

## Representatives of the North American salticid fauna, revisited

G. B. Edwards<sup>1</sup> and David E. Hill<sup>2</sup>

<sup>1</sup>Curator: Arachnida (except Acari), Myriapoda, Terrestrial Crustacea, Thysanoptera, Florida State Collection of Arthropods, FDACS, Division of Plant Industry, P. O. Box 147100, 1911 SW 34th St., Gainesville, FL 32614-7100 USA

<sup>2</sup>213 Wild Horse Creek Drive, Simpsonville, SC, 29680-6513 USA, email [platycryptus@yahoo.com](mailto:platycryptus@yahoo.com)

### Introduction

Two groups of salticids (both members of the Salticoida clade per Maddison and Hedin 2003b) have diversified or radiated across the North American continent with spectacular success. The first of these groups is the *Marpissoida* (Maddison and Hedin 2003b), with an emphasis on the *dendryphantines* (subfamily Dendryphantinae) within that group. These range in size from the relatively small but often abundant *Sassacus* (Richman 2008) and *Pelegrina* (Maddison 1996) to the very large (for salticids) spiders of the genus *Phidippus*. Edwards (2004) listed 60 species of *Phidippus* alone, distributed throughout North America and neighboring islands. Most, but not all, marpissoids dwell above the ground, on plants (including trees).

The second major North American group consists of pellenines of the genus *Habronattus*, characterized by a relatively long third pair of legs, often highly ornamented, and a tendency to hop about at or near ground level. Griswold (1987) listed 94 species within this genus, also largely endemic to North America and neighboring islands.

Many other salticids of great interest also appear in North America, with substantially less diversity. Some of these represent cosmopolitan synanthropes (e.g., *Menemerus bivittatus*, *Plexippus paykulli* and *Salticus scenicus*), while others most certainly represent a distribution and moderate radiation from the American tropics toward the north (e.g., *Anasaitis*, *Lyssomanes*, and *Thiodina*). In terms of absolute numbers, many of these less diverse groups have also been very successful in North America.

As evidence of a large and growing interest in the North American salticid fauna, a series of important revisions of the major genera have been published since the original publication of *Representatives of the North American salticid fauna* (Edwards & Hill 1978). The present account does not represent a new (or even comprehensive) compilation of the North American fauna, but is rather a new presentation of the species illustrated in that earlier publication, with reference to the more recent body of work and opinion related to salticid systematics.

A 1.0 mm scale is included with each photograph. Photographs and species are presented according to the



Fig. 1. f.*Sassacus cyaneus* from Gadsden County, Florida, USA.



Fig. 2. f.*Attidops nickersoni* from Ocala National Forest, Marion County, Florida, USA.

reference numbers presented in Edwards & Hill (1978). In most cases, improved versions of photographs that appeared in that original publication are presented here.

### Representative North American salticids

1. *Sassacus cyaneus* (Hentz, 1846) [*Agassa cyanea*: Edwards & Hill 1978]

Like some other *Sassacus*, this small spider looks like a small beetle (Coleoptera). It is found from the eastern United States southwest to northern Mexico. Richman (2008) recently transferred this species from the monotypic genus *Agassa* to *Sassacus*, and noted its similarity to certain chrysomelid beetles. Hedin & Maddison (2001) had previously suggested that *A. cyanea* was closely related to *Sassacus* among the dendryphantines.

2. *Attidops nickersoni* Edwards 1999 [*Ballus* n. sp.:



Fig. 3. m *Anasaitis canosa* from Alachua county, Florida, USA.



Fig. 4. m *Eris flava* captured near Lake Wauberg in Alachua County, Florida, USA.

Edwards & Hill 1978]

Edwards (1999b) placed four salticids, including *Ballus youngi* and this new species, in the small genus *Attidops* Banks 1905. *Attidops* are known from eastern North America, ranging from Canada to Mexico. These compressed salticids are thought to be closely related to *Admetina*, and more distantly related to *Ballus*. All may be marpissoids (Maddison & Hedin 2003b).

**3. *Anasaitis canosa*** [*Corythalia canosa*: Edwards & Hill 1978]

Edwards (1999a) moved this spider into the tropical, mostly Caribbean genus *Anasaitis*. Bright silver-white scales on the pedipalps of this dark spider appear as two moving spots as the spider jumps from place to place in its leaf-litter habitat. Hill (1979) described the distinctive, multicolored scales of this spider. *A. canosa* pursues and preys upon ants (Edwards, Carroll, & Whitcomb 1974; Hill 2006).

**4. *Eris flava*** Peckham & Peckham 1888 [*Eris* sp.: Edwards & Hill 1978]

Maddison (1986) described and compared *Eris flava* and

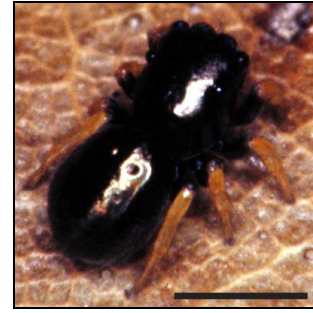


Fig. 5. f *Chalcoscirtus diminutus* from Prairie Creek, Alachua County, Florida, USA.



Fig. 6. m *Evarcha hoyi* from Minnesota.

*E. militaris* (formerly *E. marginata*). *E. flava* has the more restricted distribution, and is only commonly found in the southeastern United States. *Eris* is a relatively small dendryphantine genus, closely allied to *Pelegrina* (Maddison, 1996; Hedin & Maddison 2001). Male *Eris* are strongly prognathous. A white band of scales extends from the clypeus toward the rear, along the margin of the carapace of the male (Fig. 4).

**5. *Chalcoscirtus diminutus*** (Banks 1896) [*Euophrys* sp.: Edwards & Hill 1978]

Edwards (2003a) placed this spider in the large Holarctic euophryine genus *Chalcoscirtus*, based on overall shared similarities of somatic and genital characters. The presence of a retromarginal tooth is the main questionable character, as typical *Chalcoscirtus* lack this tooth. Prószyński more recently (2007) stated that placement in *Chalcoscirtus* (or *Corythalia*, or *Euophrys*) was unlikely. Whatever their ultimate placement, these spiders are widespread in North America. These very small, shiny spiders live on or near the ground, often in leaf-litter or under rocks, as do the other two North American species placed in this genus.

**6. *Evarcha hoyi*** (Peckham & Peckham 1883) [*E. falcata*: Edwards & Hill 1978]

This is the only *Evarcha* known from eastern North America (*E. proszynskii* Marusik & Logunov 1998 occurs in western North America). Prószyński (2007) has suggested that the Nearctic *E. hoyi* is probably a synonym for the Palaearctic *E. falcata*. This is not the case, as



Fig. 7. m *Naphrys bufoides* from Welaka, Putnam County, Florida, USA.



Fig. 8. m *Naphrys pulex* from Gainesville, Alachua County, Florida, USA.

previously shown by comparisons of the genitalia of the two species (Kaston 1938, Edwards 1980). *Evarcha* is a large genus with many Eurasian species.

7. *Naphrys bufoides* (Chamberlin & Ivie 1944) [*Habrocestum bufoides*: Edwards & Hill 1978, Richman 1981]

This small salticid was previously placed in a large genus with an extensive old world distribution, *Habrocestum*. Richman (1981) retained this classification, in his revision of new world *Habrocestum*. Edwards more recently (2003a) moved this, and several related *Habrocestum*, to a new euophryine genus, *Naphrys*. This small spider is known from southern Georgia and Northern Florida, in mesic, hardwood leaf litter.

8. *Naphrys pulex* (Hentz 1846) [*Habrocestum pulex*: Edwards & Hill 1978, Richman 1981]

This is the most widely-distributed *Naphrys* in eastern North America, found from the East Coast to wooded areas in the tall grass prairies west of the Mississippi River. Along with *N. bufoides*, *N. pulex* was retained in *Habrocestum* by Richman (1981), and later moved (Edwards, 2003a) to the new genus *Naphrys*. *N. pulex* can be very common in mesic hardwood forests, at or near the ground in leaf litter, on rocky outcrops, on bark, or on buildings.

9-10. *Hentzia grenada* (Peckham & Peckham 1894)



Fig. 9. m *Hentzia grenada* from southern Florida, USA. Note the highly prognathous chelicerae of this male *Hentzia*.



Fig. 10. f *Hentzia grenada* from Martin County, Florida, USA.



Fig. 11. m *Hentzia mitrata* from Gainesville, Alachua County, Florida, USA.

Richman (1989) described or redescribed 20 species in this genus of elongate dendryphantines, most with a tropical Caribbean or Central American distribution. *H. grenada* is largely restricted to Florida, with a few found in neighboring areas. They are often found on palm trees or cycads.

11. *Hentzia mitrata* (Hentz 1846)

Also described by Richman (1989), this spider has the widest distribution of any species in the genus, often found on shrubs throughout most of eastern North America.



Fig. 12. m (top) and f (bottom) *Lyssomanes viridis* from Greenville County, South Carolina, USA.

### 12. *Lyssomanes viridis* (Walckenaer 1837)

This is the type species of a very large, "non-salticoid" genus of jumping spiders. As such, *L. viridis* has a fairly atypical distribution, as the sole representative of this genus in the southeastern United States. Most *Lyssomanes* are from South America, and several are found in Central America or on the islands of the Caribbean. *L. viridis* is often found on the underside of large leaves, such as those of *Magnolia grandiflora*, but can also be found on the leaves of a variety of woodland shrubs. They construct relatively simple "nests," consisting mostly of parallel lines of silk arranged in a simple sheet on the underside of a leaf. Male *L. viridis* tend to be translucent yellow-green, females bright green. Both have red and white scales on the top of the ocular quadrangle. In many respects, they behave much like other salticid spiders. The elongate chelicerae and fangs of the male figure prominently in their visual courtship display, but are otherwise somewhat dysfunctional. Males are able, nonetheless, to skewer prey with their long fangs.

### 13. *Paramaevia michelsoni* Barnes 1955 [*Maevia michelsoni*: Edwards & Hill 1978]

Barnes (1955) described this marpissine spider, in the genus *Maevia*, but later (1958) transferred it to a new genus, *Paramaevia*. Platnick (2008) has for several years listed the species in *Maevia*, based on the comments of



Fig. 13. m *Paramaevia michelsoni* from Ocala National Forest, Marion County, Florida, USA.

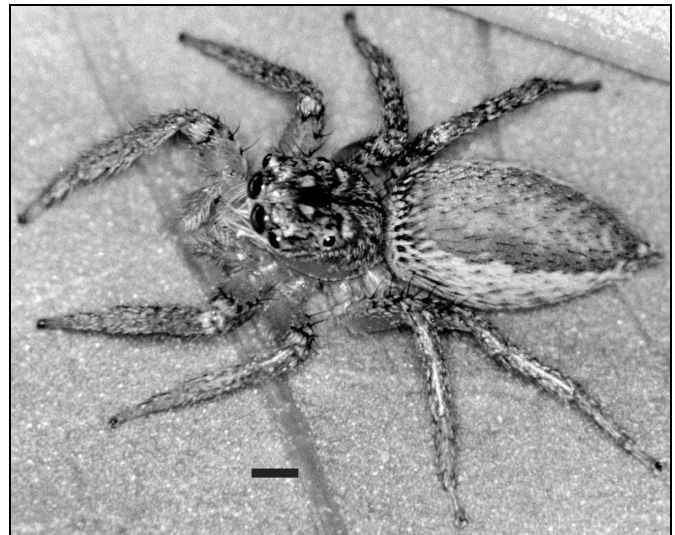


Fig. 14. f *Maevia inclemens* from vicinity of Cross Creek, Alachua County, Florida. Opisthosoma with ivory-white marginal bands (scales), rust-red middorsal chevrons.

Edwards (1977). However, Richman et al. (2005) made a *de facto* return of the 3 described species in this group to *Paramaevia*, which has been followed by Prószyński (2007).

### 14-15. *Maevia inclemens* (Walckenaer 1837) [*Maevia vittata*: Edwards & Hill 1978]

This common North American spider was called *M. vittata* for a long time, but the use of *M. inclemens* per Barnes (1955) has gained acceptance. Males are known to occur in two completely different forms (morphs), hence the common name, *Dimorphic Jumping Spider*. One form is cryptic and resembles the female in coloration, while the other has a black body, white legs, and yellow palps, with 3 prominent tufts above the eyes. Beyond this difference in coloration, the *behavior* of the two males is completely different. The cryptic form approaches a female at low elevation, crossing its front legs. The form with contrasting coloration raises itself high above the surface (Clark & Uetz 1993, Clark 1994), in a bold display that is



Fig. 15. m *Maevia inclemens* from Rodman Dam, Putnam County, Florida, USA. Note the conspicuous tufts on the carapace, and the high contrast between the white legs and the black body of this form.

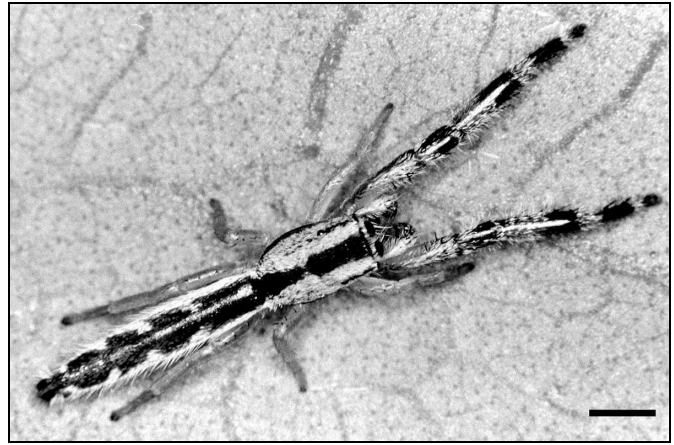


Fig. 18. m *Marpissa pikei* from Cedar Key, Florida, USA.



Fig. 16. m *Marpissa bina* from Gainesville, Alachua County, Florida, USA.



Fig. 19. m *Marpissa sulcosa* from Gainesville, Alachua County, Florida, USA.



Fig. 17. f *Marpissa bina* from Cedar Key, Florida, USA. Note the bronze, iridescent scales.

anything but cryptic. Females superficially resemble the slower-moving but unrelated *Thiodina*, and are often found in the same habitat. Unlike *Thiodina* (*slow stalkers*), *Maevia* (*runners*) are quite willing to run after fast-moving prey.

**16-17. *Marpissa bina* (Hentz 1846)**

This is one of the *Hyctia* spiders grouped with the large

old-world genus *Marpissa* by Barnes (1958). *M. bina* is the southeastern (Florida to North Carolina) counterpart to the very similar, northern *M. formosa*.

**18. *Marpissa pikei* (Peckham & Peckham, 1888)**

This *Hyctia* group spider was also placed in *Marpissa* by Barnes (1958). White scales cover the brown integument of this elongated spider. Legs II-IV are relatively short and light yellow-brown. This elongated spider is found throughout the eastern United States, in open herbaceous, grass, and shrub fields or prairies. Barnes (1958) documented its occurrence in maritime grass, dune, and broom sedge communities.

**19. *Marpissa sulcosa* Barnes 1958**

Barnes (1958) first described this new species, from the southeastern United States (Florida to the low country, or coastal Carolinas).

**20-21. *Menemerus bivittatus* (Dufour 1831)**

This is a well-known cosmopolitan (tropical to subtropical) spider, usually found living upon the walls of human dwellings (synanthropic). It is the only North



Fig. 20. m *Menemerus bivittatus* (shades of brown, with white on clypeus, chelicerae, and pedipalps) from the wall of a USDA research laboratory in Gainesville, Alachua County, Florida USA.



Fig. 21. f *Menemerus bivittatus* (light to dark brown, with dull but distinctive orange clypeal scales) from same locality as male in Fig. 20.

American member of a very large old-world *heliophaninae* genus, and it is thought to be a recent introduction.

## 22. *Metacyrba floridana* Gertsch 1934

This *Metacyrba* is a mostly southeastern (United States) representative of a small marpissine genus found from the United States to northern South America. The type species of *Metacyrba*, *M. taeniola*, is relatively inconspicuous but widely distributed in eastern North America. This species was described by Barnes (1958), and more recently by Edwards (2006). *Metacyrba* are relatively small, flattened salticids, often found under tree bark or rocks.

## 23-24. *Platycryptus undatus* (DeGeer 1778) [*Metacyrba undata*: Edwards & Hill 1978]

The small but widespread genus of North American spiders was often associated with the old world genus *Marpissa*, but was later placed in *Metacyrba* by Barnes

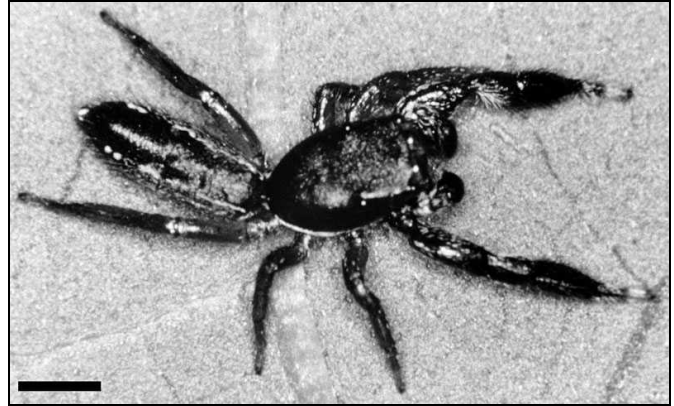


Fig. 22. m *Metacyrba floridana* from Martin County, Florida, USA.

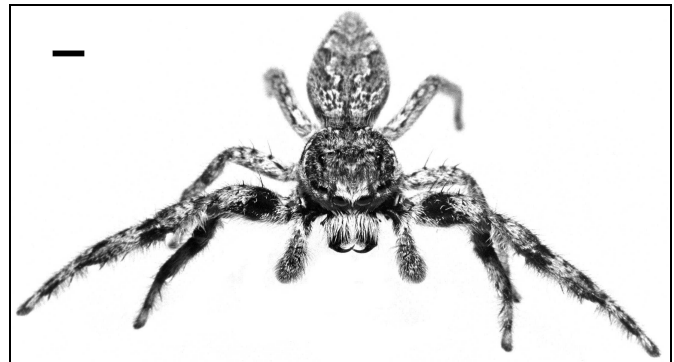


Fig. 23. m *Platycryptus undatus* from Oklahoma, USA, facing female.



Fig. 24. f *Platycryptus undatus* from Oklahoma, USA.

(1958). Based on scale structure, Hill (1979) removed this species to a new genus, *Platycryptus*. More recently, Edwards (2006) has reviewed the marpissine genus *Platycryptus*, including the eastern *P. undatus*, and the west coast *P. californicus*. All are compressed, with relatively small chelicerae, and tend to live in cracks in tree bark. They are often encountered on human dwellings. These are cryptically colored, with scales in various shades of brown and gray. Long, white setae cover the exposed chelicerae of the male *P. undatus*, while the chelicerae of females are shiny and smooth, devoid of scales or setae. The undulating (hence *undatus*) pattern of the dorsal opisthosoma is distinctive.



Fig. 25. f *Ghelna castanea* from Gainesville, Alachua County, Florida, USA.

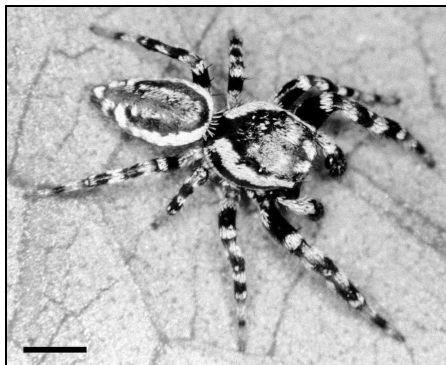


Fig. 26. m *Pelegrina galathea* from Gainesville, Alachua County, Florida, USA.

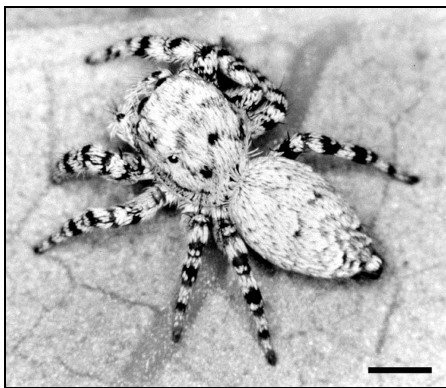


Fig. 27. f *Pelegrina galathea* from Gainesville, Alachua County, Florida, USA.

**25. *Ghelna castanea*** (Hentz 1846) [*Metaphidippus castaneus*: Edwards & Hill 1978]

Maddison (1996) moved four small dendryphantines (from *Metaphidippus*) into this new genus, all from the eastern United States. *G. castanea* extend and rotate the white tips of their pedipalps, perhaps to "mesmerize" their prey.

**26-27. *Pelegrina galathea*** (Walckenaer 1837) [*Metaphidippus galathea*: Edwards & Hill 1978]

Maddison (1996) placed these small spiders in the large



Fig. 28. m *Neon nelli* from Alachua County, Florida, USA.



Fig. 29. m *Neonella vinnula* from Gainesville, Alachua County, Florida, USA.



Fig. 30. f *Peckhamia americana* from vicinity of Gainesville, Alachua County, Florida, USA.

dendryphantine genus *Pelegrina*. *Pelegrina* species are widely distributed throughout North America, often abundant in the flower heads or umbels at the top of herbaceous plants. Unlike *Eris*, males are not prognathous.

**28. *Neon nelli*** Peckham & Peckham 1888 [*Neon nelli*: Edwards & Hill 1978]

*Neon* is a widely distributed Holarctic genus of relatively inconspicuous, ground-dwelling salticids. *N. nelli* is found throughout eastern North America. Gertsch & Ivie (1955) wrote the most recent review of *Neon* in North America.

**29. *Neonella vinnula*** Gertsch 1936

This is a very small jumping spider from the coastal plain of the southeastern United States, first described by Gertsch in 1936. Edwards (2003b) more recently described a new species from this small tropical American



Fig. 31. m *Habronattus georgiensis* from Cedar Key, Levy County, Florida, USA.



Fig. 32. f *Habronattus georgiensis* from Seahorse Key, Levy County, Florida, USA.



Fig. 33. m *Habronattus brunneus* from vicinity of Gainesville, Alachua County, Florida, USA.



Fig. 34. f *Habronattus brunneus* from vicinity of Gainesville, Alachua County, Florida, USA.



Fig. 35. m *Habronattus calcaratus* from Ocala National Forest, Florida, USA.



Fig. 36. f *Habronattus calcaratus* from Ocala National Forest, Florida, USA.

genus, from Florida. *Neonella* are the smallest known jumping spiders (Edwards 2003b). They are shiny, and somewhat ant-like, and can be captured by sifting leaf-litter. Apparently, *Neonella* are very small, atypical euophryine jumping spiders (W. Maddison, pers. comm.).

### 30. *Peckhamia americana* (Peckham & Peckham 1892)

This ant-like salticid is found from the northeastern United States southwest to Mexico. *Peckhamia* is a small genus with a wide distribution, from Canada to Argentina. Maddison & Hedin (2003b) placed the ant-mimics *Peckhamia* with *Synageles* in the marpissoids, and *Sarinda* with *Synemosyna* in the amycoids.

### 31-32. *Habronattus georgiensis* (Chamberlin & Ivie 1944) [*Pellenes agilis*: Edwards & Hill 1978]

Griswold (1987) described or cataloged a total of 94 species in the large, essentially North American genus *Habronattus*. Most dwell near or on the ground, and have elongated legs III that are used to power their frequent jumps as they move about. Males are often highly ornamented. This species is found on the ground in sandy xeric habitat, including inland dunes and beaches.

### 33-34. *Habronattus brunneus* (Peckham & Peckham 1901) [*Pellenes brunneus*: Edwards & Hill 1978]

A single pair of bright white spots are found on the posterior, dorsal opisthosoma of many *Habronattus*,





Fig. 37. m *Habronattus carolinensis* from Florida, USA.



Fig. 39. m *Pellenes wrighti*, from Minnesota, USA.



Fig. 38. f *Habronattus carolinensis* from Florida, USA.



Fig. 40. f *Phidippus apacheanus* from Welaka, Putnam County, Florida, USA.

particularly as juveniles. This species from the southeastern United States is also found in the Caribbean. Female coloration of *Habronattus* tends to be relatively cryptic. This species is found in grassy habitat.

**35-36. *Habronattus calcaratus*** (Banks 1904) [*Pellenes calcaratus*: Edwards & Hill 1978]

Griswold (1987) recognized three subspecies of *H. calcaratus*, all east of the Rocky Mountains. However, Maddison & Hedin (2003a) found, based on comparison of mitochondrial and nuclear DNA sequences, that two of these "subspecies" were not closely related to *H. calcaratus calcaratus*. The spiders shown here are true Florida *H. calcaratus*. One good way to locate these spiders, which hop around on the ground, is to stare fixedly at an open patch of ground in xeric fields and wait for signs of movement.

**37-38. *Habronattus carolinensis*** (Peckham & Peckham 1901) [*Pellenes tachypodus*: Edwards & Hill 1978]

Griswold (1987) synonymized *H. (P.) tachypodus* with *H. carolinensis*. This spider is found in northern Florida and adjacent parts of the Gulf and Atlantic coastal plains, in open, xeric woodland habitat.

**39. *Pellenes wrighti*** Lowrie & Gertsch 1955

This species, found from the north central United States

into adjacent parts of Canada, is one of the few North American spiders retained in the primarily old world genus *Pellenes*. The Nearctic species of this genus have not yet been revised.

**40. *Phidippus apacheanus*** Chamberlin & Gertsch 1929

*Phidippus* is a large and well-known genus of large, predominantly North American spiders. The recent (2004) revision by Edwards tallied 60 species, including 23 new species. Many, like *P. apacheanus*, bear conspicuous bright-red scales and may mimic mutillid wasps. *P. apacheanus* is found in xeric areas across most of the continental United States, south to northern Mexico and Cuba, but not on the west coast.

**41. *Phidippus cardinalis*** (Hentz 1845)

*P. cardinalis* is found primarily in the eastern United States, with a range that extends north to Massachusetts. Immatures are pale yellow, usually turning red as they approach maturity. There is a brown female morph in Florida.

**42. *Phidippus clarus*** Keyserling 1885



Fig. 41. ♀ *Phidippus cardinalis*, Ocala National Forest, Marion County, Florida, USA.



Fig. 43. ♀ *Phidippus otiosus* found on tree at Newnan's Lake, Alachua County, Florida, USA. Coloration of females varies from tan to bright orange. Placement of cheliceral scales (just below clypeus) allows the pedipalps to cover the iridescent surfaces of the chelicerae.



Fig. 42. mf *Phidippus clarus* (m below), mating, from Big Prairie, Ocala National Forest, Marion County, Florida, USA.



Fig. 44. m *Phidippus otiosus* from vicinity of Lake Wauberg, Alachua County, Florida, USA.

*P. clarus* are found across North America, often in relatively dense populations living on herbaceous plants in old field or prairie habitats. Females vary greatly in color, even within a local population, from a dark, glabrous form similar to the male, to more cryptic bronze, gold, or tan forms. Males vary considerably in size, and can have very long legs I.

**43-44. *Phidippus otiosus*** (Hentz 1846) [*Phidippus pulcher*: Hill, in Edwards & Hill 1978]

Edwards (1982) requested suppression by the ICZN of Walckenaer's *pulcher* based on usage, hence the name change. This is one of the most massive *Phidippus*, a canopy inhabitant of hardwood or mixed hardwood-pine forests in the southeastern United States. As with *P. regius*, chelicerae of females vary in color from iridescent violet to green.

**45-46. *Phidippus pulcherrimus*** Keyserling 1884

*P. pulcherrimus* dwell on herbs and shrubs in open field habitat or woodland understory, like the related *P. princeps* which this spider replaces in the extreme

southeastern United States (northern Florida and adjacent areas). Bright orange to red scales cover much of the opisthosoma.



Fig. 45. m *Phidippus pulcherrimus*, Big Prairie, Ocala National Forest, Marion County, Florida, USA

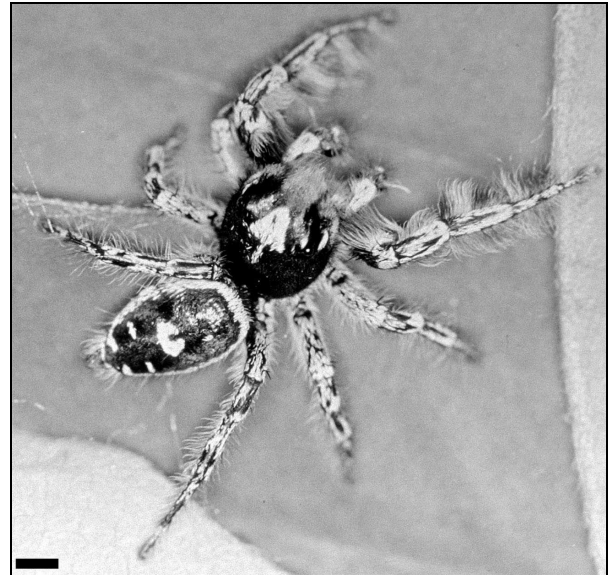


Fig. 48. m *Phidippus putnami*, from Lynchburg, Virginia, USA. Black with white scales.



Fig. 46. f *Phidippus pulcherrimus* from Big Prairie, Ocala National Forest, Florida, USA.



Fig. 49. f *Phidippus richmani*, Ocala National Forest, Florida, USA.



Fig. 47. f *Phidippus purpuratus* from Ontario, Canada.

**47. *Phidippus purpuratus* Keyserling 1885**

This spider is found from the eastern to the northern United States, as well as southern Canada. It is closely related to the midwestern *P. texanus* and western *P. ardens* (Edwards 2004).

**48. *Phidippus putnami* (Peckham & Peckham 1883)**

*P. putnami* has a wide distribution in the southeastern United States, north to New Jersey and west to eastern Nebraska and Texas (Edwards 2004).

**49. *Phidippus richmani* Edwards 2004 [*Phidippus putnami*: Edwards & Hill 1978]**

The very similar appearing *P. richmani* replaces the closely related *P. putnami* in northern Florida (Edwards 2004). It lives in the understory of xeric woodlands.

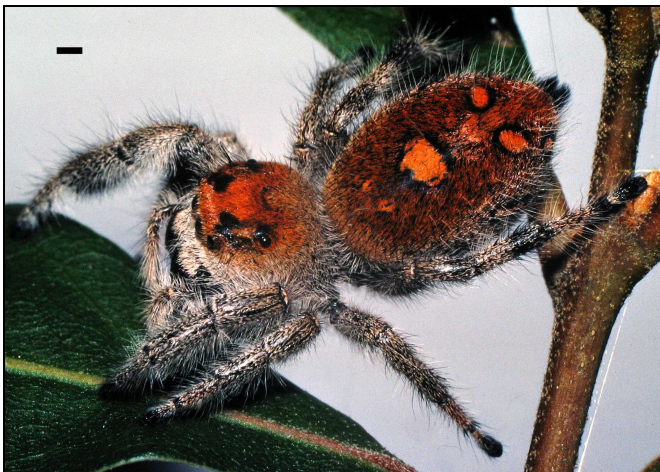


Fig. 50. ♀ *Phidippus regius* of the red-orange or *mineatus* form from Ocala National Forest, Florida, USA (two different spiders). Iridescent chelicerae of *P. regius* vary greatly in color, from green to violet.

#### 50. *Phidippus regius* C. L. Koch 1846

*P. regius* is the largest known member of the genus *Phidippus*, and one of the largest salticids in the world. It is widely distributed from Florida to the neighboring Gulf and Atlantic coastal plains, and is found on many Caribbean islands. Immatures live on herbaceous plants in old fields, and adults are found on nearby palms, palmettos, oaks, and pines (Edwards 2004). Immature coloration is very similar to adult coloration, for both males and females. Females vary greatly in color, from bright red-orange to black, brown, gray, or white. Chelicerae of females also vary from iridescent green to magenta in color. In contrast, males are uniformly black with isolated patches of white scales, and green to violet chelicerae. A pair of rounded spots (scale groups) can be observed on the postero-dorsal opisthosoma of both sexes.

#### 51-52. *Plexippus paykulli* (Savigny & Audouin 1827)

This is the type species of a mostly Asian genus. *P. paykulli* has a pantropical distribution due to its propensity to be distributed by commerce. Maddison & Hedin (2003b) found support for placement of *Plexippus*



Fig. 51. ♂ *Plexippus paykulli* from the University of Florida campus in Gainesville, Alachua County, Florida, USA



Fig. 52. ♀ *Plexippus paykulli* from the same locality as the male in Fig. 51. Note the distinctive pattern and pair of light spots on the dorsal opisthosoma.

with *Evarcha* in the plexippines, grouped with the pellenines into the plexippoids (Plexippoida). *P. paykulli* is often found in relatively high densities on the walls of buildings, under lights where it may be active at night. On a worldwide basis, *P. paykulli* may be the most familiar of all salticid spiders. Agonistic displays or contests of the distinctively striped males have been studied fairly recently (Taylor *et al.* 2000, 2001). At the same time, when one considers how easy it is to rear these relatively large salticids, it is fair to say that we know relatively little of their behavior, biology, and original habitat outside of their relationship to human buildings.

#### 53. *Salticus scenicus* (Clerck 1757)

*S. scenicus* is one of the best known spiders of the northern hemisphere, with a wide (cosmopolitan) distribution in Europe and the more temperate parts of North America, often in association with man-made structures (*synanthropic*).

#### 54. *Sarinda hentzi* Banks 1913

Most *Sarinda* species are found in tropical South and Central America. This is the only species of this genus of ant mimics found in the southeastern United States. It seems to be a mimic of ponerine ants. The range of this



Fig. 53. f *Salticus scenicus*, from Minnesota, USA.



Fig. 54. m *Sarinda hentzi* from Alachua County, Florida, USA.



Fig. 55. f *Sassacus papenhoei* from Knob Noster State Park, Missouri, USA.

species seems to have extended from the Neotropics, as it has also been collected in Panama and Costa Rica.

**55. *Sassacus papenhoei*** Peckham & Peckham 1895

This is the type species of a relatively small genus of beetle-like, dendryphantine salticids, with a wide distribution in North and South America. *S. papenhoei* varies in color from iridescent blue and red to purple or green. Richman recently (2008) revised the North American section of this genus, and suggested that the South American species may belong in a different genus.



Fig. 56. m *Sitticus concolor* from Alachua County, Florida, USA.



Fig. 57. f *Synemosyna petrunkevitchi* from Martin County, Florida, USA.

This small, attractive spider can occur in very high density populations in an old field habitat. Several adults may inhabit the same plant.

**56. *Sitticus concolor*** (Banks 1895) [*Sitticus cursor*: Edwards & Hill 1978]

*Sitticus* as presently defined is a very cosmopolitan genus, with both Holarctic and Neotropical elements. *S. concolor* is a relatively small salticid, found only in the eastern United States.

**57. *Synemosyna petrunkevitchi*** (Chapin 1922)

There are about 24 named species in this genus of ant mimics, all from the Americas. The great majority are tropical in distribution. *S. petrunkevitchi* is a rarely encountered Florida species. The related *S. formica* is found throughout the eastern United States.

**58-60. *Thiodina sylvana*** (Hentz 1846)

Richman and Vetter recently (2004) redescribed three North American species in this primarily tropical American genus, including *T. sylvana*. *Thiodina* is



Fig. 58. m *Thiodina sylvana*, Alachua County, Florida, USA.

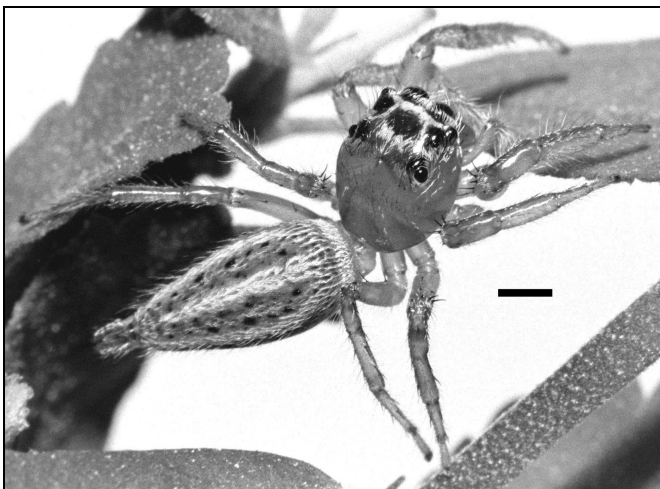


Fig. 59. f *Thiodina sylvana*, University of Florida campus, Gainesville, Alachua County, Florida, USA, from shrub in a wooded area. Translucent brown with white and tan scales.

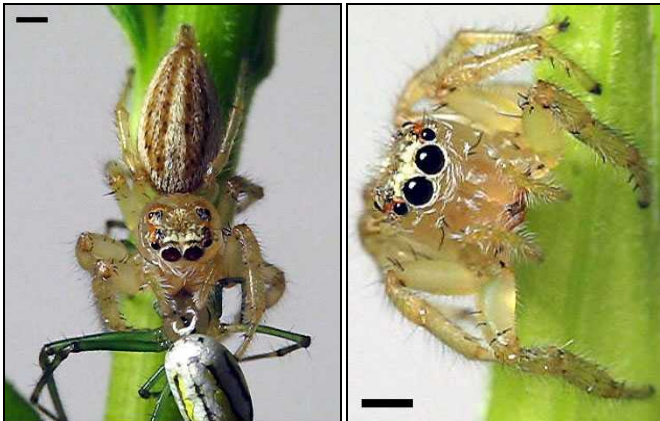


Fig. 60. f *Thiodina sylvana*, Greenville County, South Carolina, USA. The prey (left) was an Orchard Spider, *Leucauge venusta*.

characterized by the presence of two pairs of bulbous setae on the underside of tibia I in both sexes, and in immatures. The function of these specialized setae is not known. *T. sylvana* is a common inhabitant of woodland margins and shrubs throughout much of the southeastern United States. It moves slowly, recognizing, stalking, and jumping upon completely immobile prey, including other spiders. The related *T. puerpera* is also found in the southeastern United States, frequently in the same

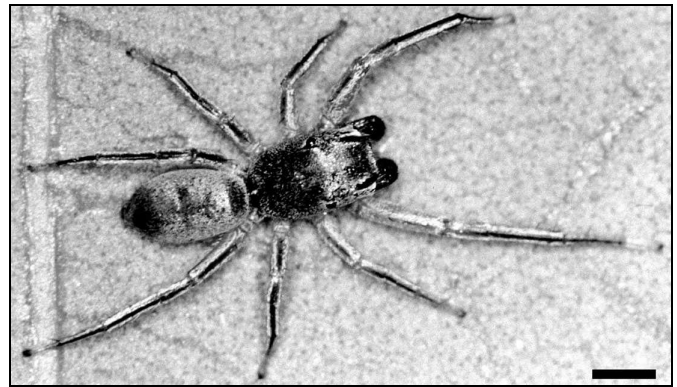


Fig. 61. m *Tutelina n. sp. (cf. elegans)* from Ocala National Forest, Florida, USA. Blue-gray iridescent, some light scales and yellow legs.

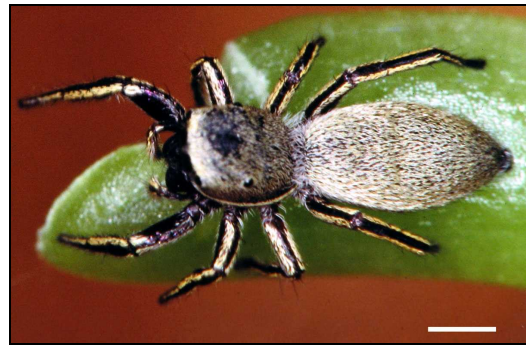


Fig. 62. f *Tutelina similis* from Minnesota.



Fig. 63. m *Zygoballus rufipes* from Gainesville, Alachua County, Florida, USA.

locations as *T. sylvana*, but *T. puerpera* prefers grassy areas.

**61. *Tutelina n. sp. (cf. elegans)* [*Tutelina elegans*: Edwards & Hill 1978]**

*Tutelina* is a small genus of very interesting American salticids that deserve much more study. These spiders, which themselves seem to be generalized ant mimics, readily attack and feed upon small ants. It is unusual for ant mimics to attack ants, as more often the spiders are Batesian ant mimics.

**62. *Tutelina similis* (Banks 1895)**

*T. similis* is also found in eastern North America, as far west as Wyoming, but does not occur in Florida.

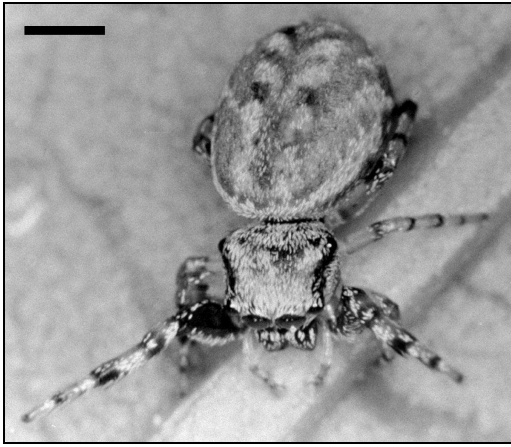


Fig. 64. ♀ *Zygoballus rufipes* from Gainesville, Alachua County, Florida, USA. Scales are white and light brown. *Zygoballus* frequently display with legs I as shown here.

**63-64. *Zygoballus rufipes* Peckham & Peckham 1885**  
[*Zygoballus bettini*: Edwards & Hill 1978]

*Zygoballus* is a genus of small dendryphantines distributed throughout the Americas. *Z. bettini* was recognized as a synonym of *Z. rufipes*, the type species for this genus, by Edwards (1980). Both males and females have white to light-blue scales on the face and chelicerae. The PLE project from the rear corners of a carapace that is almost cubical in shape.

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