# PSEUDOSCORPIONS FROM FLORIDA. 3. *EPACTIOCHERNES*, A NEW GENUS BASED UPON *CHELANOPS TUMIDUS* BANKS (CHERNETIDAE)[1]

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ABSTRACT

The genus *Epactiochernes* is defined, with *Chelanops tumidus* Banks, from Florida, as the type species. Also placed in the genus are *Chelanops tristis* Banks, from New England, and *Epactiochernes insularum*, new species, from Puerto Rico, Cuba and Jamaica.

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Since the detailed report by Hoff (1947), *Chelanops tristis* Banks (1891) and *Chelanops tumidus* Banks (1895) have been assigned to the genus *Dinocheirus*, mainly because of the occurrence of 4 setae in the cheliceral flagellum and a tactile seta on the fourth pedal tarsus. As I have mentioned elsewhere (1974a, 1974b), recent study has shown that these 2 species have other characters which clearly set them apart from the species of *Dinocheirus*. As far as I can discover, they can not be assigned properly to any other known genus. Therefore, a new genus is defined to include the 2, as well as a new species described below.

*Epactiochernes*, new genus

Type species: *Chelanops tumidus* Banks, 1895.

Diagnosis: A genus of the family Chernetidae. Only moderately heavily sclerotized and, as a result, carapace and palps light brown and other parts much paler. Carapace longer than broad; with 2 distinct transverse furrows and 2 very faint eyespots. Tergites 1-10 and sternites 4-10 divided. Surfaces of carapace, abdominal tergites and palps lightly granulate; pleural membranes and interscutal membranes of abdomen heavily papillose. Vestitural setae of dorsal surfaces usually terminally broadened and denticulate, most ventral setae acuminate; setae of spiracular plates and anal plates acuminate; eleventh tergite with 2, and eleventh sternite with 4, long, acuminate tactile setae; carapace with about 60 setae; tergites with 8-12 setae per segment; sternites 5-8 or 9 with many setae (up to 20 on sternite 5), having elevated bases and characteristically arranged, with clusters at lateral and medial ends of sternal halves. Cheliceral hand with 5 setae, all acuminate except *sb*, which is finely denticulate terminally; flagellum of 4 setae, including 2 long ones distally and 2 short ones proximally, all usually with some denticulation;

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galea of female very well developed with about 6 prominent rami, that of male as well or less well developed. Palps rather robust, palpal chela of male usually stouter (sometimes markedly) than that of female; venom apparatus well developed in movable chelal finger, vestigial in fixed finger; both fingers with accessory teeth, male usually with more internal than external and female usually with more external than internal; trichobothrium *st* of movable finger closer to *t* than to *sb* and near middle of finger; trichobothrium *ist* of fixed finger at or a little distal to level of *est,* both near middle of finger; tarsus of each leg with an elevated slit sensillum on extensor margin near proximal end; tarsus of leg III and IV with a long, erect, tactile seta just distad of middle of segment; male anterior genital operculum with a loose cluster of about 15 setae, including 3 long, heavy ones medially, and posterior operculum with 2 small setae on either side beneath middle of anterior margin and about 15 larger setae on face; internal genitalia of male without obvious special features; anterior operculum of female with a ∩-shaped group of about 15 setae and posterior operculum with a single marginal row of 12-14 setae; female with paired spermathecae in form of very delicate, short, narrow, gently curved tubules.

Etymology: The genus is named for the fact that its representatives are usually found on the seashore (GR. *epaktios*).

Remarks: Representatives of *Epactiochernes* are superficially much like those of *Dinocheirus,* in their general conformation, in the possession of 5 setae on the cheliceral hand and of 4 setae in the flagellum, and in the occurrence of a long, acuminate tactile seta on the tarsus of the fourth leg. The differences, though not spectacular, are, nevertheless, quite distinctive. Firstly, the tarsal tactile seta in *Dinocheirus* is located some distance distad of the middle of the segment and is distinctly oblique to the transverse axis, inclined toward the tip of the leg, while that in *Epactiochernes* is barely distad of the middle and very nearly perpendicular to the long axis of the tarsus. [No doubt it was this character which led Beier (1932) to suggest that *C. tristis* might belong in the genus *Pselaphochernes.*] Secondly, in *Epactiochernes* the setae of sternites 5-8 or 9 are set in elevated bases and are more or less clustered toward the lateral and medial ends of the sternal halves; this is not known to occur in *Dinocheirus.* Thirdly, and perhaps most distinctive, the spermathecae of the 2 are quite different, those of *Dinocheirus* being well developed, long, looped tubules with expanded ends, while those of *Epactiochernes* are delicate, short, and of uniform diameter throughout.

Some other Central and South American pseudoscorpions in my collection share many of the characteristics of *Epactiochernes* but have peculiarities of their own. They may prove to belong to some already named, but poorly defined, genus or may represent yet another new one.

*Epactiochernes tumidus* (Banks), new combination
Fig. 1-11

*Chelanops tumidus* Banks, 1895, p. 7.
*Dinocheirus tumidus*: Beier, 1932, p. 139; Hoff, 1947, p. 529; 1958, p. 26; Weygoldt, 1966, p. 462; 1969, p. 114.

Though the description of the male given by Hoff (1947) is quite detailed, it seems advisable to give here a complete description of the species as now known, because it is the type species of the new genus.

Material examined: Lectotype male and 2 paratypes, male and female, from Indian River Inlet, St. Lucie County, Florida [Museum of Comparative Zoology, Harvard]; 1 male from beach, under board, Pepper Park, Fort Pierce, St. Lucie County, on 10 May 1965, by L. L. Pechuman; 12 males and 4 females from under boards at tide line, Fort Pierce, St. Lucie County, on 17 March 1958, by M. H. Muma; 1 female from Cocoa Beach, Brevard County, Florida, on 23 February 1936; 7 males and 2 females from under wood at the drift line on Big Pine Key, Monroe County, Florida, 30 December 1965, by P. Weygoldt; 24 males and 8 females in drift on beach at Beaufort, Carteret County, North Carolina, March and April 1966, by P. Weygoldt.

Description of male (including lectotype and 8 mounted specimens from St. Lucie County, Florida): Carapace, palps and tergites light reddish brown, other parts paler. Carapace a little longer than broad; with 2 distinct transverse furrows and 2 indistinct eyespots; surface nearly smooth medially, but granulate toward the sides; with about 60 terminally dentate, vestitural setae, of which 4 are at anterior margin and usually 8 at posterior margin. Tergites 1-10 and sternites 4-10 divided; surfaces of tergites lightly granulate, of sternites smooth; interscutal and pleural membranes strongly papillose; most dorsal setae terminally broadened and denticulate, most ventral ones acuminate. Tergal chaetotaxy of lectotype 8:7:6:9:9:8:9:10:11:10:T6T:2; others similar but varied. Sternal chaetotaxy of lectotype 15:(3)$\frac{2\text{-}2}{14}$(3):(1)6(1):23:16:15:15:12:12: $\frac{TT}{T47}$:2;others varied, usually with more setae on sternites 5 and 6; setae on anterior genital operculum range 14-17, including usually 3 (rarely 4) longer and heavier ones in the middle (Fig. 1); notable are the clusters of setae at lateral and medial ends of each sternal half on segments 5-8 or 9 (Fig. 2); setae on spiracular and anal plates acuminate. Internal genitalia of usual chernetid type, well sclerotized and distinct. Coxal area generally typical.

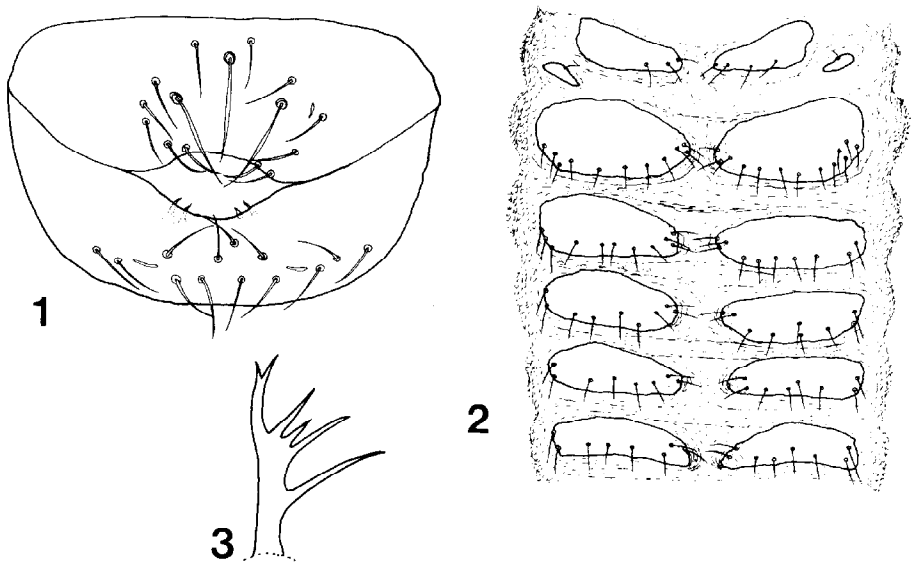


Fig. 1-3. *Epactiochernes tumidus* (Banks): 1. Genital opercula of male; 2. Sternites of abdominal segments 4-9; 3. Cheliceral galea of male.

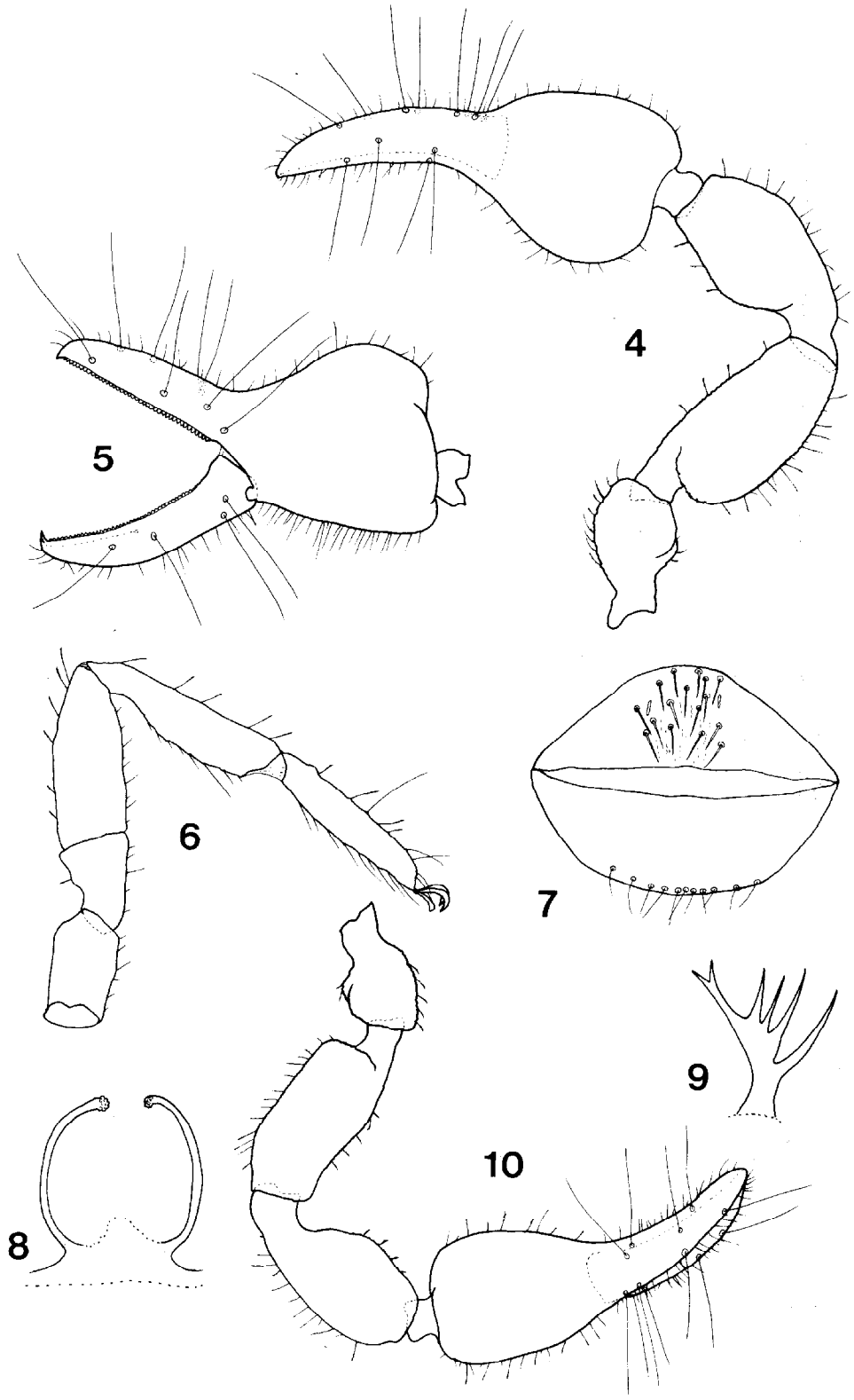


Fig. 4-10. *Epactiochernes tumidus* (Banks): 4. Dorsal view of right palp of male; 5. Lateral view of left chela of male; 6. Lateral view of leg IV; 7. Genital opercula of female; 8. Spermathecae of female; 9. Cheliceral galea of female; 10. Dorsal view of right palp of female.

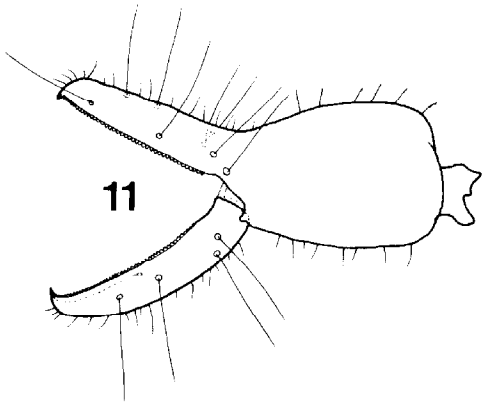


Fig. 11. *Epactiochernes tumidus* (Banks): Lateral view of left chela of female.

Chelicera generally typical of the family; 0.35-0.40 as long as carapace; hand with 5 setae, *sb* terminally denticulate, *b* and *es* acuminate; flagellum of 4 setae, 2 large distal and 2 small proximal, all denticulate; galea large, usually with 6 prominent rami (Fig. 3).

Palp rather robust, with chelal hand usually much deeper than broad (Fig. 4 and 5); femur 2.3-2.6, tibia 2.0-2.15, and chela (without pedical) 2.25-2.45 times as long as broad; hand (without pedicel) 1.00-1.10 times as long as deep; movable finger 1.08-1.25 times as long as hand. Surfaces more or less granulate, except chelal fingers; most setae terminally broadened and denticulate. Trichobothria as indicated in Fig. 5. Fixed finger with 41-50 contiguous, cusped marginal teeth, and 2-3 external and 3-6 internal accessory teeth; movable finger with 42-50 similar marginal teeth, and 1-3 external and 3-5 internal accessory teeth; movable finger with well developed venedens and venom duct, nodus ramosus proximal to trichobothrium *t*; terminal tooth of fixed finger reduced and with vestigial venom duct.

Legs typical in form, rather slender; leg IV (Fig. 6) with entire femur 3.75-4.1 times as long as deep. Each tarsus with a prominent slit sensillum near proximal end; subterminal tarsal setae curved, simple. Tactile seta on tarsus of leg IV long, erect, and usually just distad of middle of segment.

Female (based on 5 mounted specimens from St. Lucie County, Florida): Similar to male in most respects, but palpal chela clearly less robust. Genital opercula as shown in Fig. 7; anterior operculum with 11-16 setae on face, posterior operculum with 9-12 setae along margin. Spermathecae delicate and often difficult to make out or lost entirely; as shown in Fig. 8. Cheliceral galea only slightly better developed than in male (Fig. 9). Palp much as in male with exception of chelal hand (Fig. 10 and 11); femur 2.35-2.6, tibia 2.0-2.22, and chela (without pedicel) 2.5-2.7 times as long as broad; hand (without pedicel) 1.25-1.35 times as long as deep; movable finger 1.10-1.12 times as long as hand. Fixed finger with 43-48 and movable finger with 42-48 marginal teeth; fixed finger with 3-5 external and 1-2 internal, and movable finger with 3-6 external and 1-3 internal accessory teeth.

Measurements (mm): Male (ranges for the 9 mounted specimens): Body length 1.83-2.35. Carapace length 0.585-0.725. Chelicera 0.215-0.25 by 0.11-0.13. Palpal trochanter 0.295-0.325 by 0.17-0.215; femur 0.48-0.585 by 0.19-0.245; tibia 0.435-0.525 by 0.21-0.265; chela (without pedicel) 0.76-0.96 by 0.33-0.42; hand (without pedicel) 0.38-0.465 by 0.355-0.46; pedicel about 0.075 long; movable finger 0.42-0.52 long. Leg IV: entire femur 0.43-0.53 by 0.11-0.13; tibia 0.34-0.42 by 0.08-0.095; tarsus 0.295-0.36 by 0.06-0.065.

Female (ranges for the 5 mounted females): Body length 2.07-2.50. Carapace length 0.66-0.71. Chelicera 0.23-0.25 by 0.11-0.125. Palpal trochanter 0.32-0.34 by 0.18-0.21; femur 0.48-0.55 by 0.20-0.23; tibia 0.445-0.52 by 0.215-0.25; chela (without pedicel) 0.79-0.93 by 0.29-0.355; hand (without pedicel) 0.385-0.46 by 0.295-0.36; pedicel about 0.075 long; movable finger 0.435-0.52 long. Leg IV: entire femur 0.495-0.525 by 0.12-0.13; tibia 0.37-0.415 by 0.08-0.09; tarsus 0.31-0.35 by 0.06-0.065.

Remarks: It is obvious that there is considerable variation in the measurements and proportions of the specimens described above, all from beaches in St. Lucie County, Florida. Other specimens from Florida beaches, notably from Big Pine Key, are generally similar in qualitative characters, but on the average are slightly smaller and have less robust appendages. Also, the specimens from Beaufort, North Carolina, are generally similar, but are slightly larger and have less robust appendages. It is doubtful that these differences are specific in nature; they probably only represent populational variation and may largely disappear when greater numbers of specimens become available for study.

All specimens considered above were found at the drift line on ocean beaches. A few other specimens are at hand which are certainly congeneric with the material of *E. tumidus,* but which show certain distinct differences and which were collected away from the coast in Florida—from palmetto, on bougainvillea, in pine compost, and in a McPhail trap in a sapodilla tree. Because of the small numbers of specimens, it is impossible to decide at present whether or not the morphological and ecological differences indicate the presence of additional species.

It is interesting to note that among those specimens taken from beaches, the cheliceral galea of males is nearly as large and complex as that of females. On the other hand, in the 2 males taken on bougainvillea and from a McPhail trap in a sapodilla tree (presumably not on a beach), the galea is much reduced in length and in the number and size of rami present, as is usual in chernetids (unfortunately, no females accompanied these males). It is generally accepted that the galea is a spinneret from which the pseudoscorpion spins out the silk used to fashion a protective chamber ("cocoon"). Such chambers are known to be used by nymphs during molting and by adult females during brooding. The reduced galea of most chernetid males may indicate that they seldom, if ever, produce silken chambers; and so it may be with the male *Epactiochernes* taken from trees. However, the well developed galeas of seashore males suggest very strongly that these animals actively spin silk, possibly to make chambers to protect them from the tides.

A puzzling sexual dimorphism may be seen in the distribution of accessory teeth on the chelal fingers. In most males there are more internal (3-6) than external (1-3) accessory teeth on each finger, while in most females the reverse is true, that is, there are more external (3-6) than internal (1-3) accessory teeth. I can think of no plausible explanation for this state of affairs.

It should also be noted that Weygoldt has reported extensively on the ecology and courtship and mating behavior of this species from North Carolina, under the name of *Dinocheirus tumidus* (1966, 1969).

*Epactiochernes tristis* (Banks), new combination
Fig. 12

*Chelanops tristis* Banks, 1891, p. 163; 1895, p. 7.
*Pselaphocernes*(?) *tristis*: Beier, 1932, p. 134.
*Dinocheirus tristis*: Hoff, 1947, p. 532; 1958, p. 26; Weygoldt, 1966, p. 462; 1969, p. 114.

Material examined: Lectotype male and 2 paratypes (2 males, 3 females) "on the sea shore of Long Island" at Sea Cliff, Nassau County, New York, June 1889 [Museum of Comparative Zoology, Harvard]; 1 female from Todd's Point, Old Greenwich, Fairfield County, Connecticut, 28 August 1970, by C. H. Alteri; 2 males, 2 females and 1 tritonymph from Cape Cod, Barnstable County, Massachusetts, in July and August 1967-70, by W. J. Wall.

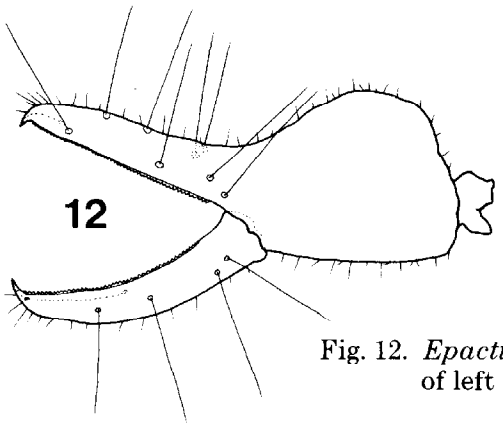


Fig. 12. *Epactiochernes tristis* (Banks). Lateral view of left chela of male.

The description by Hoff (1947) is excellent in most respects and only needs some supplementation.

Diagnosis: Similar to *E. tumidus* in most respects but on the average smaller and with less robust palps.

Male: Carapace distinctly longer than broad, with 2 obvious transverse furrows; vestitural setae total about 60-70, with 4 at anterior and 6-8 at posterior margin. Tergal chaetotaxy of lectotype 8:9:9:12:12:12:12:12:15:-12:T9T:2; others similar but varied. Sternal chaetotaxy of lectotype 15:-(3)$\frac{2\text{-}2}{17}$(3):(1)9(1):27, 24:19:21:18:14:$\frac{TT}{T4T}$:2, anterior genital operculum with 3 long, heavy setae in center of 12 smaller ones; as in *E. tumidus,* setae on sternal halves of segments 5 to 8 or 9 clustered at lateral and medial edges; setae of spiracular and anal plates acuminate. Cheliceral hand with 5 setae; *sb* finely denticulate terminally, *b* and *es* acuminate. Dorsal aspect of palp as shown by Hoff (1947, Fig. 31), lateral view shown here in Fig. 12. Hand of chela usually a little deeper than broad; femur 2.5-2.8, tibia 2.0-2.25, chela (without pedical) 2.6-2.9 times as long as broad; hand (without pedicel) 1.1-1.35 times as long as deep; movable finger 1.10-1.24 times as long as hand. Fixed finger with 41-48 and movable finger with 42-48

marginal teeth; each finger with 2-4 external and 2-5 internal accessory teeth. Leg IV with entire femur 3.8-4.3 times as long as deep; tarsus with long, erect, tactile seta just distad of middle of segment.

Female: Quite similar to male but larger and with slightly more slender appendages. Anterior genital operculum with 14-18 setae and posterior operculum with 9-13 setae, arranged as in *E. tumidus;* spermathecae essentially as shown for *E. tumidus* (Fig. 8). Cheliceral galea only slightly better developed than that of male. Palpal femur 2.5-2.7, tibia 2.15-2.3, and chela (without pedicel) 2.9-3.3 times as long as broad; hand (without pedicel) 1.45-1.6 times as long as deep; movable finger 1.09-1.16 times as long as hand. Fixed chelal finger with 43-50 and movable finger with 44-53 marginal teeth; both fingers usually with 3-6 external and 1-2 internal accessory teeth.

Measurements (mm): Male (ranges for 5 specimens, including the lectotype): Body length 1.70-2.03. Carapace length 0.55-0.62. Palpal femur 0.41-0.52 by 0.16-0.19; tibia 0.365-0.47 by 0.185-0.21; chela (without pedicel) 0.70-0.875 by 0.24-0.33; hand (without pedicel) 0.35-0.43 by 0.265-0.36; movable finger 0.385-0.49 long. Leg IV: entire femur 0.37-0.46 by 0.09-0.12; tibia 0.285-0.36 by 0.07-0.08; tarsus 0.235-0.31 by 0.055-0.065.

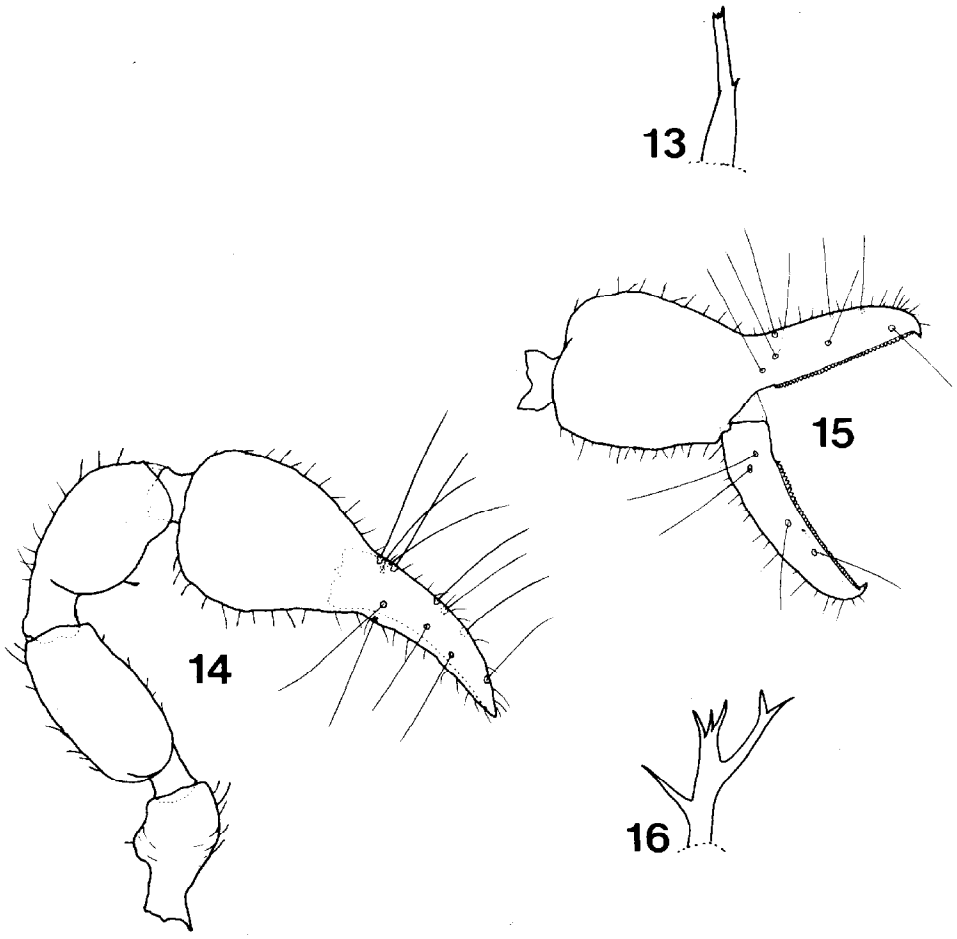


Fig. 13-16. *Epactiochernes insularum,* new species: 13. Cheliceral galea of holotype male; 14. Dorsal view of left palp of male; 15. Lateral view of right chela of male; 16. Cheliceral galea of female.

Female (ranges for 6 specimens): Body length 1.90-2.63. Carapace length 0.60-0.705. Palpal femur 0.46-0.555 by 0.17-0.21; tibia 0.435-0.49 by 0.19-0.22; chela (without pedicel) 0.79-0.90 by 0.26-0.31; hand (without pedicel) 0.385-0.44 by 0.265-0.295; movable finger 0.445-0.50 long. Leg IV: entire femur 0.435-0.54 by 0.105-0.125; tibia 0.33-0.42 by 0.075-0.09; tarsus 0.30-0.36 by 0.60-0.065.

Remarks: *Epactiochernes tristis* is quite similar to *E. tumidus* in most, obvious respects, but it does appear to be different in its smaller average size and less robust palps, particularly in the males. However, there still remains the possibility that further study of *Epactiochernes* populations along the Atlantic coast will prove that these 2 apparent species are, in fact, only 1.

The New England populations called *tristis* were probably established originally by rafting northward along the coast from some more southerly source (Lee 1972). Living as they do under and in driftwood at the tideline on Atlantic Ocean beaches, individuals might relatively frequently be washed out to sea by strong storms and hurricanes. Female pseudoscorpions in particular might easily survive a long period at sea, for it is believed that females carrying eggs or young retire to crevices, in which they surround themselves with protective chambers of silk. Because the general trend of many Atlantic storms and hurricanes and of the Gulf Stream is northward, it is quite conceivable that such females (potential founders) would have been transported many times from Florida or the West Indies to North Atlantic shores. In this manner, a number of derivative populations might have been established, each more or less isolated from the others because of the low vagility of the animals under normal conditions. If this has happened over a long period of time, it seems quite possible that some of the populations have developed into new species (Carson 1970). Thus, *E. tristis* may well be specifically distinct from *E. tumidus* even though the gross morphological differences do not appear great.

*Epactiochernes insularum,* new species
Fig. 13-16

Material: Holotype male (WM 927.01001) and paratype female from Ahogado Key, Puerto Rico, 21 September 1965, by R. Levins and F. McKenzie; 2 tritonmymphs from same place on 17 December 1964 and 31 August 1966; 1 paratype male from Paradise Key, off Pinar del Rio, Cuba, 11 January, 1965, by R. Levins and G. Silva; 1 paratype male from Jackson Bay, Clarendon Parish, Jamaica, 21 December 1972, by S. B. Peck.

Diagnosis: A small species of the genus, having length of palpal femur 0.46 mm or less, and with chela less robust than in *E. tumidus.*

Description of male: With the characters of the genus as outlined above. Carapace and palps light reddish brown, other parts paler. Carapace distinctly longer than broad; with 2 distinct transverse furrows and 2 very faint eyespots; surface definitely, but not heavily granulate; with about 60 terminally broadened, dentate vestitural setae. Surfaces of abdominal tergites lightly granulate, of sternites smooth; interscutal and pleural membranes strongly papillose. Tergal chaetotaxy of holotype 9:9:7:8:9:10:9:11:8:10:T6T:2; sternal chaetotaxy 15:(3)$\frac{2\text{-}2}{14}$(3):(1)7(1):24:18:15:17:15:12:$\frac{TT}{T2T}$:2; paratypes similar but varied; anterior genital operculum with 3 long, heavy setae in middle of 12 smaller ones; with characteristic grouping of setae medially and laterally on each sternal half; setae of spiracular and anal places acuminate. Internal genitalia apparently typical.

Chelicera slightly more than one-third as long as carapace; hand with 5 setae, *sb* finely denticulate terminally, *b* and *es* acuminate; flagellum of 4 setae, all denticulate; galea of holotype small, with few small spinules (Fig. 13); galea of paratype from Jamaica similar, but that of paratype from Paradise Key larger and with longer rami, much as in female.

Palp moderately robust, with chelal hand slightly deeper than broad (Figs. 14 and 15). Femur 2.5-2.7, tibia 2.0-2.1, and chela (without pedicel) 2.55-2.7 times as long as broad; hand (without pedicel) 1.2 times as long as deep; movable finger 1.15-1.17 times as long as hand. Surfaces generally rough, distinctly granulate on trochanter and medial faces of femur, tibia and chelal hand; most setae denticulate, many terminally broadened. Trichobothria positioned as in Fig. 15. Fixed finger with 39-46 marginal teeth, and 1-3 external and 4-6 internal accessory teeth; movable finger with 42-45 marginal, 3-4 external and 3 internal accessory teeth; only movable finger with well developed venedens and venom duct, nodus ramosus just distal to level of trichobothrium *st*; fixed finger with reduced terminal tooth and vestigial venom duct.

Legs typical, rather slender; femur of leg IV 3.7-3.9 times as long as deep. Tactile seta on tarsus of leg IV long, erect, about 0.6 length of segment from proximal end.

Female: Quite similar to male in most general respects. Anterior genital operculum with 15 setae on face, posterior operculum with 10 along margin. Spermathecae delicate and difficult to make out, but apparently similar to those of *E. tumidus*. Cheliceral galea larger and more branched than in holotype male (Fig. 16). Palp much as in male, except for less robust chelal hand; femur 2.45, tibia 2.15, and chela (without pedicel) 2.75 times as long as broad; hand (without pedicel) 1.4 times as long as deep, movable finger 1.12 times as long as hand. Fixed finger with 44 marginal, and 5 external and 2 internal accessory teeth; movable finger with 47 marginal, and 3 external and 1 internal accessory teeth.

Tritonymph: Much like the adults in general aspects, but with the usual differences in size, proportions and chaetotaxy. Cheliceral galea relatively large and well branched, as in female.

Measurements (mm): Male (ranges for the holotype and 2 paratypes): Body length 1.71-1.80. Carapace length 0.55-0.58. Chelicera 0.20-0.215 by 0.095-0.105. Palpal trochanter 0.27-0.30 by 0.155-0.18; femur 0.435-0.46 by 0.165-0.185; tibia 0.40-0.415 by 0.19-0.21; chela (without pedicel) 0.71-0.785 by 0.26-0.295; hand (without pedicel) 0.35-0.39 by 0.295-0.33; movable finger 0.41-0.445 long. Leg IV: entire femur 0.39-0.435 by 0.105-0.115; tibia 0.30-0.35 by 0.075-0.08; tarsus 0.26-0.29 by 0.055-0.06.

Female: Body length 1.80. Carapace length 0.58. Chelicera 0.215 by 0.11. Palpal trochanter 0.295 by 0.16; femur 0.445 by 0.18; tibia 0.41 by 0.19; chela (without pedicel) 0.74 by 0.27; hand (without pedicel) 0.37 by 0.265; movable finger 0.415 long. Leg IV: entire femur 0.42 by 0.105; tibia 0.34 by 0.075; tarsus 0.27 by 0.055.

Tritonymph: Body length 1.40-1.46. Carapace length 0.445-0.465. Palpal femur 0.29-0.305 by 0.135; tibia 0.275-0.29 by 0.15; chela (without pedical) 0.525-0.535 by 0.19-0.20; hand (without pedicel) 0.265 by 0.20-0.205; movable finger 0.28 long.

Etymology: The species is named *insularum* in reference to its occurrence on islands.

Remarks: Two females belonging to *Epactiochernes* are at hand from Jefferson County, Florida. They are of the same size and proportions as the female of *E. insularum* but appear to differ from this species in several respects. Because they were found in litter away from the seashore and are smaller than any known specimens of *E. tumidus*, they also appear to differ from that species. For the present, therefore, they remain undetermined, until further material becomes available for comparison.

It was noted above that certain male specimens otherwise generally similar to *E. tumidus* have much reduced cheliceral galea. Similarly, the galeas are reduced in the males of *E. insularum* from Ahogado Key and Jamaica, but not in the male from Paradise Key. Unfortunately, no ecological data are available for any of these specimens, so it is not known whether there is a correlation between size of galea and the environment in which the creatures live. In this case, all specimens have been considered conspecific because of the great similarities in all other features; but it does remain possible that 2 separate species are present.

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