THE PACHYGRONTHINAE (HEMIPTERA: LYgaeidae) 
OF TRINIDAD WITH THE DESCRIPTION OF 
A NEW SPECIES AND NOTES ON 
OTHER SEDGE FEEDING LYgaeIDS

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ABSTRACT

Oedancala scutellata n.sp. is described from Trinidad. Pachygrontha 
saileri Slater is reduced to the status of a subspecies of P. minarum 
Lethierry and Severin and previous records of P. saileri for Trinidad, 
Guyana and Surinam are referred to the nominate subspecies. P. longiceps 
Stål and O. acuminata Slater are reported for Trinidad and P. longiceps 
from Venezuela for the first time and Oedancala meridionalis Stål reported 
for the first time from Mexico. Host plant, habitat and distributional data 
are given. Host plants of the subfamily Cyminae also are discussed.

A table of host plants for each Trinidad species of Pachygronthinæ and 
Cyminae is given. It is concluded that the Trinidad fauna of both of these 
subfamilies can be separated into specialists and generalists.

RESUMEN

Oedancala scutellata se describe como una especie nueva de Trinidad. Pachygrontha 
saileri Slater es reducida a una sub-especie de P. minarum 
Lethierry y Severin y los registros previos de P. saileri para Trinidad, 
Guyana y Surinam son referidos a la sub-especie nominada. P. longiceps 
Stål y O. acuminata son reportados de Trinidad, P. longiceps es también 
reportado por primera vez de Venezuela y Oedancala meridionalis Stål es 
reportado por primera vez de Mexico. Se informa sobre las plantas 
hospedantes, habitat y distribución de las especies. Las plantas hospedantes 
de la sub-familia Cyminae son también discutidas.

Una tabla de las plantas hospedantes para cada una de las especies de 
Trinidad de las subfamilias Pachygronthinæ y Cyminae es reportada. Este 
estudio permite separar la fauna de Trinidad de ambas subfamilias con 
respecto a la especificidad del hospedante en especies especializadas y 
generalizadas.

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The Trinidad pachygronthine fauna is restricted to 6 species in the tribe 
Pachygronthini, including an endemic species of Oedancala. The other 5 
species all occur in mainland South America, although one of these shows 
subspecific differentiation in the Lesser Antilles.

Although Trinidad is a "continental" island and although there are sev-
eral pachygronthines found in northern South America that are not known 
from the West Indies, only one of these latter species is known from Trin-
idad. With the exception of Oedancala acuminata Slater and the endemic 
Oedancala described below, all of the other species occur on the offshore 
islands. Thus, surprisingly, the pachygronthine fauna of Trinidad is little
more “continental” than are other larger “non-continental” islands of the West Indies.

In the present paper we describe Oedancala scutellata n.sp. Pachygrontha salieri Slater is assigned to subspecific status with P. minarum Letherry and Severin. Slater’s (1975) Trinidad, Surinam and Guyana records of salieri are referred to the nominate subspecies. We report Pachygrontha longiceps Stål and Oedancala acuminata Slater from Trinidad and P. longiceps from Venezuela for the first time. The biology, general distribution and immature stages of the various species are discussed.

We have included a discussion and analysis of the host plant associations of the species of Cyminae known to occur in Trinidad. Since the Cyminae are sedge feeders the relationship of the members of the 2 subfamilies seems important as they form a rather unique trophic “guild” within the Lygaeidae.

In the following discussion, distributions follow Slater’s (1964) catalogue and subsequent publications. Many of the distribution records are from Slater’s (1965) World revision of the subfamily that includes comprehensive keys to the fauna of the Western Hemisphere. All measurements are in mm.

Key to the Pachygronthinae of Trinidad

1. Length of the eye equal to or less than length of preocular margin (measured to apex of antennal process); length of 3rd antennal segment 1.2 or more times length of 4th .......................... 2

1’. Length of eye greater than length of preocular margin; length of 3rd antennal segment never more than 1.1 times length of 4th ........................................................................................................ 4

2(1). Small species, 5 mm or less ........................................................................ P. compacta

2’. Larger species, 7.5 mm or more .................................................................... 3

3(2’). Distal 1/2 of 3rd antennal segment pale differentiated from dark color of proximal 1/2; 3rd antennal segment more than 1.6 times length of 4th; apical margin of corium with 2 black spots, one at apex, 2nd midway along margin .......... P. longiceps

3’. Third antennal segment unicolorous; less than 1.5 times length of 4th; apical margin of corium with only 1 black spot located midway along margin ......................................................... P. minarum

4(1’). Larger species, more than 7.5 mm in length; apical margin of corium often suffused with dark brown, never with a distinct black spot ................................................................................................ O. scutellata

4’. Smaller species, less than 6.5 mm in length; apical corial margin with or without a dark apical spot .................................................. 5

5(4’). Labium elongate, 2nd labial segment exceeding anterior margin of pro sternum by at least 1/2 its length; middle of apical margin of corium lacking a dark spot ........................................................................ O. acuminata

5’. Labium short, 2nd labial segment scarcely, if at all, exceeding anterior margin of pro sternum, middle of the apical margin of corium with a dark spot present ........................................... O. bimaculata

Key to 5th instar nymphs

1. Length of eye equal to or less than length of preocular margin
(measured to apex of antenniferous tubercle) ........................................ 2
1'. Length of eye greater than length of preocular margin .................. 4
2(1). Small species, 5 mm or less .................................................. P. commutata
2'. Larger species, 7 mm or more ................................................. 3
3(2'). Third antennal segment uniformly brown; thoracic pleura without longitudinal stripe above acetabula ................................ P. minorum
3'. Distal 1/3 of 3rd antennal segment distinctly paler than remainder of antenna; thoracic pleura with a longitudinal dark stripe above acetabula .................................................. P. longiceps
4(1'). Antennal segment uniformly reddish brown ......................... O. scutellata
4'. 4th antennal segment darker than preceding segments .............. 5
5(4'). Labium elongate, extending caudad to anterior margin of mesocoxae ............................................................. O. acuminata
5'. Labium shorter, not reaching anterior margin of mesocoxae .................................................. O. binuculata

Oedaneclata scutellata Baranowski and Slater, New Species

Fig. 1

Form and color similar to meridionalis Stål. General coloration reddish brown to testaceeous. Apical corial margin lacking distinctly differentiated black spine either at middle or apex. Head and pronotum with a strongly contrasting pale yellow median longitudinal stripe. Scutellum almost completely calloused and light yellow, including meson, but with excavated mesal area at scutellar base contrasting dark red brown. Antennae and a diffuse area on either side of pale median pronotal stripe, ventral surfaces of fore femora, distal portion of clavalus and apical margin of corium a darker red brown than adjacent areas.

Head elongate, strongly tapering anteriorly, apex of tylus not extending anteriorly to middle of 1st antennal segment, head length 1.38, width 1.28, interocular space 0.78. Pronotum narrowing from posterior to anterior margin, transverse impression obsolete, lateral margin modestly sinuate; pronotum length 2.0, width 2.45. Scutellum elevated basally but with a deep median basal excavation, almost completely pale yellowish white including midline and elevated “calliotes” adjacent to basal excavation, scutellum length 1.25, width 1.28. Hemelytra with lateral corial margins abruptly explanate posterior to level of apex of scutellum. Claval commissure length 0.65, distance along midline from apex clavalus to apex corium 1.75; distance along midline from apex corium to apex wing membrane 1.65. Fore femora very strongly incassate, armed below with 4 heavy blunt major spines, lacking a minor spine between 2 proximal major ones. Labium just attaining anterior margin of mesonotum, 1st segment short, minute from eye, extending posteriorly only to antenniferous tubercle, segment 2 slightly exceeding base of head. Labial segments length I 0.5, II 0.58, III 0.63, IV 0.65. Antennae thick, first segment “bent laterally” toward distal end. Antennal segments length I 1.7, II 1.0, III 0.98, IV 0.88. Total length 8.1.


Paratypes: TRINIDAD: 49 6, 46 6, same data as holotype; 103 6, 89 6, Nariva Co. Manzanilla—Mayaro Rd., 46 mi. post, 22-III-1979, M. J. W.
Fig. 1. Oedancata scutellata Baranowski & Slater, new species, dorsal view.

Cock; 41 ♂, 47 ♀, Nariva Co., Manzanilla-Mayaro Rd., 46 mi. post, 21-IX-1979, K. M. Baranowski; 3 ♂, 3 ♀ same, 5-IX-1981; 8 ♂, 5 ♀ St. Patrick Co. LaBrea, Pitch Lake 9-IX-1981, R. M. Baranowski. All specimens were collected on Rhynchospora corymbosa (L.) Britton. Paratypes are deposited
in U. S. National Museum of Natural History, American Museum of Natural History, British Museum of Natural History, Commonwealth Institute of Biological Control, Trinidad, Florida State Collection of Arthropods, and James A. Slater and Richard M. Baranowski collections.

There is some color variation in the type series. In some individuals the dorsal body coloration is nearly uniformly testaceous, in others the increased reddish brown coloration on the clavus along the apical corial margin is conspicuously differentiated from the remainder of the surface. Not uncommonly a small "minor spine" is present between the 2 proximal major spines of the fore femora.

*O. scutellata* is very closely related to *meridionalis* Stål. It may be most readily distinguished from *meridionalis* (to which it will run in Slater's (1955) key) by the nearly completely laevigate pale yellow scutellum. In all specimens of *meridionalis* that we have examined (from Mexico to Argentina), the scutellum bears a prominent pale laevigate diagonal stripe laterally on each side of the scutellum, but mesally the scutellum invariably has a complete and broad brown stripe.

In *O. scutellata* the males always have much more elongate antennae than do the females (Table 1). So far as we know, in *Oedancalea* marked antennal dimorphism has been observed previously in *O. cubana* Stål. *O. scutellata* can be distinguished from *meridionalis* by the relatively longer antennal segments.

**Description of scutellata nymphs**

5th instar (in alcohol, n = 3)

Shape elongate oval. Coloration light brown. Distal end of wing pads, tarsi, 4th labial segment darker brown. Antennae and tibiae reddish brown. Head, thorax including wing pads with dark brown punctures. Abdomen pale yellow with a faint median reddish stripe, this darker and wider around scent gland openings and a pair of reddish longitudinal bands widest just under the wing pads extending nearly to a point at the posterior border of the 8th segment. Ventral surface with same markings. Head length 1.2, width 1.2, interocular space 0.8. Pronotum length 1.23, width 2.19. Wing pads length 2.19. Abdomen length 2.8. Labial segments length I 0.44, II 0.52, III 0.55, IV 0.55. Antennal segments length I 0.52, II 0.36, III 0.36, IV 0.36. Total body length 5.95.

**TABLE 1. Antennal segment lengths of O. scutellata and O. meridionalis (n = 5).**

<table>
<thead>
<tr>
<th>Segment</th>
<th><em>O. scutellata</em></th>
<th><em>O. meridionalis</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>♂</td>
<td>♀</td>
</tr>
<tr>
<td>1</td>
<td>1.60-1.72 (1.65)</td>
<td>1.28-1.44 (1.37)</td>
</tr>
<tr>
<td>2</td>
<td>0.92-1.00 (0.97)</td>
<td>0.80-0.84 (0.81)</td>
</tr>
<tr>
<td>3</td>
<td>0.92-1.00 (0.96)</td>
<td>0.80-0.88 (0.83)</td>
</tr>
<tr>
<td>4</td>
<td>0.92-0.96 (0.93)</td>
<td>0.84-0.88 (0.85)</td>
</tr>
</tbody>
</table>
Baranowski & Slater: Pachygronthinae of Trinidad

4th instar (in alcohol, n = 3)

Similar in shape and color to 5th instar, but darkened area at distal ends of wing pads not as apparent. Head length 1.04, width 1.01, interocular space 0.8. Pronotum length 0.81, width 1.61; wing pads length 1.01. Abdomen length 2.37. Labial segments length I 0.39, II 0.43, III 0.43, IV 0.40. Antennal segments length I 0.64, II 0.53, III 0.56, IV 0.65. Total body length 4.35.

3rd instar (in alcohol, n = 3)

Similar in shape and color to 4th instar, but 4th antennal segment and legs dark brown. Head length 0.72, width 0.8, interocular space 0.53. Pronotum length 0.55, width 1.16. Abdomen length 1.26. Labial segments length I 0.27, II 0.32, III 0.33, IV 0.35. Antennal segments length I 0.39, II 0.39, III 0.41, IV 0.51. Total body length 2.75.

2nd instar (in alcohol, n = 3)

Similar in shape and color to 3rd, but punctures on head and thorax considerably reduced. Head length 0.59, width 0.62, interocular space 0.45. Pronotum length 0.33, width 0.79. Abdomen length 1.0. Labial segments length I 0.23, II 0.25, III 0.26, IV 0.31. Antennal segments length I 0.25, II 0.29, III 0.29, IV 0.42. Total body length 1.95.

1st instar (in alcohol, n = 3)

Head, thorax dark brown, impunctate. Legs dark brown except for distal end of femur and tibia and basal tarsal segment pale. Antennal segments I, IV dark brown, II, III pale. Body and appendages with scattered long hairs. Head length 0.49, width 0.44, interocular space 0.34. Pronotum length 0.17, width 0.41. Abdomen length 0.81. Labial segments length I 0.20, II 0.21, III 0.20, IV 0.25. Antennal segments length I 0.17, II 0.19, III 0.21, IV 0.3. Total body length 1.53.

egg (in alcohol, n = 3)

Cream colored, elongate, tapering to a narrow rounded posterior end and a narrow truncate anterior end with typically 6 short stubby micropylar processes. Chorion faintly reticulated. Length 1.52, maximum width 0.37.

Biology of O. scutellata

The eggs of O. scutellata are deposited between the “sheath” and seed of the sedge, Rhynchospora corymbosa (L.). Nymphs and adults are typically found on the seed heads. All stages were present at the first 3 visits to the type locality (October 1978, March and September 1979).

The type locality, in Nariva County on the edge of the Nariva swamp at the 46 mile post on the Manzanilla-Mayaro Road, covered an area no more than 100 x 300 m of shallow, partially disturbed swamp. Rhynchospora corymbosa was not a dominant plant but was present in scattered clumps. At the first visit, 12-X-1978, it was fairly common, somewhat less so on 21-IX-1979; only an occasional plant was present on 19-VIII-1980. O. scutellata adults and nymphs were numerous in 1978 and 1979; no specimens were
found in 1980. On 5-IX-1981, the type locality was again visited. *K. corymbosa* had re-established itself in the immediate area and also at another site about 200 m away. Adults and nymphs of *O. scutellata* were present in low numbers.

**Oedancala meridionalis** Stål

The closely related *Oedancala meridionalis* Stål, originally described from Brazil, and subsequently reported by Slater (1955) from Paraguay, Bolivia and Argentina, does not appear to be distinguishable from a series collected at several localities in southern Mexico. The range, unless disjunct, must be more extensive than previously believed. We have examined the following material: Mexico: 1 ♂, 1 ♀, Rio Lacanja, Carr. Palenque-ocosino, 21-VII-1978, E. Verrera; 1 ♀, same, G. Ortega L.; 1 ♂, Chianas, Bonampak, 2-V-1978, Noct; 1 ♂, Chianas, Rio Lacanja, 23-VI-1978, E. Barrera (H. Drahovský collection); 2 ♂, 3 ♀, Tabasco, Hwy 180, 10 m E. Rio Tonalá, 12-VI-1965, Burke, Meyer, Schaffner; 1 ♂, Veracruz, 4 mi. E. Coatzocóalcos, 20-VII-1967, H. K. Burke, at blacklight; 1 ♀, Veracruz, 4 mi. NE Mitatlitan, 11-VI-1965, Burke, Meyer, Schaffner (J. A. Slater collection).

We have also examined several specimens from Mexico and Honduras that clearly belong to the "meridionalis group", but do not appear to represent either *meridionalis* or *scutellata* and will probably prove to be an undescribed species.

**Oedancala bimaculata** (Distant) 1893

General coloration nearly uniformly testaceous over entire body, occasionally darker on head; apical margin of corium with a brown spot midway between apex of corium and mesal angle, apex of corium immaculate; scutellum either with or without a mesal dark longitudinal stripe; punctures dark brown to black; total length 5.40-6.04.

*Distribution*: Slater (1955, 1964, 1975), lists it as occurring in Brazil, Belize, Cuba, Dominica, Grenada, Hispaniola, Jamaica, Mexico, Panama, Paraguay, Puerto Rico, Texas and Trinidad (Aripo Savana).

Description of bimaculata nymphs

5th instar (in alcohol, n = 3)

Shape elongate oval, coloration yellowish brown. Fourth labial segment, 4th antennal segment and tarsi dark brown. Head, thorax including wing pads with dark brown punctures. Distal 1/2 of femora with dark brown spots. Abdominal terga pale yellow with a narrow median and a wider pair of lateral longitudinal reddish stripes. Abdominal sternae with a reddish longitudinal stripe along lateral edge. The reddish stripes on the abdomen are very faint on some specimens. Labium extending posterior to midpoint between pro and mesocoxae. Head length 0.93, width 0.96, interocular space 0.59. Pronotum length 0.80, width 1.34. Wing pads length 1.55. Abdomen length 2.05. Labial segments length I 0.33, II 0.32, III 0.31, IV 0.37. Antennal segments length I 0.89, II 0.63, III 0.64, IV 0.64. Total body length 5.95.

4th instar (in alcohol, n = 3)

Similar in shape and color to 5th instar. Head length 0.72, width 0.82, interocular space 0.56. Pronotum length 0.56, width 1.07. Wing pads length 0.69. Abdomen length 1.27. Labial segments length I 0.26, II 0.26, III 0.26, IV 0.33. Antennal segments length I 0.57, II 0.43, III 0.44, IV 0.55; Total body length 2.80.

3rd instar (in alcohol, n = 3)

Similar in shape and color to 4th instar, but fewer punctures on head, thorax and wing pads. Head length 0.65, width 0.69, interocular space 0.48. Pronotum length 0.40, width 0.84. Wing pads length 0.30. Abdomen length 1.20. Labial segments length I 0.25, II 0.22, III 0.22, IV 0.31. Antennal segments length I 0.41, II 0.35, III 0.36, IV 0.50 Total body length 2.41.

2nd instar (in alcohol, n = 3)

Somewhat more oval than preceding instars, color similar to preceding except head, thorax, brownish with only an occasional dark brown puncture. Posterior femora and tibiae brown. Head length 0.53, width 0.55, interocular space 0.39. Pronotum length 0.28, width 0.63. Abdomen length 0.70. Labial segments length I 0.20, II 0.18, III 0.18, IV 0.22. Antennal segments length I 0.26, II 0.24, III 0.25, IV 0.41 Total body length 1.52.

1st instar (in alcohol, n = 3)

Similar in shape to 2nd instar. Head, thorax, 4th antennal segment, distal 1/2 of terminal tarsal segment, posterior tibiae and central portion of femora dark brown. Middle femora and tibiae slightly suffused with
brown. Dorsal abdominal stripes poorly differentiated, distinct only around scent gland openings, ventral abdominal strips present. Head length 0.41, width 0.39, interocular space 0.29. Pronotum length 0.17, width 0.42. Abdomen length 0.81. Labial segments length I 0.16, II 0.15, III 0.15, IV 0.21. Antennal segments length I 0.18, II 0.26, III 0.21, IV 0.37. Total body length 1.35.

*Oedanacela acuminata* Slater 1956

General coloration pale yellowish, lightly marked with reddish brown on claval commissure and ventral surface. Head very elongate and tapering, slightly declivit anteriorly. Labium very elongate, reaching the mesocoxae, the 1st segment reaching posteriorly to the compound eyes. Apical margin of corium lacking dark spots. Total length 5.8-6.2.

Originally described from Kaieteur, British Guiana (Slater, 1956) and not subsequently reported in the literature. Slater (1966) described the 5th instar nymph from a dried specimen from the type locality.


*O. acuminata* was collected together with considerably larger numbers of *O. bimaculata* on *R. holoschoenoides*. Although the host plant was swept in several areas in Wallerfield, *O. acuminata* was only present at one site.

*Pachygrontha compacta* Distant 1893

General coloration testaceous, shading to light castaneous with a pair of dark brown to black spots along the apical margin of corium; pronotum and scutellum with a pale median longitudinal stripe; easily recognized by its small size; total length 4-4.8.

Slater (1966) reported *P. compacta* on *Sceirpus* sp. and described the 5th-2nd instar nymphs.

*Distribution:* Recorded by Slater (1964, 1966, 1975) from Texas, Brazil, Belize, Dominica, Cuba, Grenada, Guatemala, Hispaniola, Honduras, Costa Rica, Jamaica, Mona Island, Panama and Trinidad.


*Pachygrontha longiceps* Stål, 1874

General coloration testaceous, shining, a pair of spots on apical margin of corium, one at apex, second midway between apex and claval commissure; a large slender elongate species readily recognizable by the spots along the corial margin and by the pale distal 1/3 of the 3rd antennal segment; total length 7.6-9.0.

**Distribution:** Recorded by Slater (1964, 1975) from Belize, Columbia, Costa Rica, Cuba, Guatemala, Jamaica and Panama. We list below the first records from Trinidad and Venezuela.


**Description of longiceps nymph**

5th instar nymph (in alcohol, n – 1)

General coloration, including appendages, pale yellow tan. Head, thorax, scutellum and wing pads covered with numerous strongly contrasting dark brown punctures, becoming nearly black on thoracic pleura (which have a longitudinal dark stripe just above acetabula) and at anterior-lateral corners of dorsal surface of pronotum. Femora, tibiae and 1st 3 antennal segments covered with numerous brown spots. Abdominal terga nearly white with 5 longitudinal pink stripes. Terga 7, 8 with a pair of large yellow heavily sclerotized areas covering all but mesial area, the inner margin darker brown and crenulate. Sclerotization around dorsal abdominal scent glands narrow, not extending laterad of gland opening, that anterior to gland opening largest. Distal 1/3 of antennal segment 3 distinctly paler than remainder of antenna. Abdominal sterna with a broad pink stripe on either side midway between meson and lateral margin. Mesal portion of sterna 6, 7 and 8 with a large quadrat brown sclerotized area. Labrum extending nearly to middle of mesosternum, remote from mesocoxae. Head length 1.14, width 1.20, interocular space 0.80. Pronotum length 1.12, width 1.84. Wing pads length 2.36. Abdomen length 3.0. Antenential segments length I 2.0, II
Pachygrontha minarum minarum Lethierry and Severin 1894

Coloration nearly uniform yellowish brown; apical margin of corium with a prominent black spot midway between apex and apex of claviga; punctures rather densely and uniformly distributed, dark brown and strongly contrasting with ground color; total length 7.84-9.80.

Slater (1955) described Pachygrontha sailleni from Grenada noting its close relationship to minarum. Slater (1966) reported sailleni from Trinidad, Surinam and Guyana (British Guiana) and later (Slater 1975) from St. Lucia, St. Vincent and Dominica. Slater (1975) suggested that sailleni “may well prove eventually to represent a subspecies.” We can now substantiate this prediction. In the original description Slater (1955) separated sailleni from minarum primarily on the basis of a minor spine between the 2 proximal major spines on the fore femora and the relatively shorter 2nd antennal segment (not more than twice as long as the interocular space). The fore femoral spine character has proven to be unreliable. Specimens occur with the “minor” spine present on one femur and absent on the other and many specimens from the mainland have this minor spine present. The antennal ratio will separate specimens from the Lesser Antilles from all mainland specimens. These Antillean specimens are also smaller.

Specimens from Dominica, St. Lucia, St. Vincent and Grenada are recognizable as a distinct population. This population is treated here as Pachygrontha minarum sailleni Slater, new status. Slater’s earlier records from Trinidad and northern South America pertain to the nominate subspecies.

The nominate subspecies has been previously reported by Slater (1964) from Bolivia, Brazil and Paraguay (and as noted above, as sailleni from Trinidad, Guyana and Surinam).


VENEZUELA: 1 ♂, 5 ♀, Barinas Reserva Forestal Capare-Camp Cañanicos, 100 m 6-14-VIII-1969, J. Salcedo, F. Zambrano (J. A. Slater Collection).

Description of minarum nymph

5th instar (In alcohol, n = 3)

Elongate, general coloration tan. Head, thorax, scutellum and wing pads covered with numerous strongly contrasting dark brown punctures. Femora, tibiae and 1st 3 antennal segments covered with numerous brown spots.
Abdominal terga pale yellow with 5 longitudinal reddish-pink stripes. Sclerotization around dorsal abdominal scent gland openings dark brown, almost circular, that anterior to gland opening largest. Abdominal sterna with a faint pink median longitudinal stripe, a faint, (sometimes absent) longitudinal stripe along the lateral margins and a broad longitudinal reddish stripe between the median and lateral stripes. Mesal portion of sterna 6, 7, 8 with a quadrature brown sclerotized area. Labium extending nearly to anterior of mesocoxae. Head length 1.0, width 1.19, interocular space 0.3. Pronotum length 1.04, width 1.53. Wing pads length 2.54. Abdomen length 3.26. Antennal segments length I 1.69, II 1.27, III 1.15, IV 1.0. Labial segment length I 0.48, II 0.48, III 0.63, IV 0.68. Total body length 6.13.

HOST PLANT RELATIONSHIPS

Many Lygaeidae that feed and breed on sedges tend to be restricted to these host plants. Although some species of Rhyparochrominae and Blissinae are sedge feeders, the most abundant and diversified fauna are species of Pachygronthinae and Cyminiinae. In most of these, all Western Hemisphere species, the nymphs and adults have body shapes and color patterns very similar to the seed heads of the host plants. All literature records for Pachygronthini associate them worldwide with sedges only. We now know, however, of a species of Oedancala that breeds exclusively on grasses in the Florida keys (Baranowski and Slater, unpub.).

Here we present data from Trinidad that suggests that the Trinidad pachygronthines and cymines can be segregated into specialists (feeding and breeding on a single species of sedge) and generalists (feeding and breeding on more than one species of sedge) (Table 2). Although these categories may be modified with collections from different seasons and years, we feel that our data provide a reasonable picture of the insect-host plant relationships during the summer months. These data from Trinidad agree with our empirical observations from other islands of the West Indies, and from Central America.

We attempted to collect lygaeids from 24 sedges. No lygaeids were collected on 6 species, Rhynchospora nervosa (Vahl) Boeck, R. trichodes C.B. Cl., Xyris auriculatum Walth., Cyperus diffusus Vahl, Finikristylius spadiceus (L.) Vahl and F. ferruginia (L.) Vahl. Cymines but no pachygronthines were found on Fuirena umbellata Kottb, Torulina muehretrum (L) Hooper, C. lazulata (L.) Retz, and Scleria bracteata Car. No cymines were found on R. corymbosa (L.), R. rugosa (Vahl) Gale, C. ligularia L., C. rotundus L. and S. latifolia Swartz, but pachygronthines were present.

Specialist species:
1. Oedancala scutellata n. sp. occurs only on R. corymbosa and only in the southern part of Trinidad. It has been taken breeding on this host on both the east and west coasts. The sedge is more widely distributed however, and a small "island" of it in the northern part of the island on the O'Meara Ferry Rd., 2 miles south of Arima (St. George Co.) was swept carefully but no specimens were taken. O. scutellata may be restricted to southern Trinidad.
2. Oedancala acuminata Slater was taken in Trinidad breeding on R. holoscioehenoides (L. C. Rich.) Iler in one small area directly adjacent to one of the 2 main runways of the Wallerfield airfield. No specimens were
**TABLE 2. SEGES Swept for PACEGRONTHINAE AND CYMINAE IN TEHINAD.**

<table>
<thead>
<tr>
<th>Sedge</th>
<th>Oedona scutellata</th>
<th>O. himezukata</th>
<th>O. acuminata</th>
<th>Pachygrontha compacta</th>
<th>F. longiceps</th>
<th>P. miliarum</th>
<th>Cymodema breviceps</th>
<th>Neoclytus dilatrus</th>
<th>Cymognathus notabilis</th>
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<tbody>
<tr>
<td>Rynchospora</td>
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<td>R. trichodes</td>
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<tr>
<td>R. corymbosa</td>
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<tr>
<td>R. rugosa</td>
<td>B,B,B,B,B</td>
<td>B,B</td>
<td>A(1)</td>
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<td>R. holoschoenoides</td>
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<td>R. setacea</td>
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<td>R. micrantha</td>
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<td>Xyris carpiniana</td>
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<td>Fairena umbellata</td>
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<td>Eucylia geniculata</td>
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<td>Cyperus polyphyllum</td>
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<td>Fimbriatelia dichotoma</td>
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<td>F. littoralis</td>
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<td>F. ferruginea</td>
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</table>

1May be S. melaleuca. B = breeding population, adults & nymphs. A = adults only. ( ) = number adults collected. Each letter represents 1 collection.
found at several other localities. Nothing has previously been reported on
the biology of this species.

3. *Pachygyrthanta minorum* L. & S. appears to be restricted to *Scleria
melaleuca* Cham. & Schlech. Most of our specimens were collected in south-
ern Trinidad; however, it does occur in the northern range where a single
specimen was taken. It was also reported on this host (as *P. saleti*) on
Dominica by Slater (1975).

4. *Pachygyrthanta longicarpa* Stål is apparently restricted to *Scleria* sp.
Our collections on Trinidad were chiefly in or near the northern range.
Slater (1975) reported it breeding on *Scleria* sp. in Jamaica.

5. *Neoninus illustris* Distant. Like the 2 pachygyrthanteos discussed above,
may be restricted to *S. melaleuca* as a breeding host. We found only nymphs
on this host although adults were taken on other sedges (Table 2). Slater,
Baranowski & Harrington (unpub. 1971) also took breeding populations on
*S. melaleuca* on Dominica.

6. *Cymodeuma breviceps* Stål. A breeding population was taken only on
*Fuirena umbellata* Rothb. The taxonomic situation of this species is not
satisfactory. *C. breviceps* may actually be a composite of several species.
Specimens from Grenada, St. Vincent, Dominica and Venezuela have a
deeply incised genital capsule. By contrast, Trinidad specimens have a nearly
smoothly sloping posterior face to the genital capsule. A similar condition
is found in material from Florida, Texas, Paraguay and Chile. This problem
will require careful study, and for the present we will refer Trinidad ma-
terial to *breviceps*.

Generalist species:

1. *Odacnaca bimaculata* (Dist.) is widely distributed in Trinidad, col-
lected in the north and central range and also in southern areas of the
island. It has the greatest host range of any of the Trinidad pachygyr-
thantes, breeding on *Rhynchospora holoschoenoides*, *R. setacea* (Berg) Becc,
*R. rugosa* (Vahl) Gale, *Eleocharis geniculata* (L.) *Scleria* probably *lattifolia*
Swartz and *Fimbriastylus litoralis* G. Adults were collected on 3 additional
sedges (Table 2).

2. *Pachygyrthanta compacta* Dist. is also widely distributed. Breeding
populations were taken on *Cyperus rotundus* L., *C. surinamensis* Rothb. and
*C. ligularis* L. suggesting that it may be limited to *Cyperus* species.

3. *Cymonomus notabilis* Dist. is a widely distributed species in Trinidad.
Breeding populations were taken on 6 sedges in 5 genera: *Rhynchospora
micrantha* Vahl, *Eleocharis geniculata*, *Torrilium odoratum* (L.), *Cyperus
polystachos* Rothb., *C. surinamensis*, and *F. litoralis*.

ACKNOWLEDGEMENTS

We thank Dr. M. J. W. Cock, Commonwealth Institute of Biological Con-
trol, Trinidad, for bringing *O. scuettata* to our attention, Dr. F. D. Bennett,
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sistance and facilities in Trinidad, Dr. C. D. Adams, University of the West
Indies, Mise Yaemin Baksh and Mr. M. Bhorsal Kaloo, National Herbarium
of Trinidad & Tobago, Drs. D. & H. Correll, Fairchild Tropical Garden,
Miami, FL for identifying the host plants, Ms. Mary Jane Spring for the
fine illustration of *O. scuettata*, and Mrs. Helen Baranowski and Ms. Connie
Stieger for field assistance.
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REFERENCES CITED


HUDSONIMYIA PARRISHI, A NEW SPECIES OF TANYPODINAE (DIPTERA: CHIRONOMIDAE) FROM GEORGIA

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Environmental Protection Division,
Georgia Department of Natural Resources, Atlanta, GA 30334, and
Laboyratory of Aquatic Entomology, Florida A and M University,
Tallahassee, FL 32307 USA, respectively

ABSTRACT

The adult male, adult female, pupa, and larva of Hudsonimyia parrishi n. sp. are described. Characters are given to distinguish H. parrishi from the other member of the genus, H. karelena Roback. The generic diagnosis for Hudsonimyia Roback is emended to include the new species. The habitat and aspects of the ecology of the immature stages are discussed.

RESUMEN

Se describe el macho, la hembra, la pupa, y la larva de Hudsonimyia parrishi sp. n. Se indican los caracteres que distinguen H. parrishi del otro miembro del género, H. karelena Roback. Se modifica la diagnosis del género Hudsonimyia Roback para incluir la nueva especie. Se discute el habitat, y aspectos de la ecología de los estados inmaduros.

The new species described here was present in collections of chironomids from an urban Georgia stream. All specimens were collected in intense sampling efforts of an uncommon stream microhabitat. The immature stages of the new species occupy a wet, mossy, algal, and detrital granite micro-