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## Baseline richness of Salticidae (Araneae) from Misiones, Argentina

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**Abstract:** The relatively poor knowledge of the spiders of Argentina provided the impetus to set up a checklist for Misiones province, and the primary focus of this study was on the jumping spiders (Salticidae) which was done with the aim of providing a baseline for future research. This checklist compiles 13 subfamilies, 66 genera and 106 known species of salticids from Misiones, which now represent almost 52% of the Argentinean salticid fauna. Distributions of species are given by ecoregion, department and locality. 21 new species records are here cited for Argentina, and full color photographs are provided for 46 salticid species.

**Key words:** jumping spiders, Misiones province, salticids, species checklist

**Resumen:** El conocimiento relativamente escaso sobre las arañas de Argentina proporcionó el impulso para establecer una lista de especies para la provincia de Misiones, y el enfoque principal de este estudio fue sobre las arañas saltadoras (Salticidae); lo cual se hizo con el objetivo de proporcionar una línea de base para futuras investigaciones. Esta lista compila 13 subfamilias, 66 géneros y 106 especies conocidas de salticidos para Misiones, que ya representa casi el 52% de la fauna de salticidos argentinos. Las distribuciones de las especies se dan por ecorregión, departamento y localidad. 21 nuevos registros de especies son aquí citados para Argentina, y se proporcionan fotografías a todo color de 46 especies salticidos.

**Palabras clave:** arañas saltadoras, provincia de Misiones, salticidos, lista de especies

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### Introduction

Checklist and faunistic studies demonstrate a clear connection between basic taxonomy and biodiversity issues. According to some estimates, only 20% of all spider species have been named (Coddington & Levi 1991). As in other fields, catalogs or checklists provide an important source of compiled information concerning species diversity of several regions.

Misiones rainforest (northeastern Argentina) is biogeographically linked with the Atlantic Forest of Brazil (Brown *et al.* 1993), and has the least fragmented remnants of the Alto Parana Atlantic Forest (APAF) and the Araucaria Moist Forest ecoregions (AMF) (Olson *et al.* 2001; Placci & Di Bitetti 2006). In Argentina, those ecoregions have a high biodiversity and endemism only analogous with the Yungas rainforest in the northwest (Bertonatti & Corcuera 2000). Misiones and Yungas rainforest cores, with similar surface area (29,800 km<sup>2</sup>), together represent less than 2% of continental Argentina, but contain more than 50% of the country's biodiversity (Brown *et al.* 1993). In addition to the APAF and AMF, at the southern end of Misiones province is another ecoregion: Southern Cone Mesopotamian Savanna (SCMS), consisting predominantly of a tropical savanna with flooded plains, wetlands and grasslands (Viglizzo *et al.* 2006). Those three ecoregions of Misiones have suitable conditions for a high diversity of species including many spiders.

The salticid fauna of Misiones is relatively well known, but such knowledge is disjointed and needs to be ordered and compiled. Few works have been done on spiders and inventories exclusively for Misiones (see below), and many distribution records are limited only to species descriptions. The substantial diversity of Misiones has yet to be cataloged; the salticid fauna is listed here as a starting point.

In the literature there are two long-standing works of spider species inventory from Misiones. Mello-Leitão (1945) cited 41 valid species of Salticidae from the Province. Another early paper was that of Gerschman de Pikelín & Schiapelli (1958), where no salticids were mentioned. Undoubtedly, the most important contributions of Salticidae are the numerous Galiano papers between 1962 and 1999 (at least  $n = 22$ ), describing 26 species inhabiting Misiones. The spider fauna of Misiones also likely shares species with Rio Grande do Sul, Brazil (Buckup *et al.* 2010), which contains the same geographically proximate ecoregions. These authors listed 72 species of salticids.

Published or not, it is common knowledge that museum collections have a lot of information. Part of the wide spectrum of data that accumulates in these collections is the knowledge of diversity and distribution of species (Ramírez 2012). In Argentina, the arachnid collection of the Museo Argentino de Ciencias Naturales (MACN-Ar) is one of the largest and best organized collections of Latin America (Ramírez 2012). This collection preserves vouchers belonging to more than 3700 lots of Araneae from Misiones from the 1930s to the present. Furthermore, the collection of the Museo de La Plata (MLP) contains all specimens and types described by Mello-Leitão (1945) from Misiones.

Recently obtained samples, plus all of the above mentioned publications, as well as specimens deposited in museum collections, contain information about the occurrence of just over 100 salticid species in Misiones. All available information on the occurrence and distribution of these spiders within Misiones limits is summarized in a checklist given below. This study will enhance the existing biodiversity database of the region and establishes baseline information which will provide reference data for future research. It is hoped that it will also encourage interest in local arachnology.

## Materials and Methods

For the building of this salticid checklist from Misiones, a number of sources were used. A total of 463 records were examined, the majority of which (68%) are based on specimens in the arachnid collection of the Museo Argentino de Ciencias Naturales “Bernardino Rivadavia” (MACN-Ar, C. Scioscia). Other sources were the recent surveys of 2013, 2014 (23%) deposited at the arachnid collection of the Instituto de Biología Subtropical (IBSI-Ara, G. Rubio), and available literature (9%) including cited specimens from the collection of the Museo de La Plata (MLP, L. Pereira) (Mello-Leitão 1945; Pereira *et al.* 1999). All photographs are of living specimens, and were taken by the author in nature with a Nikon D80 digital camera using a Micro-Nikkor 85 mm lens (except photos in Figure 25 taken with a pocket camera, and photos in Figure 44 taken by M.I. Izquierdo). All specimen photographs are referred to through their voucher preparation codes (sample ID), formed by initials of the name and surname of the author plus a four-digit number (*e.g.*, GDR-4077).

Taxa of this checklist are arranged by subfamilies in phylogenetic order; within these, species are listed alphabetically by genus, and then by specific epithet to provide rapid access to names. Specific names were checked for consistency with the current taxonomic nomenclature in the World Spider Catalog (WSC 2014) which was followed in every case. Subfamily classification of salticids was based on the following priority order: Maddison *et al.* (2014), Bodner & Maddison (2012), Maddison (2011), Maddison & Hedin (2003) and the Catalogue of Salticidae by Jerzy Prószyński (2013).

According to its frequency in collections, each species was classified as: **rare** [\*] when individuals do not exceed the number of 10, **scarce** [\*\*] over 10 and under 30 individuals and **common** [\*\*\*] over 30 individuals. Distribution is presented from north to south, by ecoregion (APAF: Alto Parana Atlantic Forest, AMF: Araucaria Moist Forest, SCMS: Southern Cone Mesopotamian Savanna), then political department (**Ig**: Iguazú, **MB**: General Manuel Belgrano, **El**: Eldorado, **SP**: San Pedro, **Mo**: Montecarlo, **Gu**:

Guaraní, **SM**: Lib. General San Martín, **Ci**: Cainguás, **SI**: San Ignacio, **25**: 25 de Mayo, **Ob**: Oberá, **Ca**: Candelaria, **Cp**: Capital, **LA**: Leandro N. Alem, **SJ**: San Javier, **Ap**: Apóstoles, **Co**: Concepción) and then by locality. Another abbreviation used in the list is CIAR: Centro de Investigaciones Antonia Ramos. First Record for the country is indicated by [FstRc].

## Results and discussion

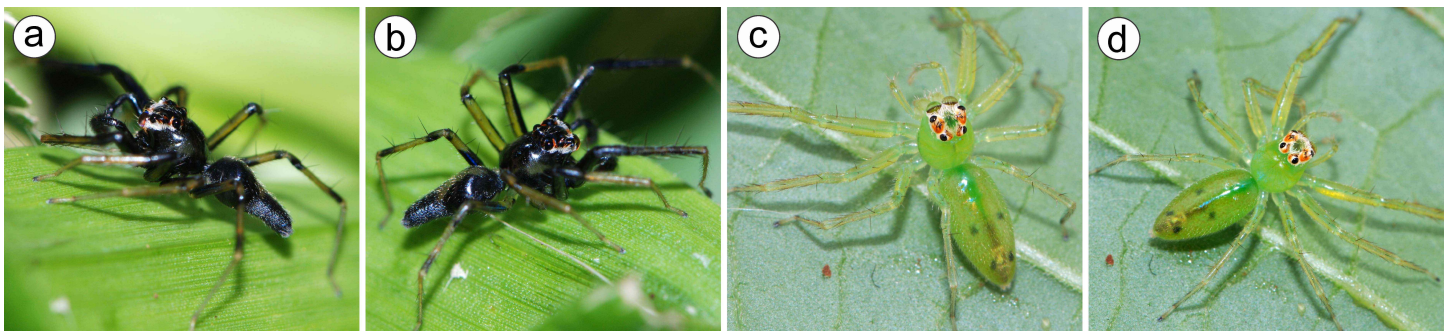
Previously, 182 species of Salticidae have been recorded from Argentina (WSC 2014; plus a species in Galiano 1965). In this list, 21 additional species are reported, bringing the total to 203 species for the country. This includes 106 species now known for Misiones (Checklist), which represents 52.22% of the Argentine fauna of Salticidae, in agreement with the overall diversity relationship between Misiones/Yungas vs. country indicated by Brown *et al.* (1993). These species belong to 66 genera and at least 13 subfamilies; for four species the subfamilies are not known, so are considered as “miscellaneous salticids” (Checklist). In the same ecoregions, Buckup *et al.* (2010) cite 72 species of salticids from Rio Grande do Sul, Brazil, of which 39 (54.17%) were shared species with Misiones, Argentina.

The Salticidae is a mega-diverse group that includes more than 600 genera in the world, and at least 66 genera in Misiones. This salticid checklist and the photos of natural habitus in many species can be helpful tools to facilitate the identification of one species from more than a hundred species that inhabit Misiones, to complement the original descriptions or taxonomic revisions. A management plan for conservation can only be developed and implemented once inventories, or at least baseline information, can be provided.

### Checklist. Salticid species from Misiones province, Argentina.

#### Subfamily LYSSOMANINAE

1. *Lyssomanes austerus* Peckham & Wheeler, 1889. [\*\*]; APAF, AMF; (**Ig**): Arroyo Urugua-i Destacamento Yacú-Poí; Puerto Libertad; (**MB**): San Antonio; Piñalito.
2. *Lyssomanes belgranoi* Galiano, 1984. [\*]; AMF; (**MB**): San Antonio.
3. *Lyssomanes leucomelas* Mello-Leitão, 1917. (Figure 1); [\*]; APAF, AMF; (**MB**): Reserva de Vida Silvestre Urugua-í; Reserva Natural Estricta San Antonio; (**EI**): Puerto Victoria; (**SP**): Parque Provincial Cruce Caballero.



**Figure 1.** Habitus in life. *Lyssomanes leucomelas* (a, b ♂ GDR-4073) (c, d ♀ GDR-4106).

4. *Lyssomanes miniaceus* Peckham & Wheeler, 1889. (Figure 2); [\*]; APAF, AMF; (**Ig**): Parque Nacional Iguazú; (**MB**): Reserva de Vida Silvestre Urugua-í; San Antonio.

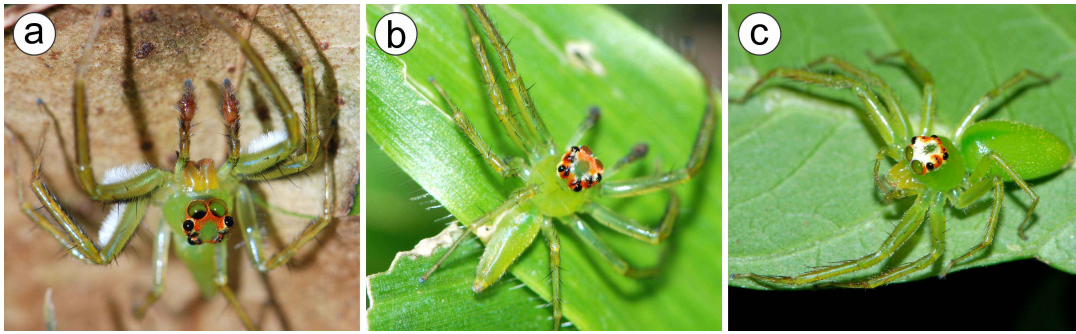


Figure 2. Habitus in life. *Lyssomanes miniaceus* (a, b ♂, c ♀ GDR-4099).

5. *Lyssomanes nigrofimbriatus* Mello-Leitão, 1941. [\*]; AMF, SCMS; (**MB**): San Antonio; Piñalito; (**Co**): Santa María.
6. *Lyssomanes pauper* Mello-Leitão, 1945. (Figure 3); [\*\*\*]; APAF, AMF, SCMS; (**Ig**): Parque Nacional Iguazú; Arroyo Urugua-í, Destacamento Yacú-Poí; Puerto Libertad; (**El**): Puerto Victoria; (**MB**): Piñalito; (**Co**): Santa María.

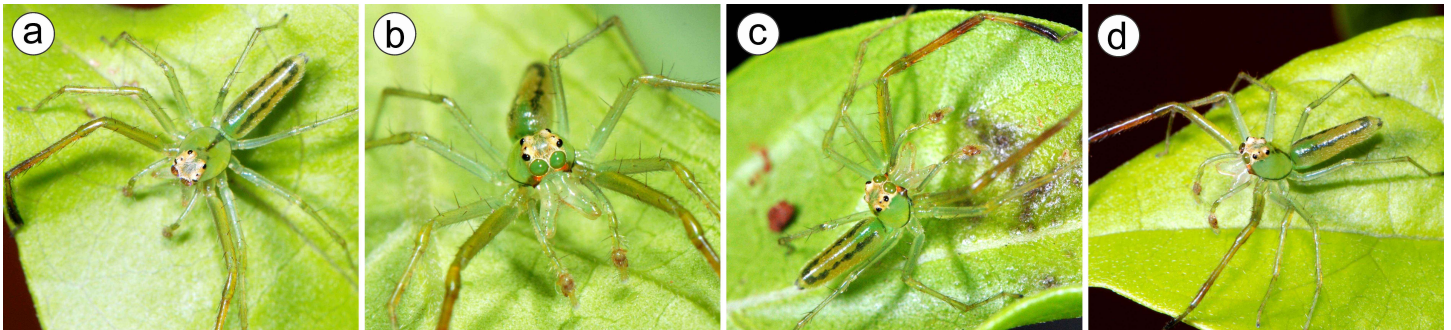
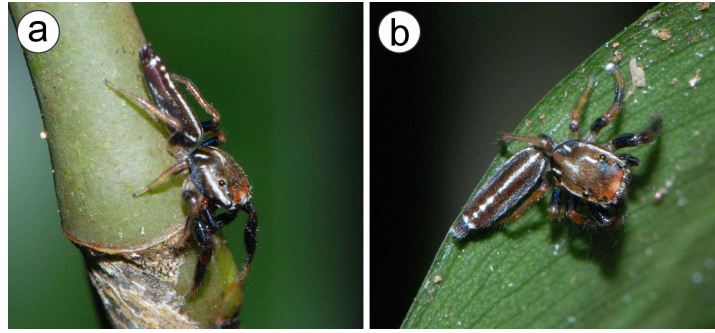


Figure 3. Habitus in life. *Lyssomanes pauper* (a-d ♂ GDR-0390).

7. *Lyssomanes penicillatus* Mello-Leitão, 1927. [\*\*]; APAF, AMF; (**Ig**): Arroyo Urugua-í, Destacamento Yacú-Poí; (**MB**): San Antonio; Piñalito.
8. *Lyssomanes tristis* Peckham & Wheeler, 1889. [\*]; APAF; (**Ig**): Parque Nacional Iguazú.
9. *Lyssomanes yacui* Galiano, 1984. [\*]; APAF; (**Ig**): Parque Nacional Iguazú.

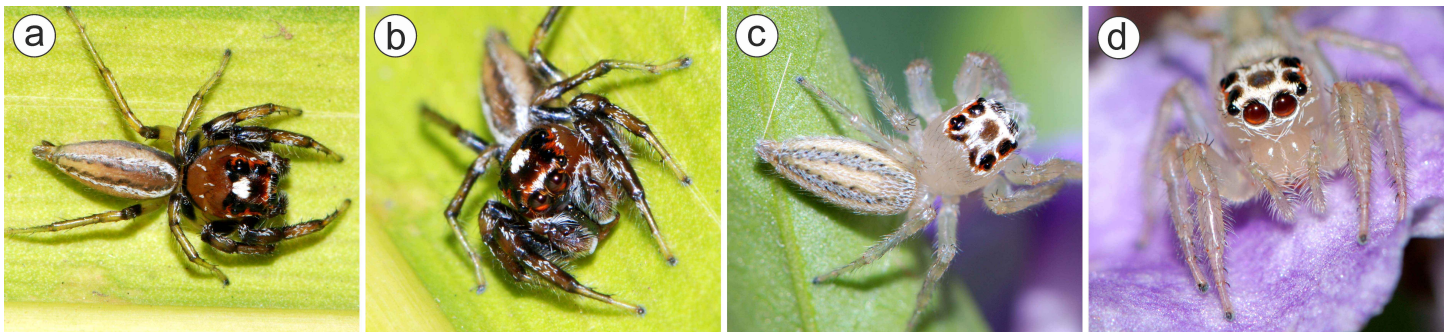
#### Subfamily THIODININAE

10. *Cotinusa albescens* Mello-Leitão, 1945. [\*]; APAF; (**El**): Puerto Victoria.
11. *Cotinusa trifasciata* (Mello-Leitão, 1943). (Figure 4); [\*]; APAF; (**Ig**): Parque Nacional Iguazú; (**El**): Puerto Victoria.



**Figure 4.** Habitus in life. *Cotinusa trifasciata* (a, b ♂ GDR-4082).

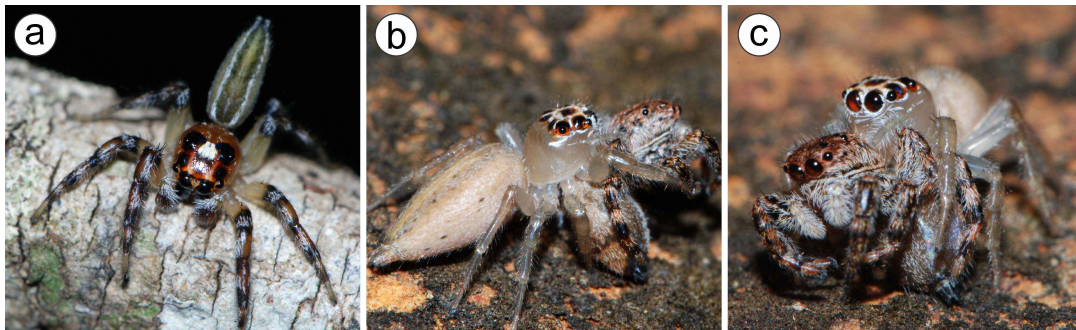
12. *Thiodina germaini* Simon, 1900. (Figure 5); [\*\*]; APAF; (Ig): Parque Nacional Iguazú; Puerto Iguazú; Puerto Libertad; (SI): San Ignacio.



**Figure 5.** Habitus in life. *Thiodina germaini* (a, b ♂ GDR-4043) (c, d ♀ GDR-4034).

13. *Thiodina robusta* Mello-Leitão, 1945. [\*]; APAF; (El): Puerto Victoria.

14. *Thiodina vaccula* Simon, 1900. (Figure 6); [\*]; APAF; (Ig): Parque Nacional Iguazú. [FstRc]



**Figure 6.** Habitus in life. *Thiodina vaccula* (a ♂ GDR-4088) (b, c ♀ GDR-4134).

#### Subfamily SITTICINAE

15. *Semiopyla viperina* Galiano, 1985. (Figure 7); [\*]; APAF; (Ig): Parque Nacional Iguazú; Puerto Libertad.



Figure 7. Habitus in life. *Semiopyla viperina* (a–c ♂ GDR-0412).

16. *Sitticus flabellatus* Galiano, 1989. [\*]; APAF; (**Ig**): Puerto Libertad.

Subfamily HYETUSSINAE

17. *Agelista andina* Simon, 1900. (Figure 8); [\*]; APAF, AMF, SCMS; (**Ig**): Arroyo Urugua-í, near Puerto Libertad; (**MB**): San Antonio; Piñalito; (**Co**): Santa María.

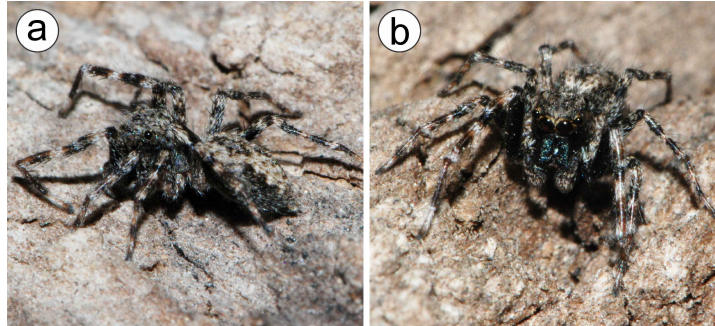


Figure 8. Habitus in life. *Agelista andina* (a, b ♂ GDR-0385).

18. *Hyetussa aguilaris* Galiano, 1978. [\*]; APAF; (**SI**): San Ignacio. [FstRc]
19. *Hyetussa mesopotamica* Galiano, 1976. [\*]; APAF; (**SJ**): San Javier.
20. *Scopocira histrio* Simon, 1900. (Figure 9); [\*\*]; APAF, AMF, SCMS; (**Ig**): Parque Nacional Iguazú; (**MB**): Reserva de Vida Silvestre Urugua-í; San Antonio; (**EI**): Puerto Victoria; (**Ob**): Campo Ramón, CIAR; (**Co**): Santa María.



Figure 9. Habitus in life. *Scopocira histrio* (a, b ♀, c ♂ GDR-4087).

## Subfamily SYNEMOSYNINAE

21. *Martella camba* (Galiano, 1969). [\*]; APAF; (**Ig**): Parque Nacional Iguazú.
22. *Martella utingae* (Galiano, 1967). [\*]; APAF; (**Ig**): Parque Nacional Iguazú. [FstRc]
23. *Sarinda chacoensis* Galiano, 1996. [\*]; APAF; (**Ig**): Parque Nacional Iguazú.
24. *Sarinda imitans* Galiano, 1965. [\*]; APAF, SCMS; (**Ig**): Parque Nacional Iguazú; Puerto Libertad; (**Co**): Santa María.
25. *Sarinda nigra* Peckham & Peckham, 1892. (Figure 10); [\*\*]; APAF, AMF, SCMS; (**Ig**): Parque Nacional Iguazú; Arroyo Urugua-í, Destacamento Yacú-Poí; Puerto Libertad; (**MB**): San Antonio; Bernardo de Irigoyen; Piñalito; (**Co**): Santa María.

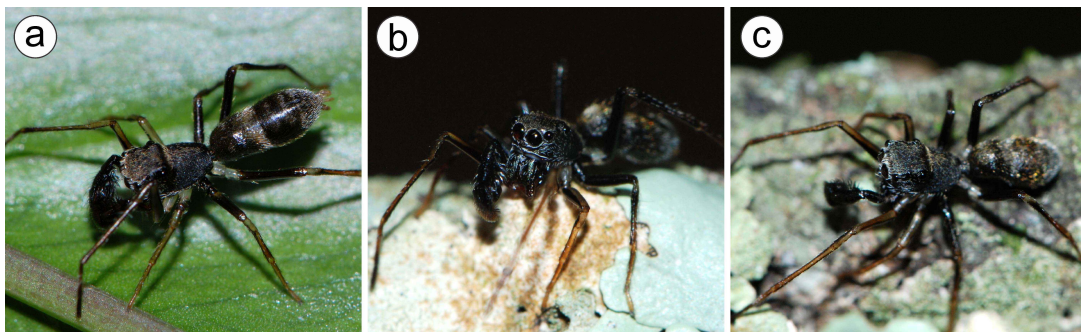


Figure 10. Habitus in life. *Sarinda nigra* (a ♂ GDR-4052) (b, c ♂ GDR-4077).

26. *Synemosyna aurantiaca* (Mello-Leitão, 1917). [\*]; AMF, SCMS; (**MB**): Reserva Natural Estricta San Antonio; (**Co**): Santa María.

## Subfamily AMYCINAE

27. *Amycus flavicomis* Simon, 1900. [\*]; APAF, AMF; (**MB**): Piñalito; (**El**): Puerto Victoria.
28. *Encolpius guaraniticus* Galiano, 1968. [\*]; APAF, AMF, SCMS; (**Ig**): Arroyo Urugua-í, Destacamento Yacú-Poí; Puerto Libertad; (**MB**): Piñalito; (**Co**): Santa María.
29. *Noegus bidens* Simon, 1900. [\*]; SCMS; (**Co**): Santa María.
30. *Noegus comatulus* Simon, 1900. [\*]; APAF, AMF; (**El**): Puerto Victoria; (**MB**): San Antonio.

## Subfamily SYNAGELINAE

31. *Consingis semicana* Simon, 1900. [\*]; APAF, AMF; (**Ig**): Parque Nacional Iguazú; (**MB**): San Antonio.
32. *Peckhamia argentinensis* Galiano, 1986. [\*]; APAF; (**Ig**): Parque Nacional Iguazú.

## Subfamily MARPISSINAE

33. *Balmaceda nigrosecta* Mello-Leitão, 1945. (Figure 11); [\*]; APAF; (**Ig**): Parque Nacional Iguazú; Puerto Libertad; (**El**): Puerto Victoria.

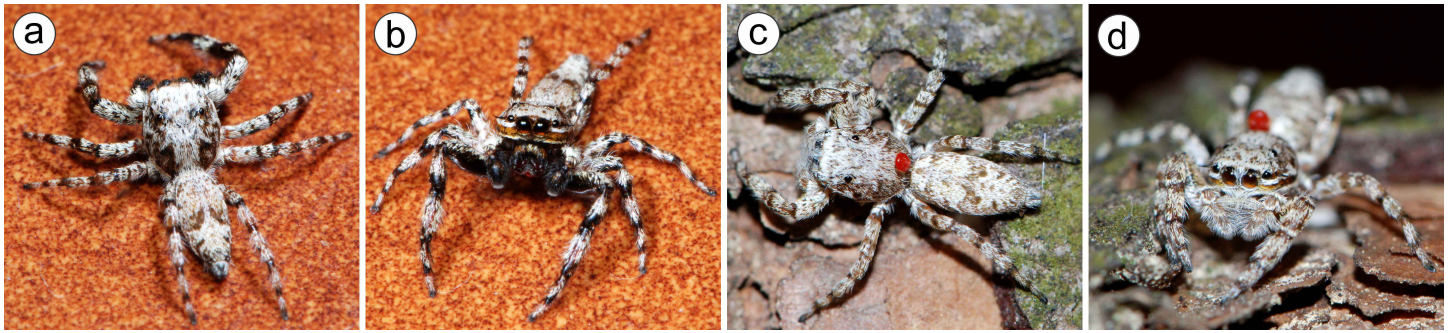


Figure 11. Habitus in life. *Balmaceda nigrosecta* (a, b ♂ GDR-0392) (c, d ♀ GDR-4126).

34. *Breda apicalis* Simon, 1901. [\*\*]; APAF, AMF; (Ig): Parque Nacional Iguazú; Arroyo Urugua-í, Destacamento Yacú-Poí; (MB): Piñalito.

35. *Breda bicruciata* (Mello-Leitão, 1943). (Figure 12); [\*]; APAF, AMF, SCMS; (Ig): Parque Nacional Iguazú; (MB): Reserva de Vida Silvestre Urugua-í; Refugio de Vida Silvestre Caa-Porá; (Co): Santa María.

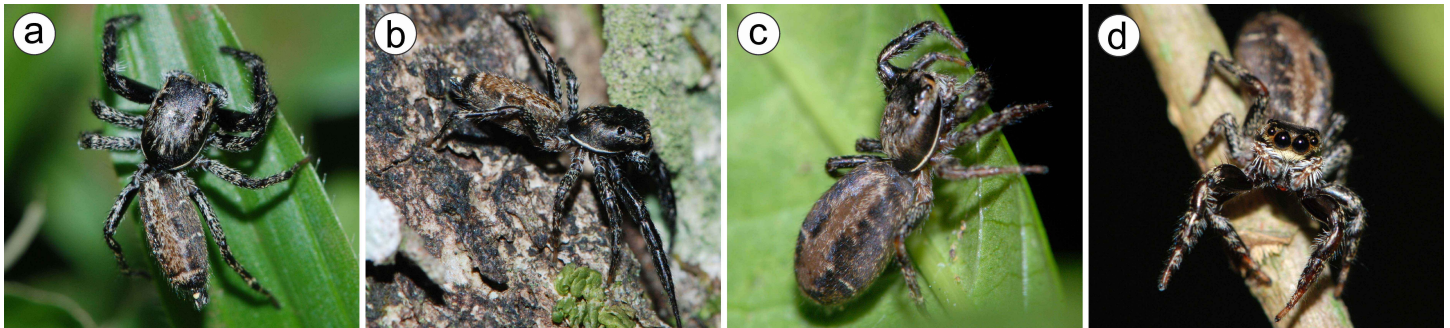


Figure 12. Habitus in life. *Breda bicruciata* (a ♂ GDR-4075) (b ♂ GDR-4068) (c, d ♀ GDR-4096).

36. *Breda modesta* (Taczanowski, 1878). (Figure 13); [\*]; APAF; (El): Eldorado; (SI): San Ignacio.



Figure 13. Habitus in life. *Breda modesta* (a-c ♂ GDR-4055).

37. *Platycryptus magnus* (Peckham & Peckham, 1894). [\*]; APAF; (Ig): Parque Nacional Iguazú. [FstRc]

38. *Psecas chapoda* (Peckham & Peckham, 1894). [\*]; APAF, SCMS; (SI): San Ignacio; (Co): Santa María. [FstRc]

39. *Psecas pulcher* Badcock, 1932. [\*]; APAF; (SI): San Ignacio.

40. *Psecas cf. sumptuosus* (Perty, 1833). (Figure 14); [\*]; APAF; (Ig): Parque Nacional Iguazú.



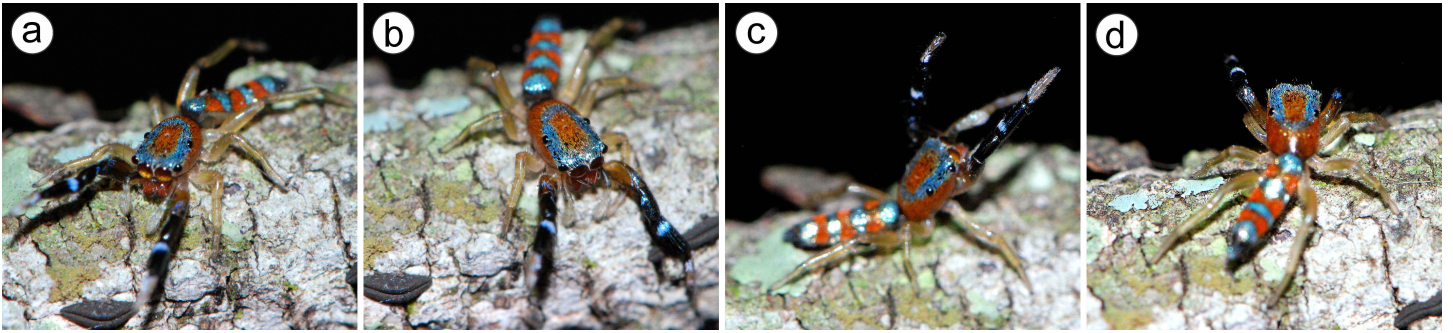


Figure 14. Habitus in life. *Psecas* cf. *sumptuosus* (a–d ♂ subadult GDR-4086).

#### Subfamily DENDRYPHANTINAE

41. *Avitus longidens* Simon, 1901. [\*]; APAF; (EI): Puerto Victoria.
42. *Avitus variabilis* Mello-Leitão, 1945. [\*]; APAF; (EI): Puerto Victoria.
43. *Beata aenea* (Mello-Leitão, 1945). (Figure 15); [\*]; APAF, AMF; (Ig): Parque Nacional Iguazú; (SP): Parque Provincial Cruce Caballero.

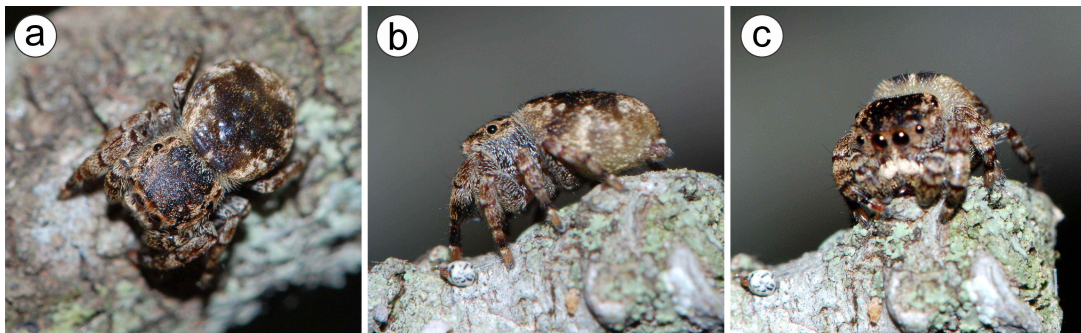


Figure 15. Habitus in life. *Beata aenea* (a–c ♂ GDR-4071).

44. *Beata fausta* (Peckham & Peckham, 1901). [\*]; APAF; (SI): San Ignacio.
45. *Beata lucida* (Galiano, 1992). [\*]; APAF, AMF; (Ig): Parque Nacional Iguazú; (MB): San Antonio.
46. *Bellota yacui* Galiano, 1972. [\*\*\*]; APAF, SCMS; (Ig): Parque Nacional Iguazú; (Co): Santa María.
47. *Bryantella smaragdus* (Crane, 1945). (Figure 16); [\*\*\*]; APAF, SCMS; (Ig): Puerto Iguazú; Puerto Bossetti; Arroyo Urugua-í and Route 12 intersection; Puerto Libertad; (25): Colonia Aurora; (Ob): Oberá; (SJ): San Javier; (Co): Santa María.

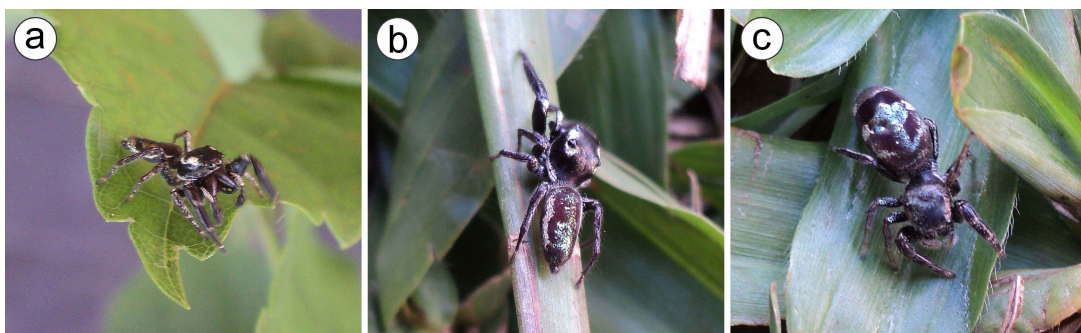
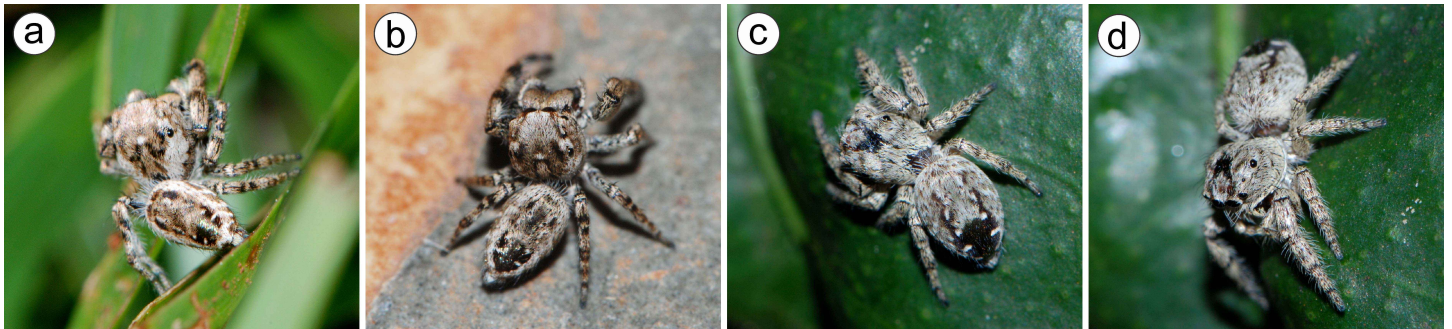


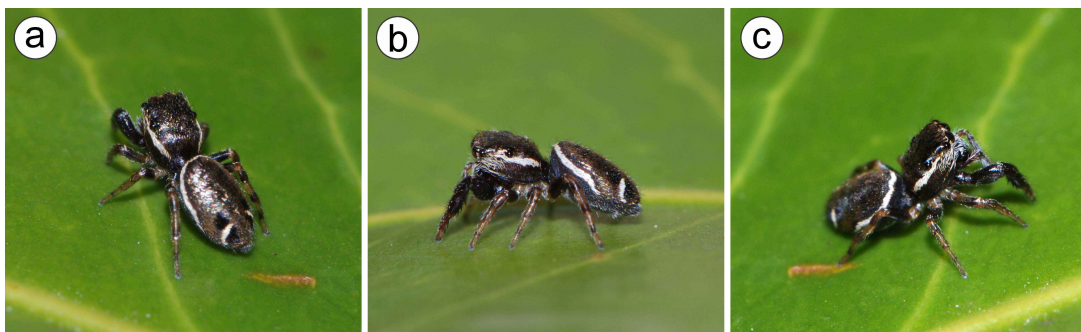
Figure 16. Habitus in life. *Bryantella smaragdus* (a ♂ GDR-4078) (b ♂, c ♀ GDR-4095).

48. *Chirothecia euchira* (Simon, 1901). [\*]; APAF, AMF; (**Ig**): Parque Nacional Iguazú; (**MB**): San Antonio.
49. *Fritzia muelleri* O. P.-Cambridge, 1879. [\*]; APAF; (**Ig**): Parque Nacional Iguazú.
50. *Metaphidippus albopilosus* (Peckham & Peckham, 1901). (Figure 17); [\*]; APAF, AMF; (**MB**): Bernardo de Irigoyen; (**Ob**): Oberá.



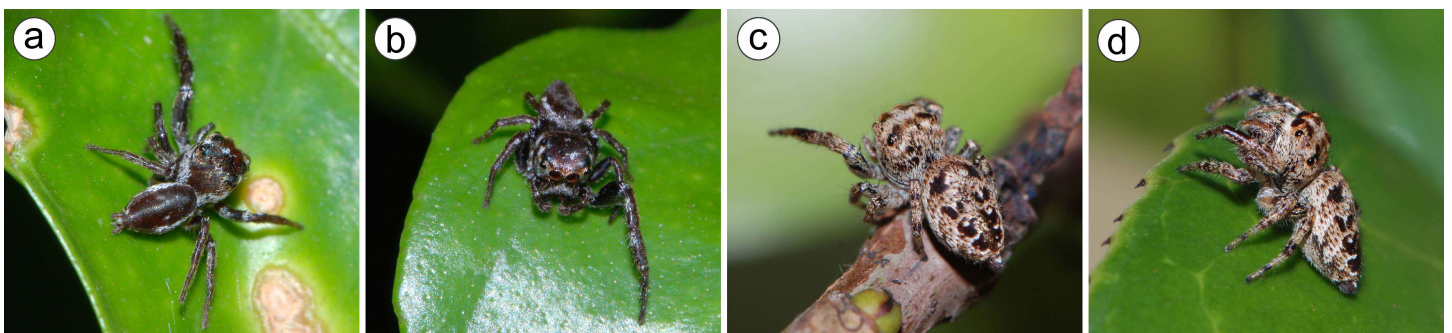
**Figure 17.** Habitus in life. *Metaphidippus albopilosus* (a ♂ GDR-4029) (b ♂ GDR-4054) (c, d ♀ GDR-4059).

51. *Metaphidippus odiosus* (Peckham & Peckham, 1901). [\*]; SCMS; (**Co**): Santa María.
52. *Metaphidippus perfectus* (Peckham & Peckham, 1901). (Figure 18); [\*]; APAF, AMF; (**Ig**): Parque Nacional Iguazú; (**MB**): Bernardo de Irigoyen. [FstRc]



**Figure 18.** Habitus in life. *Metaphidippus cf. perfectus* (a-c ♀ GDR-4038).

53. *Metaphidippus smithi* (Peckham & Peckham, 1901). (Figure 19); [\*]; APAF; (**Ig**): Puerto Iguazú. [FstRc]



**Figure 19.** Habitus in life. *Metaphidippus smithi* (a, b ♂ GDR-4027) (c, d ♀ GDR-4048).

54. *Metaphidippus tropicus* (Peckham & Peckham, 1901). [\*]; APAF; (**Ig**): Puerto Iguazú.

55. *Parnaenus cyanidens* (C. L. Koch, 1846). [\*]; APAF; (**Ig**): Arroyo Urugua-í, Destacamento Yacú-Poí. [FstRc]
56. *Rudra humilis* Mello-Leitão, 1945. [\*\*]; APAF, SCMS; (**El**): Puerto Victoria; (**SJ**): San Javier; (**Co**): Santa María.
57. *Sassacus aurantiacus* Simon, 1901. [\*]; AMF; (**MB**): Piñalito. [FstRc]
58. *Sassacus helenicus* (Mello-Leitão, 1943). [\*]; APAF, AMF; (**Ig**): Puerto Libertad; (**MB**): Piñalito. [FstRc]
59. *Semorina lineata* Mello-Leitão, 1945. [\*]; SCMS; (**Ap**): Pindapoy.
60. *Tacuna delecta* Peckham & Peckham, 1901. [\*]; SCMS; (**Co**): Santa María.
61. *Zygoballus gracilipes* Crane, 1945. (Figure 20); [\*]; AMF; (**MB**): Bernardo de Irigoyen. [FstRc]

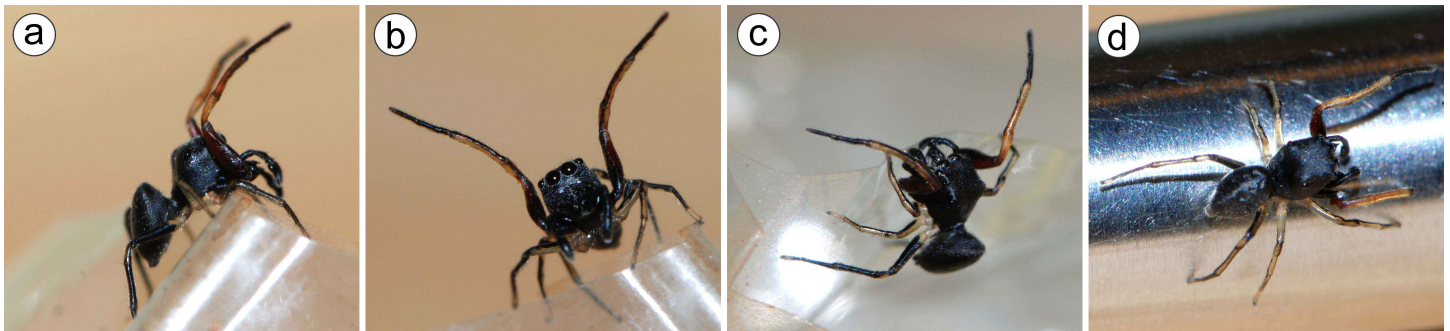


Figure 20. Habitus in life. *Zygoballus gracilipes* (a–d ♂ GDR-4044).

62. *Zygoballus melloleitaoi* Galiano, 1980. [\*]; APAF; (**El**): Puerto Victoria.

#### Subfamily MYRMARACHINAE

63. *Myrmarachne panamensis* Galiano, 1969. [\*]; APAF; (**Ig**): Puerto Libertad.

#### Subfamily EUOPHRYINAE

64. *Amphidraus argentinensis* Galiano, 1997. [\*]; APAF; (**Ig**): Parque Nacional Iguazú.
65. *Asaphobelis physonychus* Simon, 1902. (Figure 21); [\*\*]; APAF, AMF, SCMS; (**Ig**): Parque Nacional Iguazú; (**MB**): Reserva de Vida Silvestre Urugua-í; Reserva Natural Estricta San Antonio; (**Co**): Santa María. [FstRc]

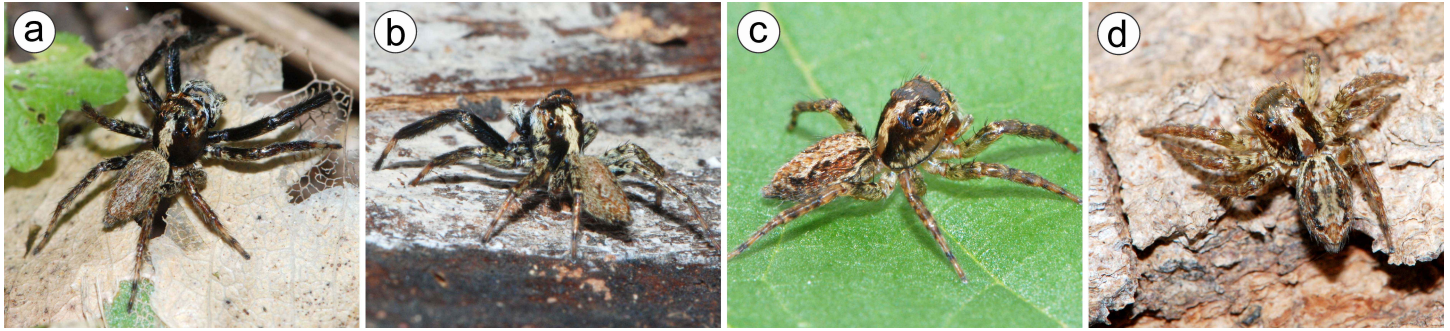


Figure 21. Habitus in life. *Asaphobelis physonychus* (a ♂ GDR-4100) (b ♂ GDR-4053) (c ♀ GDR-4108) (d ♀ GDR-4105).

66. *Coryphasia albibarbis* Simon, 1902. (Figure 22); [\*]; APAF, AMF; (Ig): Parque Nacional Iguazú; (MB): Reserva Natural Estricta San Antonio. [FstRc]

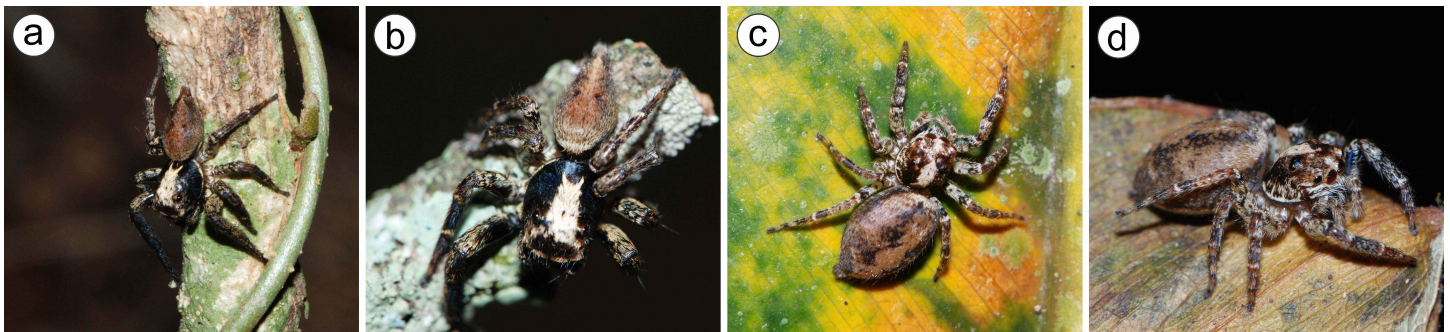


Figure 22. Habitus in life. *Coryphasia albibarbis* (a, b ♂ GDR-4097) (c, d ♀ GDR-4119).

67. *Coryphasia fasciventris* (Simon, 1902). (Figure 23); [\*]; APAF, AMF; (Ig): Parque Nacional Iguazú; (El): Puerto Victoria; (MB): San Antonio; Reserva Natural Estricta San Antonio. [FstRc]

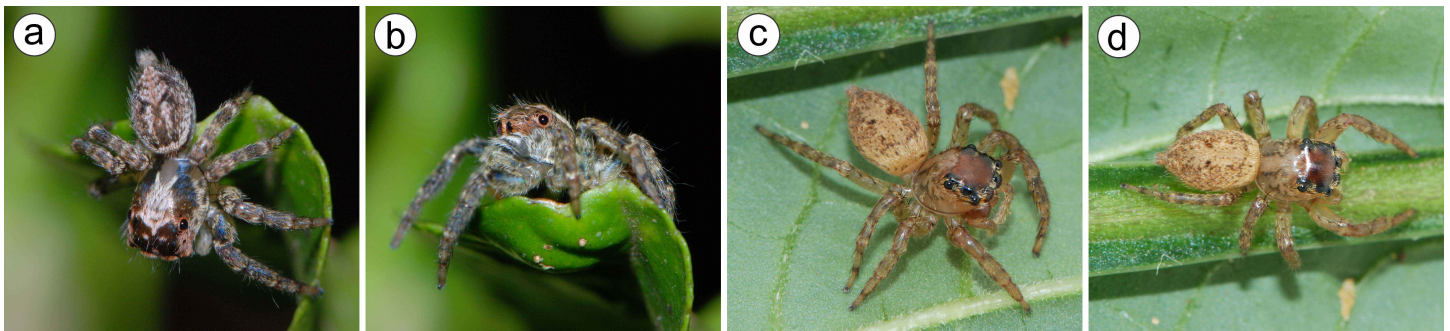
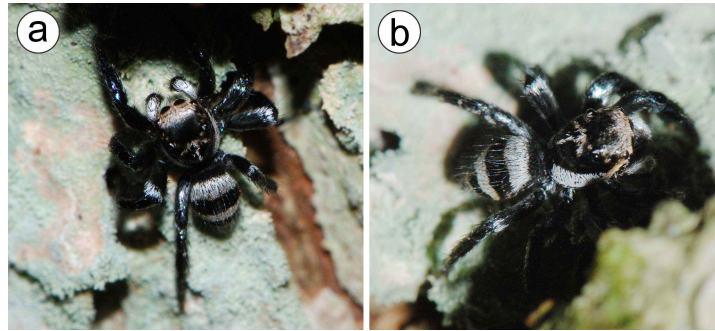


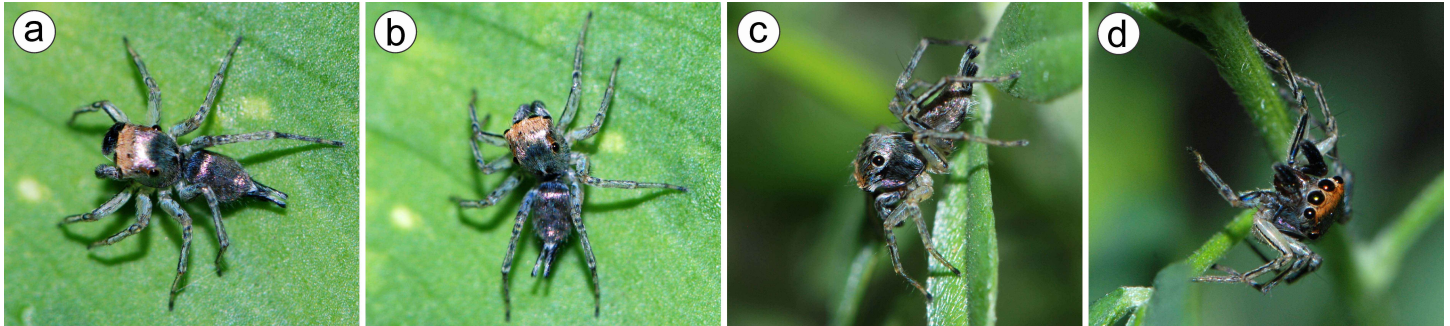
Figure 23. Habitus in life. *Coryphasia fasciventris* (a, b ♂ GDR-4092) (c, d ♀ GDR-4112).

68. *Corythalia argentinensis* Galiano, 1962. (Figure 24); [\*]; AMF; (MB): Reserva de Vida Silvestre Urugua-í; San Antonio; Piñalito.



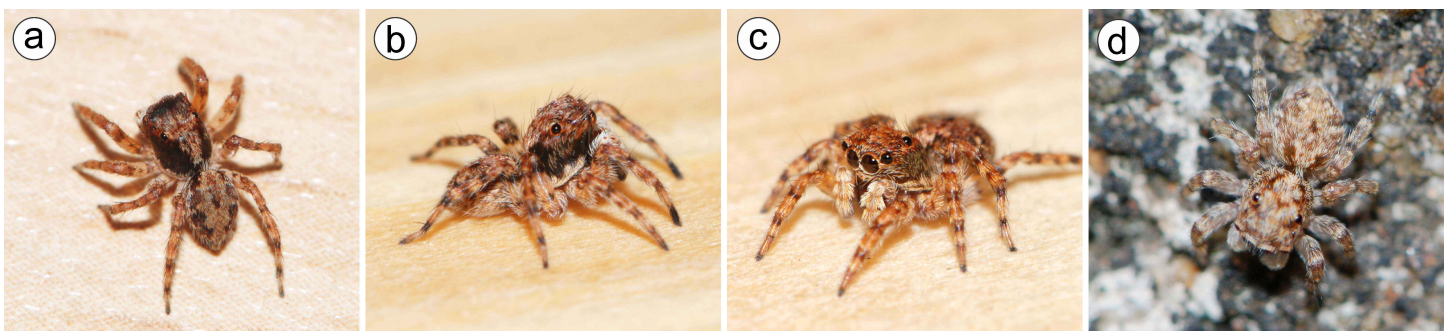
**Figure 24.** Habitus in life. *Corythalia argentinensis* (a, b ♂ GDR-4066).

69. *Ilargus coccineus* Simon, 1901. [\*]; APAF, AMF; (MB): San Antonio; (Ci): Parque Provincial Salto Encantado; (25): Puerto Londero. [FstRc]
70. *Maeota dichrura* Simon, 1901. (Figure 25); [\*]; APAF; (Ig): Parque Nacional Iguazú; Puerto Iguazú; (Ob): Campo Ramón, CIAR; Oberá.



**Figure 25.** Habitus in life. *Maeota dichrura* (a, b ♂ GDR-4026) (c, d ♂ GDR-4025).

71. *Marma nigratarsis* (Simon, 1900). (Figure 26); [\*]; APAF, AMF; (Ig): Puerto Iguazú; (MB): Bernardo de Irigoyen.



**Figure 26.** Habitus in life. *Marma nigratarsis* (a ♂, d ♀ subadult GDR-4040) (b ♂, c ♀ GDR-4060).

72. *Mopiopia comatula* Simon, 1902. (Figure 27); [\*]; APAF, AMF; (Ig): Parque Nacional Iguazú; (MB): Reserva Natural Estricta San Antonio. [FstRc]

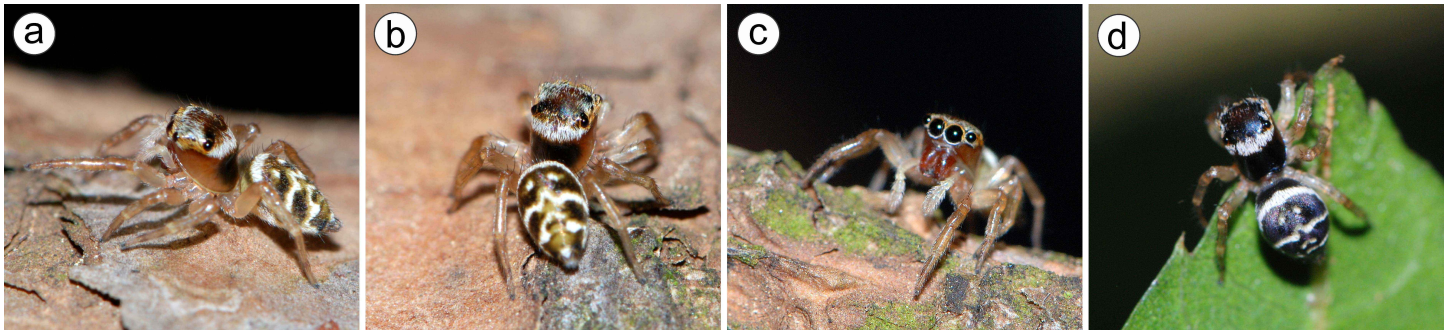


Figure 27. Habitus in life. *Mopiopia comatula* (a–c ♀ GDR-4124) (d ♀ variation GDR-0389).

73. *Mopiopia labyrinthea* (Mello-Leitão, 1947). (Figure 28); [\*]; APAF, AMF; (Ig): Parque Nacional Iguazú; (MB): Reserva de Vida Silvestre Urugua-í; Reserva Natural Estricta San Antonio; (Ci): Parque Provincial Salto Encantado; (Ob): Campo Ramón, CIAR. [FstRc]

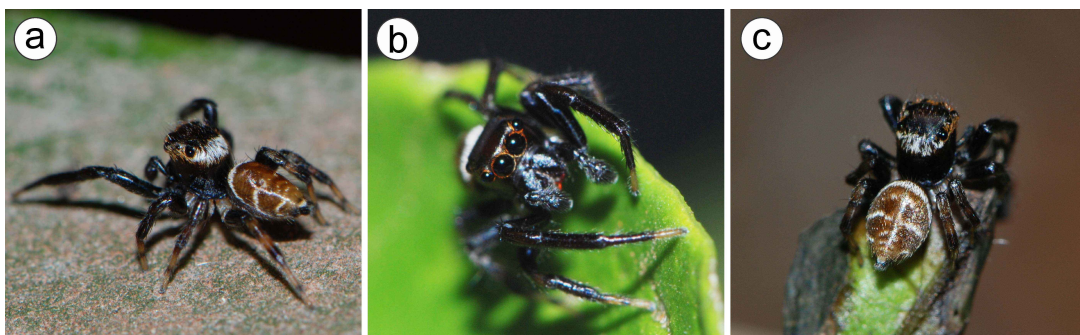


Figure 28. Habitus in life. *Mopiopia labyrinthea* (a, b ♂ GDR-4115) (c ♂ GDR-4074).

74. *Nebidia parva* Mello-Leitão, 1945. [\*]; SCMS; (Ap): Pindapoy.
75. *Neonella cf. lubrica* Galiano, 1988. [\*]; APAF; (El): Lanusse.
76. *Ocnotelus rubrolunatus* Mello-Leitão, 1945. [\*]; APAF; (El): Puerto Victoria.
77. *Saitis spinosus* (Mello-Leitão, 1945). [\*\*\*]; APAF, AMF, SCMS; (Ig): Puerto Iguazú; Puerto Libertad; (MB): San Antonio; Piñalito; (El): Eldorado; (SM): Puerto Rico; (SJ): San Javier; (Co): Santa María.
78. *Tariona bruneti* Simon, 1903. (Figure 29); [\*]; APAF, AMF; (Ig): Parque Nacional Iguazú; (MB): Reserva Natural Estricta San Antonio. [FstRc]

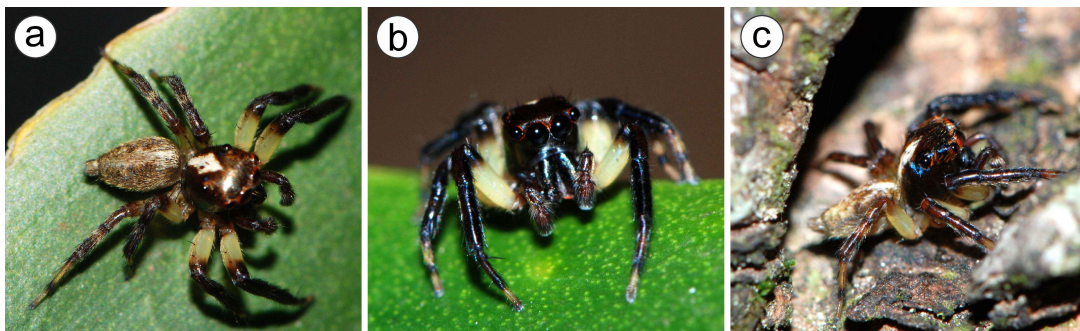
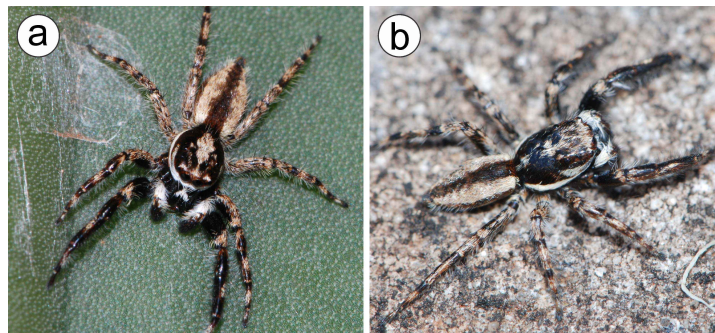


Figure 29. Habitus in life. *Tariona cf. bruneti* (a, b ♂ GDR-4114) (c ♂ GDR-4123).

## Subfamily HELIOPHANINAE

79. *Menemerus bivittatus* (Dufour, 1831). (Figure 30); [\*]; APAF, AMF; (**MB**): Bernardo de Irigoyen; (**Gu**): Guaraní; (**SI**): San Ignacio; (**25**): Colonia Aurora; (**Ob**): Oberá.



**Figure 30.** Habitus in life. *Menemerus bivittatus* (a ♂ GDR-4039) (b ♂ GDR-4041).

80. *Yepoella crassistylis* Galiano, 1970. [\*]; APAF, AMF, SCMS; (**Ig**): Parque Nacional Iguazú; (**MB**): Piñalito; (**Co**): Santa María.

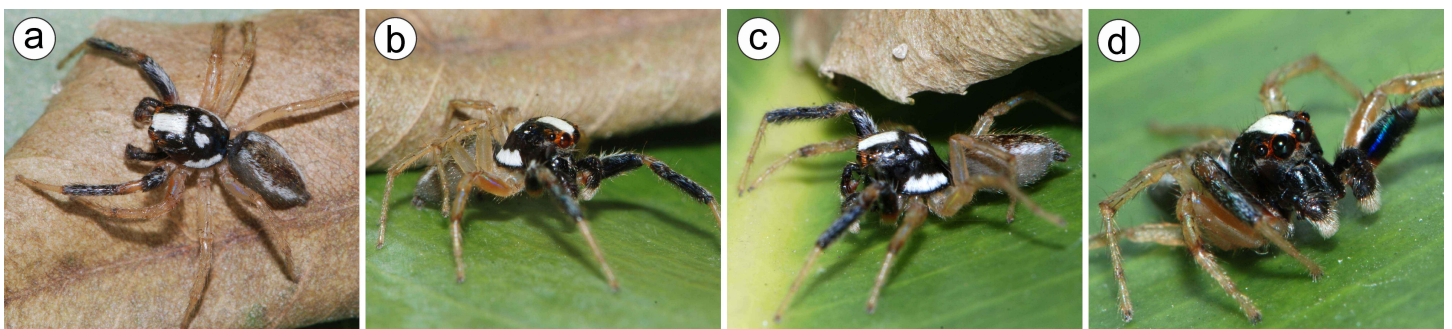
Subfamily “FREYINES” (not yet formally described —G.B. Edwards, in prep.)

81. *Aphirape misionensis* Galiano, 1981. (Figure 31); [\*\*]; APAF, AMF; (**Ig**): Puerto Iguazú; Parque Nacional Iguazú; Puerto Libertad; Puerto Esperanza; (**MB**): Piñalito; Bernardo de Irigoyen; (**SP**): Tobuna; (**Ob**): Salto Krysiuk; (**SJ**): San Javier.



**Figure 31.** Habitus in life. *Aphirape misionensis* (a–c ♀ GDR-4121).

82. *Chira distincta* Bauab, 1983. (Figure 32); [\*]; APAF; (**25**): Colonia Aurora. [FstRc]



**Figure 32.** Habitus in life. *Chira distincta* (a–d ♂ GDR-4090).

83. *Chira gounellei* (Simon, 1902). [\*]; AMF; (MB): Reserva Natural Estricta San Antonio.

84. *Chira micans* (Simon, 1902). (Figure 33); [\*]; APAF; (Ig): Parque Nacional Iguazú.

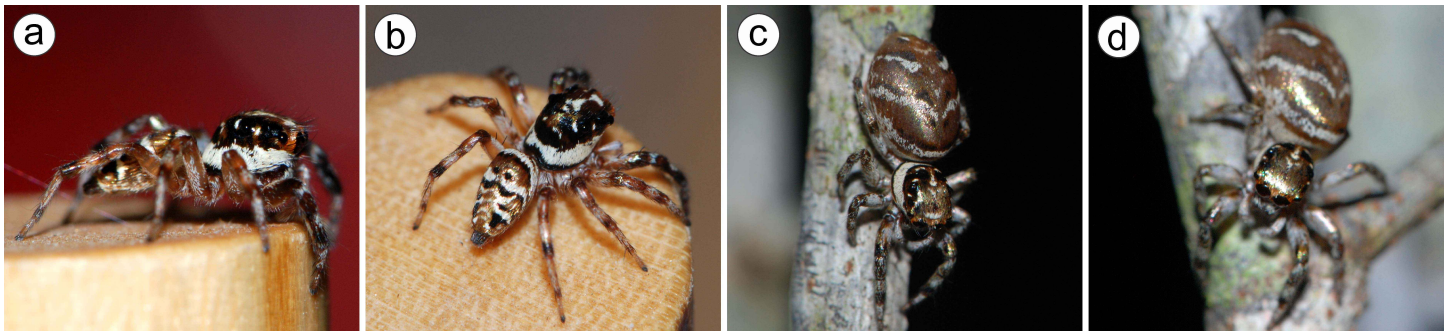


Figure 33. Habitus in life. *Chira micans* (a, b ♀ GDR-4042) (b, c ♀ GDR-4076).

85. *Chira spinosa* (Mello-Leitão, 1939). (Figure 34); [\*]; APAF, AMF; (Ig): Puerto Iguazú; (MB): Reserva de Vida Silvestre Urugua-í; San Antonio; (El): Puerto Victoria; (Ob): Oberá.

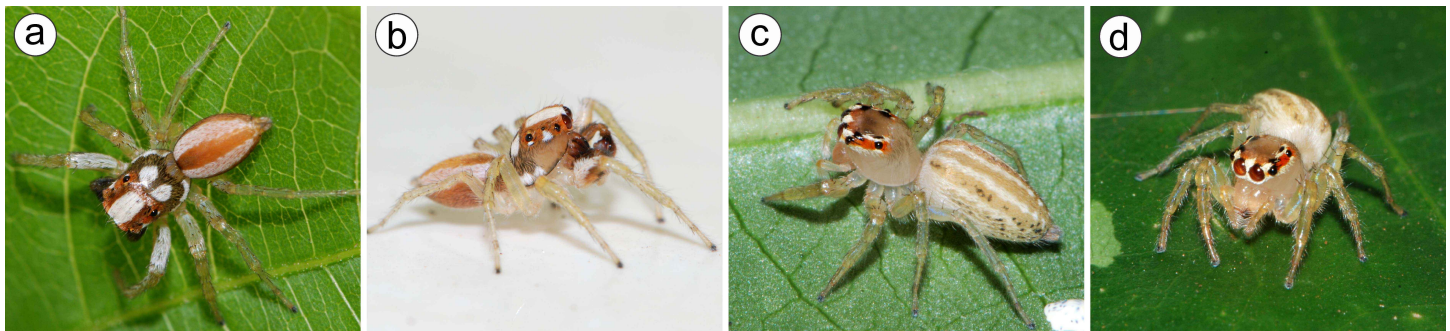


Figure 34. Habitus in life. *Chira spinosa* (a, b ♂ GDR-4094) (c, d ♀ GDR-4037).

86. *Chira thysbe* Simon, 1902. [\*]; APAF; (Ig): Parque Nacional Iguazú. [FstRc]

87. "*Euophrys*" *sutrix* Holmberg, 1875. (Figure 35); [\*]; APAF, AMF; (Ig): Puerto Iguazú; (El): Puerto Victoria; (MB): Bernardo de Irigoyen; (Gu): Guaraní; (SI): San Ignacio. Note: Not a euophryine; it appears to be related to a group of "freyines" (Edwards, in prep.)

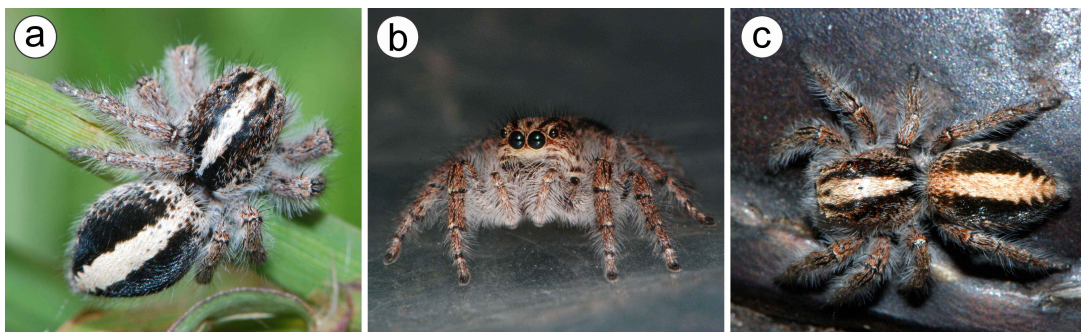


Figure 35. Habitus in life. "*Euophrys*" *sutrix* (a ♀ GDR-0388) (b, c ♀ GDR-0387).

88. *Freya nigrotaeniata* (Mello-Leitão, 1945). (Figure 36); [\*]; APAF; (Ig): Puerto Iguazú.



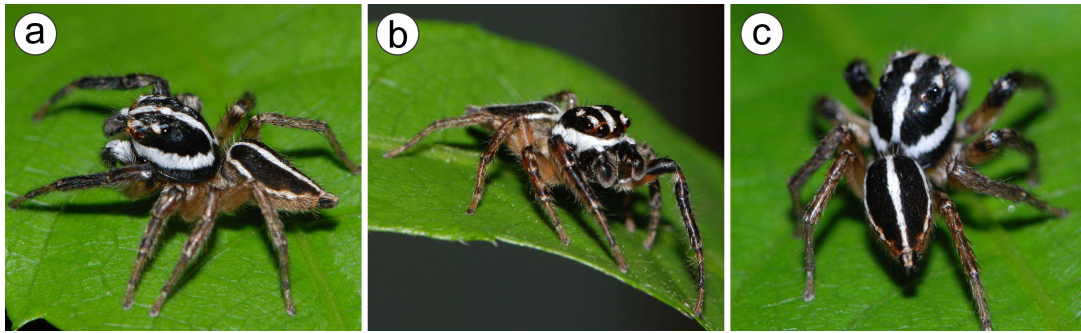


Figure 36. Habitus in life. *Freya nigrotaeniata* (a–c ♂ GDR-4056).

89. *Frigga coronigera* (C. L. Koch, 1846). [\*]; APAF; (**Ig**): Puerto Iguazú; (**El**): Puerto Victoria.

90. *Frigga quintensis* (Tullgren, 1905). (Figure 37); [\*\*]; APAF, AMF, SCMS; (**Ig**): Puerto Iguazú; Arroyo Urugua-í; Puerto Libertad; (**MB**): San Antonio; Bernardo de Irigoyen; (**25**): Colonia Aurora; (**Ob**): Oberá; (**Ca**): Candelaria; (**Cp**): Posadas; (**Co**): Santa María.



Figure 37. Habitus in life. *Frigga quintensis* (a, b ♂ GDR-4050) (c, d ♀ GDR-0386).

91. *Nycerella aprica* (Peckham & Peckham, 1896). [\*\*]; APAF; (**Ig**): Puerto Iguazú; Puerto Libertad; Puerto Esperanza.

92. *Phiale gratiosa* C. L. Koch, 1846. (Figure 38); [\*\*]; APAF, AMF, SCMS; (**Ig**): Parque Nacional Iguazú; Arroyo Urugua-í; Puerto Libertad; (**MB**): Reserva Natural Estricta San Antonio; Piñalito; (**El**): Puerto Victoria; (**SI**): San Ignacio; (**Ap**): Pindapoy; (**Co**): Santa María.

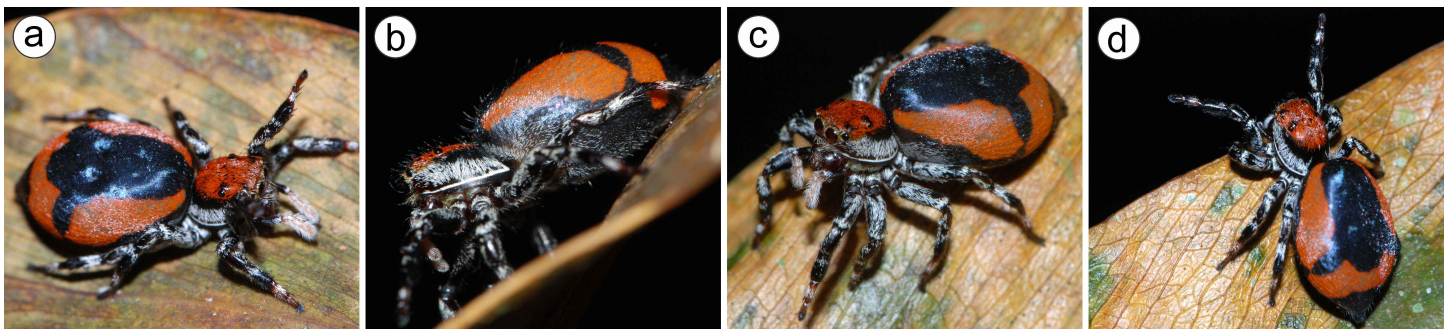


Figure 38. Habitus in life. *Phiale gratiosa* (a–d ♀ GDR-4117).

93. *Phiale quadrimaculata* (Walckenaer, 1837). [\*]; APAF, AMF; (**MB**): San Antonio; (**El**): Puerto Victoria. [FstRc]

94. *Phiale tristis* Mello-Leitão, 1945. (Figure 39); [\*\*]; APAF, AMF, SCMS; (**Ig**): Parque Nacional Iguazú; Puerto Iguazú; Puerto Esperanza; Arroyo Uruguay-í and Route 12 intersection; (**MB**): Reserva de Vida Silvestre Uruguay-í; San Antonio; Piñalito; (**EI**): Puerto Victoria; (**Co**): Santa María.



Figure 39. Habitus in life. *Phiale tristis* (a–c ♂ GDR-4098).

95. “*Phidippus*” *zebrinus* Mello-Leitão, 1945. [\*]; SCMS; (**Ap**): Pindapoy. Note: Not a Dendryphantine; it appears to be related to a group of genera close to *Freya* (Edwards 2004).
96. *Romitia misionensis* (Galiano, 1995). (Figure 40); [\*\*\*]; APAF, AMF; (**Ig**): Parque Nacional Iguazú; Puerto Libertad; Puerto Esperanza; (**MB**): San Antonio; (**Mo**): Montecarlo; (**SJ**): San Javier.

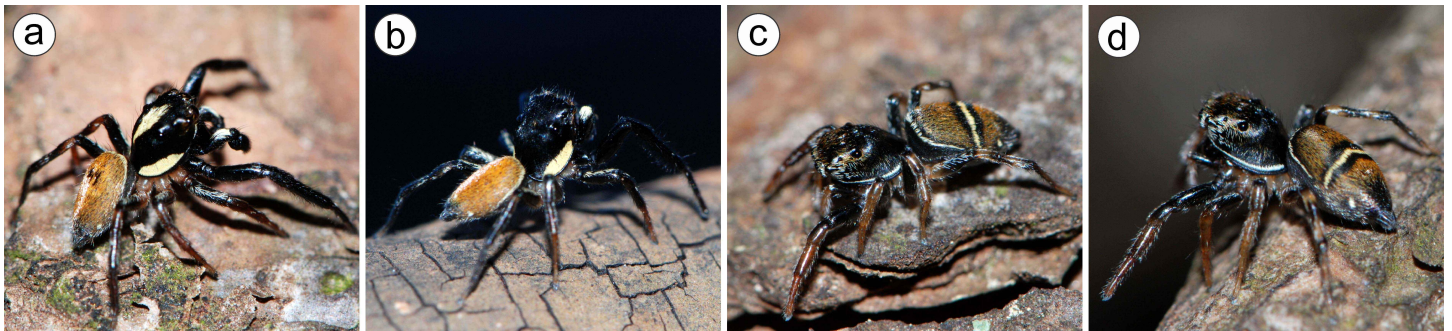


Figure 40. Habitus in life. *Romitia misionensis* (a ♂, c, d ♀ GDR-4122) (b ♂ variation GDR-4118).

97. *Sumampattus quinquerradiatus* (Taczanowski, 1878). (Figure 41); [\*\*]; APAF; (**Ig**): Parque Nacional Iguazú; Puerto Iguazú; Puerto Libertad.



Figure 41. Habitus in life. *Sumampattus quinquerradiatus* (a–c ♂ GDR-4036).

98. *Tullgrenella yungae* Galiano, 1970. (Figure 42); [\*]; APAF, AMF; (**Ig**): Puerto Libertad; (**MB**): Bernardo de Irigoyen.



Figure 42. Habitus in life. *Tullgrenella yungae* (a–c ♂ GDR-4081).

99. *Wedoquella denticulata* Galiano, 1984. [\*\*]; APAF, AMF; (Ig): Parque Nacional Iguazú; Puerto Esperanza; (MB): San Antonio.
100. *Wedoquella macrothecata* Galiano, 1984. [\*\*]; APAF, AMF, SCMS; (Ig): Parque Nacional Iguazú; Puerto Libertad; Puerto Esperanza; (MB): Reserva Natural Estricta San Antonio; (SP): Tobuna; (SJ): San Javier; (Co): Santa María.
101. *Wedoquella punctata* (Tullgren, 1905). [\*\*]; APAF, AMF; (Ig): Parque Nacional Iguazú; Puerto Libertad; (MB): San Antonio; (SJ): San Javier.

#### Subfamily PLEXIPPINAE

102. *Plexippus paykulli* (Audouin, 1826). (Figure 43); [\*]; APAF, AMF; (MB): Bernardo de Irigoyen; (Ob): Oberá.

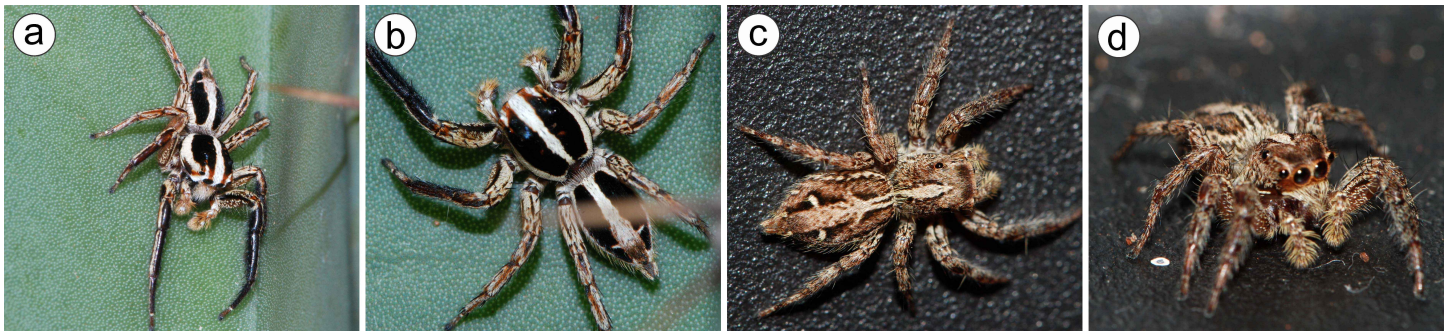


Figure 43. Habitus in life. *Plexippus paykulli* (a, b ♂ GDR-4057) (c, d ♀ GDR-4049).

#### Subfamily *undetermined* (miscellaneous salticids)

103. *Gypogyna forceps* Simon, 1900. (Figure 44); [\*]; SCMS; (Co): Santa María.

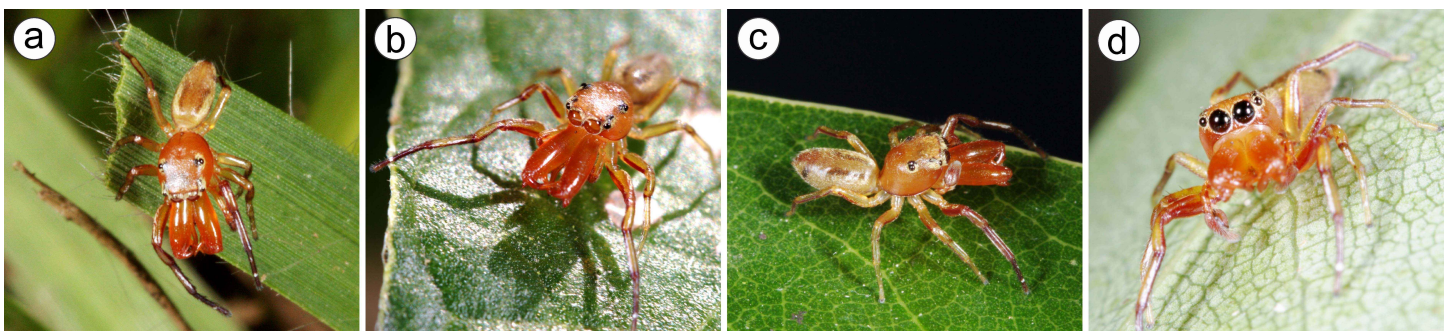


Figure 44. Habitus in life. *Gypogyna forceps* (a–d ♂ MAI-1740).

104. *Scoturius tigris* Simon, 1901. [\*]; SCMS; (Co): Santa María. Note: This genus belongs to the Hurieae group (Galiano 1987).
105. *Vinnius uncatu*s Simon, 1902. (Figure 45); [\*]; APAF, AMF; (Ig): Parque Nacional Iguazú; (MB): Piñalito; (Ob): Campo Ramón, CIAR.

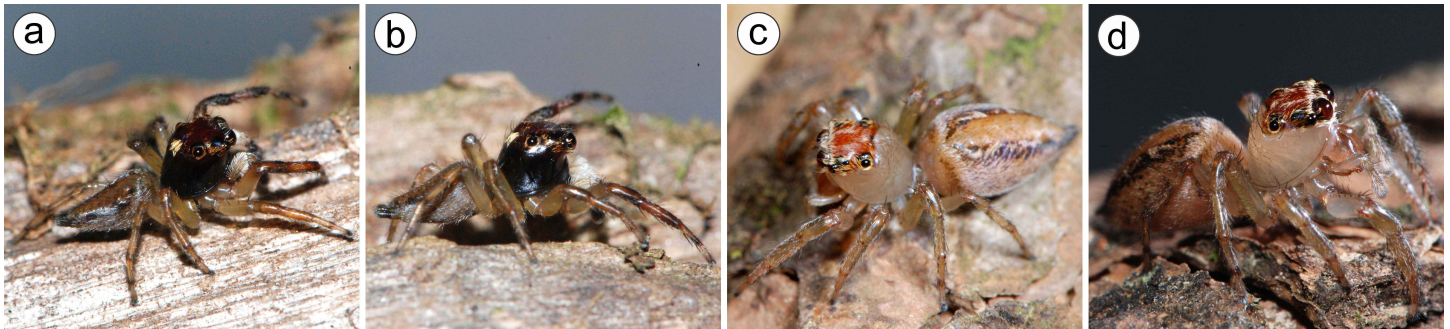


Figure 45. Habitus in life. *Vinnius uncatu*s (a, b ♂ GDR-4102) (c, d ♀ GDR-0393).

106. *Yacuitella nana* Galiano, 1999. (Figure 46); [\*]; APAF, AMF; (Ig): Parque Nacional Iguazú; (MB): Route 101.

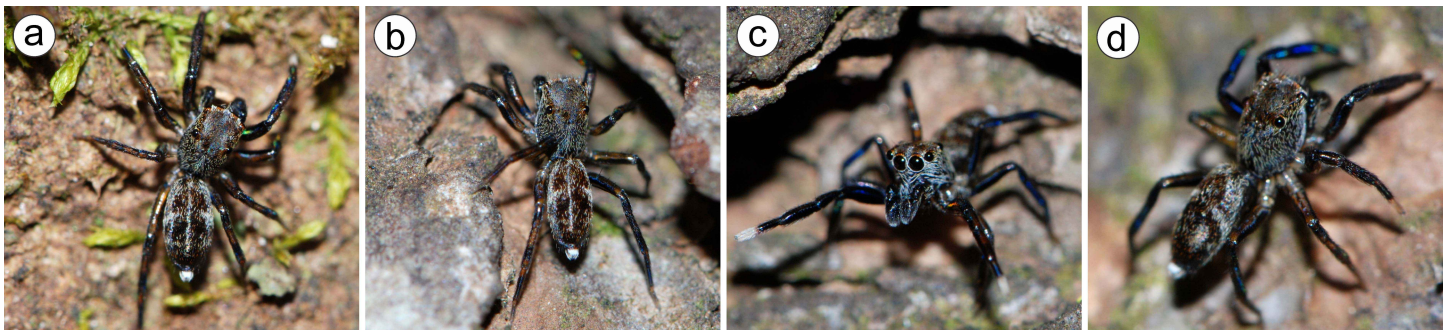


Figure 46. Habitus in life. *Yacuitella nana* (a–d ♂ GDR-4120).

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