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## A KEY AND CHECKLIST OF AMERICAN SPIDERS OF THE FAMILY THERIDIIDAE NORTH OF MEXICO (ARANEAE)

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### ABSTRACT

It is difficult to define the family Theridiidae. The 27 genera of Theridiidae represented north of Mexico can be separated by a key. There is a checklist to the 229-234 species of Theridiidae from north of Mexico.

A simple key to the genera of Theridiidae is needed for identifying spiders, but is difficult to construct. A mimeographed version of the key has had a limited circulation for several years as a tryout.

The checklist got bigger while in preparation. Because of the expense of printing, the style had to be modified slightly to make the list shorter. Therefore the synonymies are not complete but go back only to the first revision of the genus. For a complete synonymy it is necessary to consult the revisions.

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### INTRODUCTION

Theridiid spiders differ from Nesticidae, Araneidae, Linyphiidae, and most Symphytognathidae by usually lacking the fleshy colulus (Fig. 47) found in all these other families (Fig. 1) (not always in Symphytognathidae). Theridiidae usually have a tarsal comb (Fig. 80), but this is present also in Nesticidae. Those theridiid genera that have a fleshy colulus (*Steatoda*, *Latrodectus*, *Argyrodes*, *Robertus*, and *Crustulina*) have comb setae on the fourth metatarsus and tarsus (present also in Nesticidae, but absent in *Argyrodes*). Theridiids that have a fleshy colulus and comb-setae on the fourth legs differ from Nesticidae by being dark colored, while Nesticidae are generally whitish, and by not having the paracymbium attached at the base of the cymbium of the male palpus, while in Nesticidae it is at the base of the cymbium and variously enlarged.

Members of the theridiid genus *Argyrodes* have a colulus, lack a comb on the fourth

tarsus, but differ from other families with a fleshy colulus by having the paracymbium a small hook on the edge of the alveolus of the cymbium, hidden behind the bulb. The paracymbium (P in illustrations) is attached at the base of the cymbium and variously expanded in Nesticidae and some Araneidae (*Meta*, *Zygiella*), a hook at the base in *Araneus* (Araneidae), or a separate sclerite in the palpus in Linyphiidae. Some theridiids (e.g., *Theridula*, *Paratheridula*) lack a paracymbium.

The Symphytognathidae are probably polyphyletic, secondarily derived from the Theridiidae and Araneidae. All are minute, less than 2 mm, all lack a paracymbium in the male palpus; many have the eyes reduced. The carapace may be high, and both carapace and abdomen may be heavily sclerotized. The division between Symphytognathidae and Theridiidae is probably as arbitrary as that between Theridiidae and Nesticidae.

The colulus is derived from vestigial anterior spinnerets and is generally believed primitive, its loss secondary. However, the simplest male palpi in theridiid spiders are all found in genera that lack a colulus (*Theridula*, *Paratheridula*, *Achaearanea*). While the palpus of *Theridula* and *Paratheridula* might be interpreted as secondarily reduced, this probably is not the case in *Achaearanea*. *Achaearanea* (and *Dipoena*) palpi show how the various sclerites may have originated, possibly an early stage in the evolution of the complex linyphiid palpus. The complex appearing palpus of symphytognathids is secondarily simplified, judging by the absence or vestigial character of certain sclerites that are well developed in the theridiid palpus.

The limits of the family Theridiidae are arbitrary. Better knowledge of southern hemisphere spiders, especially Symphytognathidae, may make it possible to define the family better.

#### KEY TO GENERA OF THERIDIIDAE IN AMERICA NORTH OF MEXICO (AND OF EUROPE)

by Herbert W. Levi

- 1a. Abdomen sclerotized, with a series of humps and a sclerotized ring around spinnerets (Fig. 20); carapace projecting anteriorly (Fig. 20); less than 2.7 mm total length; one species in eastern U.S. .... *Phoroncidia*
- 1b. Abdomen otherwise ..... 2
- 2a(1b). A fleshy colulus present between anterior spinnerets (Fig. 1) ..... 3
- 2b. Colulus absent (Fig. 47) or replaced by two setae (Fig. 19) ..... 10
- 3a(2a). Tarsi longer than metatarsi; adults less than 1.3 mm long ..... 4
- 3b. Metatarsi equal to, or longer than tarsi; adults usually longer than 1.5 mm .. 5
- 4a(3a). Six eyes, one rare species in California (Fig. 2) ..... *Comaroma*
- 4b. Eight eyes; one species from Alaska to southeastern states (Fig. 3) .. *Theonoe*
- 5a(3b). Carapace, sternum with dumb-bell-shaped tubercles (Fig. 4); palpal cymbium with a projection (Fig. 5) ..... *Crustulina*
- 5b. Carapace, sternum not tuberculate, or only very slightly so ..... 6
- 6a(5b). Lateral eyes separated by their diameter or more; chelicerae without teeth (Fig. 6); female internal genitalia with dumb-bell-shaped seminal receptacles and male palpus with coiled embolus (Figs. 7, 8) ..... *Latrodectus*

- 6b. Lateral eyes slightly separated at most (Fig. 12); chelicerae with teeth (Figs. 14, 15); genitalia otherwise ..... 7
- 7a(6b). No comb setae on fourth tarsus; male eye or clypeal region swollen and projecting, or a groove below eyes (Fig. 9); female abdomen higher than long with humps extending beyond spinnerets, or thread-shaped, often with silver spots (Figs. 10, 11); middle tarsal claw often longer than laterals . . *Argyrodes*
- 7b. Comb-setae on fourth tarsus (Fig. 80); male eye or clypeal region never so modified; female abdomen oval to spherical (Figs. 12, 13, 17), never with silver spots; middle tarsal claw smaller than laterals ..... 8
- 8a(7b). Abdomen without pattern, uniformly colored ..... *Robertus*
- 8b. Abdomen with a pattern (Figs. 12, 13, 17) ..... 9
- 9a(8b). Female lacks a tooth on posterior cheliceral margin; male chelicerae never large. Paracymbium hook not on edge of male palpal cymbium; many species purplish-brown to black in color, with a white line around anterior of abdomen (Figs. 12, 13) ..... *Steatoda*
- 9b. Female with at least one tooth on posterior cheliceral margin (Fig. 14); male with chelicerae often enlarged (Fig. 16); paracymbial hook on margin of cymbium (Fig. 18) ..... *Enoplognatha*
- 10a(2b). Colulus replaced by two setae (Fig. 19) ..... 11
- 10b. Colulus absent (Fig. 47) ..... 21
- 11a(10a). Posterior median eyes more than three diameters apart (Fig. 21); abdomen longer than wide, widest near anterior end (Fig. 21); one species in eastern states ..... *Spintharus*
- 11b. Posterior median eyes at most two diameters apart; abdomen usually otherwise ..... 12
- 12a(11b). Abdomen longer than wide, dorso-ventrally flattened, widest posteriorly with median posterior or lateral posterior humps (Fig. 22); one species in eastern states ..... *Episinus*
- 12b. Abdomen otherwise ..... 13
- 13a(12b). Venter of abdomen and its anterior overhang black (Figs. 23, 24); abdomen variously shaped; eyes often reddish; palpal cymbium supports embolus, conductor absent (Fig. 25) ..... *Chrosiothes*
- 13b. Coloration of abdomen otherwise; eyes not reddish; palpal cymbium never supporting embolus ..... 14
- 14a(13b). Eyes large, closely grouped (Fig. 26); eye region black except between posterior median eyes (Fig. 26); fourth legs longer than first; abdomen often with a white spot above spinnerets ..... *Stemmops*
- 14b. If eyes closely grouped and eye region black then the first legs are longer than fourth; abdomen rarely with white spot above spinnerets ..... 15
- 15a(14b). Total length less than 1.8 mm ..... 16
- 15b. Total length greater than 2 mm ..... 19
- 16a(15a). Abdomen much wider than long (Fig. 27); rare; one species in Florida ..... *Tekellina*

- 16b. Abdomen spherical to longer than wide ..... 17
- 17a(16b). Anterior median eyes vestigial, minute, less than one-third that of laterals (Fig. 29); one rare species in Arizona ..... *Styposis*
- 17b. Diameter of anterior median eyes equal to radius of others or larger ..... 18
- 18a(17b). Anterior median eyes smaller than others (Figs. 30, 31); chelicerae with teeth on anterior margin, denticles on posterior ..... *Pholcomma*
- 18b. Diameter of anterior median eyes equal to others or larger (Figs. 40, 41, 42, 45, 46); chelicerae without teeth; females with two pairs of seminal receptacles ..... 20
- 19a(15b). Chelicerae with teeth on anterior and posterior margins, fangs short (Fig. 33); abdomen oval, longer than wide, often with dorsal longitudinal band (Fig. 32); one pair of seminal receptacles; comb setae on fourth tarsus . *Anelosimus*
- 19b. Chelicerae without teeth, fang long and flattened (Figs. 34-37); abdomen triangular to subspherical; four seminal receptacles (Figs. 38, 39); comb setae lacking ..... 20
- 20a(18, 19b). Abdomen usually triangular (Figs. 40-42), widest anteriorly (Figs. 40-42); male palpus without median apophysis (Fig. 43); male carapace not modified; fourth leg commonly longer than first ..... *Euryopis*
- 20b. Abdomen usually spherical; median apophysis usually present in palpus, radix a separate sclerite (Fig. 44); male carapace often modified or high (Figs. 45, 46) ..... *Dipoena*
- 21a(10b). Abdomen triangular, widest anteriorly; dorso-ventrally flattened; fourth legs longer than first, lacking comb setae; two pairs of seminal receptacles in female ..... *Euryopis*
- 21b. Abdomen otherwise; first legs longer than fourth, or if fourth longer, abdomen spherical; fourth with comb setae (Fig. 80); one pair of seminal receptacles in female (Fig. 74) ..... 22
- 22a(21b). Abdomen higher than long, often with streaks on sides (Figs. 49, 51-53); male palpus with cymbium usually extending beyond bulb (Figs. 48, 54, 55) .. 23
- 22b. Abdomen longer than high, to wider than long, to subspherical; if high then not streaked; cymbium rarely extending beyond bulb ..... 24
- 23a(22a). A narrow longitudinal white line from highest point of abdomen to spinnerets (Fig. 49); males minute with only one palpus; male palpus with median apophysis and radix (Fig. 48); epigynum with a protruding knob (Fig. 50) ...  
..... *Tidarren*
- 23b. White line much wider or absent from abdomen (Figs. 51-53); males with two palpi, lacking median apophysis; radix broadly attached (Figs. 54, 55) ...  
..... *Achaearanea*
- 24a(22b). Abdomen longer than wide, high with tubercle or point above and posterior to spinnerets (Figs. 56, 57); palpus with all sclerites present (if the whole carapace is black and eyes small, it is *Coleosoma acutiventer*, Fig. 64) .....  
..... *Chrysso*
- 24b. Abdomen otherwise, oval to spherical or wider than long ..... 25

- 25a(24b). Female abdomen wider than long, each lateral point dark and abdomen with prominent dorsal white spot (Fig. 58); carapace with wide black longitudinal band (Fig. 58); palpus very simple with a twisted embolus on distal tip of bulb (Figs. 59, 60) . . . . . *Theridula*
- 25b. Abdomen, if wider than long marked otherwise and if male has simple palpus, embolus is straight, not twisted . . . . . 26
- 26a(25b). Males with simple palpus, lacking sclerites but having a straight distal embolus (Fig. 62); females with 3-6 dorsal black patches on oval abdomen (Fig. 61); epigynum a clear plate with two circular openings (Fig. 63), to 2.2 mm total length, one species in Gulf states . . . . . *Paratheridula*
- 26b. Palpus with radix and median apophysis; epigynum otherwise . . . . . 27
- 27a(26b). Males with sclerotized ring around abdomen encircling pedicel and covering epigastric area (Figs. 65, 66); abdomen often constricted in middle (Figs. 65, 66); less than 4 mm; females difficult to separate from *Theridion* or *Chrysso* except for small eyes and projecting clypeus (Fig. 64); three small species in southeastern U.S., one of which is found in Arizona . . . . . *Coleosoma*
- 27b. Males otherwise, or larger than 6 mm; females rarely with projecting clypeus. . . . . 28
- 28a(27b). Males usually with eye region of clypeus very high, bulging, projecting, or with groove in clypeus (Figs. 68, 69); most less than 1.5 mm long; often orange in coloration; commonly with scuta on abdomen . . . . . *Thymoites*
- 28b. Male eye region never modified; usually larger than 1.5 mm long; rarely orange in color; no scutum on abdomen . . . . . *Theridion*

#### A CHECKLIST OF THE THERIDIIDAE IN AMERICA NORTH OF MEXICO

by Diane Randolph and Herbert W. Levi

\*Name with this spelling is on Official List of Generic Names in Zoology and cannot be changed.

\*\*Application has been made to place name on Official List of Generic Names in Zoology. Application not acted upon; thus existing usage is to be maintained (Art. 80 of ICZN) and has been used in preference over other names in use and not widely accepted.

*Achaeareana* Strand, 1929. Levi, 1955a (Revision); 1963b (Keys, Maps).

Type species: *A. insignis* (O.P.-Cambridge)

♀♂ *acoreensis* (Berland, 1932). Levi, 1955a: 20, f. 39, 40, 46 (♀♂ *geochares*); 1963b: 220; 1967a: 179, f. 12-14 (♀♂). CA.

♀ *ambera* Levi, 1963b: 204, f. 7-8 (♀). UT, WY.

♀♂ *canyonis* (Chamberlin and Gertsch, 1929). Levi, 1955a: 24, f. 60-68 (♀♂). UT, AZ, CA.

♀♂ *chiricahua* Levi, 1955a: 26, f. 57-59 (♀); 1963b: 213, f. 39-40 (♂). AZ.

♀♂ *conjuncta* (Gertsch and Mulaik, 1936). Levi, 1955a: 14, f. 14-18 (♀♂). LA, MS, FL, NC.

♀♂ *florendida* Levi, 1959c. 1955a: 15, f. 26-31 (♀♂ *florens*); 1959c: 65, f. 17, 20-21 (♀♂). TX, TAM.

♀♂ *fresno* Levi, 1955a: 27, f. 53-55 (♀♂). CA.

$\text{♀♂}$  *globosa* (Hentz, 1850). Levi, 1955a: 9, f. 19-25 ( $\text{♀♂}$ ); 1963b: 203. ONT to QUE to TAM and FL.

$\text{♀♂}$  *insula* (Gertsch and Mulaik, 1936). Levi, 1955a: 19, f. 41-45 ( $\text{♀♂}$ ). TX, TAM.

$\text{♀♂}$  *porteri* (Banks, 1896). Levi, 1955a: 30, f. 71-75, 80-82 ( $\text{♀♂}$ ); 1963b: 215. NY to KS to FL; NUL.

$\text{♀♂}$  *ruplicola* (Emerton, 1882). Levi, 1955a: 21, f. 47-52, 56 ( $\text{♀♂}$ ); 1963b: 215. AL to ONT to ME; ?BCA.

$\text{♀♂}$  *schullei* (Gertsch and Mulaik, 1936). Levi, 1955a: 17, f. 32-38 ( $\text{♀♂}$ ); 1959c: 61; 1963b: 203. FL, TX, TAM, AZ, CA.

$\text{♀♂}$  *serenoae* (Gertsch and Archer, 1942). Levi, 1955a: 28, f. 76-79 ( $\text{♀♂}$ ). AL, FL.

$\text{♀♂}$  *tepidiorum* (C. L. Koch, 1841). Levi, 1955a: 32, f. 69-70, 83-84 ( $\text{♀♂}$ ); 1963b: 215; 1967a: 178, f. 9-11. NOV to FL; ONT to TX; CO; KS; BCA to CA.

*Anelosimus* Simon, 1891. Levi, 1956b (Revision).

Type species: *A. eximius* (Keyserling)

$\text{♀♂}$  *analyticus* (Chamberlin, 1924). Levi, 1956b: 421, f. 19, 40-42 ( $\text{♀♂}$ ). CA, BCN, SON.

$\text{♀♂}$  *studiosus* (Hentz, 1850). Levi, 1956b: 418, f. 21-23, 37-39 ( $\text{♀♂}$ ); 1967b: 30, f. 2 (web photo). CT to FL; TN to TAM; NUL; SON.

*Argyrodes*\*\* Simon, 1864. Exline and Levi, 1962 (Revision).

Type species: *A. argyrodes* (Walckenaer)

$\text{♀♂}$  *americanus* (Taczanowski, 1872). Exline and Levi, 1962: 161, f. 236-247 ( $\text{♀♂}$ ). FL, MS, TX, TAM.

$\text{♀♂}$  *baboquivari* Exline and Levi, 1962: 119, f. 89-94 ( $\text{♀♂}$ ). AZ, CHI, SON.

$\text{♀♂}$  *cancellatus* (Hentz, 1850). Exline and Levi, 1962: 180, f. 323-336 ( $\text{♀♂}$ ). ONT, NH to FL to TX to MO.

$\text{♀♂}$  *caudatus* (Taczanowski, 1872). Exline and Levi, 1962: 176, f. 300-322 ( $\text{♀♂}$ ). TX, FL, TAM.

$\text{♀♂}$  *davisi* Exline and Levi, 1962: 191, f. 370-374 ( $\text{♀♂}$ ). TX.

$\text{♀♂}$  *dracus* Chamberlin and Ivie, 1936. Exline and Levi, 1962: 187, f. 352-358 ( $\text{♀♂}$ ). AL.

$\text{♀♂}$  *elevatus* Taczanowski, 1872. Exline and Levi, 1962: 134, f. 128-132 ( $\text{♀♂}$ ). MO; VA to FL to TAM; SIN; CA.

$\text{♀♂}$  *fictilium* (Hentz, 1850). Exline and Levi, 1962: 103, f. 6, 7, 26-28 ( $\text{♀♂}$ ). ONT; ME to FL to TX to MO; NUL; BCA to CA.

$\text{♀♂}$  *furcatus* (O.P.-Cambridge, 1898). Exline and Levi, 1962: 116, f. 84-88 ( $\text{♀♂}$ ). SC to FL to TX; NUL; TAM; CA.

$\text{♀♂}$  *globosus* Keyserling, 1884. Exline and Levi, 1962: 164, f. 248-260 ( $\text{♀♂}$ ). SC to FL to TX.

$\text{♀♂}$  *maculosus* O.P.-Cambridge, 1898. Exline and Levi, 1962: 168, f. 271-275 ( $\text{♀♂}$ ). FL.

$\text{♀♂}$  *nephilae* Taczanowski, 1872. Exline and Levi, 1962: 139, f. 133-137 ( $\text{♀♂}$ ). FL.

$\text{♀♂}$  *pluto* Banks, 1906. Exline and Levi, 1962: 143, f. 138-142 ( $\text{♀♂}$ ). MD, VA, MO, TX, CHI, TAM.

$\text{♀♂}$  *projiciens* (O.P.-Cambridge, 1896). Exline and Levi, 1962: 106, f. 8-10, 29-31 ( $\text{♀♂}$ ). FL, TX.

$\text{♀♂}$  *subdolus* O.P.-Cambridge, 1898. Exline and Levi, 1962: 190, f. 365-369 ( $\text{♀♂}$ ). TX, AZ, NUL.

$\text{♀♂}$  *trigonum* (Hentz, 1850). Exline and Levi, 1962: 122, f. 66-78 ( $\text{♀♂}$ ). ME to FL to TX to ONT.

*Chrosiothes* Simon, 1894. Levi, 1954a (Key); 1964e (Revision).

Type species: *C. silvaticus* Simon

♀♂ *chirica* (Levi, 1954). Levi, 1954a: 184, f. 7, 8, 20, 30, 31 (♀♂ *Theridiotis*). AZ, CO, UT.

♀ *iviei* Levi, 1964e: 87, f. 37-39 (♀). CA.

♀♂ *jocosus* (Gertsch and Davis, 1936). Levi, 1954a: 180, f. 1-5, 10, 19, 26, 27 (♀♂ *Theridiotis*). TX, TAM.

♀♂ *minusculus* (Gertsch, 1936). Levi, 1954a: 182, f. 11, 16-18, 21, 28, 29 (♀♂). TX, TAM.

♀♂ *portalensis* Levi, 1964e: 89, f. 19-22 (♀♂). AZ.

♀♂ *silvaticus* Simon, 1894. Levi, 1954a: 187, f. 25, 36, 37 (♀ *probabilis*), f. 13-15 (♂ *barrowsi*); 1964e: 84. FL.

*Chrysso* O.P.-Cambridge, 1882. Levi, 1955b (Revision); 1962b (Keys).

Type species: *C. albomaculata* O.P.-Cambridge

♀♂ *albomaculata* O.P.-Cambridge, 1882. Levi, 1955b: 61, f. 1-4, 18, 19, 25-27 (♀♂). NC to FL to TX.

♀♂ *nordica* (Chamberlin and Ivie, 1947). Levi, 1957c: 105, pl. 8, f. 1-2, 7-11 (♀♂ *Arctachaea*). AK, NWT, MT, CO, UT, CA.

♀♂ *pelyx* (Levi, 1957). Levi, 1957c: 104, pl. 8, f. 3-6, 12, 13 (♀♂ *Arctachaea*). UT, OR.

♀♂ *pulcherrima* (Mello-Leitão, 1917). Levi, 1962b: 231, f. 71-75 (♀♂ *clementinae*); 1967a: 182, f. 28-31 (♀♂). FL.

*Coleosoma* O.P.-Cambridge, 1882. Levi, 1959b (Revision).

Type species: *C. blandum* O.P.-Cambridge

♀♂ *acutiventris* (Keyserling, 1884). Levi, 1959b: 4, f. 6-11 (♀♂). GA to TX; TAM.

♀♂ *floridanum* Banks, 1900. Levi, 1959b: 6, f. 12-17 (♀♂). ME, MA, NJ, FL.

♀♂ *normale* Bryant, 1944. Levi, 1959b: 3, f. 1-5 (♀♂). NC, FL, AZ.

*Comaroma* Bertkau 1889. Levi, 1957a (Rev. *Archerius*).

Type species: *C. simoni* Bertkau

♀♂ *mendocino* (Levi, 1957). Levi, 1957a: 115, f. 38-47 (♀♂ *Archerius*). CA.

*Crustulina* Menge, 1868. Levi, 1957b (Revision).

Type species: *C. guttata* (Wider.).

♀♂ *altera* Gertsch and Archer, 1942. Levi, 1957b: 372, f. 4-6, 8-10 (♀♂). MA to FL to LA to WI.

♀♂ *sticta* (O.P.-Cambridge, 1861). Levi, 1957b: 370, f. 1-3, 7 (♀♂). AK to BCN; ID to TX; MAN to QUE; MN; MI; IL; NB; NEF to VA.

*Dipoena* Thorell, 1869. Levi, 1953 (Revision); 1963a (Key).

Type species: *D. melanogaster* (C. L. Koch)

♀♂ *abdicta* Gertsch and Mulaik, 1936. Levi, 1953: 37, f. 77-82, 108-109 (♀♂). FL to CA; NV.

♀♂ *alta* Keyserling, 1886. Levi, 1953: 12, f. 11-15, 120-121 (♀♂ *lineatipes*). FL to TX.

♀♂ *atopa* (Chamberlin, 1948). Levi, 1953: 35, f. 65-71, 116-117 (♀♂ *daltoni*). UT, CA.

♀ *bernardino* Levi, 1963a: 147, f. 125-127 (♀). CA.

♀♂ *buccalis* Keyserling, 1886. Levi, 1953: 27, f. 6, 16-18, 33-34, 98-101 (♀♂). ONT, OH, NY to MD; AL, MS, AZ, CHI, SON.

♂ *cathedralis* Levi, 1953: 15, f. 19-22 (♂). TX.

♀ *chathamica* Levi, 1953: 21, f. 85-86 (♀). GA.

- ♀♂ *dorsata* Muma, 1944. Levi, 1953: 17, f. 87-88, 19, f. 23-29 (♀♂ *appalachia*). MD to FL; TN, MS, AZ.
- ♀ *lana* Levi, 1953: 36, f. 112-113 (♀). CA, OR.
- ♀♂ *malkini* Levi, 1953: 33, f. 8, 60-64, 110-111 (♀♂). UT, NM, AZ, OR, CA.
- ♀ *neotoma* Levi, 1953: 36, f. 7, 118-119 (♀). CA.
- ♀♂ *nigra* (Emerton, 1882). Levi, 1953: 21, f. 30-32, 37-46, 91-97 (♀♂). Throughout U.S. and southern Canada.
- ♀♂ *prona* (Menge, 1868). Levi, 1953: 30, f. 50-59, 105-106 (♀♂ *hamata*). MA, RI, NY, NC, MI, IL, SD; NM, CO to CA.
- ♀ *provalis* Levi, 1953: 34, f. 114-115 (♀). UT, OR.
- ♀ *rita* Levi, 1953: 32, f. 107 (♀). AZ.
- ♀♂ *sulfurica* Levi, 1953: 29, f. 4-5, 47-49, 83-84, 102-104 (♀♂). NM, AZ.
- ♀ *washougalia* Levi, 1953: 35, f. 72-76 (♂). WA, OR.

*Enoplognatha*\* Pavesi, 1880. Levi, 1957d (Revision); 1962a (Key).

Type species: *Theridion mandibulare* Lucas

- ♀♂ *intrepida* (Sörensen, 1898). Levi, 1957d: 17, f. 40, 41, 48, 51, 52 (♀♂). AK, ALB, SAS, ONT; NH to PA; WI, MN, MT, WY, CO, NM.
- ♀♂ *joshua* Chamberlin and Ivie, 1942. Levi, 1957d: 15, f. 42-46, 54-56 (♀♂). VA, GA, WY, WA; ID to AZ, CA.
- ♀♂ *maricopa* Levi, 1962a: 15, f. 1-5 (♀♂). CA, AZ.
- ♀♂ *marmorata* (Hentz, 1850). Levi, 1957d: 11, f. 24, 26, 27, 30-33 (♀♂). ONT to NOV to AL to MO; ND; MT to TX to CA to WA.
- ♀♂ *ovata* (Clerck, 1757). Levi, 1957d: 7, f. 1-10 (♀♂). ME to NY; ONT; BCA to CA.
- ♀♂ *selma* Chamberlin and Ivie, 1946. Levi, 1957d: 10, f. 15, 16, 19, 20, 22, 23 (♀♂). OR, CA.
- ♀♂ *tecta* (Keyserling, 1884). Levi, 1957d: 13, f. 11, 25, 28, 29, 34-37 (♀♂). ONT to NEF to VA to IO; TX, CO, WA.
- ♀♂ *thoracica* (Hahn, 1831). Levi, 1957d: 9, f. 13, 14, 17, 18, 21 (♀♂). OR.
- ♀♂ *wyuta* Chamberlin and Ivie, 1942. Levi, 1957d: 15, f. 38, 39, 47, 49, 50, 53 (♀♂). SD, WY, UT.

*Episinus* Latreille, 1809. Levi, 1954d (Revision); 1964b (Key).

Type species: *E. truncatus* Latreille

- ♀♂ *amoenus* Banks, 1911. Levi, 1954d: 68, f. 4, 17, 18, 32, 39 (♀♂). MD to FL; TN, AL.
- ♀♂ *cognatus* O.P.-Cambridge, 1893. Levi, 1954d: 71, f. 8-10, 21, 22, 33, 41 (♀♂). TX, TAM.

*Euryopis* Menge, 1868. Levi, 1954b (Revision); 1963a (Key).

Type species: *E. flavomaculata* (C. L. Koch)

- ♀♂ *argentea* Emerton, 1882. Levi, 1954b: 11, f. 4, 7, 11-14 (♀♂). MA to VA; ONT to OH, IL; CO, OR.
- ♀♂ *emertoni* Bryant, 1933. Levi, 1954b: 15, f. 19-22, 29, 31, 34, 37 (♀♂). SC to FL to TN; MA, NY.
- ♀♂ *funebris* (Hentz, 1850). Levi, 1954b: 26, f. 53, 65, 69, 83, 84, 100, 120, 121, 129 (♀♂ *limbata*). QUE to ONT to FL; ND.
- ♀♂ *gertschi* Levi, 1951. Levi, 1954b: 9, f. 3, 6, 15, 16 (♀♂). MA to VA; MI, IN, IL.
- ♀♂ *mulaiki* Levi, 1954b: 19, f. 17, 18, 27, 28, 32 (♀♂). TX, AZ.
- ♀♂ *quinquemaculata* Banks, 1900. Levi, 1954b: 46, f. 133-136 (♀). 1963a: 131, f. 11-16.

- OH, NY, MD, DC, VA, GA, TX.
- ♀♂ *saukeae* Levi, 1951. Levi, 1954b: 7, f. 2, 5 (♂). 1963a: 130, f. 7-9 (♀). NJ, MI, WI, MN.
- ♀♂ *spinigera* O.P.-Cambridge, 1895. Levi, 1954b: 20, f. 23, 24, 30, 33, 36 (♀♂). NUL, TAM, TX, OK, NM, AZ, UT, CA.
- ♀♂ *taczanowskii* Keyserling, 1886. Levi, 1954b: 24, f. 38-52 (♀♂ *nigripes*). FL, TX, NM, CO, UT, AZ.
- ♂ *tavara* Levi, 1954b: 29, f. 54, 66, 70, 131 (♂). FL.
- ♀ *varis* Levi, 1963a: 130. Levi, 1954b: 23, f. 25, 26, 35 (♀ *variabilis*). FL.
- ♂ *weesei* Levi, 1963a: 134, f. 21 (♂). OK.

Confusion reigns among the following names of *Euryopis*. A new study is necessary to delimit the species. Specimens cannot be placed at the present time.

- ♀♂ *californica* Banks, 1904. Levi, 1954b: 39, f. 61, 74, 77, 92, 93, 105, 132 (♀♂). NV, CA, BCN.
- ♀♂ *coki* Levi, 1954b: 33, f. 58, 68, 85, 86, 102, 130 (♀♂). UT, ID, WY.
- ♀♂ *formosa* Banks, 1908. Levi, 1954b: 40, f. 62, 75, 78, 94-96, 106, 107 (♀♂). BCA to CA; ID, WY, UT.
- ♀♂ *lineatipes* O.P.-Cambridge, 1893. Levi, 1954b: 36, f. 60, 73, 76, 90, 91, 104, 125, 126 (♀♂). NUL, TAM, TX.
- ♂ *pepini* Levi, 1954b: 32, f. 55, 67, 71, 101 (♂). WI.
- ♀♂ *scriptipes* Banks, 1908. Levi, 1954b: 43, f. 59, 63, 79, 80, 82, 97-99, 108-114, 116-119, 127, 128 (♀♂). Limits uncertain: ALB to CHI; SD, NB.
- ♂ *spiritus* Levi, 1954b: 46, f. 64, 81, 115 (♂). CO.
- ♀♂ *texana* Banks, 1908. Levi, 1954b: 34, f. 57, 58, 72, 87-89, 103, 122-124 (♀♂). TX, AZ, UT, CO, NUL, SON, COA.

*Latrodectus\** Walckenaer, 1805. Levi, 1959a (Revision). Changes: McCrone and Levi, 1964; Kaston, 1970.

- Type species: *L. mactans tredecimguttatus* (Rossi)
- ♀♂ *bishopi* Kaston, 1938. McCrone and Levi, 1964: 15, f. 2, 4-7, 21-22 (♀♂). FL.
- ♀♂ *geometricus* C. L. Koch, 1841. Levi, 1959a: 21, f. 8-10, 25-28, 37, 39-50, 80-83 (♀♂). 1967a: 185, f. 57-59 (♀♂). FL.
- ♀♂ *hesperus* Chamberlin and Ivie, 1935. Kaston, 1970. Doubtful if valid species (unpubl.).
- ♀♂ *mactans* (Fabricius, 1775). Levi, 1959a: 24, f. 1, 5-7, 19-21, 38, 53-55, 56-67, 72-79 (♀♂); 1967a: 185, f. 60-62 (♀♂). NY to CA and south; TAM and BCN. Doubtful if west coast specimens same species.
- ♀♂ *variolus* Walckenaer, 1837. McCrone and Levi, 1964: 13, f. 3, 8-13, 27 (♀♂). ONT to BCA; MA, VT; FL to CA. Doubtful if BCA to CA same species.

*Paratheridula* Levi, 1957. Levi, 1957a, 1966 (Revision).

- Type species: *P. perniciosa* (Keyserling)
- ♀♂ *perniciosa* (Keyserling, 1886). Levi, 1957a: 106, f. 1-6, 48 (♀♂). 1967a: 176, f. 1-4 (♀♂). FL, AL, MS, LA.

*Pholcomma* Thorell, 1869. Levi, 1957a (Revision).

- Type species: *P. gibbum* Westring
- ♀♂ *barnesi* Levi, 1957a: 114, f. 31-37 (♀♂). NC, PA.
- ♀♂ *carota* Levi, 1957a: 113, f. 28-30 (♂), in press ♀. NC, GA, FL.
- ♀♂ *hirsuta* Emerton, 1882. Levi, 1957a: 110, f. 19-27, 48 (♀♂). NH to FL to MS to WI; MO.

*Phoronicidia* Westwood, 1835. Levi, 1955c (Rev. *Oronota*).

Type species: *P. aculeata* Westwood

♀♂ *americana* (Emerton, 1882). Levi, 1955c: 334, f. 1-8 (♀♂ *Oronota americana*). 1964c: 74, ONT to MS to FL to MA; NOV; AR.

*Robertus*\*\* O.P.-Cambridge, 1879. Kaston, 1946 (Revision *Ctenium*).

Type species: *R. neglectus* O.P.-Cambridge

Name protected by Art. 80 of ICZN.

♀♂ *banksi* (Kaston, 1946). Kaston, 1946: 5, f. 1-8, 49 (♀♂). ONT; NH to MD; MI.

♀♂ *borealis* (Kaston, 1946). Kaston, 1946: 6, f. 41-43, 50 (♀♂). ME, NY, MI.

♀ *crosbyi* (Kaston, 1946). Kaston, 1946: 7, f. 52 (♀). NY.

♀♂ *eremophilus* Chamberlin, 1928. Kaston, 1946: 7, f. 26-28, 54 (♀♂). NY, OH, MI, IL, UT.

♀ *floridensis* (Kaston, 1946). Kaston, 1946: 7, f. 48 (♀). FL.

♀♂ *frontatus* (Banks, 1892). Kaston, 1946: 7, f. 48 (♀♂). CT, NY to MD; NC, TN, OH.

♀♂ *fuscus* (Emerton, 1894). Kaston, 1946: 7, f. 38-40, 56 (♀♂). LAB, ME to NY; ONT, MI, WY.

♀♂ *laticeps* (Keyserling, 1884). Kaston, 1946: 9, f. 14-16 (♀♂). CT; NY to NC; TN; OH to NB.

♀♂ *lividus* (Blackwall, 1836). Kaston, 1946: 9, f. 17-19, 58 (♀♂). AK.

♀♂ *longipalpus* (Kaston, 1946). Kaston, 1946: 10, f. 20-22, 47 (♀♂). NH to NJ; ONT; MI.

♀♂ *pumilus* (Emerton, 1909). Kaston, 1946: 10, f. 32-34, 53 (♀♂). ME to PA.

♀♂ *riparius* (Keyserling, 1886). Kaston, 1946: 11, f. 11-13, 44 (♀♂). QUE to NC; TN, ONT, SD, MN, MI, WY.

♀ *similis* (Kaston, 1946). Kaston, 1946: 12, f. 45 (♀). NY.

♀♂ *spiniferus* (Emerton, 1909). Kaston, 1946: 12, f. 23-25, 57 (♀♂). NH, MA, CT, MI, NB.

♀♂ *vigerens* (Chamberlin and Ivie, 1933). Kaston, 1946: 13, f. 9, 10, 29-31, 55 (♀♂). AK; BCA to MT to CA.

*Spintharus* Hentz, 1850. Levi, 1954d (Revision).

Type species: *S. flavidus* Hentz

♀♂ *flavidus* Hentz, 1850. Levi, 1954d: 79, f. 46, 48-50, 52, 53 (♀♂). 1963d: 225, f. 1-6. MA, NY to FL; OH to AL; AR, TX, BCN.

*Steatoda* Sundevall, 1933. Levi, 1957b (Revision). Gertsch, 1959. Levi, 1959d (Discussion); 1962a (Key).

Type species: *S. castanea* (Clerck, 1757)

♀♂ *albomaculata* (DeGeer, 1778). Levi, 1957b: 396, f. 56-65 (♀♂). NWT to CA; ALB to CHI; MAN to NB; MN, IO to NH, CT.

♀♂ *americana* (Emerton, 1882). Levi, 1957b: 400, f. 66-69 (♀♂). ME to FL; OH to AL; ONT to MO; NB to TX; ID to SON, NM; BCA to OR.

♀♂ *atascadera* Chamberlin and Ivie, 1942. Levi, 1957b: 419, f. 106-109, 134-141 (♀♂). CA.

♀♂ *bipunctata* (Linnaeus, 1758). Levi, 1957b: 413, f. 86-89, 155-156 (♀♂). NOV to NH; NEF to ONT.

♀♂ *borealis* (Hentz, 1850). Levi, 1957b: 422, f. 116-118, 148-154 (♀♂). AK; NWT; ALB to CO to NC to NOV; MS; TX.

♀♂ *erigoniformis* (O.P.-Cambridge, 1884). Levi, 1957b: 402, f. 70-73 (♀♂ *septemmaculata*); 1967a: 184, f. 46-49 (♀♂). FL.

- ♀♂ *fulva* (Keyserling, 1882). Levi, 1957b: 391, f. 32, 33, 45-47, 52 (♀♂). OR to BCN to TAM to NB; FL to TX.
- ♀♂ *grandis* Banks, 1901. Levi, 1957b: 415, f. 92-97, 119-123 (♀♂). SD, WY, CO, UT, OR, NM, AZ.
- ♀♂ *grossa* (C. L. Koch, 1838). Levi, 1957b: 404, f. 74, 83-85 (♀♂). 1967a: 184, f. 50-52 (♀♂). WA to BCN; CHI, SON; MA to CT; FL to MS.
- ♀♂ *hespera* Chamberlin and Ivie, 1933. Levi, 1957b: 420, f. 90, 91, 110-115, 142-147 (♀♂). BCA to CA; WA to CO to MT.
- ♀ *medialis* (Banks, 1898). Levi, 1957b: 388, f. 34-36, 42-44, 53-55 (♀♂). OR to BCN to TAM to WY. Gertsch (1960) considers this five species (answ. Levi, 1959d): *punctulata* (Marx, 1898). TX, AZ to C. MEX. *medialis* (Banks, 1898). AZ, CA to MEX. *washona* Gertsch, 1960. OR, NV, UT, AZ, CA. *variata* Gertsch, 1960. WY to TX; UT to MEX. *variata china* Gertsch, 1960. TX, NUL.
- ♀♂ *mexicana* Levi, 1957b: 417, f. 98-103, 124-128 (♀♂). ID to TX; UT to CHI.
- ♀ *palomara* Chamberlin and Ivie, 1935. Levi, 1957b: 419, f. 104, 105, 129-133 (♀). CA.
- ♀♂ *pulcher* (Keyserling, 1882). Levi, 1957b: 393, f. 37-41, 48-51 (♀♂). CO, TX, NM, AZ, OR, CA, COA, CHI. Gertsch (1960) considers this three species (answ. Levi, 1959d): *pulcher* (Keyserling, 1882). OR, CA. *alamosa* Gertsch, 1960. TX to MEX. *apacheana* Gertsch, 1960. CO, NM, AZ.
- ♀♂ *quadrimaculata* (O.P.-Cambridge, 1896). Levi, 1957b: 385, f. 28-31 (♀♂). FL to TX; TAM.
- ♀♂ *transversa* (Banks, 1898). Levi, 1957b: 383, f. 23-27 (♀♂). TX, AZ, CA, SON.
- ♀♂ *triangulosa* (Walckenaer, 1892). Levi, 1957b: 407, f. 75, 76, 80-82 (♀♂). 1967a: 185, f. 53-56 (♀♂). MA, NY to NB to TX to GA; OR, CA; ID, UT, CO.

*Stemmops* O.P.-Cambridge, 1894. Levi, 1955c (Revision); 1964e (Key).

Type species: *S. bicolor* O.P.-Cambridge

♀♂ *bicolor* O.P.-Cambridge, 1894. Levi, 1955c: 338, f. 14, 17, 18, 35, 36 (♀♂). FL to TX, NUL, TAM.

♀♂ *ornatus* (Bryant, 1933). Levi, 1955c: 341, f. 16, 21, 22, 29, 30 (♀♂). NJ, OH, MO, NC, GA, MS.

*Tekellina* Levi, 1957a.

Type species: *T. archboldi*

♀♂ *archboldi* Levi, 1957a: 107, f. 7-12 (♀♂). FL.

*Theonoe*\*\* Simon, 1881. Levi, 1955a (Rev. *Coressa*).

Type species: *T. minutissima* (O.P.-Cambridge)

♀♂ *stridula* Crosby, 1906. Levi, 1955a: 4, f. 2-6 (♀♂ *Coressa*). AK, WI, ONT, NY, VA, MO.

*Theridion*\* Walckenaer, 1805. Levi, 1957d (Revision); 1963c (Key).

Type species: *T. pictum* (Walckenaer)

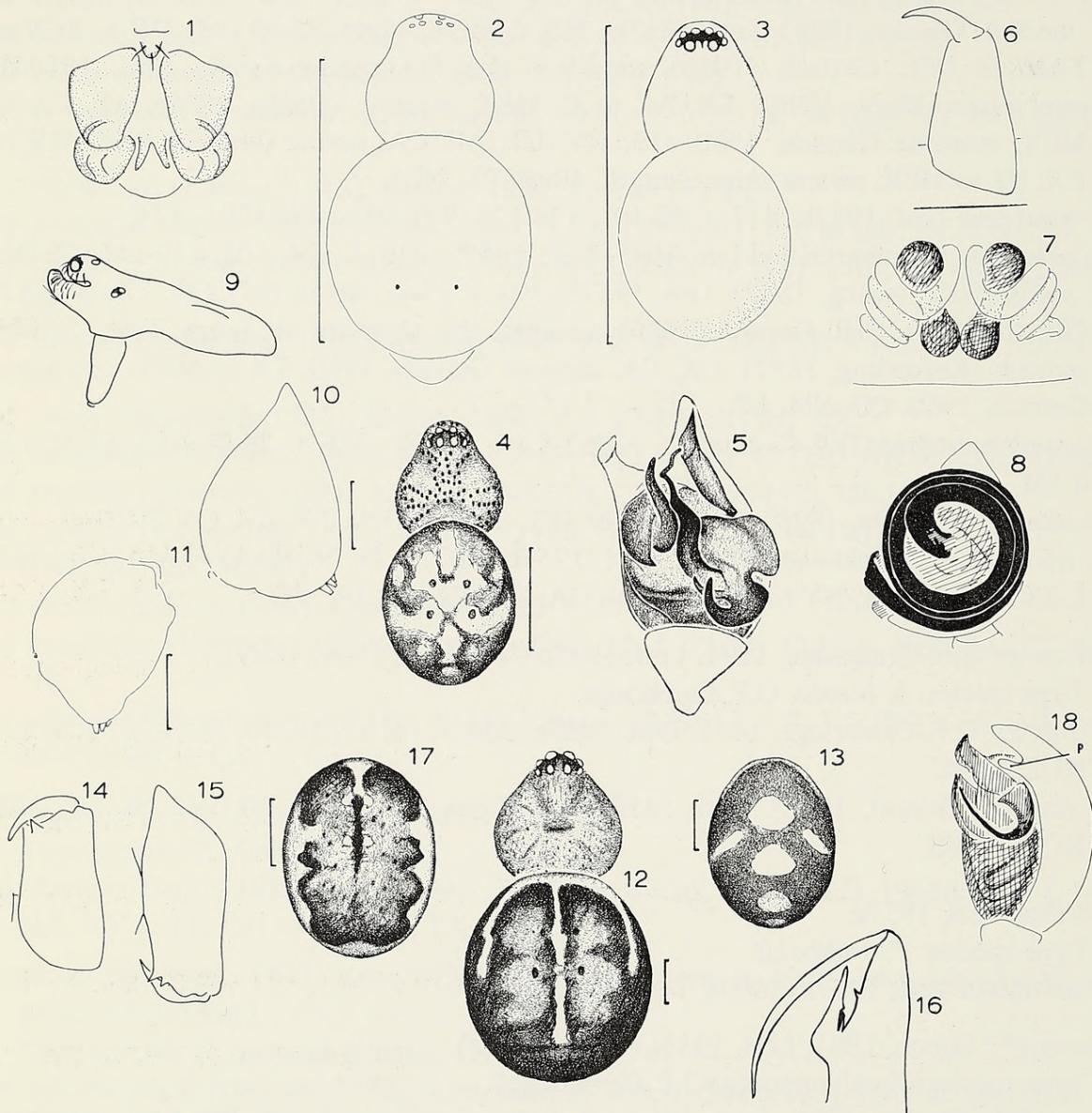
♀♂ *adamsoni* Berland, 1934. Levi, 1957d: 62, f. 198-199, 209, 213-214 (♀♂ *hobbsi*); 1963c: 568; 1967a: 181, f. 20-23 (♀♂). FL to TX.

♀ *aeolium* Levi, 1963c: 547, f. 96-97 (♀). AZ.

♀♂ *agrifoliae* Levi, 1957d: 83, f. 284, 285, 302, 303 (♀♂). BCA to CA.

♀♂ *alabamense* Gertsch and Archer, 1942. Levi, 1957d: 58, f. 202, 203, 206-208 (♀♂). WI to MA to FL to MS; TX; CA.

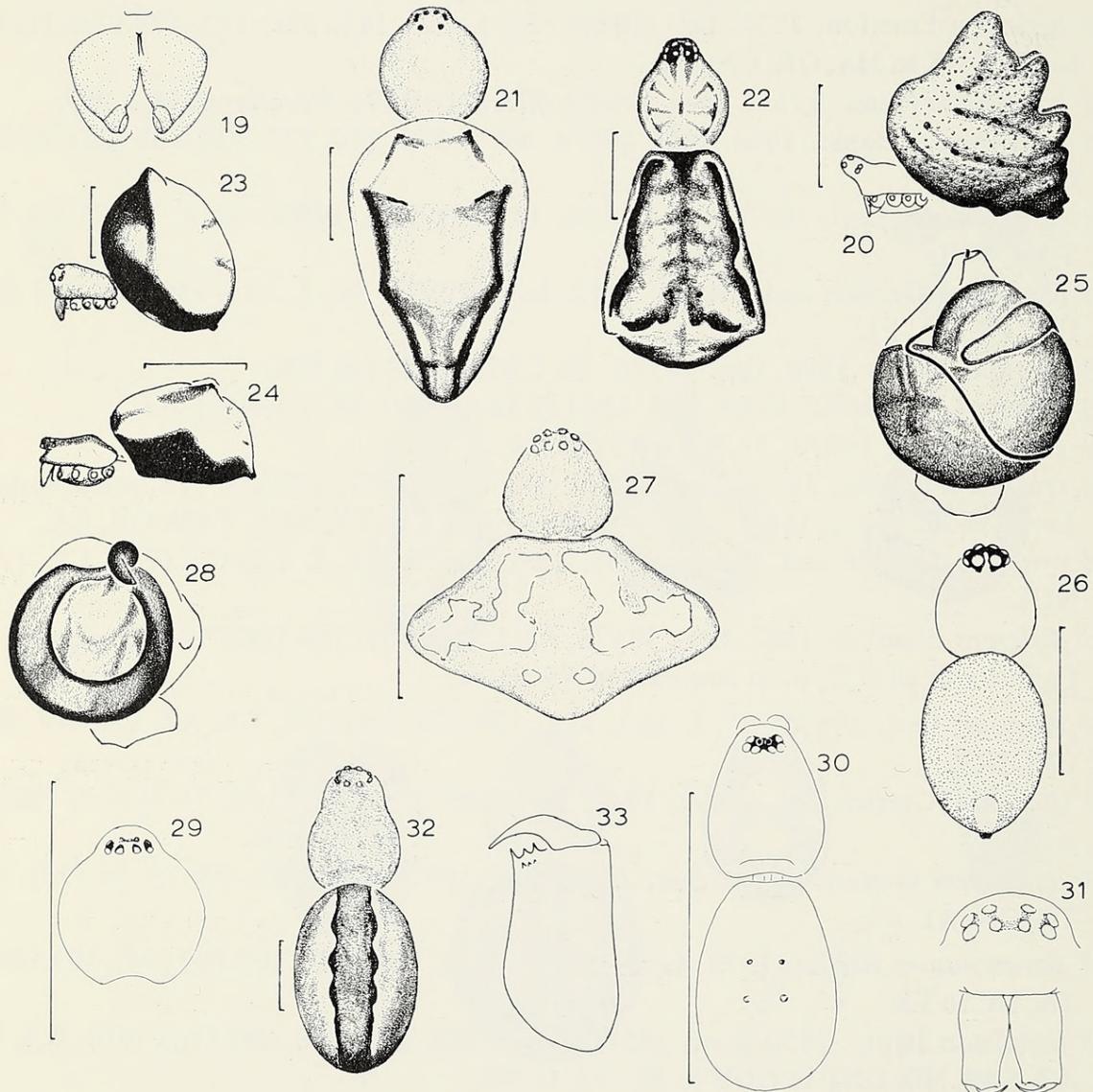
♀♂ *albidum* Banks, 1895. Levi, 1957d: 82, f. 286, 287, 300, 301 (♀♂). ONT; MA to WI



Figs. 1-18.—Theridiids with large colulus between anterior spinnerets: 1, Colulus with three setae; 2, *Comaroma mendocina* (Levi), male; 3, *Theonoe stridula* Crosby, female; Figs. 4, 5.—*Crustulina altera* Gertsch and Archer: 4, Female; 5, Male, left palpus; Figs. 6-8.—*Latrodectus mactans* (Fabricius): 6, Left chelicera of female posterior view; 7, Female genitalia, dorsal view; 8, Left male palpus; Figs. 9, 10.—*Argyrodes elevatus* Taczanowski: 9, Male carapace and chelicerae; 10, Female abdomen; 11, *Argyrodes americanus* (Taczanowski), female abdomen; 12, *Steatoda hespera* Chamberlin and Ivie, female; 13, *Steatoda medialis* (Banks), female abdomen; Figs. 14-15.—*Enoplognatha marmorata* (Hentz), female, left chelicera: 14, Posterior view; 15, Anterior view; 16, *Enoplognatha intrepida* (Sørensen), left male chelicera, posterior view; 17, *Enoplognatha tecta* (Keyserling), female abdomen; 18, *Enoplognatha marmorata* (Hentz), left male palpus, lateral view showing paracymbial hook (P) on upper part of cymbium.

Scale lines, 1 mm.

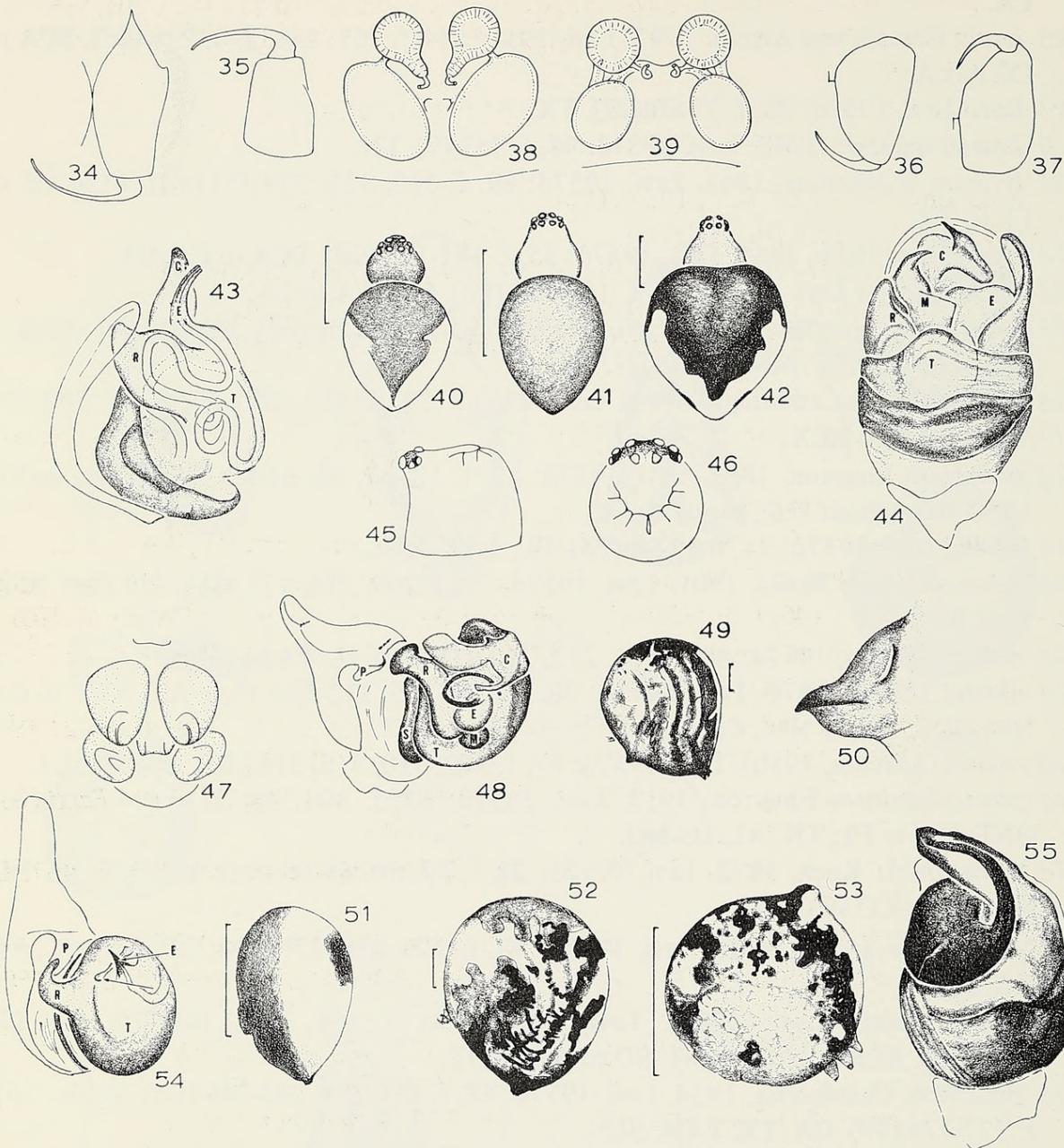
- to LA to NC.
- ♀♂ *antonii* Keyserling, 1884. Levi, 1957d: 60, f. 196, 197, 205, 215, 216, 219, 220 (♀♂). CT, NY, MD, TN, FL, MS, TX.
- ♀♂ *arizonense* Levi, 1957d: 49, f. 137, 138, (♀). Levi, 1969: 68, f. 104 (♂). NM, AZ.
- ♀♂ *atropunctatum* Petrunkevitch, 1930. Levi, 1957d: 66, f. 225-228, 232-234 (♀♂). FL.
- ♀♂ *aurantium* Emerton, 1915. Levi, 1957d: 93, f. 337-339, 350-352 (♀♂). AK; BCA; WY; NEF to NY; QUE to WI.
- ♀♂ *australe* Banks, 1899. Levi, 1957d: 41, f. 131, 132, 148-151 (♀♂). NJ; MD; NC to TAM; UT.
- ♀♂ *berkeleyi* Emerton, 1924. Levi, 1957d: 52, f. 166, 167, 171, 172, 174 (♀♂). IL; MN to NJ; ONT to MA; OR; CA; UT.
- ♀♂ *bimaculata* (Linn., 1767). Levi, 1956b: 409, f. 1-10 (♀♂, *Neottiura*). BCA, WA.
- ♀♂ *californicum* Banks, 1904. Levi, 1957d: 84, f. 273, 276, 277, 304, 305 (♀♂). BCA to CA.
- ♀ *cameronense* Levi, 1957d: 40, f. 114, 115 (♀). Levi, 1959c: 81, f. 74, 75 (♀). TX, TAM, NUL.
- ♀♂ *cheimatos* Gertsch and Archer, 1942. Levi, 1957d: 96, f. 335, 336, 354-357 (♀♂). OH, TN, GA, FL.
- ♂ *cinctipes* Banks, 1898. Levi, 1957d: 29, f. 87, 88, 99 (♂). TX.
- ♀♂ *cochise* Levi, 1963c: 553, f. 123, 124 (♂). Levi, 1969: 69, f. 5-8 (♀). AZ.
- ♀ *cowlesae* Levi, 1957d: 31, f. 91, 92 (♀). CA.
- ♀♂ *crispulum* Simon, 1895. Levi, 1957d: 64, f. 222-224, 229-231 (♀♂ *intervallatum*). Levi, 1963c: 564, f. 166-172 (♀♂). NOV to FL; TN to TX, NUL, TAM; OR, CA.
- ♀♂ *cynicum* Gertsch and Mulaik, 1936. Levi, 1957d: 39, f. 126-128 (♀♂). TX, TAM, NUL.
- ♀♂ *differens* Emerton, 1882. Levi, 1957d: 32, f. 100, 101, 104-106 (♀♂). Throughout S. Canada and all U.S., most common in NE states.
- ♀♂ *dilutum* Levi, 1957d: 37, f. 112, 113, 123-125 (♀♂). UT, TX, AZ, CA, NV, SON, CHI, NUL.
- ♀♂ *dividuum* Gertsch and Archer, 1942. Levi, 1957d: 25, f. 67, 68, 71-74 (♀♂). NC, SC, AL.
- ♀♂ *dulcineum* Gertsch and Archer, 1942. Levi, 1957d: 26, f. 69, 70, 75, 76 (♀♂). MD, TN, GA, AL.
- ♀♂ *flavonotatum* Becker, 1879. Levi, 1957d: 34, f. 102, 103, 107-109 (♀♂). MD; OH to TN; NC to TX.
- ♀♂ *frondeum* Hentz, 1850. Levi, 1957d: 81, f. 288, 289, 298, 299 (♀♂). BCA, WA, CA, AZ, SAS, ND; ONT to NOV to NC, AL to MN.
- ♀♂ *geminipunctum* Chamberlin, 1924. Levi, 1957d: 43, f. 135, 136, 142-144 (♀♂). CA, BCN.
- ♀ *gertschi* Levi, 1959c: 89, f. 91, 92 (♀). AZ, CHI.
- ♀♂ *glaucescens* Becker, 1879. Levi, 1957d: 44, f. 152, 153, 155, 156 (♀♂). NEF to WI to FL; NB, LA, TX.
- ♀♂ *goodnightorum* Levi, 1957d: 41, f. 129, 130, 145-147 (♀♂). WY to CA and TX; CHI.
- ♀♂ *hidalgo* Levi, 1957d: 43, f. 133, 134, 139-141 (♀♂). TX, TAM.
- ♀♂ *impressum* L. Koch, 1881. Levi, 1957d: 89, f. 321, 326-328 (♀♂). AK, NWT, ALB.
- ♀♂ *intritum* (Bishop and Crosby, 1926). Levi, 1957d: 35, f. 110, 111, 120-122 (♀♂). GA, AL, FL.
- ♀♂ *istokpoga* Levi, 1957d: 67, f. 235, 236, 247, 248 (♀♂). FL.



Figs. 19-33.—Theridiids with colulus between spinnerets replaced by two setae: 19, Spinnerets with two colulus setae; 20, *Phoroncidia americana* (Emerton), female; 21, *Spintharus flavidus* (Hentz), female; 22, *Episinus amoenus* (Banks), female, 23, *Chrosiothes jocosa* (Gertsch and Davis), female; 24, *Chrosiothes minuscula* (Gertsch), female; 25, *Chrosiothes jocosa* (Gertsch and Davis), left male palpus; 26, *Stemmops bicolor* O.P.-Cambridge, female; Figs. 27, 28.—*Tekellina archboldi* Levi: 27, Female; 28, Left male palpus; 29, *Styposis ajo* Levi, female carapace; 30, *Pholcomma carota* Levi, female; 31, *Pholcomma hirsuta* Emerton, eye region and chelicerae of female; Figs. 32, 33.—*Anelosimus studiosus* (Hentz): 32, Female; 33, Left chelicera, posterior view.

Scale lines, 1 mm.

- ♀ *kawea* Levi, 1957d: 48, f. 118, 119 (♀). UT, CA, CHI.
- ♀♂ *lawrencei* Gertsch and Archer, 1942. Levi, 1957d: 71, f. 257-260 (♀♂). ID, WA, OR, CA.
- ♀♂ *leechi* Gertsch and Archer, 1942. Levi, 1957d: 74, f. 267, 268, 290, 291 (♀♂). BCA to CO to CA.
- ♀♂ *llano* Levi, 1957d: 28, f. 77-80 (♀♂). TX.
- ♀ *lowriei* Barrows, 1945. Levi, 1957d: 98, f. 353 (♀). TN.
- ♀♂ *lyricum* Walckenaer, 1841. Levi, 1957d: 89, f. 322, 323, 329-331 (♀♂). WI to ME to FL to TX.
- ♀♂ *melanurum* Hahn, 1831. Levi, 1957d: 55, f. 181-186 (♀♂). BCA to CA, UT.
- ♀♂ *michelbacheri* Levi, 1957d: 47, f. 159-163 (♀♂). MT, WA to CA.
- ♀♂ *montanum* Emerton, 1882. Levi, 1957d: 71, f. 251-256 (♀♂). BCA to OR; ALB to NM; MAN to NEF; MN to NY; TN.
- ♀♂ *morulum* O.P.-Cambridge, 1898. Levi, 1957d: 79, f. 271, 280, 281, 296, 297, (♀♂ *jeanae*). AZ to MEX.
- ♀♂ *murarium* Emerton, 1882. Levi, 1957d: 22, f. 12, 57, 58, 61-63. So. Canada to No. MEX, throughout U.S., espec. E. U.S.
- ♀♂ *myersi* Levi, 1957d: 31, f. 95-98 (♀♂). FL, TAM, NUL.
- ♀♂ *neomexicanum* Banks, 1901. Levi, 1957d: 76, f. 269, 274, 275, 292, 293 (♀♂). BCA, W. U.S.
- ♀♂ *neshamini* Levi, 1957d: 88, f. 311, 312, 317-319 (♀♂). IL; PA to GA.
- ♀♂ *ohlerti* Thorell, 1870. Levi, 1957d: 98, f. 324, 325, 332-334. (♀♂). AK, NWT to CA; NM, QUE, Rocky Mts., Cascades.
- ♀♂ *orlando* (Archer, 1950). Levi, 1957d: 87, f. 309, 310, 315, 316 (♀♂). GA, FL, LA.
- ♀♂ *pennsylvanicum* Emerton, 1913. Levi, 1957d: 87, f. 306-308, 313, 314, 320 (♀♂). ONT; MA to FL; TN, AL, IL, MO.
- ♀♂ *petraeum* L. Koch, 1872. Levi, 1957d: 24, f. 59, 60, 64-66 (♀♂). ME, NY, MI, ND, NB; WA to CO to CA.
- ♀♂ *pictipes* Keyserling, 1884. Levi, 1957d: 77, f. 270, 278, 279, 294, 295 (♀♂). SC, AL, GA, FL.
- ♀♂ *pictum* (Walckenaer, 1802). Levi, 1957d: 50, f. 164, 165, 168-170, 173 (♀♂ *ornatum*). ALB to NOV to WI: SD to WA to UT.
- ♀♂ *positivum* Chamberlin, 1924. Levi, 1957d: 68, f. 237-239, 243-246 (♀♂). 1963c: 565, f. 177-178 (♀♂). CA, TX, TAM, BCN.
- ♀♂ *punctipes* Emerton, 1924. Levi, 1957d: 75, f. 261-266 (♀♂). WA to BCN.
- ♀♂ *punctosparsum* Emerton, 1882. Levi, 1957d: 60, f. 194, 195, 204, 217, 218, 220, 221 (♀♂). MA to NC to AR.
- ♀♂ *rabuni* Chamberlin and Ivie, 1944. Levi, 1957d: 28, f. 81-86 (♀♂). NJ to GA; SD, NB, CO, UT, TX, CA.
- ♀♂ *rufipes* Lucas, 1849. Levi, 1957d: 56, f. 188-193 (♀♂). Levi, 1967a: 179, f. 24-27 (♀♂). FL, TX.
- ♀♂ *saanichum* Chamberlin and Ivie, 1947. Levi, 1957d: 70, f. 240-242, 249, 250 (♀♂). AK to CA.
- ♂ *sarde* Chamberlin and Ivie, 1944. Levi, 1957d: 30, f. 89, 90 (♂). GA.
- ♀♂ *sexpunctatum* Emerton, 1882. Levi, 1957d: 91, f. 340-349 (♀♂). AK to CA; BCA, ALB to AZ; west of Rocky Mts.; MAN; ONT to NEF to NC; Appalachian Mts.
- ♀♂ *simile* C. L. Koch, 1936. Levi, 1957d: 53, f. 179, 180, 187 (♀♂). BCA, WA.
- ♀♂ *submissum* Gertsch and Davis, 1936. Levi, 1957d: 38, f. 116, 117 (♂); 1959c: 84, f.



Figs. 34-46.—*Euryopis* and *Dipoena*: Figs. 34, 35.—*Euryopis funebris* (Hentz), female, left chelicera: 34, Anterior view; 35, Posterior view; Figs. 36, 37.—*Dipoena nigra* (Emerton), left female chelicera: 36, Anterior view; 37, Posterior view; 38, *Euryopis flavomaculatis* (C. L. Koch), seminal receptacles, dorsal view; 39, *Dipoena melanogaster* (C. L. Koch), seminal receptacles, dorsal view; Figs. 40-42.—Females: 40, *Euryopis taczanowskii* Keyserling; 41, *Euryopis emertoni* Bryant; 42, *Euryopis funebris* (Hentz); 43, *Euryopis emertoni* Bryant, left male palpus expanded and cleared; 44, *Dipoena atopa* (Chamberlin), left male palpus; 45, 46, *Dipoena alta* (Keyserling), male carapace.

Figs. 47-55.—Theridiids without colulus between anterior spinnerets: 47, Spinnerets without colulus; Figs. 48-50.—*Tidarren sisyphoides* (Walckenaer): 48, Left male palpus, expanded; 49, Female abdomen from side; 50, Epigynum, lateral view; Figs. 51-53.—*Achaearanea* female abdomen from side: 51, *A. globosa* (Hentz); 52, *A. tepidariorum* (C. L. Koch); 53, *A. ambera* Levi; Figs. 54, 55.—*Achaearanea* left male palpus: 54, *A. globosa*, expanded; 55, *A. tepidariorum* (C. L. Koch).

Scale lines, 1 mm.

*Abbreviations.* C, conductor; E, embolus; M, median apophysis; P, paracymbium; R, radix; T, tegulum.

89-90 (♀). TX, NM, AZ, SON, CHI.

♀ *timpanogos* Levi, 1957d: 31, f. 93, 94 (♀). UT.

♀♂ *tinctum* (Walckenaer, 1802). Levi, 1957d: 61, f. 200, 201, 210-212 (♀♂). OR, WA.

♀♂ *transgressum* Petrunkevitch, 1911. Levi, 1957d: 47, f. 154, 157, 158 (♀♂). CO, UT, NM, AZ, CHI.

♀♂ *varians* Hahn, 1831. Levi, 1957d: 52, f. 175-178 (♀♂). BCA, WA.

♂ *yuma* Levi, 1963c: 535, f. 42-43 (♂). AZ.

*Theridula* Emerton, 1882. Levi, 1954c (Revision); 1966 (Key)

Type species: *T. sphaerula* (Hentz)

♀♂ *emertoni* Levi, 1954c: 333, f. 1-5 (♀♂). ONT to WI to CT to NEF; WV, TN.

♀♂ *gonygaster* (Simon, 1873). Levi, 1954c: 340, f. 18-22 (♀♂). FL, AZ.

♀♂ *opulenta* (Walckenaer, 1837). Levi, 1954c: 334, f. 9-13. NY to FL to TX; MO, UT, OR.

*Thymoites* Keyserling, 1884. Levi, 1957d (Rev. *Paidisca*); 1959c (Rev. *Sphyrotinus*); 1964a (Key).

Type species: *T. crassipes* Keyserling

♀♂ *camano* (Levi, 1957). Levi, 1957d: 105, f. 367-373 (♀♂ *Paidisca*). UT, WA to CA.

♀♂ *expulsus* (Gertsch and Mulaik, 1936). Levi, 1957d: 109, f. 400, 416, 417 (♀♂ *Paidisca*); 1959c: 146, f. 365-366 (♀♂ *Sphyrotinus*). NC to FL to TX; CA, TAM, NUL.

♀♂ *illudens* (Gertsch and Mulaik, 1936). Levi, 1957d: 110, f. 396, 399, 414, 415 (♀♂ *Paidisca*). TX, TAM, NUL.

♀♂ *maderae* (Gertsch and Archer, 1942). Levi, 1957d: 106, f. 397, 398, 420, 421 (♀♂ *Paidisca*); 1959c: 147, f. 350-356 (♀♂ *Sphyrotinus*). AZ, CHI, NUL.

♀♂ *marxi* (Crosby, 1906). Levi, 1957d: 111, f. 393-395, 401, 418, 419 (♀♂ *Paidisca*); 1959c: 148, f. 363-364 (♀ *Sphyrotinus*). CT to TX to FL; MO.

♀♂ *minnesota* Levi, 1957d: 81, f. 272, 282, 283 (♀ *Theridion pretense*); 1964a: 467, f. 74-76 (♂). MN, MI.

♀♂ *missionensis* (Levi, 1957). Levi, 1957d: 102, f. 380-383 (♀♂ *Paidisca*). TX.

♀♂ *pallidus* (Emerton, 1913). Levi, 1957d: 99, f. 358-366 (♀♂ *Paidisca*); 1959c: 158. MA, RI, NY, TN, NC to FL to TAM, CO, UT, CA.

♀♂ *pictipes* (Banks, 1904). Levi, 1957d: 102, f. 374-379 (♀♂ *Paidisca*). WA to AZ.

♀ *sarasota* (Levi, 1957). Levi, 1957d: 105, f. 402-405 (♀ *Paidisca*). FL.

♀ *sclerotis* (Levi, 1957). Levi, 1957d: 104, f. 384-387 (♀ *Paidisca*). NM.

♀♂ *unimaculatus* (Emerton, 1882). Levi, 1957d: 106, f. 388-392, 406-413 (♀♂ *Paidisca*). ME, QUE, ONT to MN; NY, MA to FL to TX.

*Tidarren* Chamberlin and Ivie, 1934. Levi, 1955b (Revision).

Type species: *T. sisypoides* (Walckenaer)

♀♂ *haemorrhoidale* (Bertkau, 1884). Levi, 1955b: 73, f. 49-57, 61-64 (♀♂ *fordum*). FL to CA; TAM.

♀♂ *sisypoides* (Walckenaer, 1841). Levi, 1955b: 70, f. 41-45, 58-60. KY; FL to TX, TAM, NUL, AZ, CA, BCN.

#### SYNONYMS OF NORTH AMERICAN THERIDIID GENERA AND SPECIES WHOSE NAME CHANGED SINCE FIRST REVISION

*appalachia*, *Dipoena* = *Dipoena dorsata*

*Archerius* = *Comaroma*

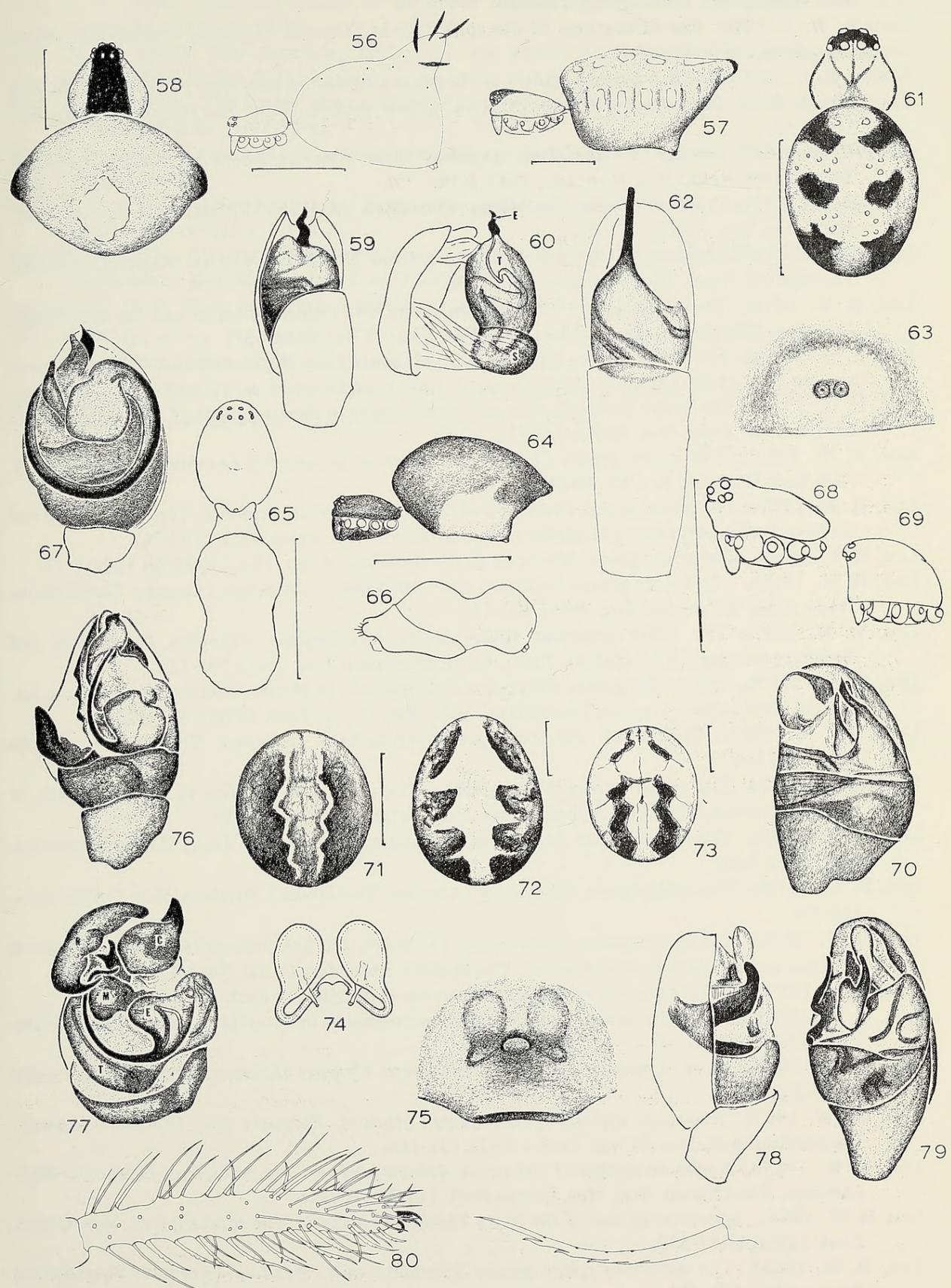
*Arctachaea* = *Chrysso*  
*barrowsi*, *Theridiotis* = *Chrosiothes silvaticus*  
*bryantae*, *Euryopis* = *Euryopis quinquemaculata*  
*clementinae*, *Chrysso* = *Chrysso pulcherrima*  
*Coressa* = *Theonoe*  
*Ctenium* = *Robertus*  
*curacaviensis*, — Levi, 1959a, *Latrodectus* = *Latrodectus variolus*  
*daltoni*, *Dipoena* = *Dipoena atopa*  
*florens*, — Levi, 1955, *Achaearanea* = *A. florendida*  
*fordum*, — Levi, 1956, *Tidarren* = *Tidarren haemorrhoidale*  
*goecharis*, *Achaearanea* = *A. acoreensis*  
*hamata*, *Dipoena* = *Dipoena prona*  
*hobbsi*, *Theridion* = *Theridion adamsoni*  
*intervallatum*, *Theridion* = *Theridion crispulum*  
*jeanae*, *Theridion* = *Theridion morulum*  
*limbata*, *Euryopis* = *Euryopis funebris*  
*lineatipes*, *Dipoena* = *Dipoena alta*  
*Neottiura* = *Theridion*  
*nigripes*, *Euryopis* = *Euryopis taczanowskii*  
*ornatum*, *Theridion* = *Theridion pictum*  
*Oronota* = *Phoroncidia*  
*Paidisca* = *Thymoites*  
*pretense*, — Levi, 1957, *Theridion* = *Thymoites minnesota*  
*probabilis*, *Theridiotis* = *Chrosiothes silvaticus*  
*quadrimaculata*, *Paratheridula* = *Paratheridula perniciosa*  
*septemmaculata*, *Steatoda* = *Steatoda erigoniformis*  
*Sphyrotinus* = *Thymoites*  
*Theridiotis* = *Chrosiothes*  
*variabilis*, — Levi, *Euryopis* = *Euryopis varis*



Figs. 56-80.—Theridiids without colulus: 56, *Chrysso pulcherrima* (Mello-Leitão), female, 57, *Chrysso albomaculata* O.P.-Cambridge, female; Figs. 58-60.—*Theridula emertoni* Levi: 58, Female; 59, Left male palpus; 60, Left male palpus, expanded; Figs. 61-63.—*Paratheridula perniciosa* (Keyserling): 61, Female; 62, Left male palpus; 63, Epigynum; Figs. 64-66.—*Coleosoma acutiventer* (Keyserling): 64, Female; 65, 66, Male; 67, *Coleosoma normale* Bryant, left male palpus; 68, *Thymoites illudens* (Gertsch and Mulaik), male carapace; 69, *Thymoites maderae* (Gertsch and Archer), male carapace; 70, *Thymoites expulsa* (Gertsch and Mulaik), left male palpus; Figs. 71-73.—*Theridion* female abdomens: 71, *T. differens* Emerton; 72, *T. pictum* (Walckenaer); 73, *T. pictipes* Keyserling; Figs. 74-77.—*T. pictum* (Walckenaer): 74, Seminal receptacles, dorsal view; 75, Epigynum; 76, Left male palpus; 77, Palpus expanded; Figs. 78, 79.—*Theridion neomexicanum* Banks, left male palpus: 78, Mesal view; 79, Ventral; 80, Fourth leg of *Steatoda borealis* with comb setae and a comb seta.

Scale lines, 1 mm.

Abbreviations. C, conductor; E, embolus; M, median apophysis; P, paracymbium; R, radix; T, tegulum.





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