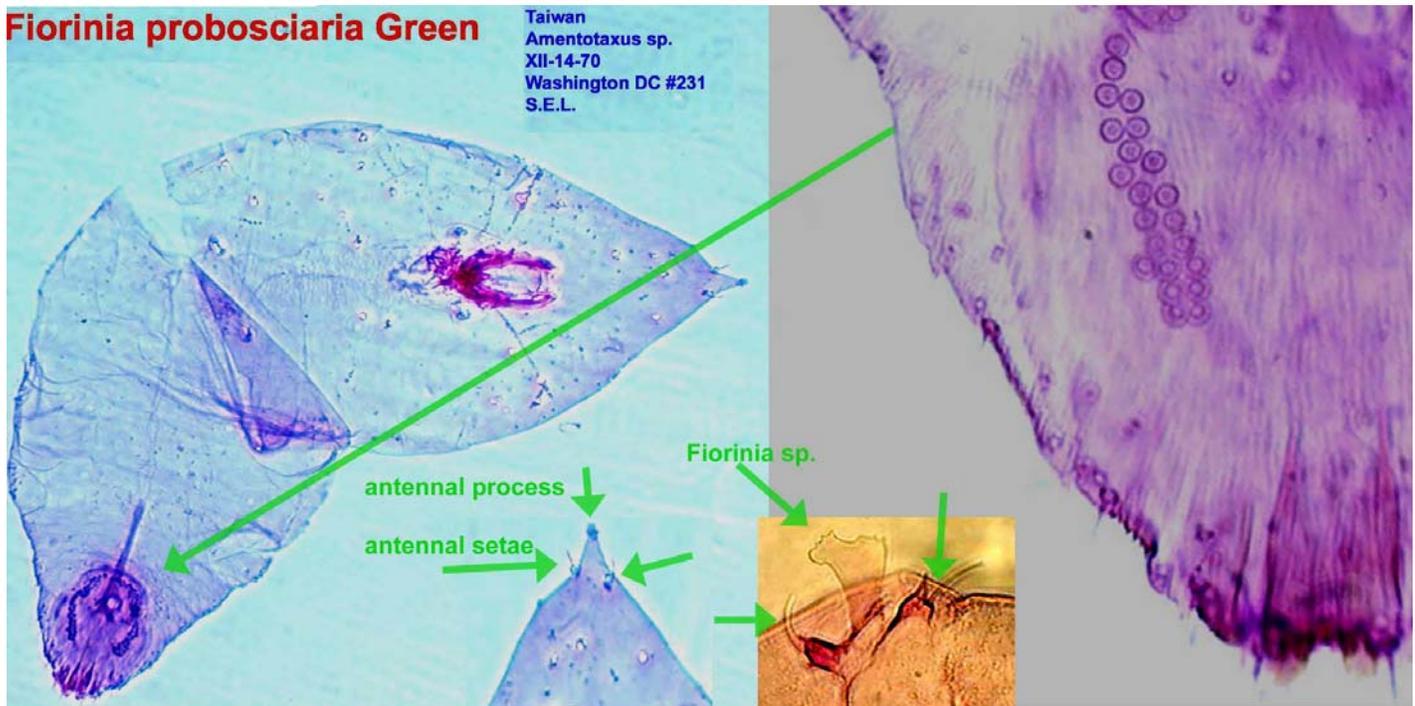


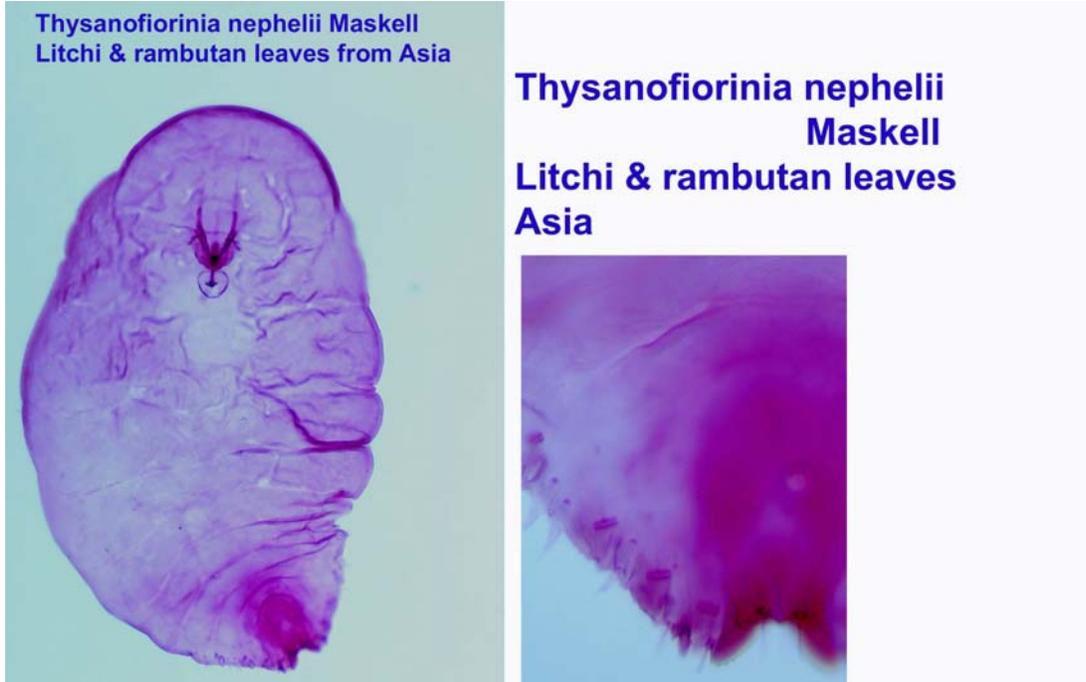
## KEY TO THE DIASPIDINI GENERA

1. Adult female pupillarial (entirely enclosed within the exuviae of the preceding stage)..... 2
- 1' Adult female not pupillarial; in a few forms this exuviae is unusually large and may more or less envelop the female but does not enclose it completely .....13
- 2(1). Adult female with disc pores present on at least one segment anterior and in addition to the usual perivulvar pores; form elongate and slender; 2nd. stage with well-developed lobes and large macroducts.....Go to Leucaspidini.
- 2' Adult female with only the usual perivulvar groups or a transverse row anterior to the vulva; or with all such pores lacking .....3
- 3(2) Adult female with the median lobes forming a notch in the apex of the pygidium .....4
- 3' Adult female with the median lobes not forming a notch in the apex of the pygidium, variously developed, at times lacking .....5
- 4(3) Median lobes separated and yoked together basally; antennae tending to be enlarged, elongate, or conical and close together at the apex of the head (at times with a membranous process between); pygidial dorsum with large ducts; perivulvar pores present; phytophagus from the Afrotropical, Australasia, Nearctic, Oriental, Palearctic Regions; 66 species known .....Fiorinia Targioni Tozzetti

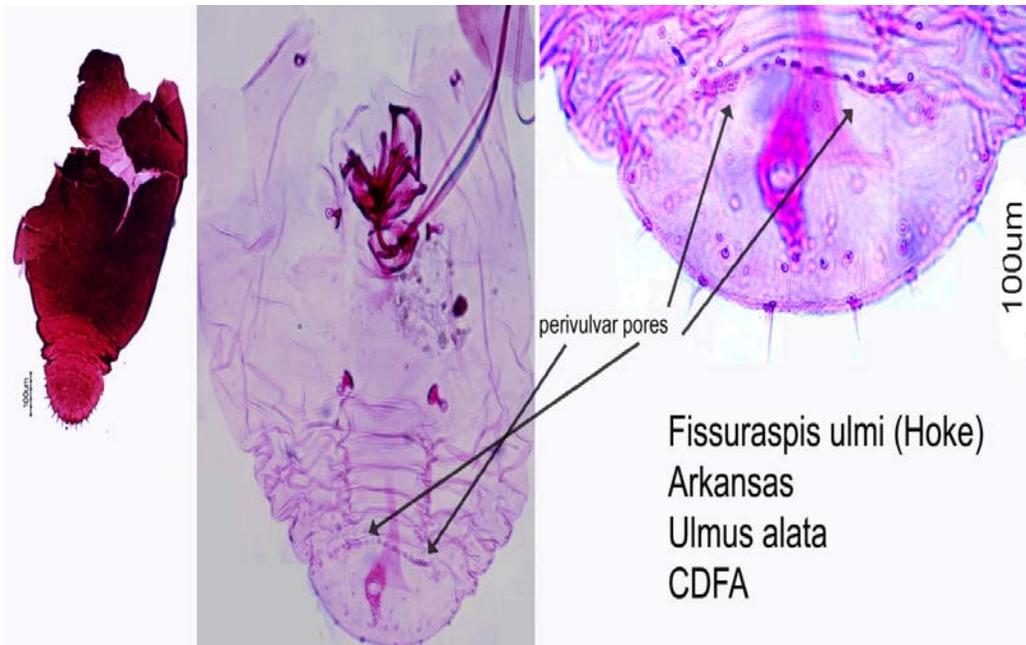


## KEY TO THE DIASPIDINI GENERA

4' Median lobes not yoked together basally; antennae not obviously enlarged; pygidial dorsum without large ducts; perivulvar pores absent; on *Kentia* sp., *Euphorbia longena*, *Indigofera* sp., *Dimocarpus longan*, *Litchi chinensis*, *Nephelium longanum* from the Australasia, Neotropical, Oriental, & the Palaearctic Regions; 2 species known.....*Thysanofiorinia* Balachowsky



- 5(4). Adult female lacks any kind of pygidial lobe, gland spines or marginal pygidial processes .....6
- 5' Adult female with marginal pygidial processes of some sort, in the form of either lobes, gland spines or fimbriate structures (not mere slight irregularities).....7
- 6(5). Adult female with perivulvar pores; 2nd. stage with median lobes and with gland spines around the pygidial margin on *Telia* and *Ulmus* from the Nearctic USA; one species known .....*Fissuraspis* Ferris



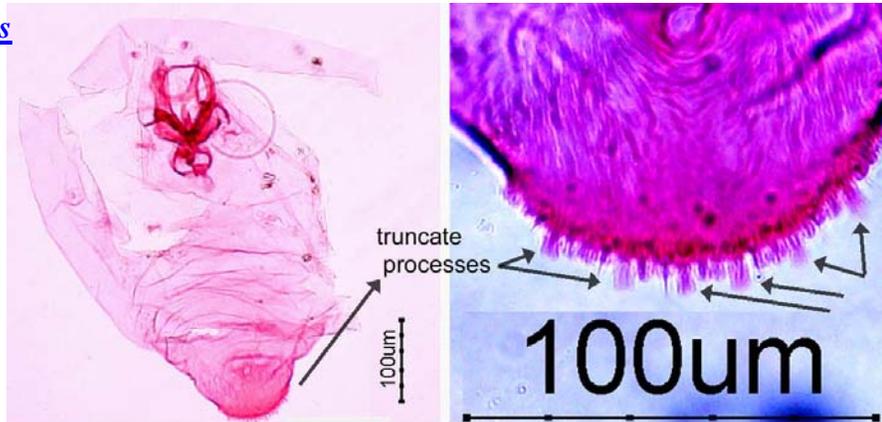
## KEY TO THE DIASPIDINI GENERA

- 6' 2nd. stage with no definite lobes and without gland spine; on *Teclea simplicifolia* from Kenya and Panama; 2 species known .....*Anotaspis* Ferris



- 7(5). Adult female with a series of flat, apically truncate, unsclerotized processes on the pygidial margin, these alternating with shorter lobulate marginal irregularities; no sclerotized lobes; perivulvar pores lacking; 2nd stage without lobes, gland spines or pygidial, macroducts; on Mango from the Afrotropical, Australasian, Nearctic, Neotropical, and Oriental Regions.....*Radionaspis* Ferris

*Leucodiaspis indica* and *Leucaspis indica* are synonyms of *Radionaspis indica* (Marlatt)

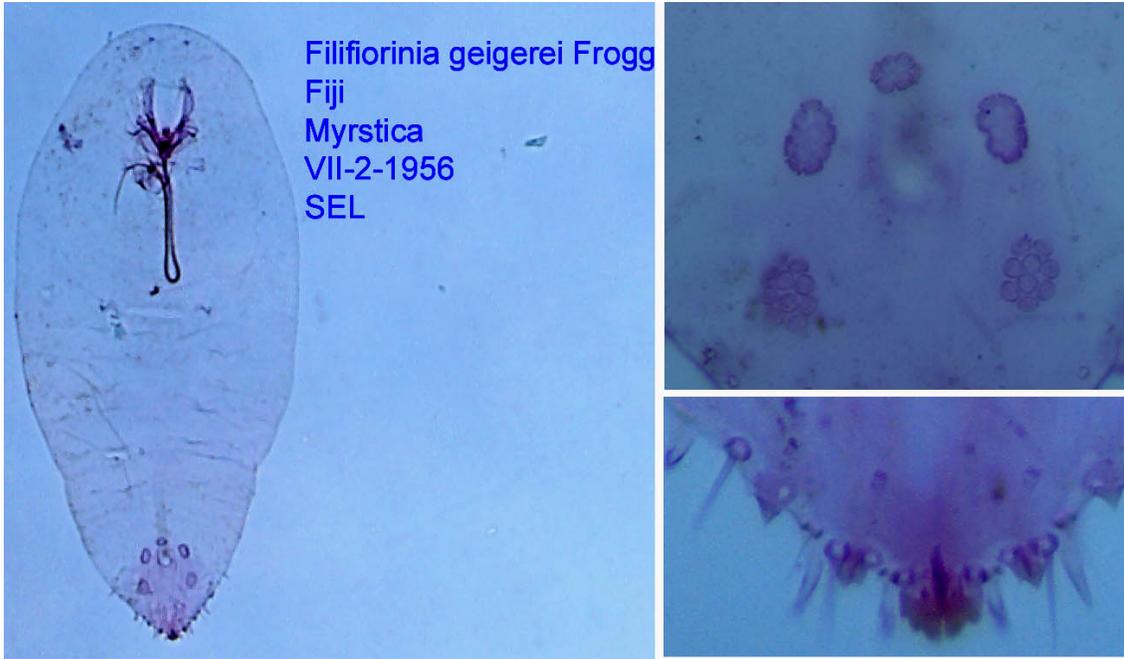


**Radionaspis indica (Marlatt)**  
 California  
 Mango  
 CDFA

- 7' Adult female otherwise.....7a.

## KEY TO THE DIASPIDINI GENERA

7a(7) Median lobes prominent and fused except towards apex, without setae between them, yoked at base with elongate process; 2<sup>nd</sup> and 3<sup>rd</sup> lobes present or absent; marginal ducts 2-barred; gland spines and perivulvar pores present in 5 groups; pygidial microducts with minute spines at orifices; from Australia on *Astronidium* sp, *Erythrina lithosperma*, *Myristica macrantha*; 2 species known.....[Fijiflorinia](#) Williams & Watson



7a' Not as above; the margin of the pygidium with processes of various kinds; 2nd stage with lobes, gland spines and marginal macroducts ..... 8

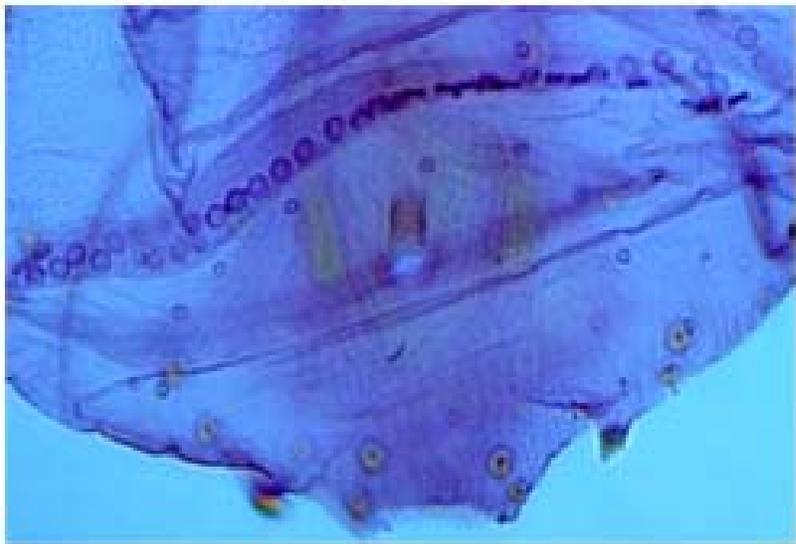
8(7). Adult female with a closely set series of short. conical gland spines along the pygidial margin, but without trace of lobes and without pygidial macroducts; perivulvar pores lacking; 2nd stage with three pairs of well-developed lobe of pygidium and with marginal and sub marginal macroducts; polyphagous with worldwide distribution; 14 species known; now placed in the Parlatoriini ..... [Gymnaspis](#) Newstead



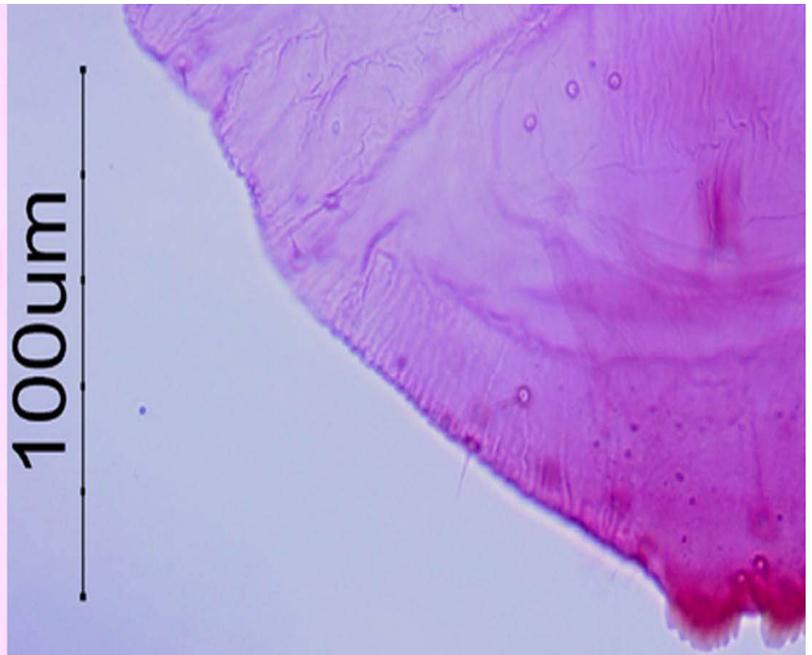
8' Adult female otherwise; 2nd. stage with not more than two pairs of lobe of pygidium.....9

## KEY TO THE DIASPIDINI GENERA

9(8). Adult female with an irregularly single row of disc pores on the 2nd segment anterior to the vulva on *Celtis* and indet from Panama & USA (Texas) ; 3 species known .....*Pelliculaspis* Ferris

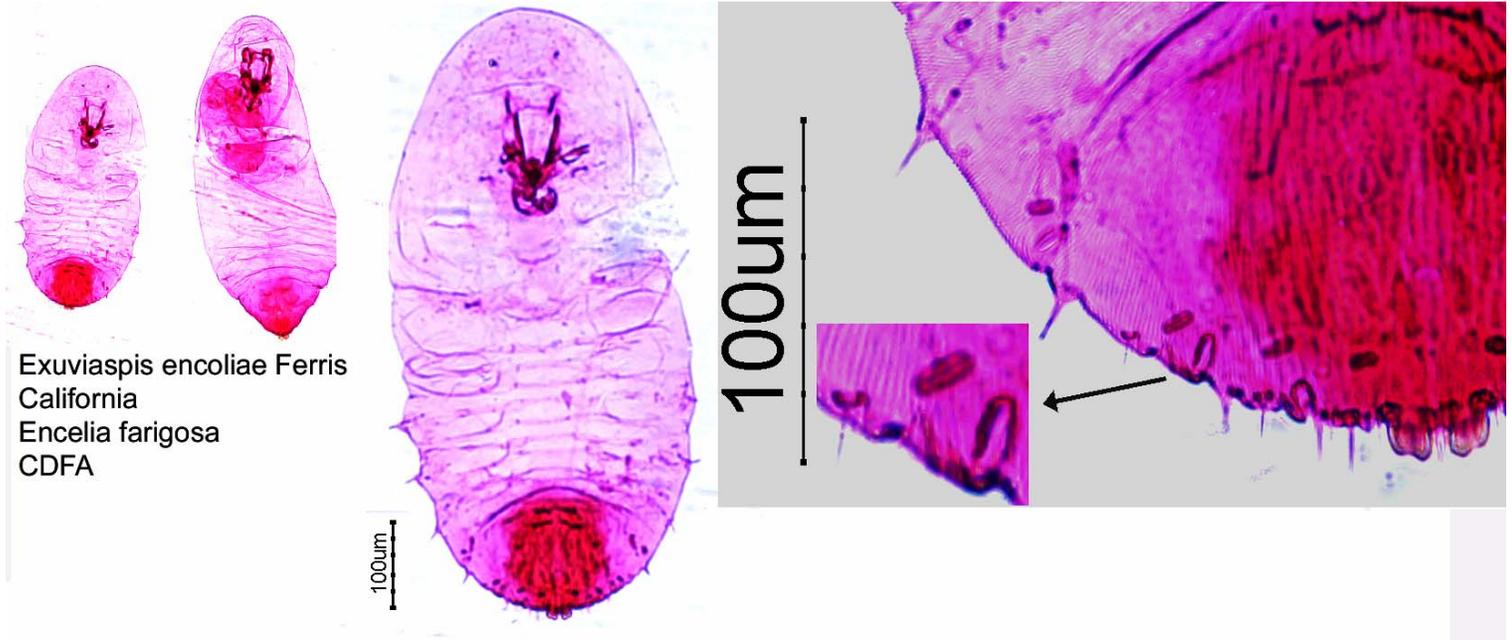


- 9' Adult female with the perivulvar pores, if present, arranged in the usual perivulvar groups.....10
- 10(9) Adult female with the median lobes alone present, these large and prominent.....11
- 10' Adult female with two pairs of lobe of pygidium ..... 12
- 11(10) 2<sup>nd</sup> stage with large, swollen sclerosis about the orifices of the marginal macroducts of the pygidium. On *Bumelia rigida* & *Septobasidium* sp from Mexico & USA (Arizona) ; 2 species known .....*Nicholiella* Ferris

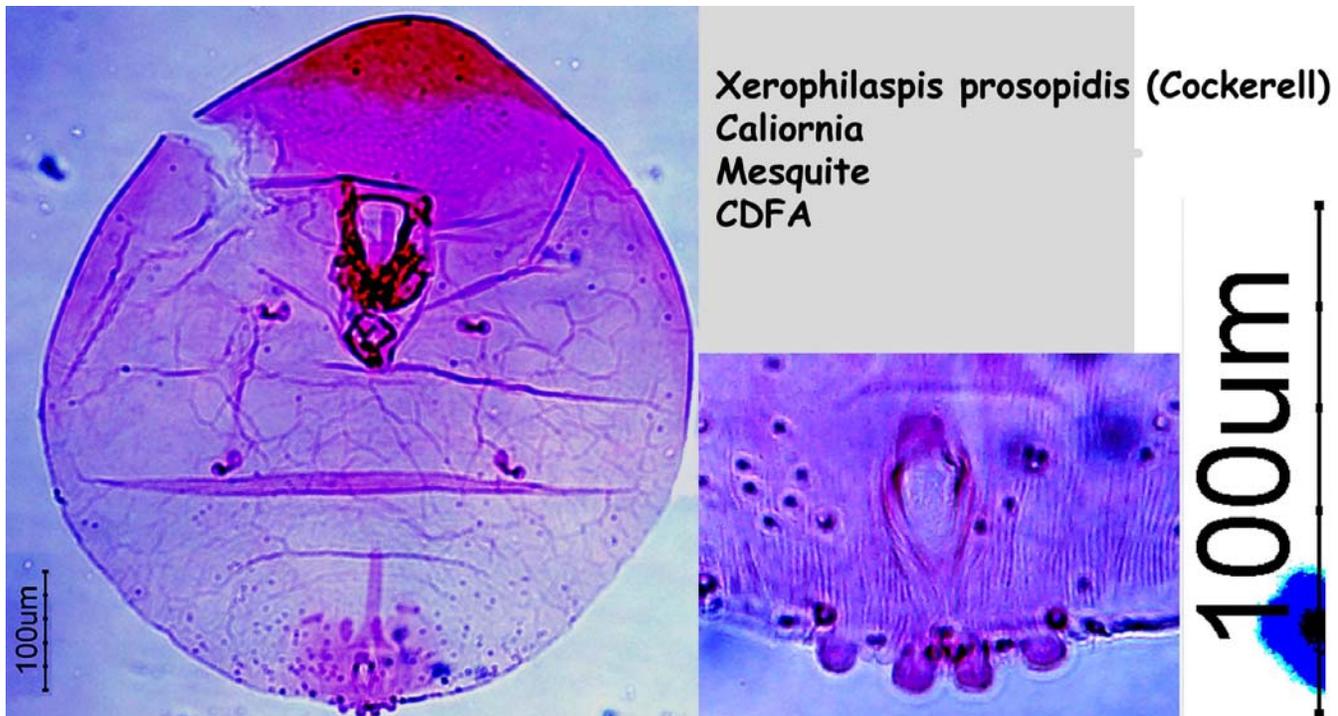


## KEY TO THE DIASPIDINI GENERA

- 11' 2nd. stage with at most a narrow, sclerotized rim about the orifices of the macroducts on the pygidium; on *Encelia palmeri* from Nearctic (Mexico) ; one species known .....*Exuviaspis* Ferris

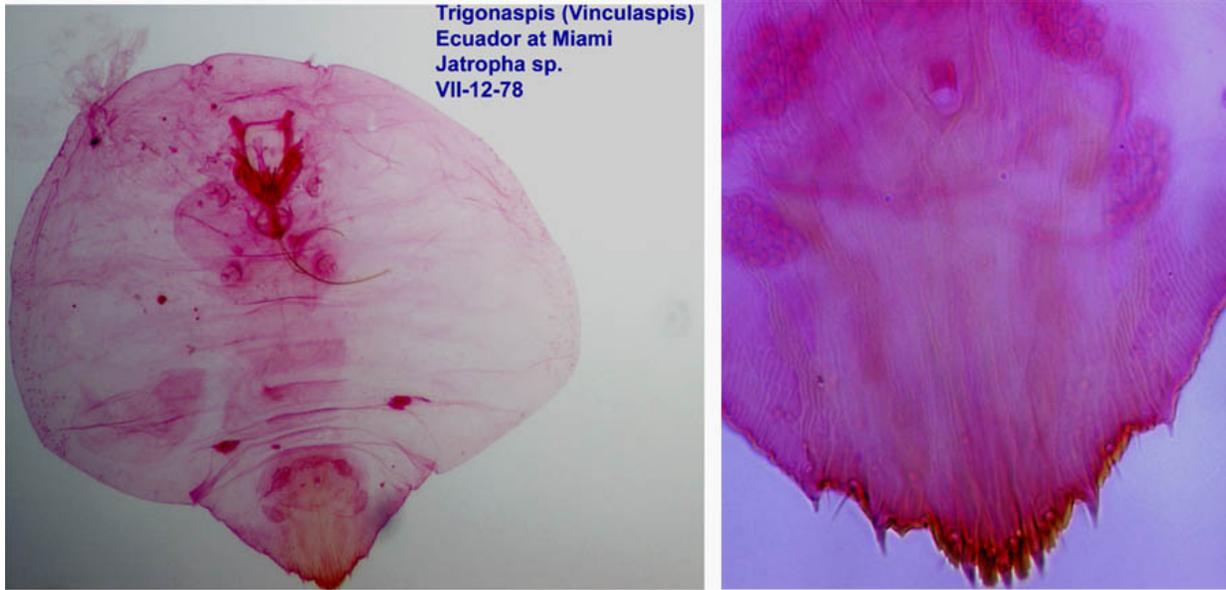


- 12(10). Both adult female and 2<sup>nd</sup>. stage with two pairs of short, apically rounded lobes; gland spines absent; on *Prosopis* from Nearctic (Mexico & USA) and Neotropical Regions; one species known .....*Xerophilaspis* (Cockerell)

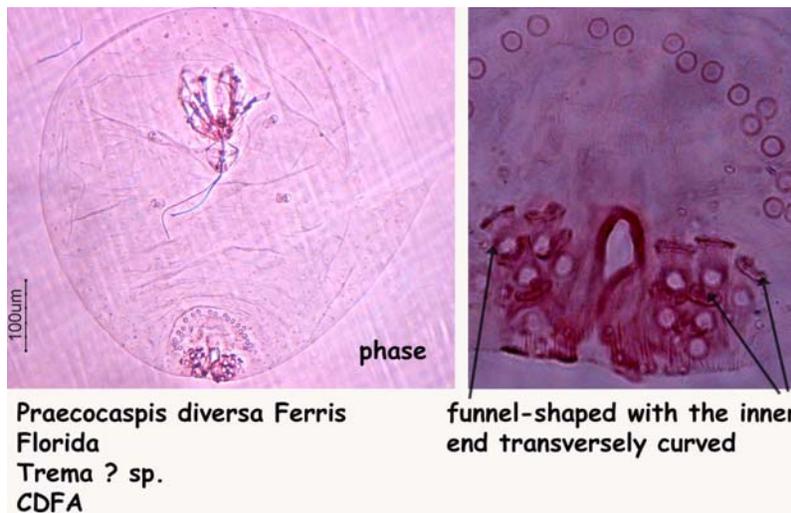


## KEY TO THE DIASPIDINI GENERA

- 12' Both adult female and 2<sup>nd</sup>. stage with two pairs or even with indications of a third pair of lobes pointed and more or less toothed; gland spines present or short sclerotized points that bear microducts; polyphagous from Nearctic & Neotropical Regions; 9 species known.....Vinculaspis Ferris (formerly Trigonaspis)



- 13(1). Macroducts of the pygidium in part with the inner extremity conspicuously modified and departing from the normal two-barred form ..... 14
- 13' Macroducts of the pygidium absent or present; if present and recognizable, not departing from the normal form ..... I5
- 14(13). Macroducts of the pygidium confined to the dorsum, in part very large, funnel-shaped and with the inner end transversely curved and crescentic in cross section; lobes and gland spines absent; on **Rhamnaceae**: *Colubrina cubensis* [Dekle1965c]. **Ulmaceae**: *Trema* sp. [Ferris1942]. **Verbenaceae**: *Lantana involucrata* from Nearctic (USA-Florida) ; one species known ..... Praecocaspis Ferris

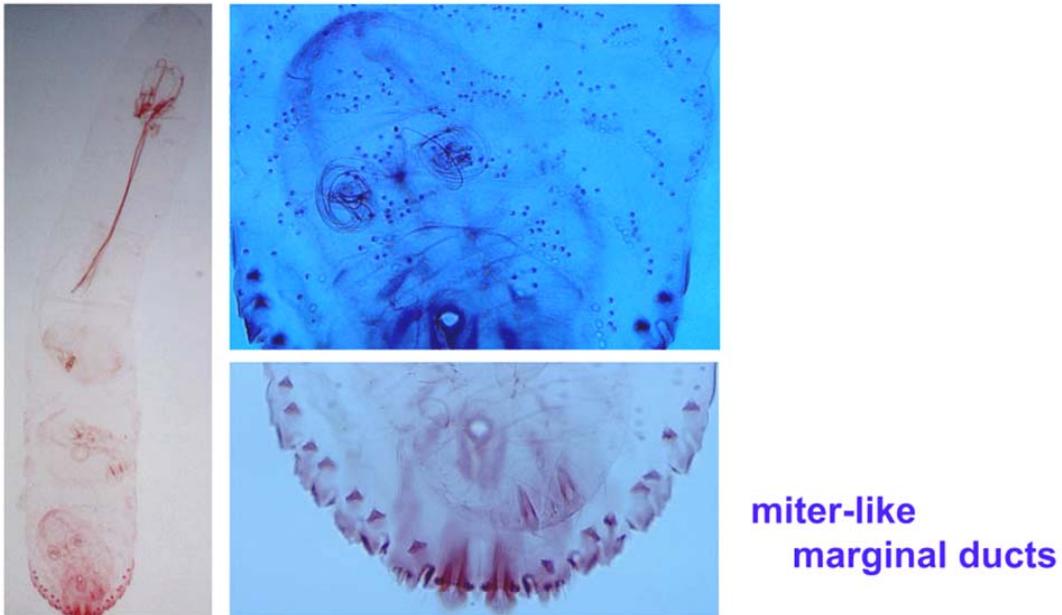


**Praecocaspis diversus** Ferris  
Florida  
*Trema* ? sp.  
CDFA

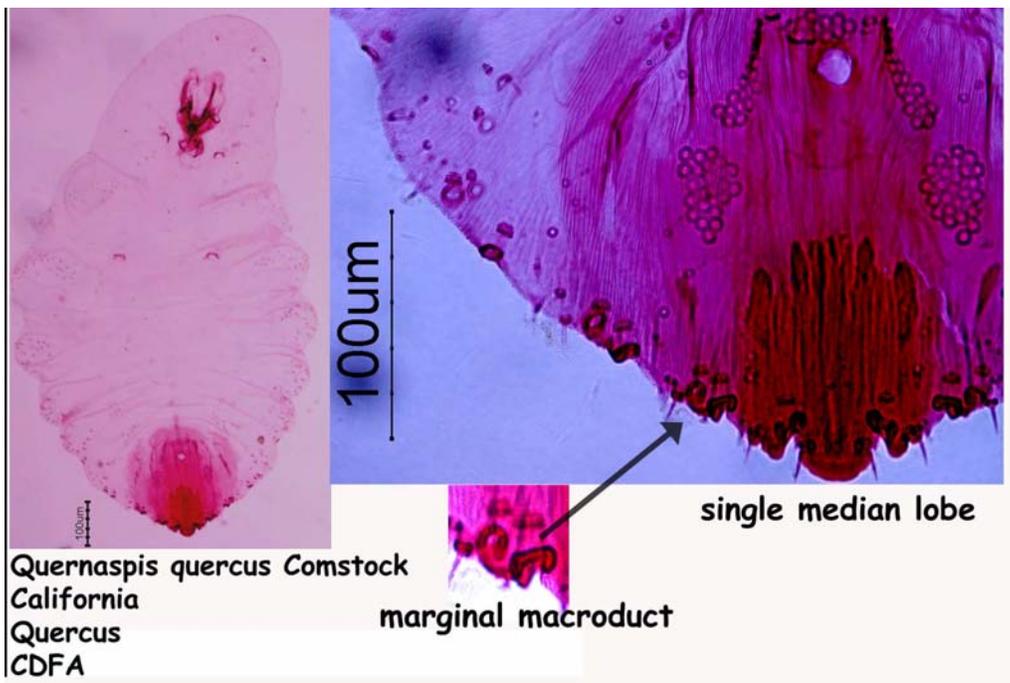
funnel-shaped with the inner end transversely curved

## KEY TO THE DIASPIDINI GENERA

- 14' Macroducts present on both margin and dorsum of pygidium; the marginal ducts large and with the inner end modified into a conical or mitre-like structure; lobes and gland spines present; indet from Neotropical: Panama; one species known ..... Mitraspis Ferris



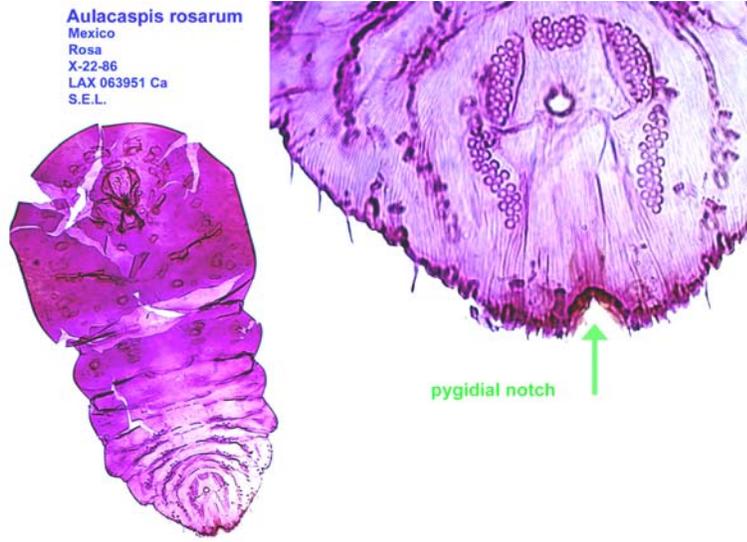
- 15 (13).Pygidium with a single median lobe showing no trace of division; marginal macroducts each with a swollen, sclerotic rim about the orifice; currently known primarily on oaks but also found on Hibiscus from the Nearctic Regions of Mexico and the USA; 3 species known ..... Quernaspis (Comstock)



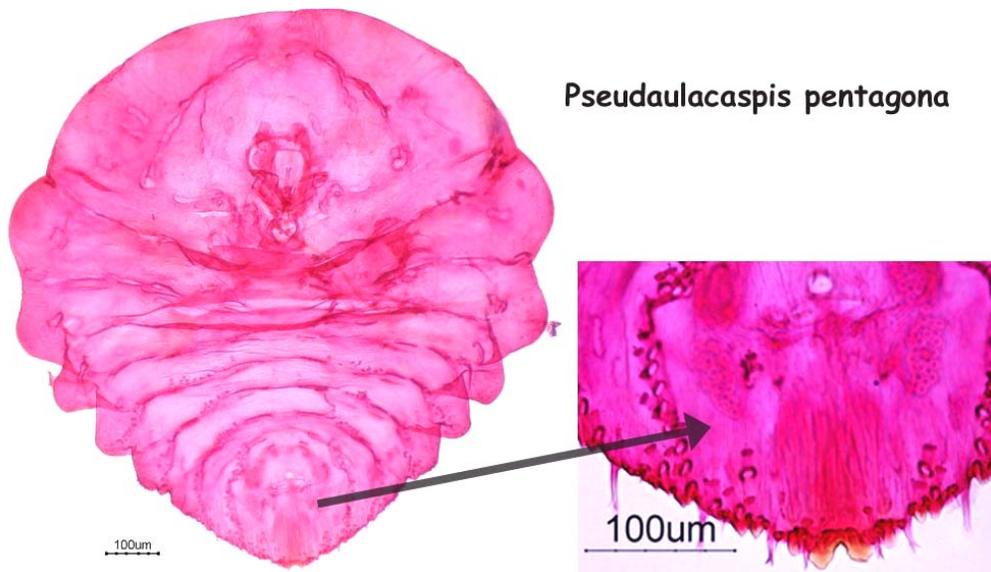
- 15' Median lobes, if present, sometimes fused at the base but always with some indication of their paired character; at times lacking.....16

## KEY TO THE DIASPIDINI GENERA

- 16(14). Median lobes present, yoked basally by an internal sclerosis.....17
- 16' Median lobes present or absent; if present not yoked basally by an internal sclerosis (their separation is sometimes obscured by crowding or by 2nd.ary sclerotization but is definitely determinable by careful examination)..... 22
- 17(16). Prosoma swollen, more or less quadrate, wider than the postsoma, the sides of the latter roughly parallel; lobe of pygidium forming a distinct notch in the apex of the Pygidium; polyphagus with worldwide distribution; 91 species known ..... Aulacaspis Cockerell



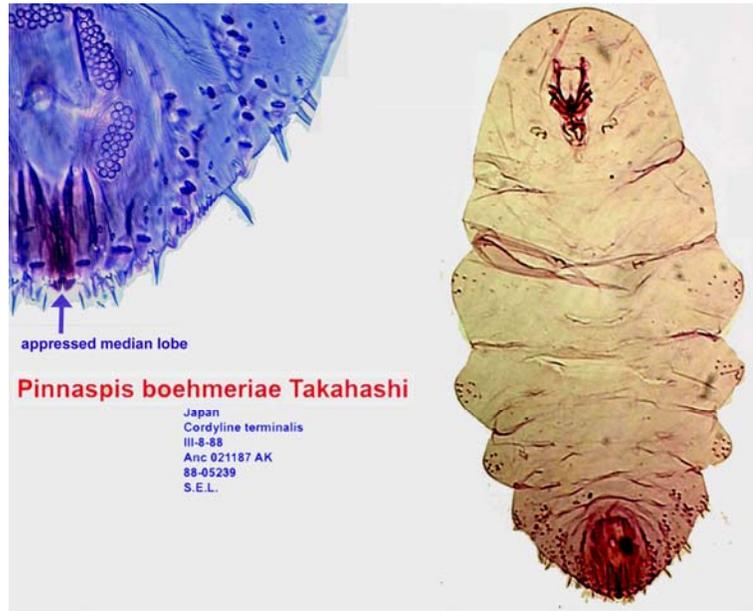
- 17' Body not thus formed, turbinate or elongate..... 18
- 18(17). Body broadly turbinate; median lobes large and prominent; polyphagus with worldwide distribution; 66 species known.....Pseudaulacaspis MacGillivray (in part)



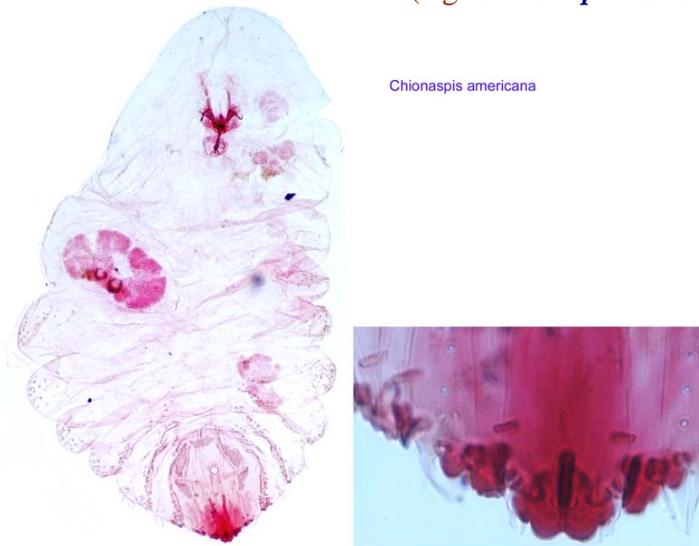
- 18' Body fusiform, the prosoma tapering anteriorly; median lobes various..... 19

## KEY TO THE DIASPIDINI GENERA

19(18) Median lobes separate, but their mesal margins very tightly appressed sometimes appearing as one lobe; macroducts on and those anterior to the pygidium confined to the margin and to a few in submarginal series; polyphagus with worldwide distribution; 42 species known .....*Pinnaspis* Cockerell

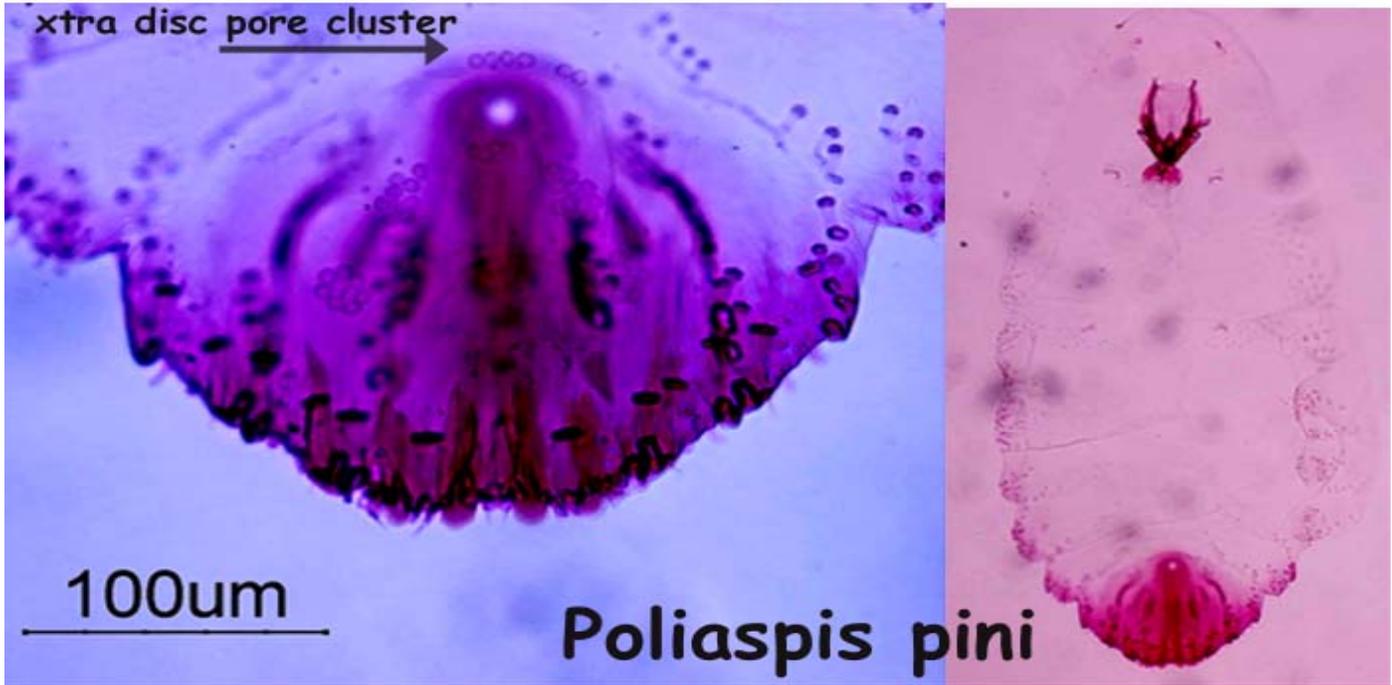


- 19' Median lobes usually distinctly separate or divergent for at least a part of their length, although at times fused basally and with merely an apical notch; if appressed mesally the dorsal macroducts are abundant in both sub marginal and sub median series on the fifth and preceding segments ..... 20
- 20(19) Median lobes with the free inner margin longer than the free outer margin and an inverted V- or U-shaped notch being formed in the apex of the pygidium; usually the lobes are strongly divergent..... 21
- 20' Median lobes with the free outer margin usually as long as or even longer than the free inner margin, the lobes tending to project from the body for their whole length and thus not forming a median apical notch in the Pygidium; polyphagus with worldwide distribution; 79 species known .....*Chionaspis* Signoret (e.g. *Chionaspis americana* or *C. furfura*)

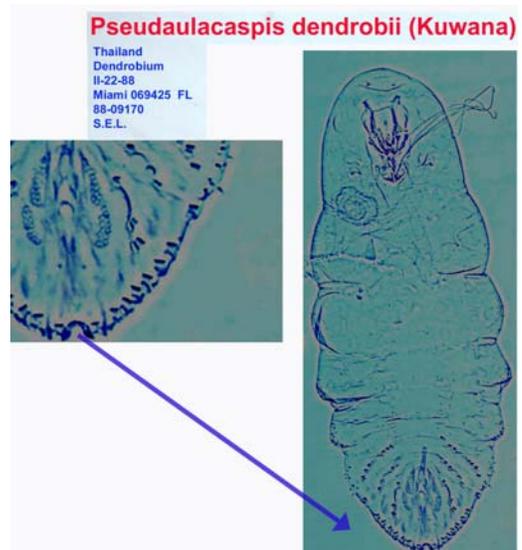
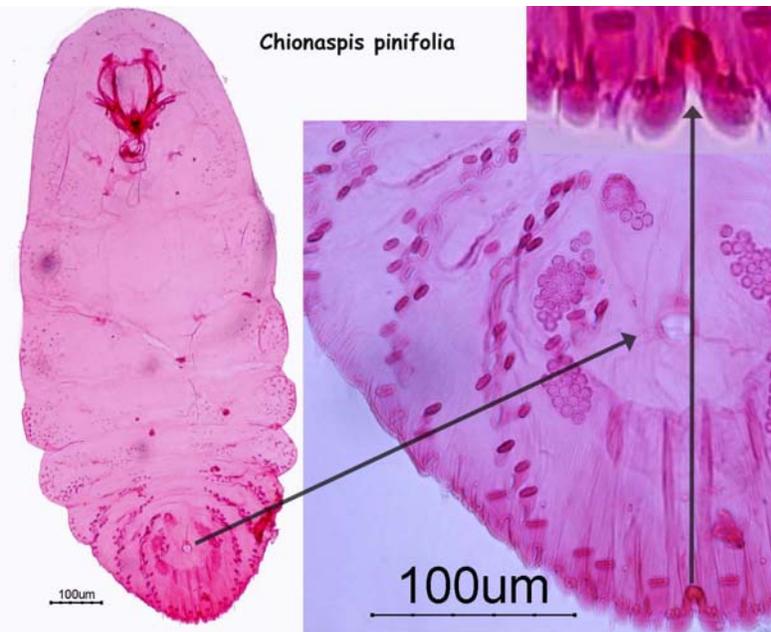


## KEY TO THE DIASPIDINI GENERA

21(20) Supplementary groups of disc pores present on the ventral side of the body anterior to the normal perivulvar pores; 10 species known ..... *Poliaspis* Maskell

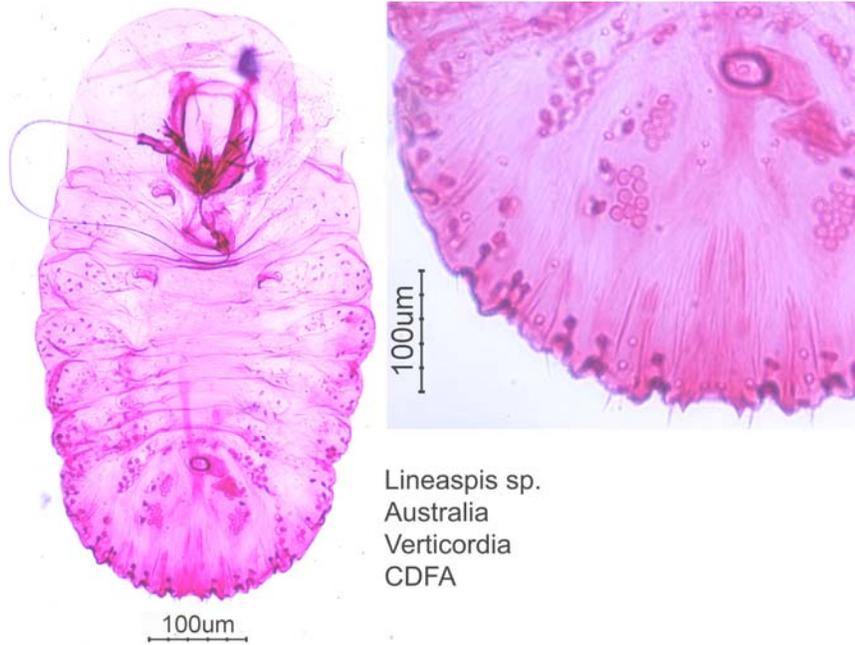


21' None but the usual perivulvar pore groups present; polyphagus with worldwide distribution.....*Pseudaulacaspis* MacGillivray (in part) including *Pseudaulacaspis cockerelli* & some *Chionaspis* (formerly *Phenacaspis*) including *Chionaspis pinifolia*, *C. corni* or *C. parkii*.

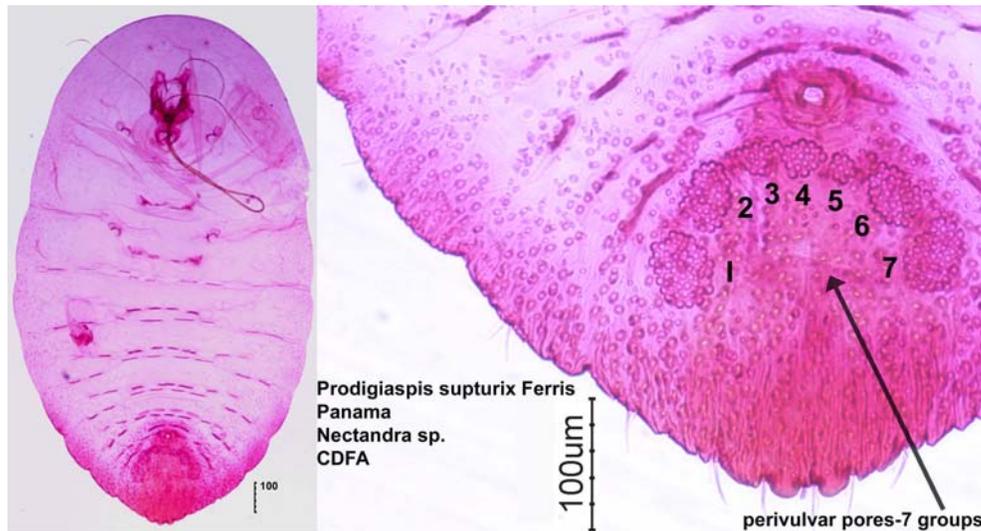


## KEY TO THE DIASPIDINI GENERA

22(16) Median lobes very small and obscure, much exceeded in size by the 2nd. lobes; as known primarily occurring on Cupressaceae & pinaceae from the Australasian, Oriental & Palaeartic Regions; one species known ..... *Lineaspis* MacGillivray



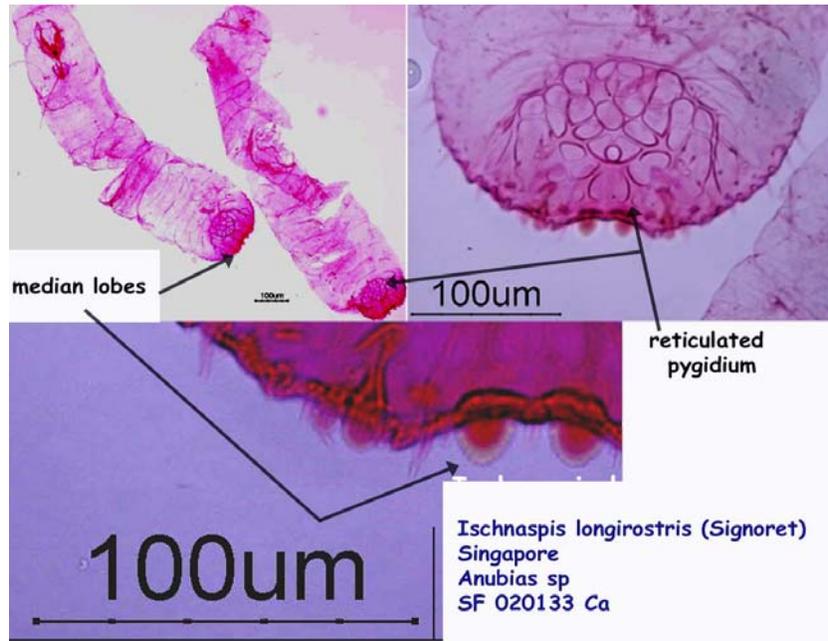
- 22' Median lobes present or absent. if present always larger than or at least equal to the 2nd. lobes.....23
- 23 Marginal pygidial macroducts with the axis of their orifices set transversely or essentially so, each with the orifice surrounded by a transversely oval, sclerotized rim.....go to Parlatoriini
- 23' Marginal pygidial macroducts with the axis of their orifices set longitudinally or diagonally, the sclerotized rim, if present. similarly disposed..... 24
- 24(23) Perivulvar pores in seven groups; on *Nectandra sp.* & *Smilax sp.* from Neotropical (Panama); one species known .....*Prodigiaspis*\* Ferris



24' Perivulvar pores in five groups or less, or lacking .....25

## KEY TO THE DIASPIDINI GENERA

25(24). Dorsum of the pygidium with the sclerotization forming a coarse reticulum or "lattice work" pattern; polyphagus with worldwide distribution; 7 species known .....*Ischnaspis* Douglas

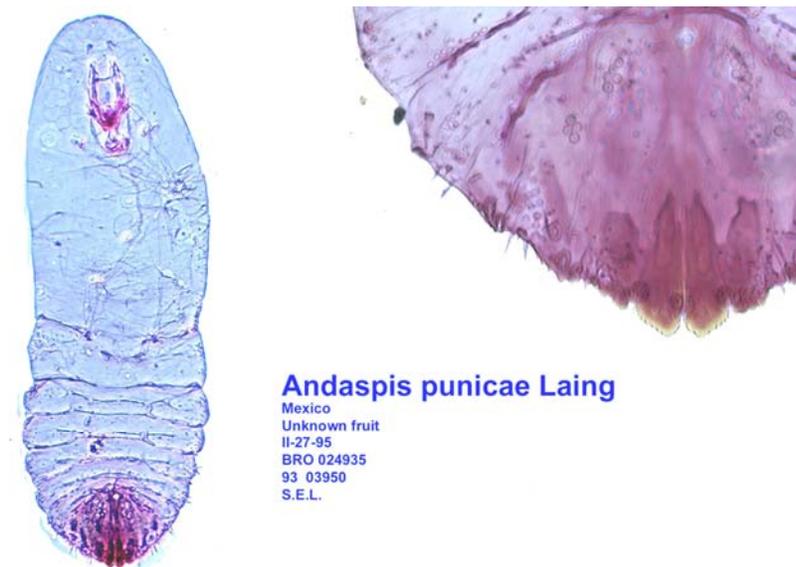


25' Dorsum of the pygidium without such reticulum.....26

26(25). With an elongate, club-shaped, internal, sclerotized process arising from the base of each median lobe. ....27

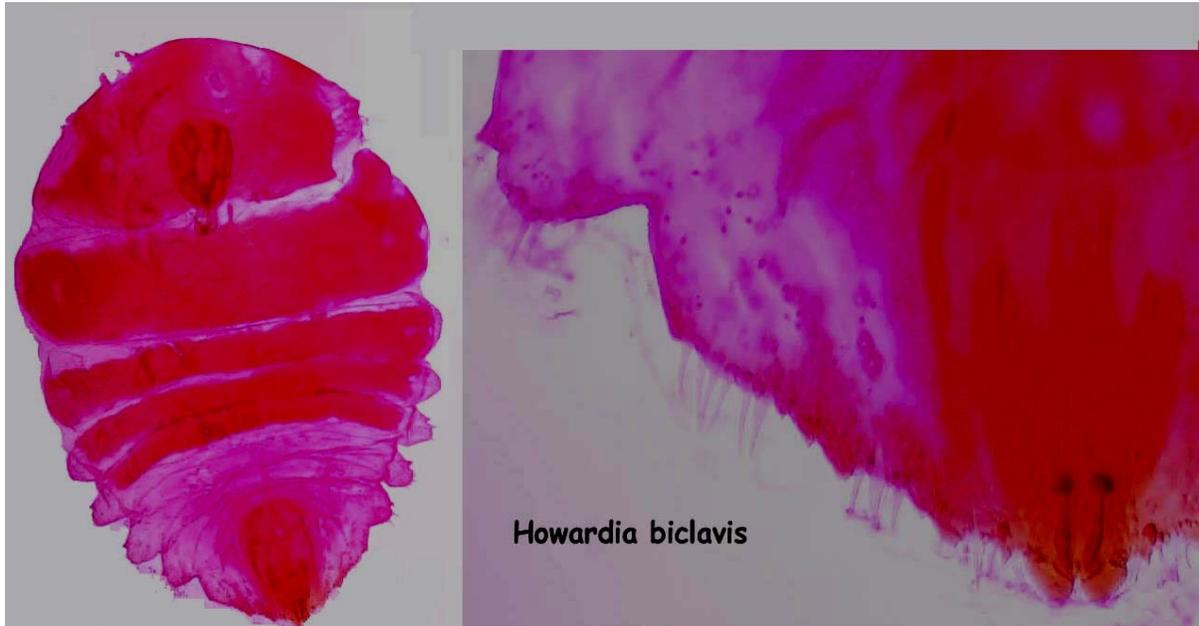
26' Without such a structure, or if it is present, a similar structure arises from the base of each 2nd. lobe also .....28

27(26). Body slender fusiform and membranous at maturity; perivulvar pores present; polyphagus with worldwide distribution; 43 species known.....*Andaspis* MacGillivray

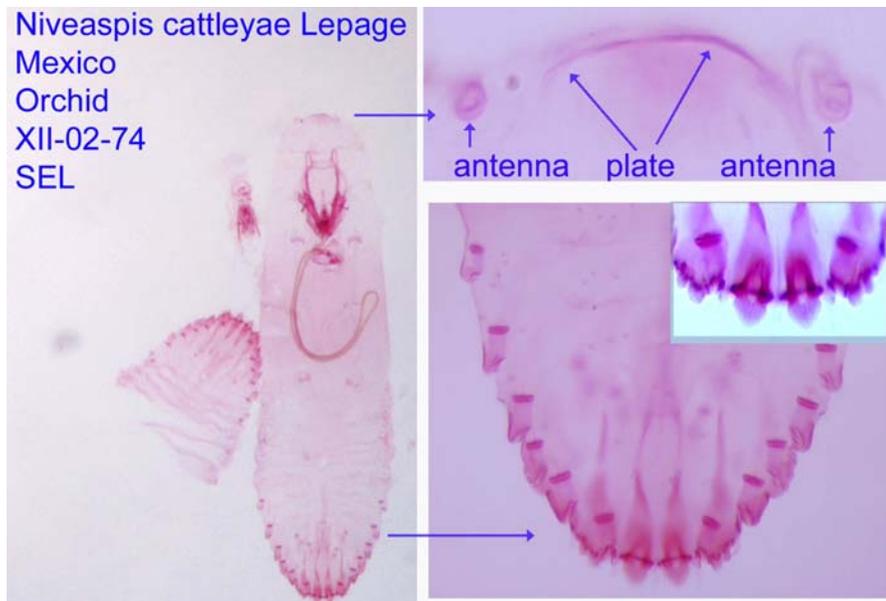


## KEY TO THE DIASPIDINI GENERA

- 27' Body broadly turbinate; cephalic & the abdominal dorsum as far posterior as the first abdominal segment strongly sclerotized at maturity; perivulvar pores lacking; polyphagous with worldwide distribution ; 3 species known .....[Howardia](#) Berlese & Leonardi



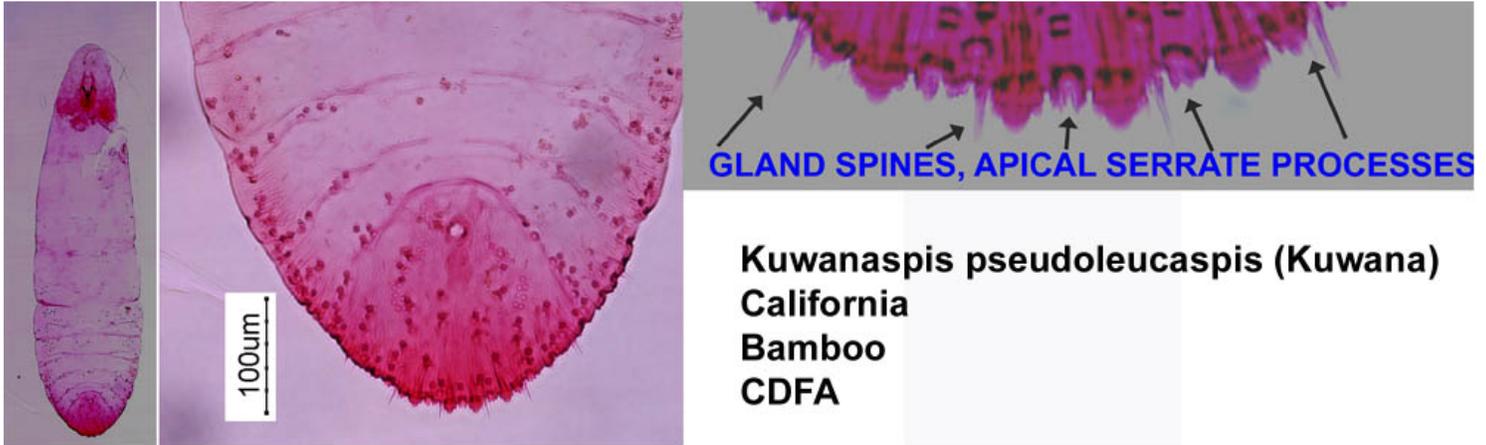
- 28(26) With a structure in the form either of a membranous lobe, a sclerotized plate between the bases of the antennae, or this plate divided with a portion at the base of each antenna; body long and slender; pygidium with the marginal macroducts generally exceeding the number found in the normal pattern and very regularly arranged; dorsal pygidial macroducts sometimes lacking, but when present tending to be arranged in crowded clusters near the anterior Pygidial from margin; polyphagous from Nearctic & Neotropical Regions; 12 species known .....[Niveaspis](#) MacGillivray



- 28' Not with such characteristics (one species with a sclerotized fold at the base of each antenna).....29

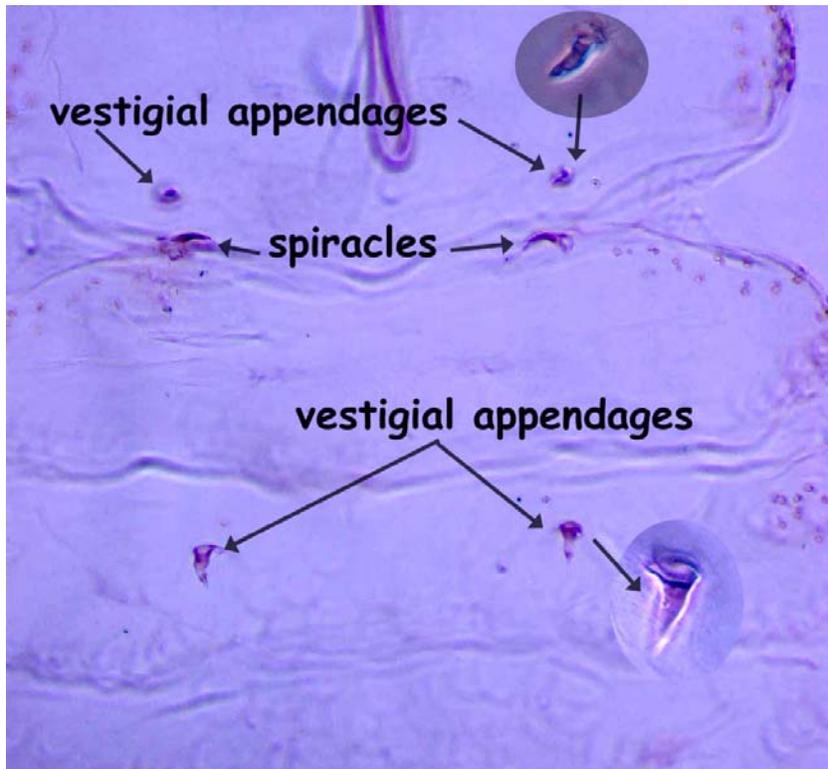
## KEY TO THE DIASPIDINI GENERA

29(28).Margin of the pygidium with lobes, gland spines, and membranous low, broad, apical serrate processes known primarily from bamboo, but on other Poaceae from the Afrotropical, Nearctic, Neotropical, Oriental, & Palaearctic Regions; 20 species known ..... *Kuwanaspis* MacGillivray



29' Margin of the pygidium not so.....30

30(29) Vestiges of legs retained as sclerotized points.....31



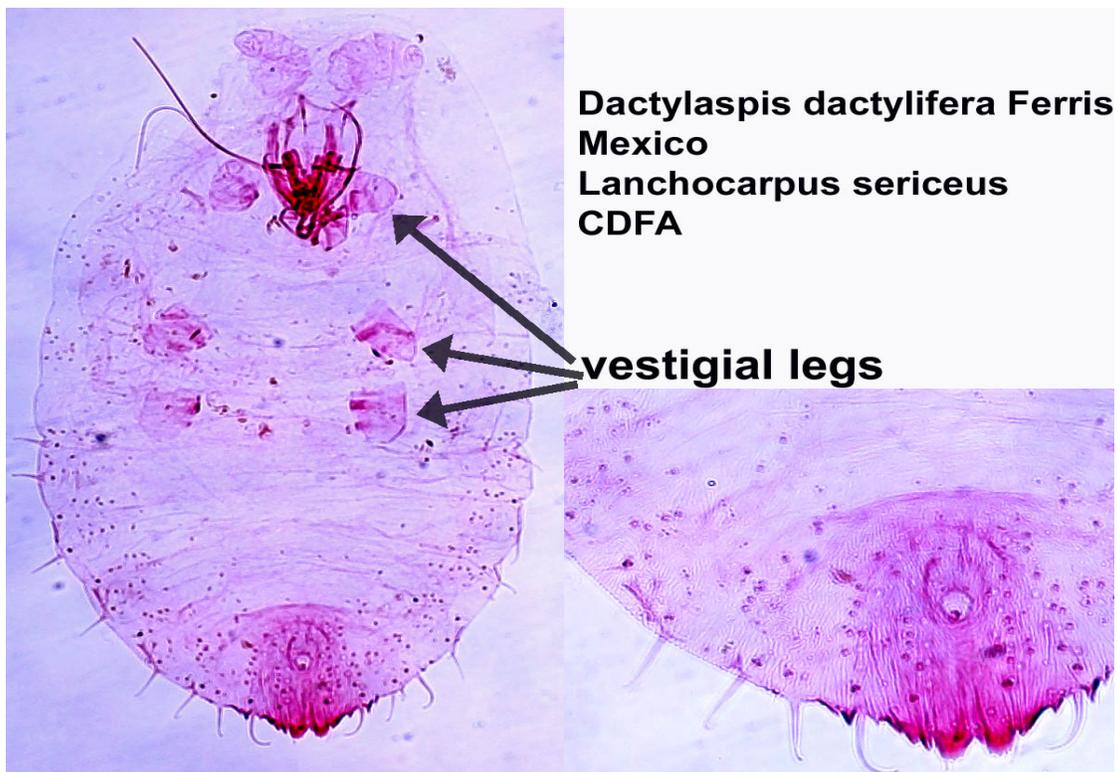
30' With no vestiges of the legs retained.....32

## KEY TO THE DIASPIDINI GENERA

- 31(30) Dorsal pygidial macroducts arranged in very definite rows, present to the seventh or perhaps even to the eighth segment; body becoming strongly sclerotized at maturity and with a conspicuous, unsclerotized constriction between prosoma and mesosoma; polyphagus on Nearctic, Neotropical, & Palaeartic Regions; 3 species known .....*Opuntiaspis* (Cockerell)

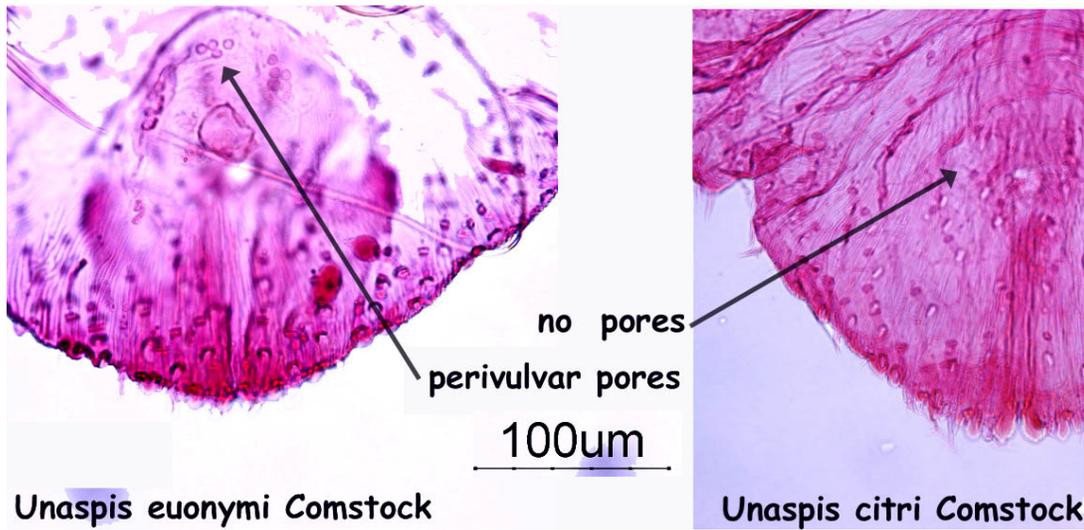


- 31' Dorsal pygidial macroducts distributed irregularly; body membranous or variously sclerotized, but not as in the preceding genus; polyphagus from the Australasian, Nearctic, & Neotropical Regions; 7 species known .....*Dactylaspis* (in part) Ferris



## KEY TO THE DIASPIDINI GENERA

32(30). Body elongate and fusiform or elongate oval, not widening anteriorly, the length normally at least twice the greatest breadth and the greatest breadth not across the head or prothoracic region .....33

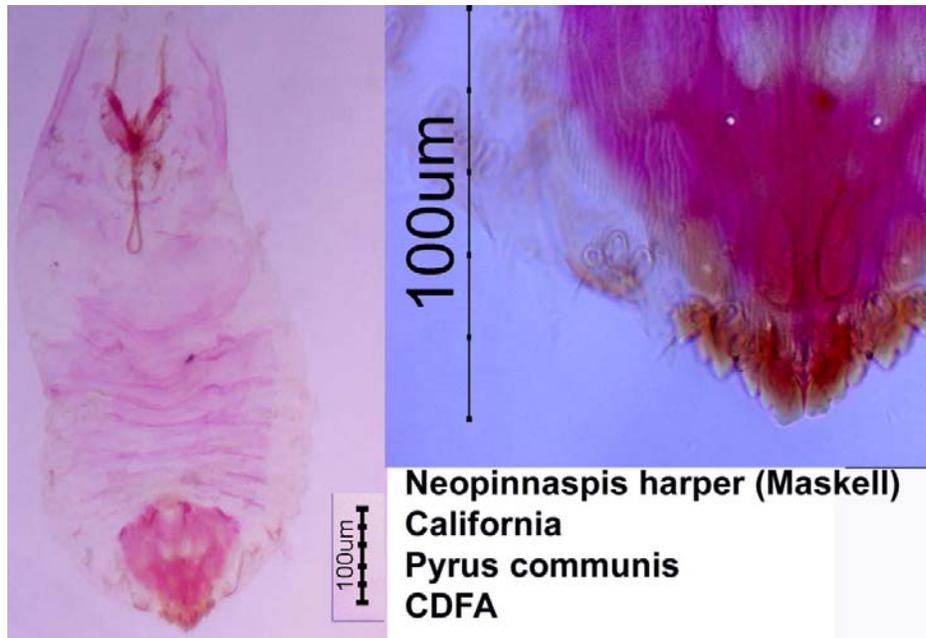


32' Body turbinate or pyriform or with the prosoma laterally expanded, length not likely to be more than twice the greatest breadth. the greatest breadth across the head or the prothoracic region.....48

33(32) Perivulvar pores present, although at times very few.....34

33' Perivulvar pores lacking.....40

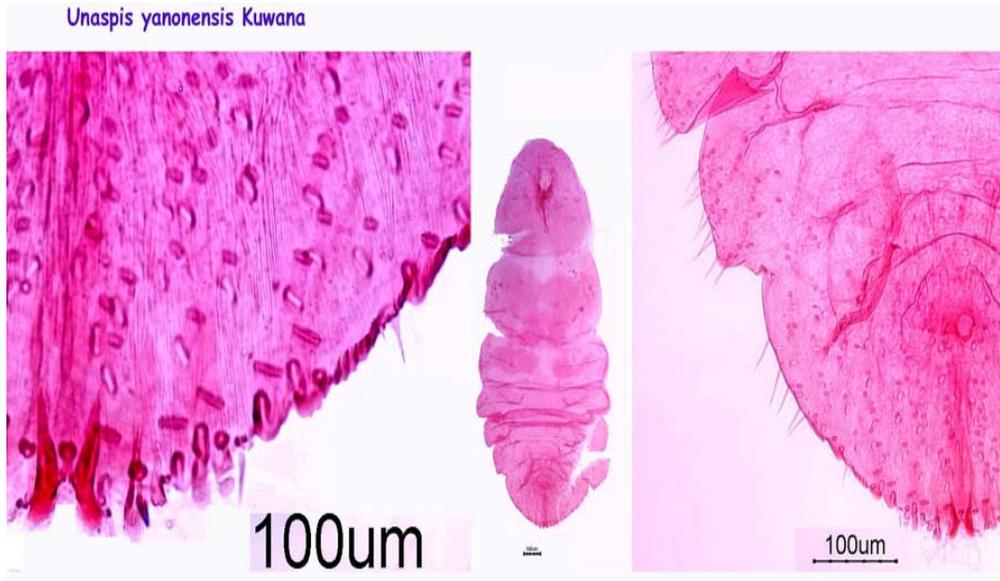
34(33) Median and 2nd. pair of lobes large, deeply notched, close set, forming an acute projection at the apex of the pygidium; with a small paraphysis arising from the 2nd. lateral notch of each median lobe; polyphagus from the Nearctic, Oriental, & Palaeartic Regions; 3 species known .....[Neopinnaspis](#) McKenzie



34' Median and 2nd. pair of lobes not close set and forming an acute projection at the pygidial apex; without a paraphysis arising from the 2nd. lateral notch of each median lobe .....35

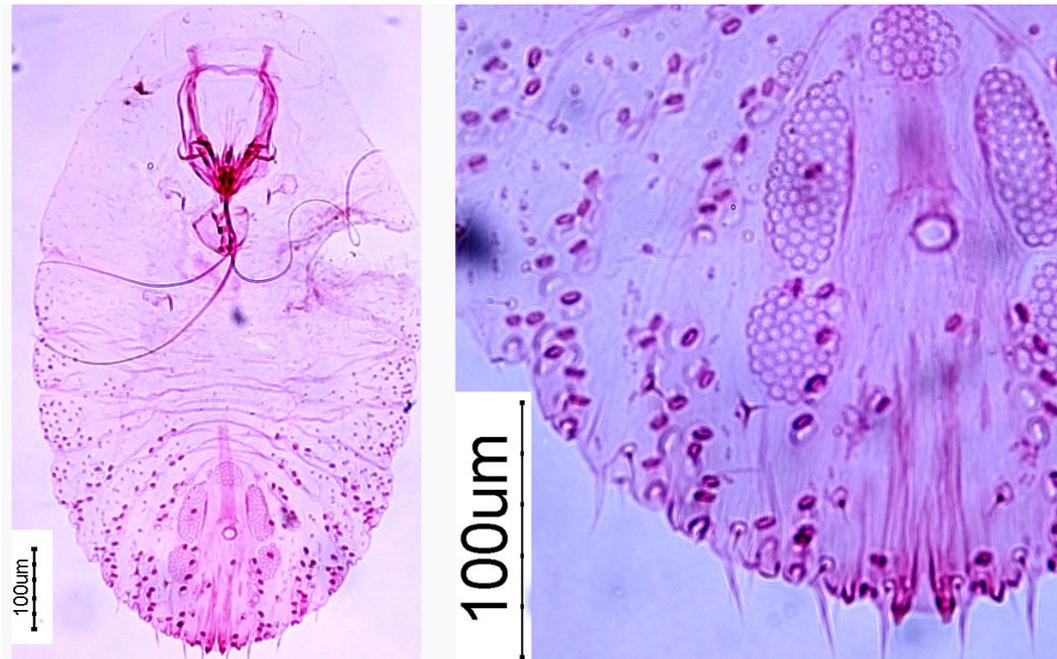
## KEY TO THE DIASPIDINI GENERA

- 35(34). Three pairs of lobe of pygidium present, the third pair distinct, flattened, resembling the 2nd. Pair in size and form; dorsal pygidial ducts scattered irregularly, present to the seventh or perhaps the eighth segment; 18 species known ..... *Unaspis* MacGillivray (in part)



- 35' Third lobes represented at the most merely by a variously shaped, sclerotized point or points, at times lacking.....36

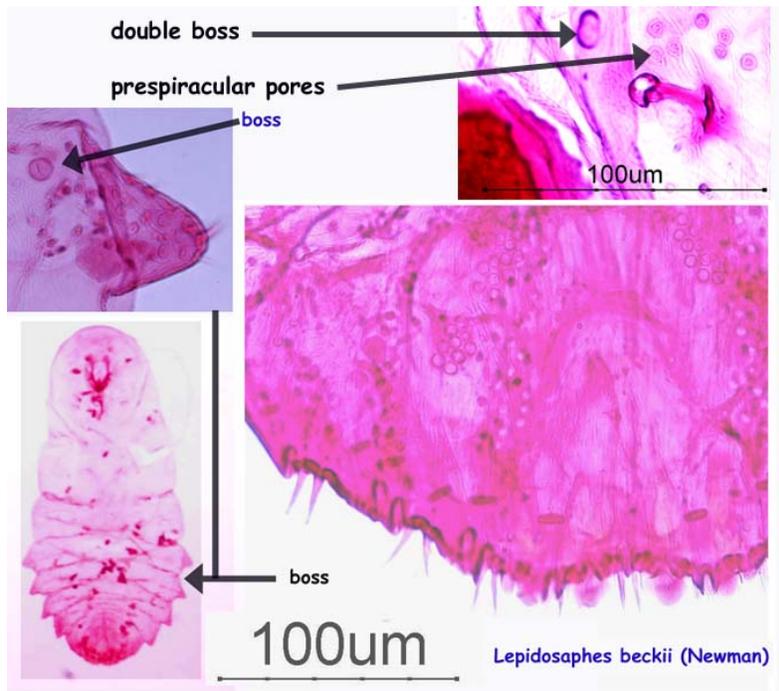
- 36(35) Median lobes apically rounded, tending to be elongate and narrow, never laterally notched; gland spines never present between them; dorsal ducts tending to be only slightly smaller than the marginal and to be arranged in distinct segmental rows; sub marginal setae on the ventral side of the pygidium tending to be enlarged; all the species now known are grass-infesting; on Cyperaceae & Poaceae from the Nearctic & Neotropical Regions; 11 species known ..... *Haliaspis* Takagi



- 36' Median lobes usually quite broad and heavy, but even if narrow they are notched laterally and are apically truncate or irregular and usually there is a pair of gland spines between them; dorsal ducts various.....37

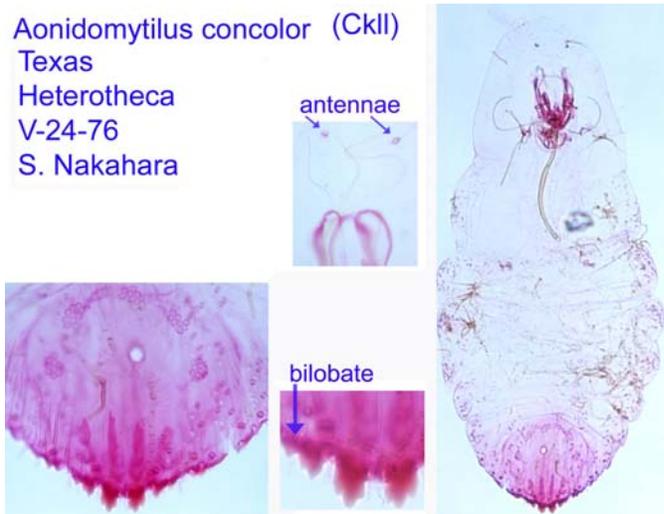
## KEY TO THE DIASPIDINI GENERA

37(36). Dorsal pygidial ducts, even if few, arranged in definite segmental rows or series, none present posterior to the sixth segment (except in one species a single duct on seventh and eighth); neither eyes nor antennae ever with any unusual developments; 2nd. lobe of pygidium always present, well developed, flattened & bilobulate; polyphagus with widespread distribution ; 160 species known .....*Lepidosaphes* Shimer



37' Dorsal pygidial ducts, distributed irregularly, frequently present to the seventh or even the eighth segment; eyes or antennae at times with some unusual feature; 2nd. pygidial lobe various, at times reduced to a mere point or heavily sclerotized and but slightly bilobulate..... 42

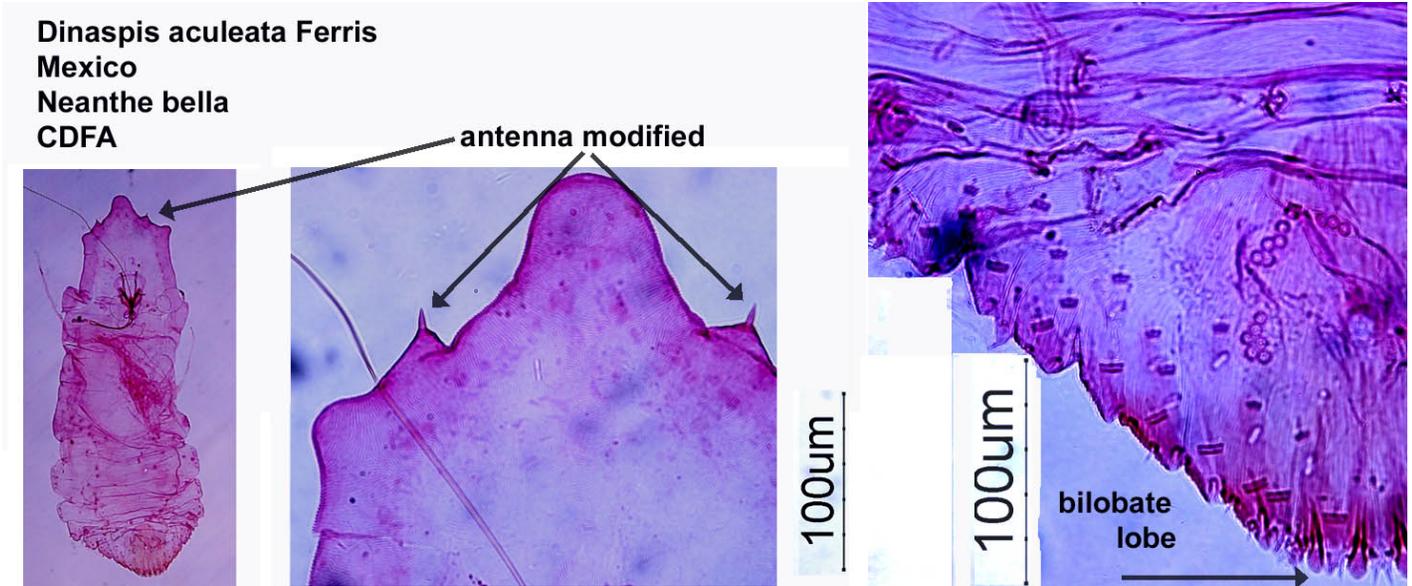
38(37) 2nd. pygidial lobe well-developed and bilobulate; eyes and antennae without unusual developments; anterior border of the head without tubercles; polyphagus from the Nearctic & Neotropical Regions ; 16 species known ..... *Aonidomytilus* Leonardi (in part)



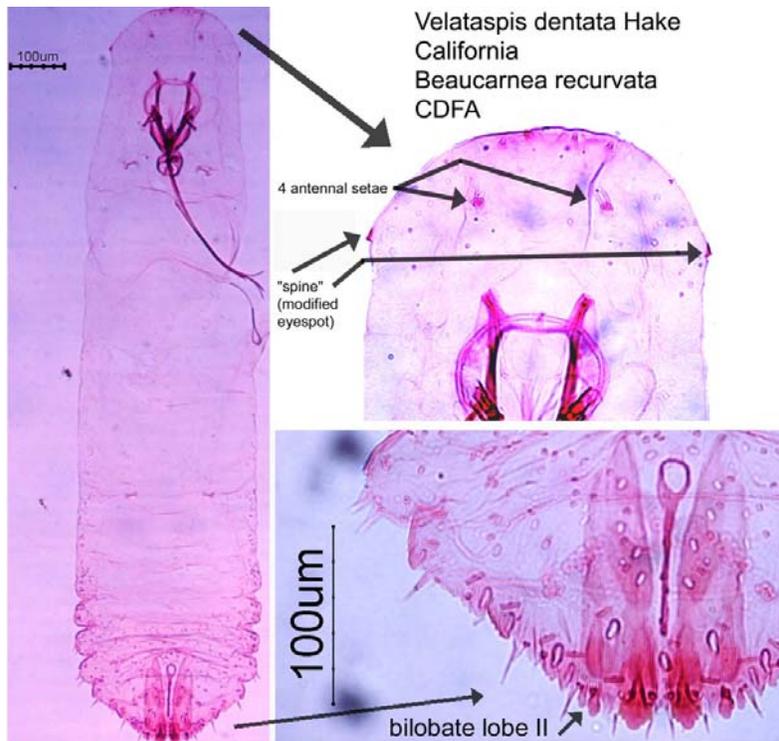
38' 2nd. pygidial lobe variable, sometimes reduced to a single sclerotized point, if well developed the eyes or the antennae with some unusual modification or the anterior margin of the head with tubercles .....39

## KEY TO THE DIASPIDINI GENERA

39(38) Antennae in some way modified: in one species shifted to the side of the head and consisting of a single large seta. in another with a sclerotized fold at the base; eyes unmodified; 2nd. lobe of pygidium well developed and bilobulate; polyphagus from the Afrotropical, Neotropical, & Oriental Regions; 11 species known ..... *Dinaspis*\* (in part) Leonardi

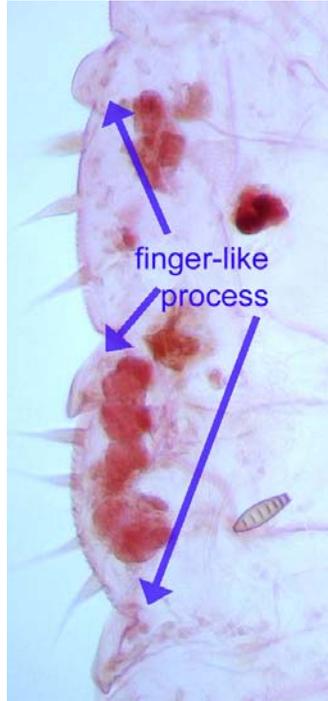


39' Antennae unmodified, but the eyes presenting unusual modifications in some species or the anterior margin of the head with tubercles; or the 2nd. lobe of pygidium reduced to an unsclerotized point; polyphagus from the Nearctic, Neotropical & Oriental Regions; 7 species known ..... *Velataspis* Ferris



## KEY TO THE DIASPIDINI GENERA

40(33) Prepygidial abdominal segments each with a sclerotized spur or a narrow lobe or a finger-like process at each anterior lateral angle; polyphagus from the Australasian, Nearctic, & Neotropical Regions; 7 species known ..... Dactylaspis (in part) Ferris

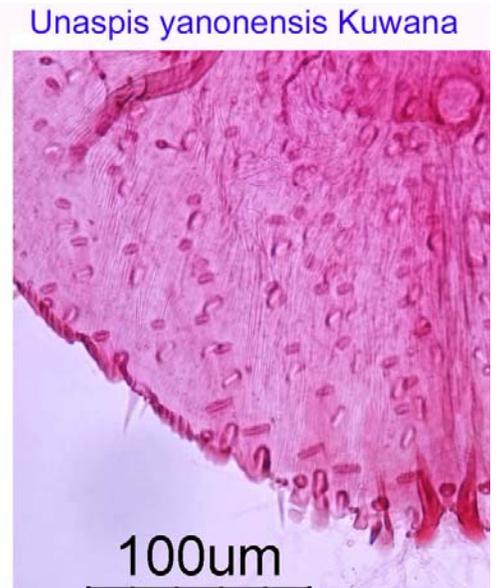
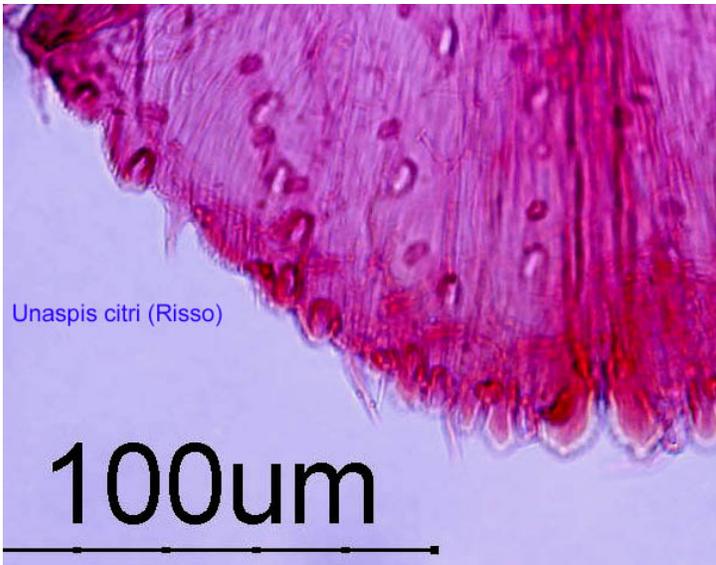


40' Not so .....41

41(40) Three pairs of well-developed lobe of pygidium present. the third pair deeply bilobulate and resembling the 2nd. in size and form.....42

41' Third lobe of pygidium, if recognizable at all, not bilobed.....43

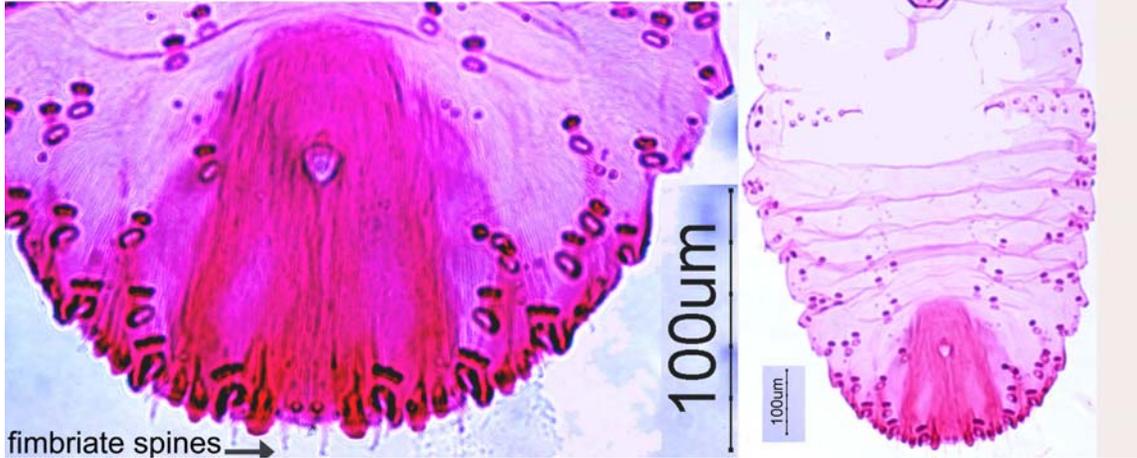
42(41) Median lobes close together and with no gland spines between; none of the gland spines at all fimbriate polyphagus with widespread distribution; 18 species known.....Unaspis MacGillivray (in part)



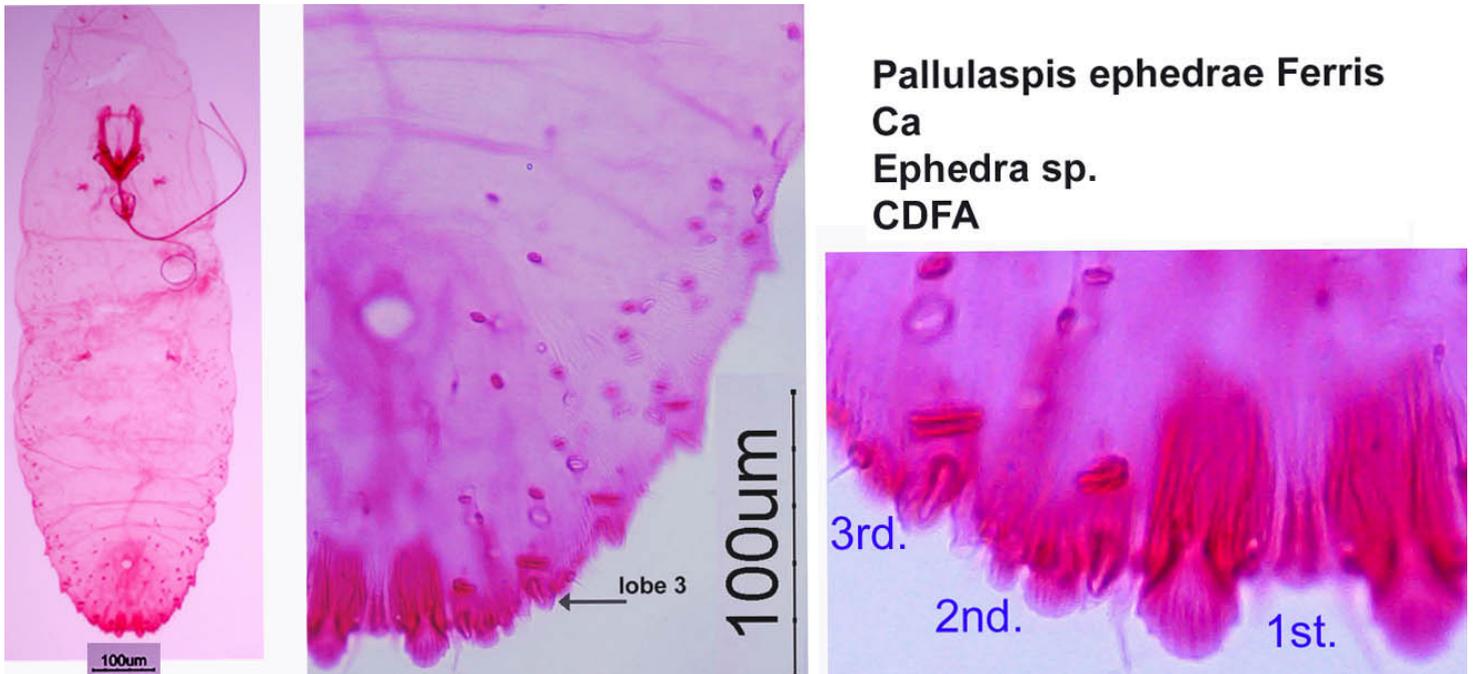
## KEY TO THE DIASPIDINI GENERA

- 42' Median lobes widely separated. with a pair of fimbriate gland spines between; known only from conifers; from Nearctic ( Mexico & the USA ) ; one species known .....*Stramenaspis* Ferris

*Stramenaspis kellogii* (Coleman)  
California  
Pseudotsuga sp.  
CDFA



- 43(41) Third pygidial lobe present, flattened, resembling the first lobule of the 2nd. lobe in size and form; no marginal macroducts in pairs; polyphagous from the Nearctic & Palaeartic Regions; 5 species known ..... *Pallulaspis* Ferris

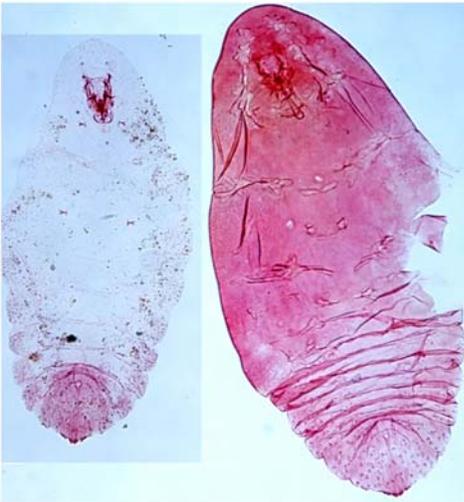


*Pallulaspis ephedrae* Ferris  
Ca  
Ephedra sp.  
CDFA

## KEY TO THE DIASPIDINI GENERA

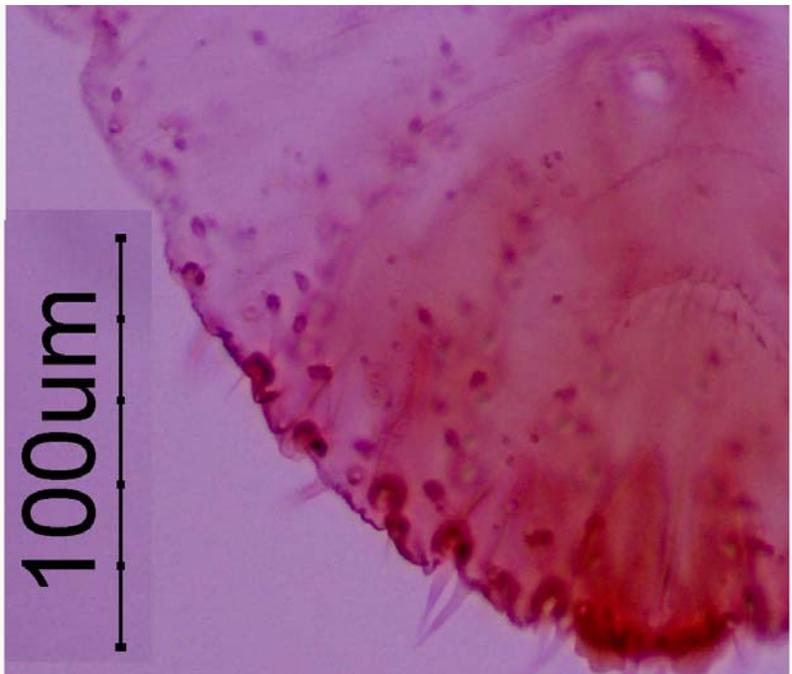
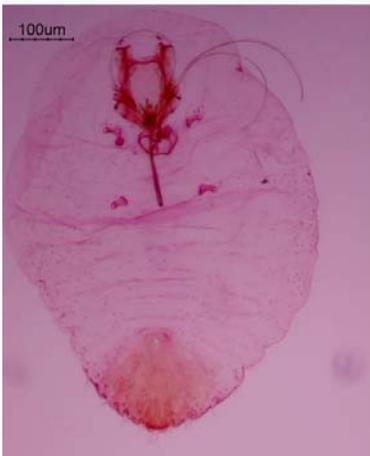
- 43' Third pygidial lobe, if recognizable at all, merely a sclerotized point; some of the marginal macroducts arranged in pairs.....44
- 44(43) Gland spines or gland tubercles totally absent; median lobes fused at base; polyphagus from the Australasian, Nearctic, & Neotropical Regions; 7 species known..... *Dactylaspis* (in part) Ferris

*Dactylaspis acuta* (Ferris)  
Mexico  
Lycium?  
SEL



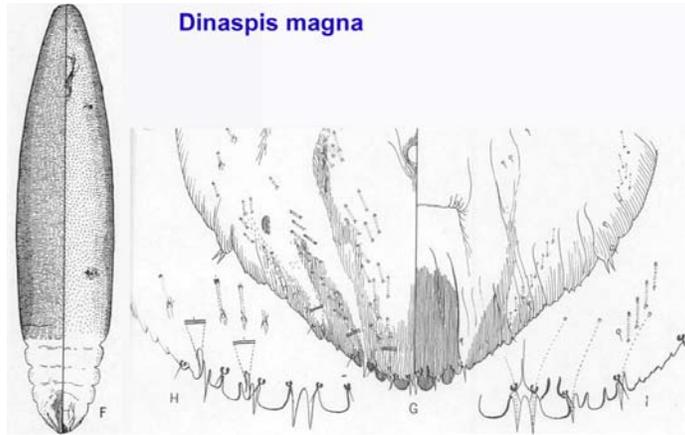
- 44' At least a few gland spines present along the pygidium .....45
- 45(44) Dorsal pygidial ducts, although few, arranged in definite segmental rows; median lobes alone present; polyphagus from the Nearctic, Oriental & Palearctic Regions; 13 species known .....  
.....*Mercetaspis* (formerly *Nilotaspis*) Gómez-Menor Ortega
- 45' Dorsal pygidial ducts scattered or in broad bands, not in segmental rows; median lobes various.....46

*Nilotaspis halimodendronis*  
Borschenius  
Russia  
Halimodendron  
CDFA



## KEY TO THE DIASPIDINI GENERA

46(45) Dorsal pygidial ducts arranged in irregular bands; 2nd. lobe well developed and bilobulate; body long, arrow and fusiform; polyphagus from the Afrotropical, Neotropical, & Oriental Regions; 11 species known  
 ..... *Dinaspis*\* (in part) Leonardi



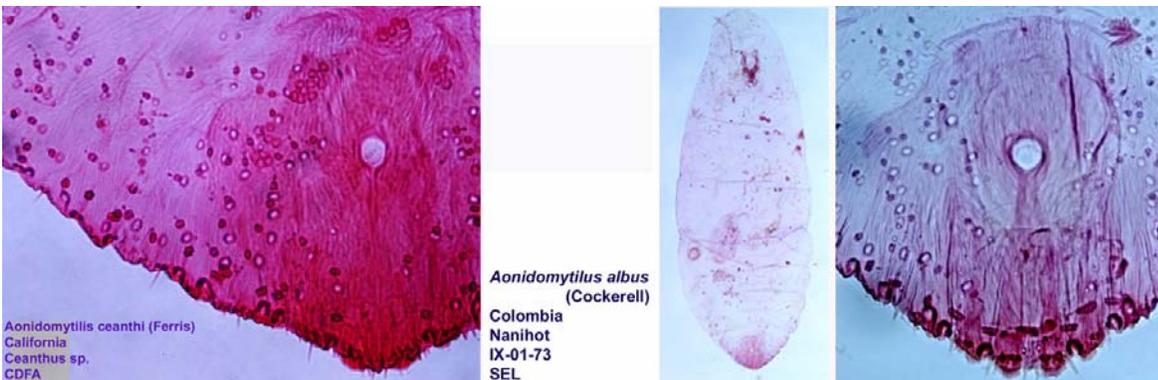
46' Dorsal pygidial ducts irregularly distributed; 2nd. lobes variously developed; third lobe at times indicated.....47

47(46) Median lobes closely crowded together but with a pair of gland spines between; 2nd. and third lobes in the form of single, sclerotized points; 2nd. exuviae larger than the adult female, which it envelopes but does not enclose; 2 species known ..... *Lapazia*\* Ferris



**Lapazia obtecta (Ferris)**  
 Mexico  
 Atriplex sp.  
 CDFA

47' Median lobes more widely separated, 2nd. and third lobes entirely lacking or both present and bilobed. Some species of ; polyphagus from the Nearctic & Neotropical Regions; 16 species known  
 ..... *Aonidomytilus* Leonardi (in part)

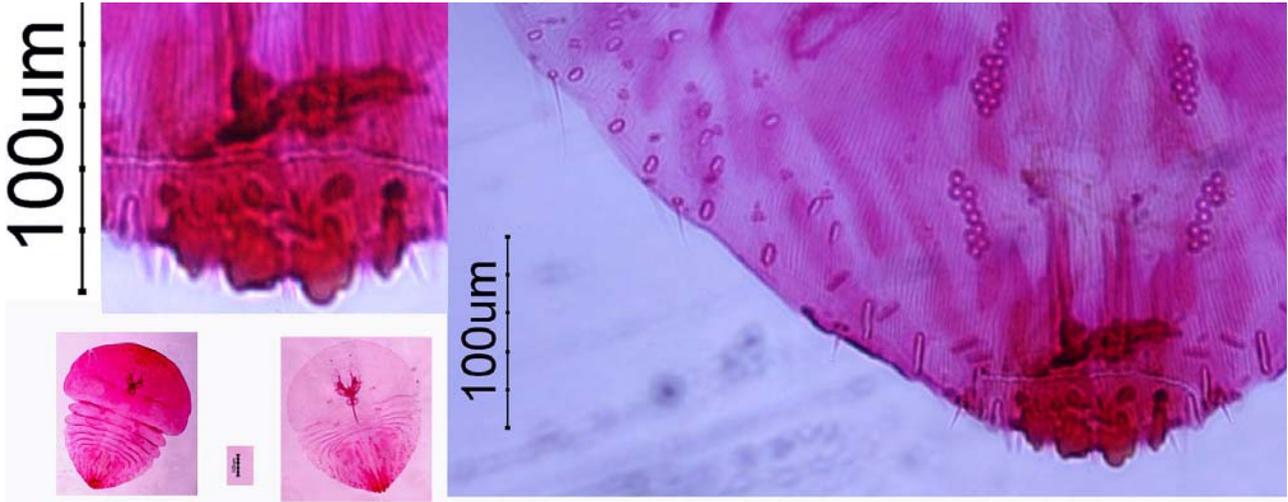


**Aonidomytilus ceanthi (Ferris)**  
 California  
 Ceanthus sp.  
 CDFA

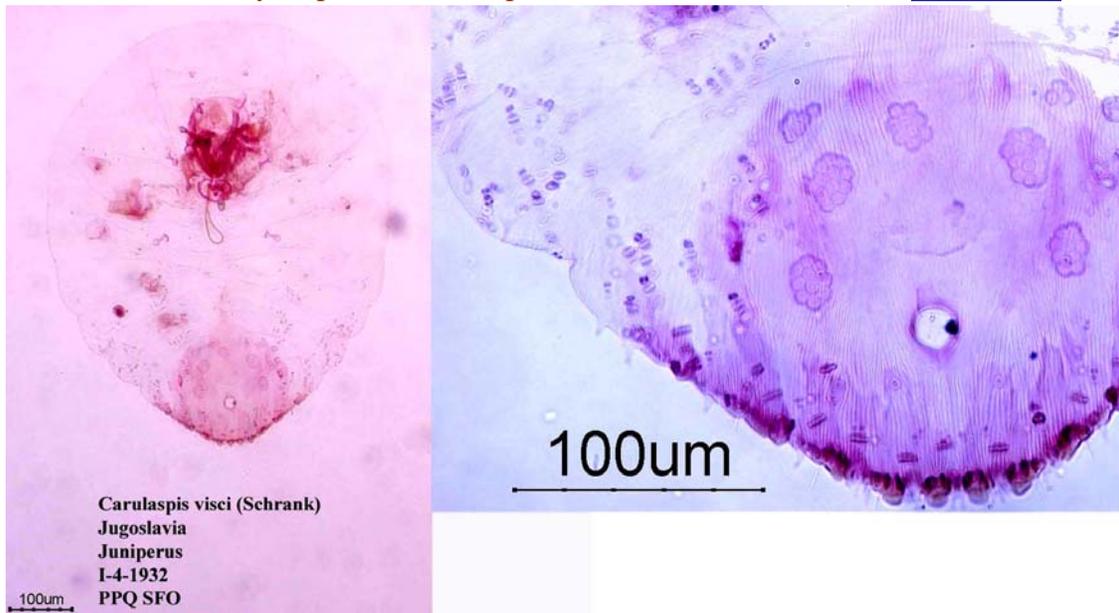
**Aonidomytilus albus (Cockerell)**  
 Colombia  
 Nanihot  
 IX-01-73  
 SEL

## KEY TO THE DIASPIDINI GENERA

- 48(32) Perivulvar pores present.....49
- 48' Perivulvar pores lacking (in one species occasionally present).....53
- 49(48) Median and 2nd. lobes of pygidium each with a sclerotized process arising from its base; on *Elaphrium microphyllum* or *Larrea tridentata* from the Nearctic (Mexico & USA) and Neotropical (Bahamas) Regions; 3 species known .....One species of *Pseudodiaspis* (Cockerell)



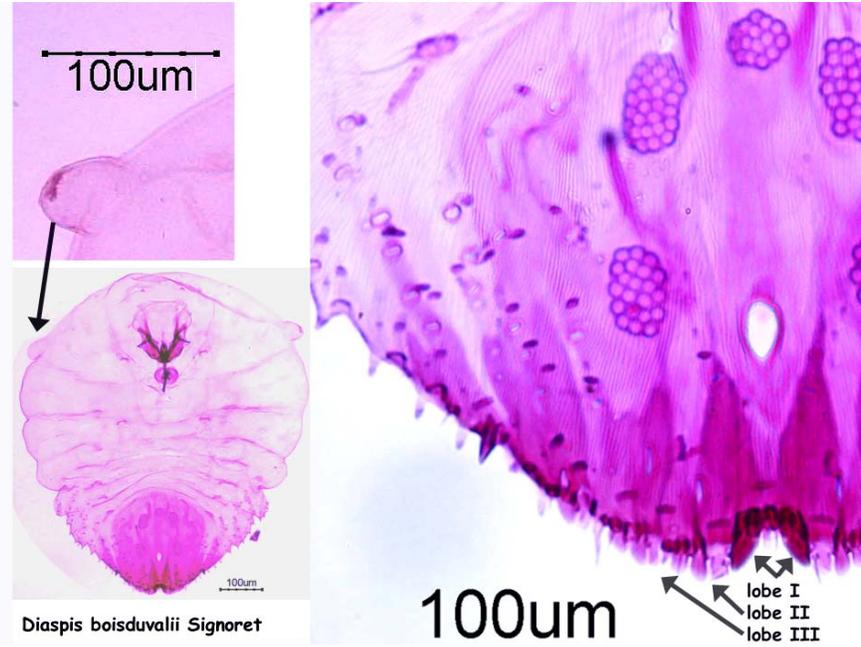
- 49' Lobe of pygidium with no such sclerotized process .....50
- 50(49) Dorsal ducts of the pygidium arranged in definite, segmental rows, not present posterior to the fifth segment except for a single sub marginal duct anterior to the 2nd. lobe; known in North America only from conifers of the family Cupressaceae; 7 species known .....*Carulaspis* MacGillivray



- 50' Dorsal pygidial ducts at times exceedingly few or almost lacking; but when in sufficient numbers to define any arrangement, not in definite segmental rows, usually scattered or in clusters except for rows on the prepygidial segments (present to the sixth or seventh segment).....51

## KEY TO THE DIASPIDINI GENERA

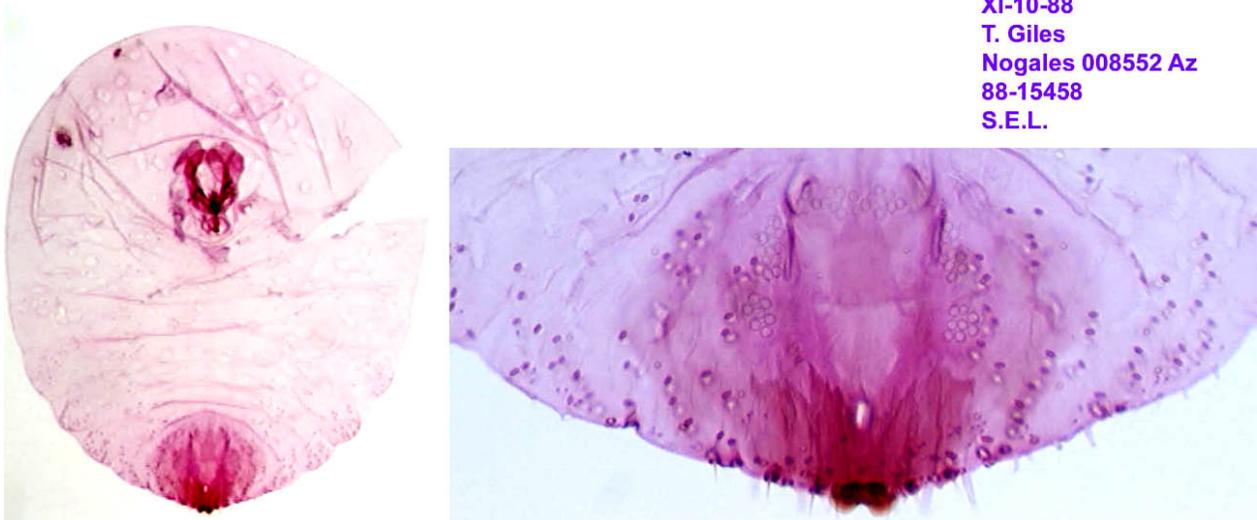
- 51(50). Basal scleroses of the dorsal marginal setae of at least segments six and seven (2nd. and third lobes) definitely enlarged; median lobes usually close together or even basally approximate or fused, never apically divergent; 2nd. lobes tending to be reduced, sometimes almost obsolete; third lobe never developed as more than a minute point .....52
- 51' Basal scleroses of these setae not enlarged; median lobes well separated or in many species apically divergent and forming an apical notch in the pygidium; 2nd. lobes tending to be well developed and even the third lobe at times present; polyphagus with worldwide distribution; 58 species known.....  
Diaspis Costa



- 52(51) Perivulvar pores in four or five well-developed groups; polyphagus with worldwide distribution; 14 species known ..... Epidiaspis (Cockerell)

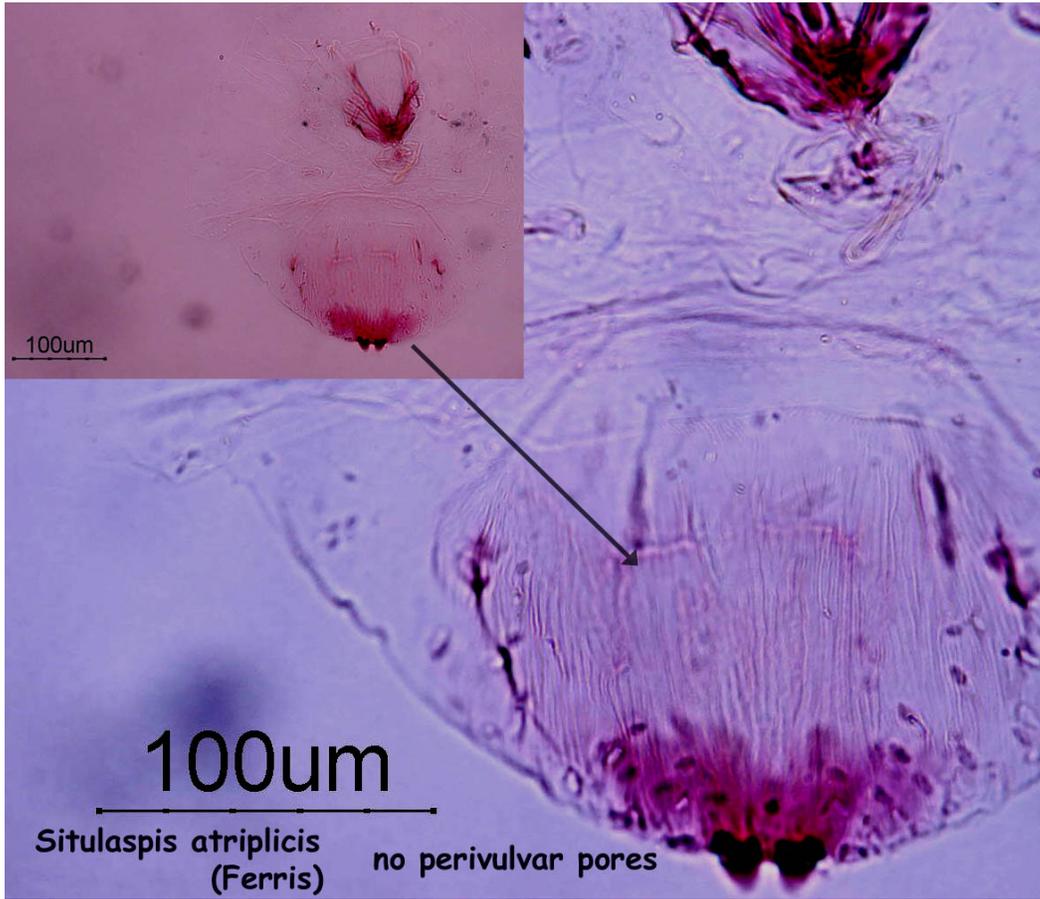
### Epidiaspis persimilis (Cockerell)

Mexico  
unknown cutting  
XI-10-88  
T. Giles  
Nogales 008552 Az  
88-15458  
S.E.L.

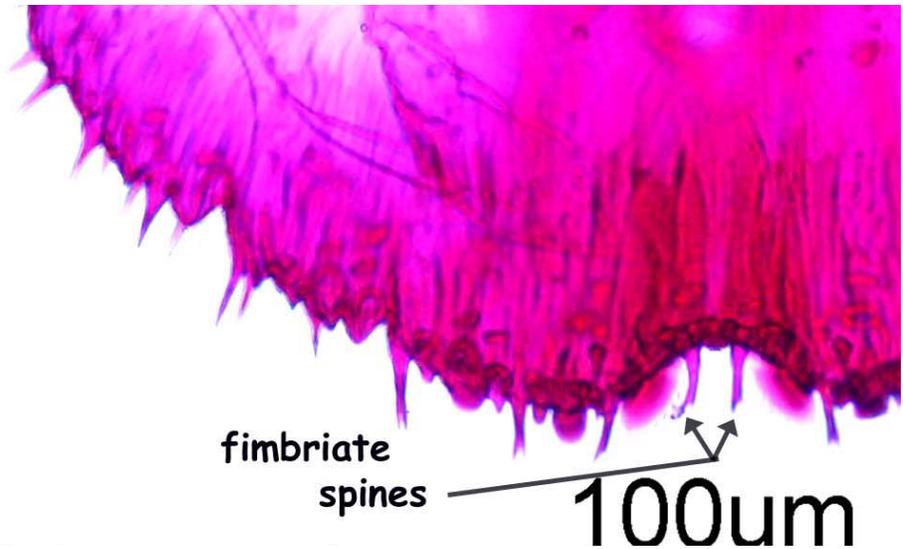


## KEY TO THE DIASPIDINI GENERA

- 52' Perivulvar pores vestigial, or if definitely present with not more than four or five on either side. One species, in which the perivulvar pores may be either present or absent, belonging to the genus; polyphagous from the Nearctic Region (Mexico & USA); 5 species known ..... *Situlaspis* MacGillivray



- 53(48) Median lobes forming a notch in the apex of the pygidium, widely separated and with a pair of apically fimbriate gland spines between; polyphagous but known primarily from Cycads in quarantine with worldwide distribution; one species known..... *Furchadaspis* MacGillivray

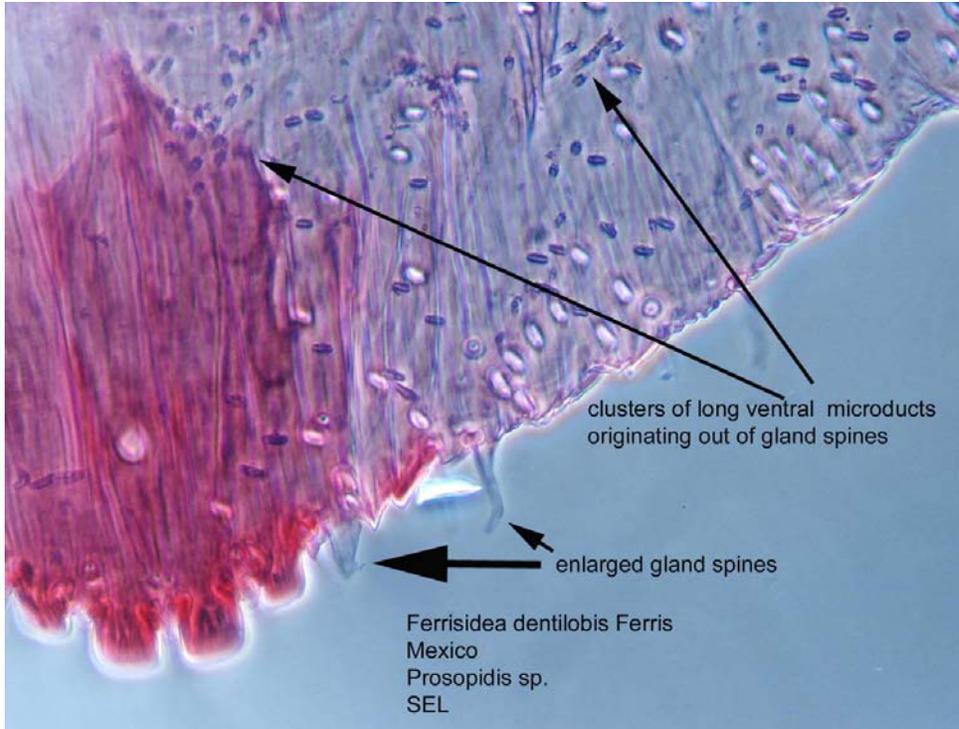


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## KEY TO THE DIASPIDINI GENERA

m an apical notch in the pygidium.....54

54(53) Gland spines of the pygidium unusually stout. apically truncate and with a bundle of very long, slender microducts discharging through each; Fabaceae & Solanaceae from Nearctic Region (Mexico & USA); 3 species known.....Ferrisidea Borchsenius



54' Gland spines of pygidium of normal character, with at most two microducts discharging through each .....55

55(54) With a sclerotized process arising from the base of each median lobe and from the sites of the obsolete 2nd. and 3<sup>rd</sup>. lobes on *Elaphrium microphyllum* or *Larrea tridentate* from the Nearctic (Mexico & USA) and Neotropical (Bahamas) Regions; 3 species known.....Pseudodiaspis (Cockerell)



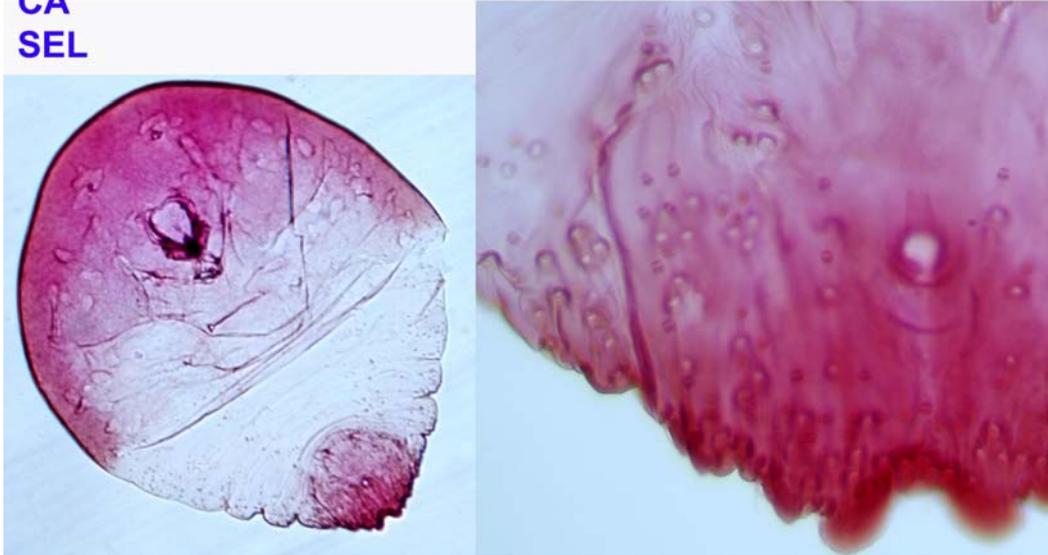
55' sclerotized process absent or not as above.....56

## KEY TO THE DIASPIDINI GENERA

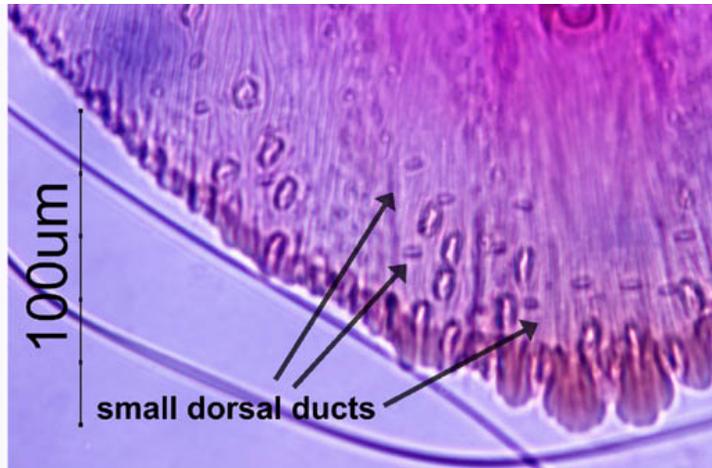
- 56(55) Marginal macroducts, of the pygidium present or absent, if present not distinctly differentiated from the dorsal ducts by larger size or by occupation of some of the normal fixed positions .....57
- 56' Marginal macroducts of the pygidium distinctly differentiated from the dorsal ducts by larger size or by occupation of some of the normal fixed positions.....58
- 57(56). Median lobe of pygidium present, prominent, quite widely separated; 2nd. and third lobes represented merely by marginal irregularities; on *Celtis*, *Cercidium sp.*, & *Phoradendron flavescens* from Mexico (USA) ; 2 species known ..... *Crassaspis* Ferris

### Crassaspis (Stulaspis) multipori (Ferris)

CA  
SEL



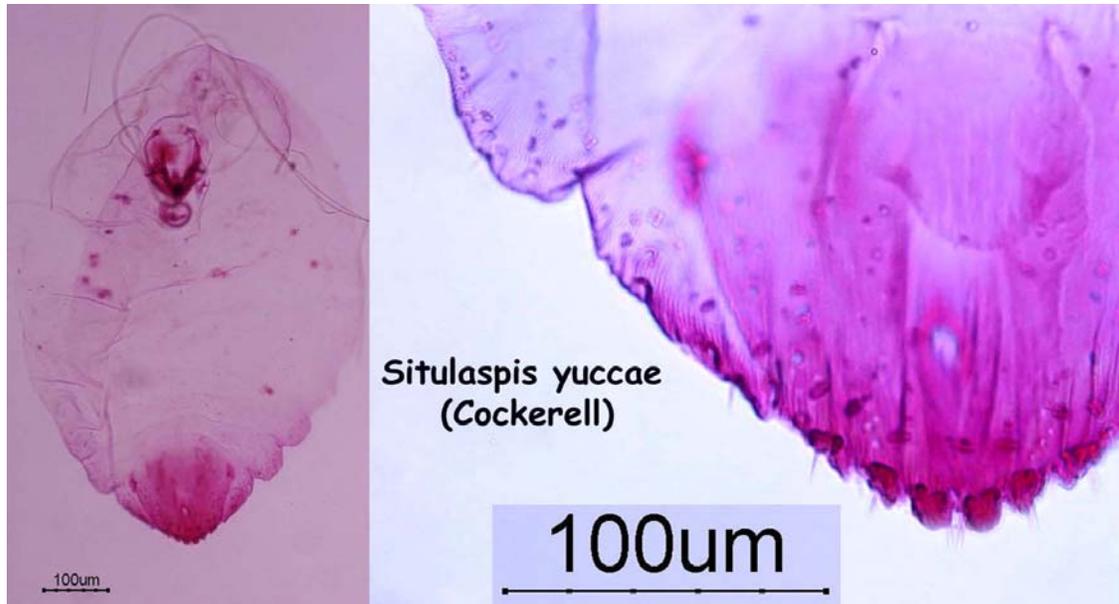
- 57' Median lobe of pygidium present or absent, if present then the 2<sup>nd</sup> lobes are present & distinctly bilobate; pygidium at times heavily sclerotized, somewhat elongated lacking lobes; primarily occurring on oaks from Australasia, Nearctic & Neotropical Regions; 16 species known ..... *Protodiaspis* Cockerell
- 58(56) Very broadly pyriform species with almost the entire body strongly sclerotized at maturity; dorsum of the pygidium with numerous. scattered. minute ducts and with at times a few larger ones; gland spines entirely lacking; primarily on Fabaceae from the Neotropical Region (Mexico & Panama) ; 2 species known ..... *Mancaspis*\* Ferris



**Mancaspis lunata Ferris**  
Panama  
Enterolobium  
CDFA

## KEY TO THE DIASPIDINI GENERA

- 58' Turbinate or with the prosoma expanded laterally; prosomatic area of the dorsum sclerotized at maturity; dorsal pygidial ducts only slightly smaller than the marginal ducts and with some tendency to be arranged in rows or series; gland spines small but definitely present; polyphagus from the Nearctic Region; 5 species known .....Situlaspis MacGillivray



## References & Bibliography : Key source & other data

1. PRINCIPLES OF CLASSIFICATION OF THE ARMORED SCALE INSECTS (HOMOPTERA, COCCOIDEA, DIASPIDIDAE) 1965 BY N.S.BORKSHENIUS.
2. "Atlas of the Scale Insects of North America" by G. F. Ferris 1937-1942.
3. "World Crop Pests Armored Scale Insects" Volume 4A and 4B W. Helle.
4. Scalenet: <http://198.77.169.79/scalenet/query.htm>
5. All images by PPQ (J. Dooley). Specimens provided by CDFA, PPQ, and ARS (Systematic Entomology Lab).

John Dooley