution in Argentina: Chubut (Esquel and Los Alerces Nat. Park.), **Córdoba** (Capilla del Monte, 1500 m a. s. l., **new locality** and Pampa de Achala, 2000 m a. s. l.), **Jujuy** (Abra Pampa, 3484 m a. s. l.), **Mendoza** (Potrerillos, 1386 m a. s. l.), **Neuquén** (Isla Victoria and Quetrihué), **Río Negro** (Bariloche and Pto. Blest), **Salta** (Cafayate), **Santa Cruz** (El Calafate and Los Glaciares Nat. Park.), and **Tucumán** (Hualinchay, 1700 m a. s. l.) (Fig. 14).

DISCUSSION

Most of Calliphoridae species in Argentina are scattered in several biogeographic provinces (Cabrera & Willink, 1973). Only few of them seem to be associated to a particular phytogeographic province e.g. *C. idioidea*, *H. segmentaria*, *H semidiaphana*, *H. souzalopesi* and *P. fulvinota* to the Paranense province. *Phaenicia peruviana* to the Yungas province and *N. chilensis* to the Subantartica province. *Compsomyiops verena* is found in the Yungas province and in the highland areas in Córdoba.

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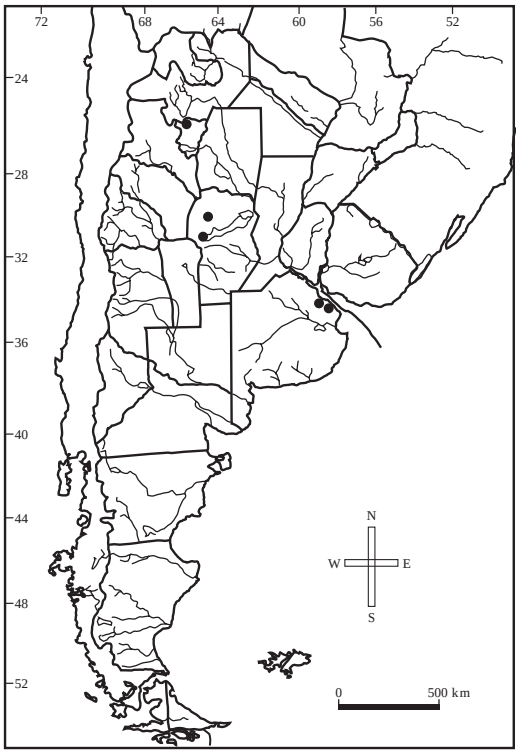

Figure 1: Distribution of *Calliphora nigribasis.*

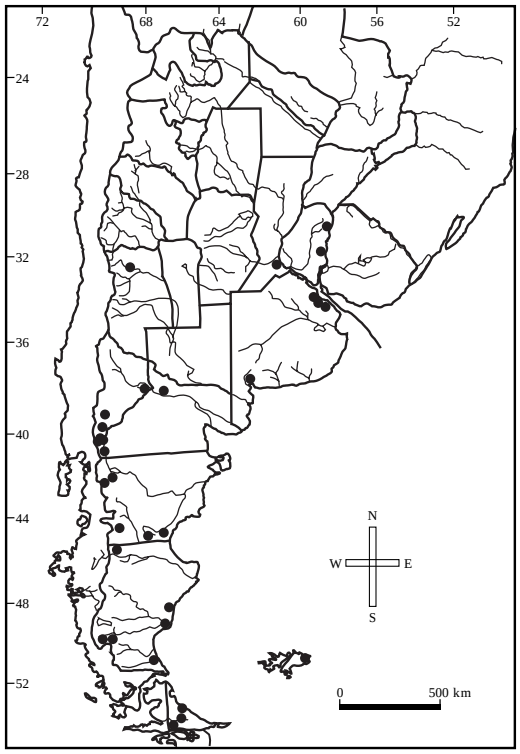

Figure 2: Distribution of *Calliphora vicina.*

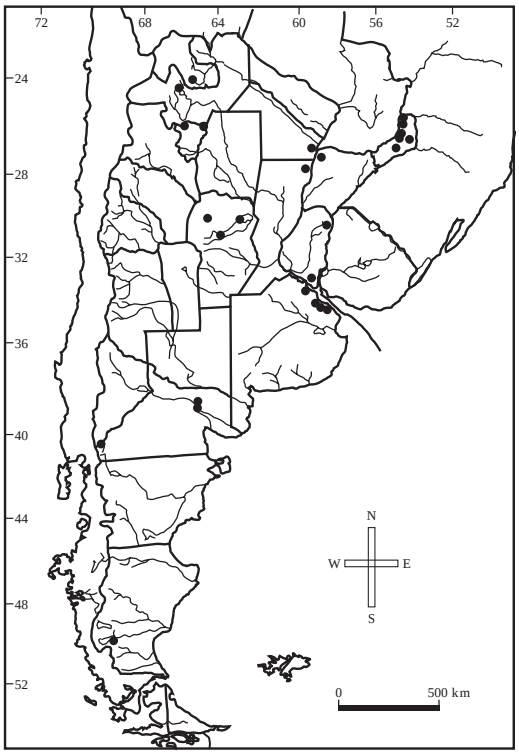

Figure 3: Distribution of *Phaenicia cluvia.*

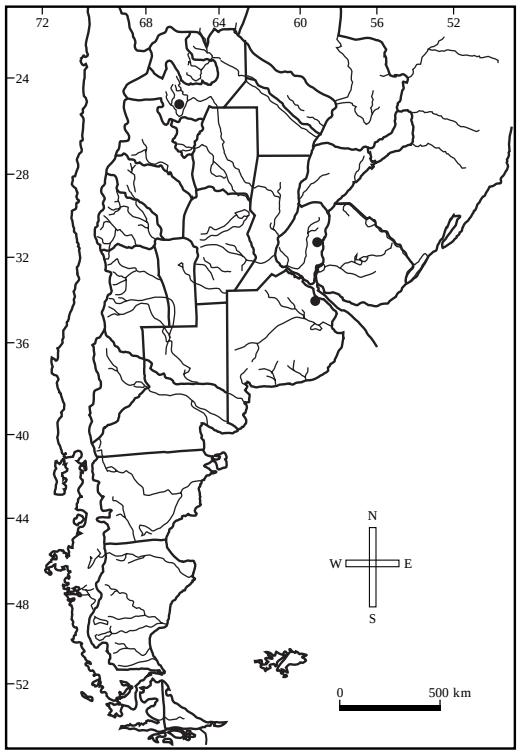

Figure 4: Distribution of *Phaenicia cuprina.*

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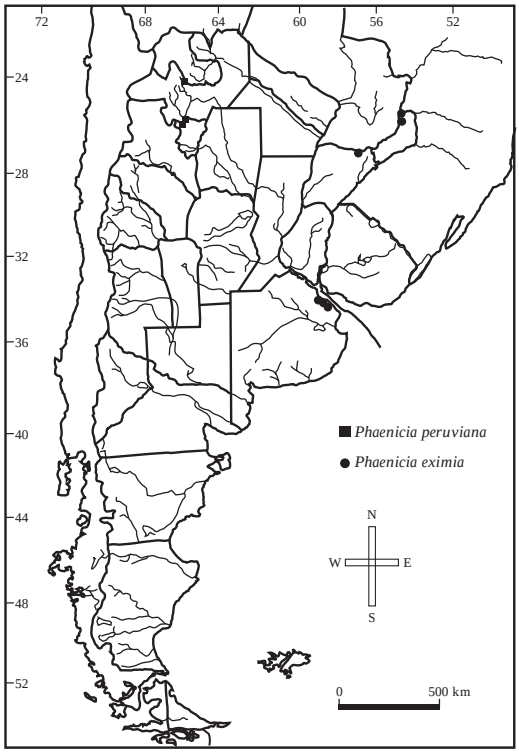

Figure 5: Distribution of *Phaenicia eximia* and *Phaenicia peruviana.*

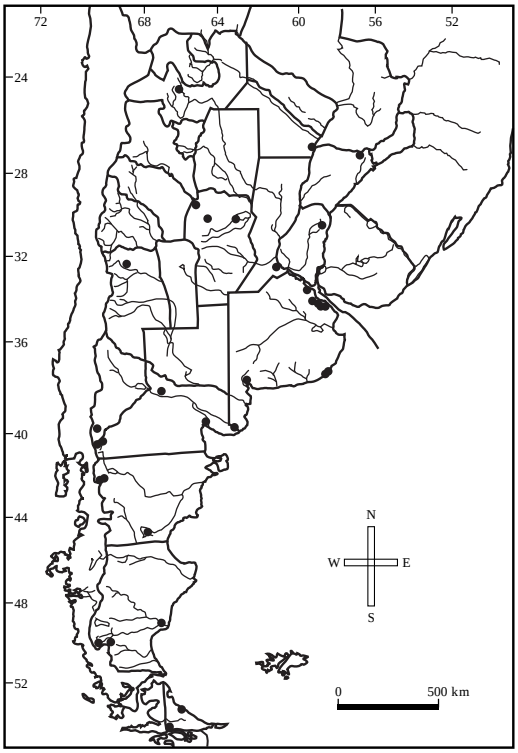

Figure 6: Distribution of *Phaenicia sericata.*

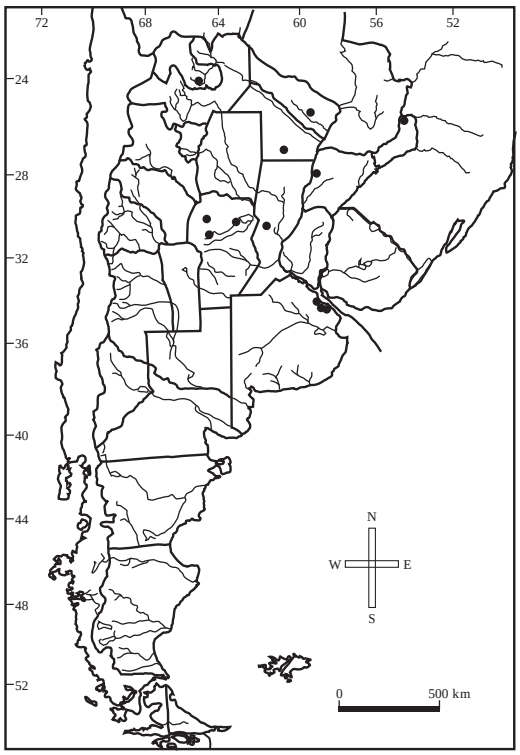

Figure 7: Distribution of *Cochliomyia hominivorax.*

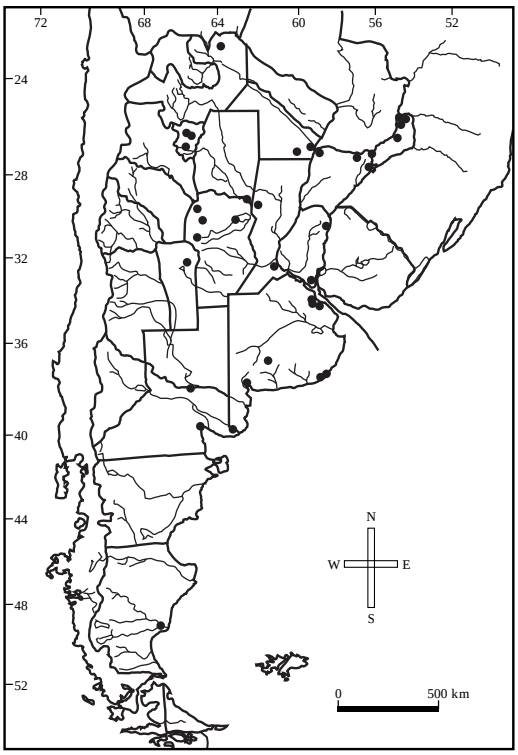

Figure 8: Distribution of *Cochliomyia macellaria.*

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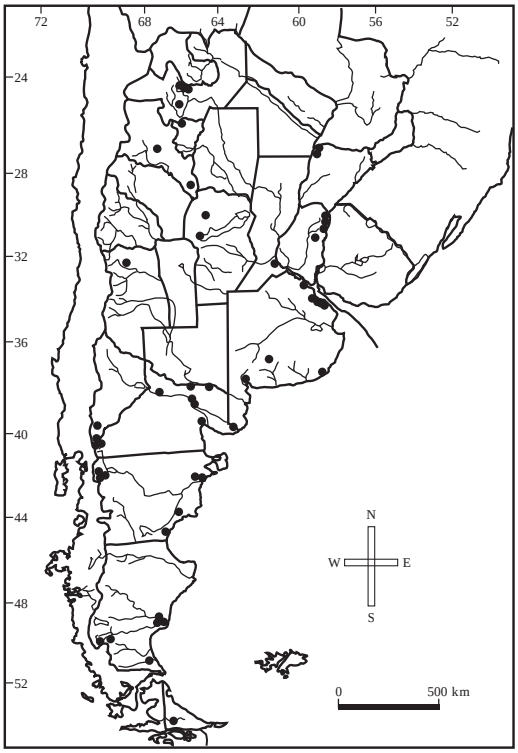

Figure 9: Distribution of *Compsomyiops fulvicrura.*

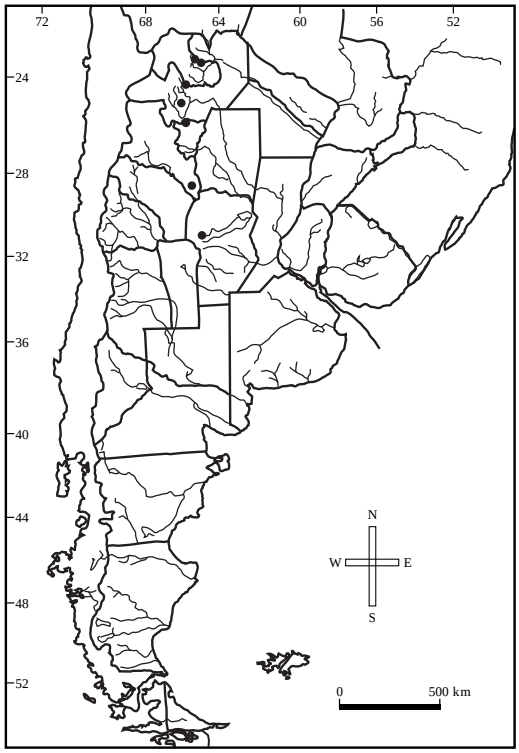

Figure 10: Distribution of *Compsomyiops verena.*

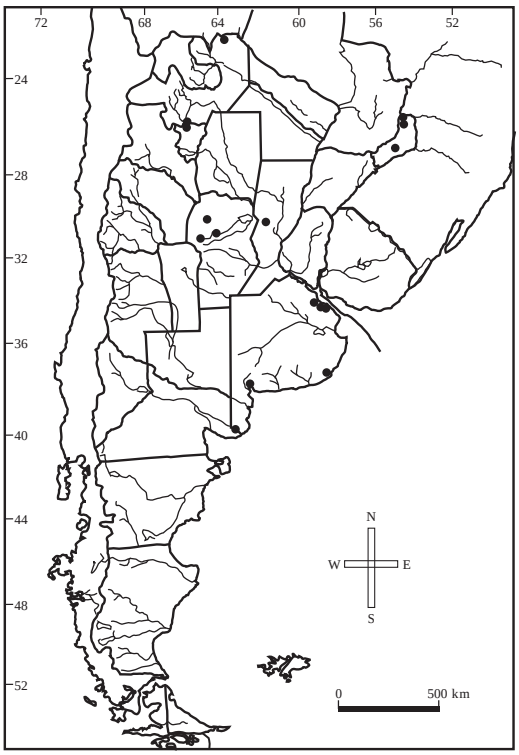

Figure 11: Distribution of *Chrysomya albiceps.*

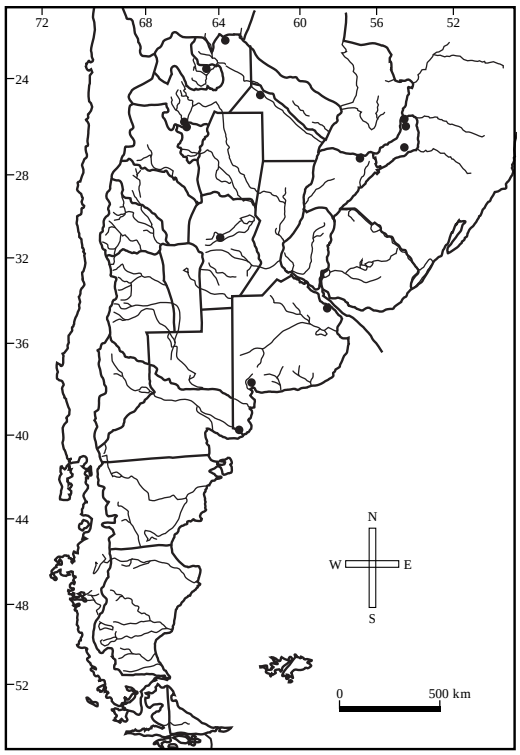

Figure 12: Distribution of *Chrysomya chloropyga.*

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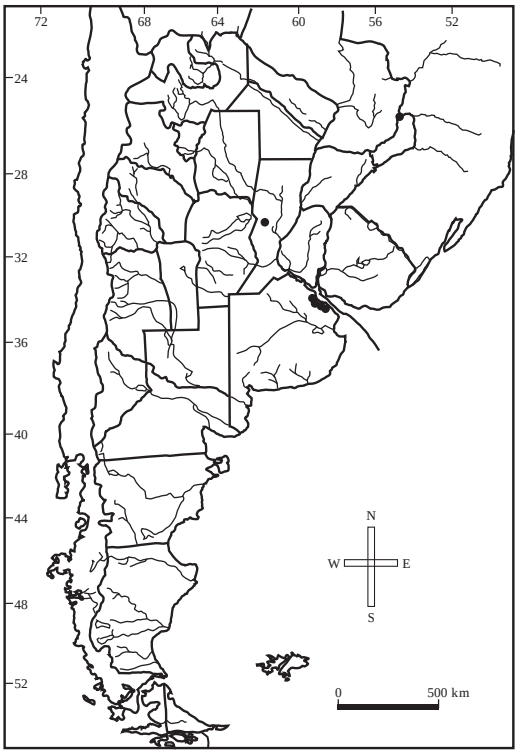

Figure 13: Distribution of *Chrysomya megacephala.*

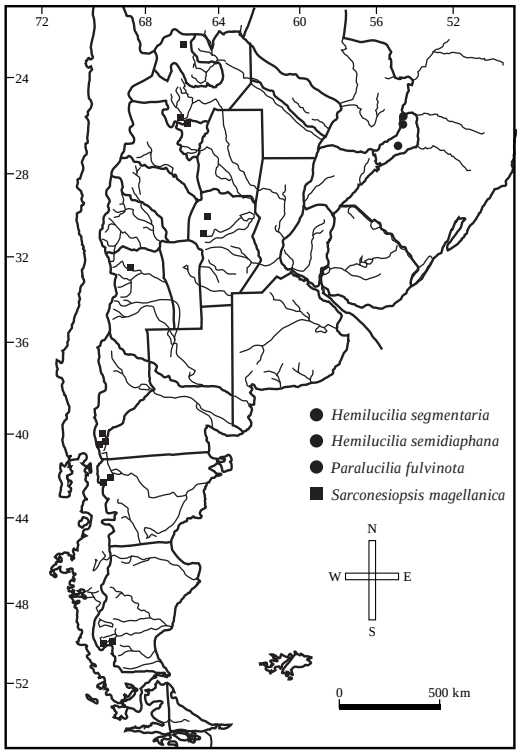

Figure 14: Distribution of *Hemilucilia segmentaria, Hemilucili semidiaphana, Paralucilia fulvinota,* and *Sarconesiopsis magellanica.*

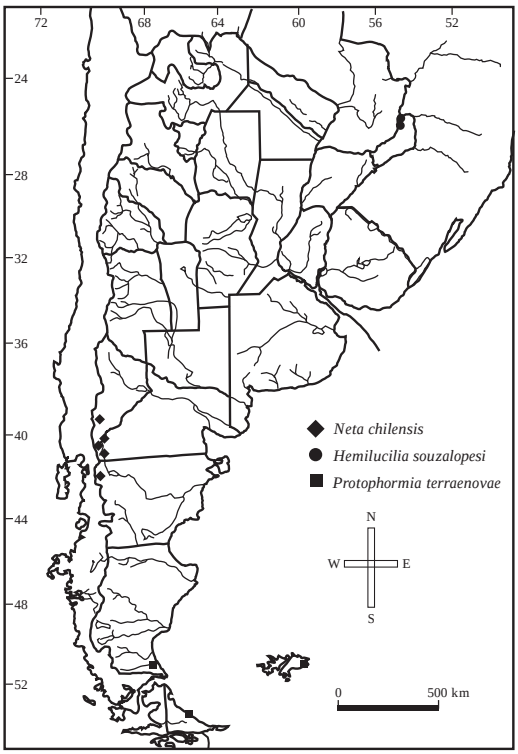

Figure 15: Distribution of *Hemilucilia souzalopesi, Neta chilensis,* and *Protophormia terraenovae.*

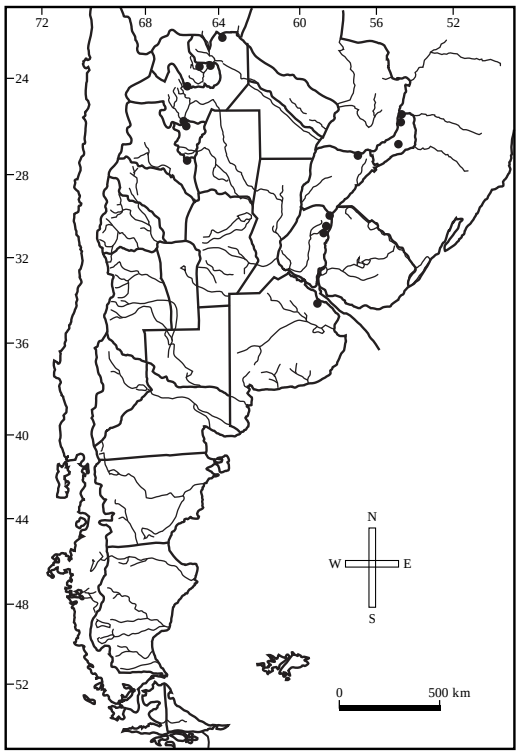

Figure 16: Distribution of *Paralucilia pseudolyrcea.*

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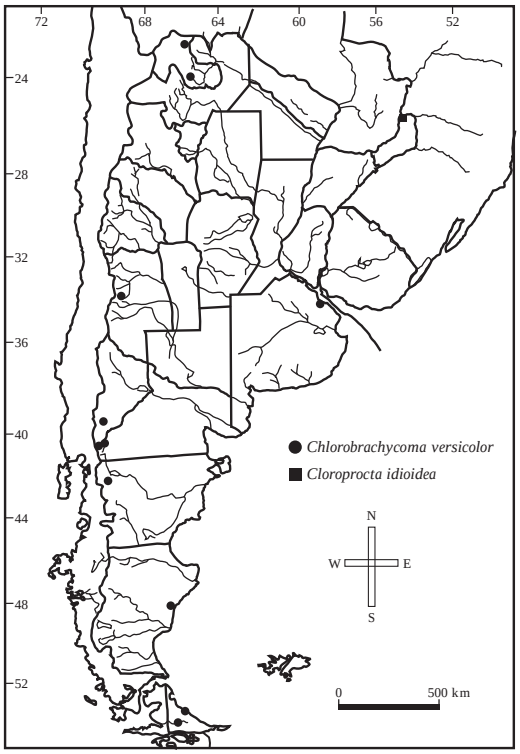

Figure 17: Distribution of *Chlorobrachycoma versicolor* and *Chloroprocta idioidea.*

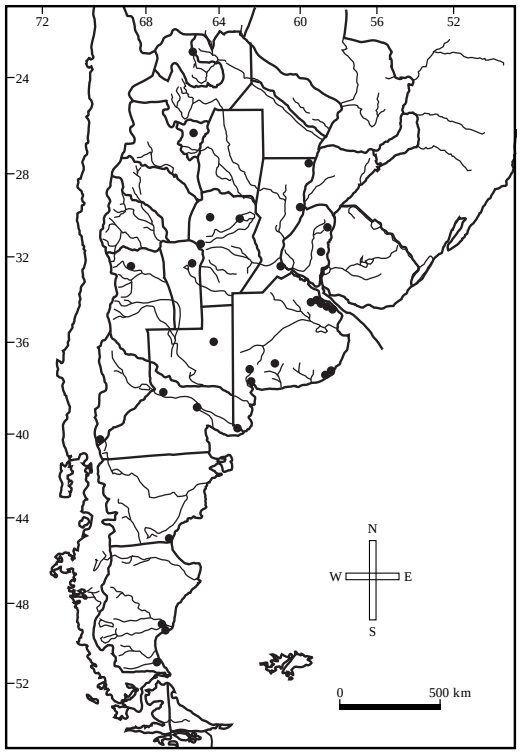

Figure 18: Distribution of *Sarconesia chlorogaster.*

There are no data about large areas of the Chacoan phytogeographic province which include Formosa and Santiago del Estero provinces and from central provinces of the country, namely Mendoza, San Luis and La Pampa. This situation makes difficult to determine the presence of certain species in these areas. This is the case of *C. nigribasis*, *C. versicolor*, *P. peruviana,* and *S. magellanica,* the latter one associated with highland areas.

There are only three records of *P. cuprina* and its distributional pattern is unclear. After studying the material identified as *P. eximia* by Costamagna (op. cit.) and Costamagna et al. (op. cit.) from Bahía Blanca, it should now be considered as *P. sericata*.

The relatively recent discovery of *Chrysomya* Robineau–Desvoidy species in Argentina showed the necessity to establish the extreme geographical limits of its distribution. Viedma in Río Negro is the southern limit (Centeno op. cit.). Pupae of *Chrysomya* were found in *Otaria flavescens* carcass from Punta Ninfas, Chubut (Oliva op. cit.). *Chrysomya megacephala* recorded from Santa Fe, shows a continuous distribution from Misiones to Buenos Aires. Previously it was found in Puerto Iguazú, Misiones and the surroundings of Buenos Aires city (Schnack & Mariluis op. cit.).

Protophormia terraenovae, a typical species from the high latitudes of the Holarctic Region, has recently been introduced in the south Atlantic islands and the south continental areas of Argentina and Chile (Hänel *et al*. op. cit., Mariluis 1999, Mariluis & Schnack 2002). Though it seems to be confined to austral continental extremes, its spread in Argentinean Patagonia should be considered.

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