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A REVIEW OF THE CHIRODISCINAE WITH DESCRIPTIONS OF NEW TAXA (ACARINA: LISTROPHORIDAE)  
(Part three)

BY

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Genus *Eulabidocarpus* Lawrence.


*Type species.* *Labidocarpus compressus* Ewing, 1910.

*Diagnosis.* Body strongly compressed laterally. Propodosomal shield not extending to level of leg II. Two pairs of long setae immediately posterior to propodosomal shield. Legs I and II strongly enlarged distally and with broad blunt tips. Leg III with 4 segments; tarsus III with 1 anteriorly curved claw and 2 large denticulated spurs. Leg IV subequal in length to leg III, with 4 segments; tarsus with 1 anteriorly curved claw and 1 large denticulated spur. Legs III and IV distinctly separated from legs I and II.

Three species are recorded.

**Key to the species of Eulabidocarpus.**

1. One pair of lateral setae much anterior to coxae III.  
   *E. compressus* (Ewing)  
   Two pairs of lateral setae just dorsal to coxae III.  
   2

2. Spur of tarsus IV distally curved toward claw and with pointed tip.  
   *E. flexipes* n. sp.

   Spur of tarsus IV straight and with broad blunt tip.  
   *E. rectipes* n. sp.

*Eulabidocarpus compressus* (Ewing).

*Alabidocarpus compressus*, Ewing, 1929, A manual of external parasites, p. 188.  

Diagnosis. Female: length 440 microns, depth 220 microns; about 40 annulations on dorsum. Medial pair of setae immediately posterior to propodosomal shield distinctly longer than lateral pair. One pair of lateral setae much anterior to coxae III, nearer to coxae II than coxae III. Female opisthosoma about 1/7 total length, ending with 1 pair of long setae.

Type host. Bat: *Pteropus giganteus giganteus* (Bruennich).

Type locality. Ceylon.

Deposition of types. Unknown.

Distribution. Ceylon: several specimens from *Pteropus giganteus giganteus* recorded by EWING, 1910.

Material examined. No specimens were available for study.

**Eulabidocarpus flexipes** new species.

(Fig. 20-23).

Female.

Idiosoma stout and strongly compressed laterally. Dorsal margin slightly concave at level just posterior to leg III. Length 1026 microns (915-1177), greatest depth (at level of leg III) 398 microns (336-476).

Dorsum. Propodosomal shield very much reduced and surrounding insertions of coxae I. Medial pair of setae immediately posterior to propodosomal shield slightly shorter than lateral pair. With pair of sclerotized bars joining bases of setae immediately posterior to propodosomal shield. With 66 (60-79) annulations posterior to propodosomal shield.

Venter. Two pairs of lateral setae just dorsal to coxae III; dorsal pair slightly longer than ventral pair. Pair of setae between coxae III and between coxae IV not spur-like. Opisthosoma slightly shorter than 1/3 total length, with about 26 annulations. Posterior end with 2 pairs of setae; dorsal pair twice as long as ventral pair.

Legs. Leg I with 2 minute setae on posterior margin and 1 long seta on medial surface of terminal segment. Leg II with 1 minute seta on posterior margin of terminal segment. Leg III with 4 segments; 2 distal setae on penultimate segment, 1 anterior and 1 posterior; spurs each with 4 denticulations; 1 thick seta between claw and spurs. Leg IV subequal in length to leg III, with 4 segments; 1 distal seta on posterior margin of penultimate segment; spur with about 7 denticulations, distally curved toward claw and with pointed tip; 1 thick seta between claw and spur; postero-distal seta of tarsus about 1/3 as long as claw.

Gnathosoma with pair of setae on venter.
Male.

Idiosoma stout and strongly compressed laterally. Dorsal margin slightly concave at level of leg III. Length 650 microns (598-695), greatest depth (at level of leg III) 293 microns (244-360).

Dorsum. Propodosomal shield, setation, and sclerotized bars as in female. With 45 (40-56) annulations posterior to propodosomal shield.

Venter. Two subequal pairs of lateral setae just dorsal to coxae III. Setae between coxae III and between coxae IV not spur-like. Opisthosoma about 1/9 total length, with 7 annulations. Posterior end with 3 pairs of setae; dorsal pair about 3/5 as long as middle pair, ventral pair much shorter than dorsal pair.

Legs. Legs as in female.

Gnathosoma with pair of setae on venter.

Type host. Bat: *Molossus major major* (Kerr).

Type locality. Centeno, Maraval, Valencia, and Port of Spain; Trinidad, West Indies.


Discussion. This species differs from E. compressus in having 2 pairs of lateral setae instead of 1, and from E. rectipes in the curved spur on tarsus IV, larger size and more numerous body annulations.

Eulabidocarpus rectipes new species. (Figs. 24-27).

Female.

Idiosoma stout and strongly compressed laterally. Dorsal margin convex. Length 673 microns (543-744), greatest depth (at level of leg IV) 338 microns (256-366).

Dorsum. Propodosomal shield very much reduced, and surrounding insertions of coxae I. Medial pair of setae immediately posterior to propodosomal shield slightly shorter than lateral pair. Without sclerotized bars joining bases of setae immediately posterior to propodosomal shield. With 45 (40-48) annulations posterior to propodosomal shield.

Venter. Two subequal pairs of lateral setae just dorsal to coxae III. Pair of setae between coxae III and between coxae IV not spur-like. Opisthosoma much longer than 1/3 total length, with about 30 annulations. Posterior end with 2 pairs of setae; dorsal pair twice as long as ventral pair.

Legs. Leg I with 2 minute setae on posterior margin and 1 long seta on medial surface of terminal segment. Leg II with 1 minute seta on posterior margin of terminal segment. Leg III with 4 segments; 2 distal setae on penultimate segment, 1 anterior and 1 posterior; spurs each with 4 denticulations; 1 thick seta between claw and spurs. Leg IV subequal in length to leg III, with 4 segments; 1 distal seta on posterior margin of penultimate segment; spur with 4 denticulations, straight and with broad blunt tip; 1 thick seta between claw and spur; postero-distal seta about 1/3 as long as claw.

Gnathosoma with pair of setae on venter.
Male.

Idiosoma stout and strongly compressed laterally. Dorsal margin convex. Lenth 411 microns (397-445), greatest depth (at level of leg III) 247 microns (232-281).

Dorsum. Propodosomal shield, setation, and absence of sclerotized bars as in female. With 37 (33-41) annulations posterior to propodosomal shield.

Venter. Setation as in female. Opisthosoma about 1/5 total length, with 6 denticulations. Posterior end with setae similar to those of *E. flexipes* but with additional pair of minute setae immediately ventral to middle pair.

Legs. Legs as in female but postero-distal seta of tarsus IV only about 1/4 as long as claw.

Gnathosoma with pair of setae on venter.


Type locality. Centeno, Trinidad, West Indies.


Discussion. This mite closely resembles E. flexipes, from which it is differentiated by a straight spur on tarsus IV, smaller size and fewer body annulations.

Genus Olabidocarpus Lawrence.

Olabidocarpus Lawrence, 1948, Jour. Parasitol. 34 : 375.

Type species. Labidocarpus belsorum Eyndhoven, 1940.

Diagnosis. Body strongly compressed laterally. Propodosomal shield not extending to level of leg II. One or 2 pairs of long setae immediately posterior to propodosomal shield. Legs I and II strongly enlarged distally and with broad blunt tips. Leg III with 5 segments; tarsus ending with 1 slightly curved claw and 3 smooth spurs of moderate size. Leg IV subequal in length to leg III, with 5 segments; tarsus ending with 1 slightly curved claw and 2 smooth spurs of moderate size. Legs III and IV distinctly separated from legs I and II.

Two species are recorded.

Key to the species of Olabidocarpus.

One pair of setae immediately posterior to propodosomal shield. One pair of lateral setae immediately dorsal to coxae III............... O. belsorum (Eyndhoven)

Two pairs of setae immediately posterior to propodosomal shield. Two subequal pairs of lateral setae immediately dorsal to coxae III............... O. aitkeni n. sp.

Olabidocarpus belsorum (Eyndhoven).

Olabidocarpus belsorum, Lawrence, 1948, Jour. Parasitol. 34 : 375.

Diagnosis. Female: length 365 microns, greatest depth (at level between leg II and III) 80 microns; 40 annulations on dorsum. Postero-lateral projections of propodosomal shield acute and with pair of setae of moderate length. Pair of long setae immediately posterior to propodosomal shield. Pair of sclerotized longitudinal bars on mid-dorsum immediately posterior to propodosomal shield. Pair of lateral setae just dorsal to coxae III. Posterior end of female with 3 pairs of setae; dorsal pair twice as long as middle pair, ventral pair much shorter than middle pair.
Type host. Bat: *Myotis myotis* Borkhausen.

Type locality. St. Pietersberg, near Maastricht, Holland.

Deposition of types. In G. L. van Eyndhoven's private collection number 1454.

Distribution. St. Pietersberg, Holland; from *Myotis myotis* collected by P. J. Bels, 9 September 1938, recorded by Eyndhoven, 1940.

Material examined. No specimens were available for study.

**Olabidocarpus aitkeni** new species.

(Figs. 28-31).

**Female.**

Idiosoma slender and strongly compressed laterally. Dorsal margin slightly convex. Length 418 microns (409-427), greatest depth (at level of leg III) 125 microns (116-134).

**Dorsum.** Propodosomal shield with lateral margin closely adjoining coxae I, without acute postero-lateral projections. Two subequal pairs of setae immediately posterior to propodosomal shield, both pairs flagelliform. With pair of sclero-

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**Fig. 28:** *Olabidocarpus aitkeni* n. sp., lateral view of female. — **Fig. 29:** *Olabidocarpus aitkeni* n. sp., lateral view of male. — **Fig. 30:** *Olabidocarpus aitkeni* n. sp., medial view of male tarsus III. — **Fig. 31:** *Olabidocarpus aitkeni* n. sp., medial view of male tarsus IV.

tized longitudinal bars on mid-dorsum immediately posterior to propodosomal shield. With 55 annulations posterior to propodosomal shield.

**Venter.** Two subequal pairs of lateral setae just dorsal to coxae III. Pair of minute setae between coxae III and pair of setae of moderate length between coxae IV not spur-like. Opisthosoma about 2/5 total length, with about 31 annulations. Posterior end with 2 subequal pairs of setae.

**Legs.** Terminal segment of leg I with 2 setae on posterior margin. Without setae on leg II. Leg III with 5 segments; 1 distal seta on posterior margin of penultimate segment; claw approximately straight. Leg IV subequal in length to leg III; segmentation, setation and with claw similar to those of leg III. Gnathosoma with pair of setae on venter.

**Male.**

Idiosoma stout and strongly compressed laterally. Dorsal margin slightly concave at level of leg III. Length 262 microns, greatest depth (at level of leg III) 101 microns (98–104).

**Dorsum.** Propodosomal shield, setation as in female. Sclerotized longitudinal bars very short. With 31 (30–32) annulations posterior to propodosomal shield.

**Venter.** Setation as in female. Opisthosoma about 1/5 total length, with about 3 annulations. Posterior end with 4 pairs of setae; first 2 dorsal pairs long, third pair minute, fourth pair much shorter than first 2 dorsal pairs and not ensiform.

**Legs.** Legs as in female.

Gnathosoma with pair of setae on venter.

**Type host.** Bat: *Molossus major major* (Kerr).

**Type locality.** Edward's Trace, Moraga, Trinidad, West Indies.

**Deposition of types.** Holotype female, allotype male, and 7 paratypes deposited in the United States National Museum, Washington, D. C.

**Distribution.** Moraga, Trinidad, West Indies: 2 females, 4 males, and 3 copulatory nymphs from a collection of 8 specimens of *Molossus major major*, Trinidad Department of Agriculture No. 58-467-474, collected by T. H. G. Aitken, 12 March 1958.

**Discussion.** This species is named after Dr. T. H. G. Aitken of the Rockefeller Foundation who supplied much of the material on which this study was based. The mite is characterized as follows: 2 pairs of lateral setae, no ensiform setae and 2 pairs of setae immediately posterior to propodosomal shield in both sexes and 2 subequal pairs of setae on posterior end of female.