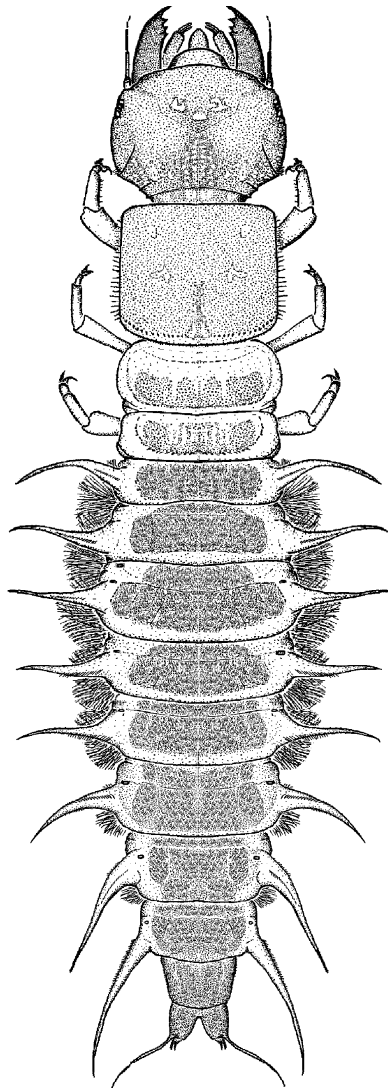


**A GUIDE TO THE
MEGALOPTERA AND AQUATIC
NEUROPTERA OF FLORIDA**



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INTRODUCTION

Aquatic habitats within Florida are home to diverse plant and animal communities. Among the more interesting and ecologically important organisms found in Florida waters are insects within the orders Megaloptera and Neuroptera. Although small in terms of species numbers, members of these 2 groups display an amazing diversity in terms of their size, morphology, habits, and habitats. At the extremes of this broad spectrum are tiny, highly specialized parasites of freshwater sponges (spongillaflies) and large generalist predators (hellgrammites) residing at the top of invertebrate food chains. In this guide we survey and document this diversity by consolidating the available taxonomic information and summarizing what is known concerning the distribution, biology and ecology of the various species found in Florida. Additionally, we provide a species checklist and database of collection records.

This guide is one in a series of identification manuals and guides to aquatic organisms of Florida published by the Florida Department of Environmental Protection. The main purpose of this guide, and the other publications, is to provide biologists a comprehensive taxonomic reference that allows for accurate identifications of aquatic organisms collected as part of the state's biological monitoring and assessment of water quality within Florida. Aside from this primary target audience, this regional guide may be of use to others that are in one way or another interested in aquatic biological diversity within Florida or Coastal Plain Alabama and Georgia.

ABOUT THIS GUIDE

Taxonomic coverage: The guide treats Megaloptera and aquatic Neuroptera known to occur in Florida. We provide taxonomic keys to families, genera, and species for both the larvae and adults. Megaloptera are treated in **Part I** and the aquatic Neuroptera are treated in **Part II**. Within the order Neuroptera is a single family, Sisyridae, that is considered aquatic and likely to be encountered during aquatic sampling. At the beginning of each Part the general morphology of the larvae and adults is discussed and illustrated. After the morphology section, dichotomous keys are provided. In Part I we first present a key to families and genera and later present separate keys to species. In Part II a single key to genera and species is provided. The literature source from which a key was derived is cited at the beginning of the key. At the beginning of the text for each family is a brief description of the morphological characteristics that define the family. The text for each genus includes a DIAGNOSIS as well as a representative habitus illustration. In the NOTES section we provide some additional comments regarding species identification.

Classification: We have adopted the classification scheme, widely used in most recent publications (e.g., Penny et al., 1997), that recognizes Megaloptera as a separate order from Neuroptera, and along with the order Raphidioptera, constitute 3 closely related orders collectively referred to as the Neuropterida.

Text Layout: The text of this guide is divided into 2 parts: Part I Megaloptera and Part II Aquatic Neuroptera. At the beginning of each Part is an introductory section providing the reader with a general overview regarding the classification, biology and ecology of the group. This information is then expanded in the family and genus sections. The text of each genus gives a brief morphological DIAGNOSIS and NOTES on Species Identification, Distribution, and Biology and Ecology of various species within that genus. At the end of the text for each genus we cite pertinent ADDITIONAL REFERENCES related to taxonomy. For all literature cited in this guide, the complete citations can be found in the LITERATURE CITED section in the back.

Illustrations: The figures in this guide are a combination of original illustrations based on Florida specimens and illustrations borrowed from other sources. If the illustrations were adapted or modified from other publications, the source of each figure is cited in the figure legend. Arrows are used in many illustrations to point out diagnostic characters.

Cover illustration: *Corydalus cornutus*. Florida: DeSoto County, Horse Creek, October 1977. Specimen provided by Bob Rutter and illustrated by Jan Peters.

Specimen Database: A state-wide project such as this requires looking at a large number of specimens from a sizeable geographic area. We accomplished this by examining specimens within the Florida A&M University aquatic insect collection in Tallahassee and the Florida State Collection of Arthropods in Gainesville. Additionally, biologists from around the state loaned us their collections (See Acknowledgments). Specimen data were also obtained by searching the scientific literature for published collection records. Data from all these sources were entered into a computer database and extracted portions are presented in Appendix B. An introduction is provided at the beginning of Appendix B that explains the field structure and information included.

ACKNOWLEDGMENTS

This guide is a product of the collective efforts of friends and colleagues. Our thanks to R.W. Flowers, M.D. Hubbard, J. Jones, J.G. and W.L. Peters, and B.A. Richard for their encouragement and contributions to the Megaloptera and aquatic Neuroptera collections at Florida A&M University (FAMU). In addition, specimens collected in Florida by Paul Carlson have significantly enhanced the FAMU collection. Jan Peters was of tremendous help in this project through her curatorial work on the collections and generous contribution of her time and talents to produce the cover illustration of *Corydalus cornutus*. We also thank Laura Line for the fine illustrations she provided. Donald Tarter and W.D. Watkins identified a significant portion of the early collections. We thank Dr. Michael Whiting (Brigham Young University) for verifying identifications of adult *Sialis*.

The study was greatly enhanced through the generous loan of specimens from the following

biologists: Lee Banks (FDEP, Jacksonville), Dana Denson (FDEP, Orlando), Laurence Donelan (FDEP, Pensacola), John Epler (Crawfordville, FL), Mike Heyn (FDEP, Tallahassee), Donald Ray (FDEP, Pensacola), Bob Rutter (FDEP, Punta Gorda), Lionel Stange (FDACS, Gainesville), Theresa Thom (Eglin Air Force Base), and Ford Walton (FDEP, Punta Gorda). In addition, we thank Dr. Lionel Stange for providing us access to the extensive Megaloptera and aquatic Neuroptera collections housed within the Florida State Collection of Arthropods in Gainesville.

Drs. H.H. Neunzig (North Carolina State University) and Atilano Contreras-Ramos (Universidad Autónoma del Estado de Hidalgo) are acknowledged for their helpful reviews of the manuscript. Additionally, we thank the following FDEP biologists for their manuscript reviews: Dana Denson, Joy Jackson, Donald Ray, and Bob Rutter. Lastly, we thank Ashley O'Neal and Ellen McCarron for their outstanding assistance in the funding and management of this project.

WORKING WITH SPECIMENS

Preservation and Storage: Larvae of aquatic Neuroptera and especially Megaloptera will almost always shrivel if killed and preserved in alcohol without first fixing. Alcohol alone does not penetrate the tissues sufficiently and poor specimens with severe body distortion and color loss are the results. We recommend that live larvae be killed and fixed in KAAD or a formalin-based fixative such as Kahle's fluid. After a day or so in the fixative, specimens can be transferred to alcohol. A second option, if these fixatives are not available, is to kill and fix the specimen by placing it in either water or ethanol/water mixture and heating the fluid to a boil. Heating is easily accomplished in the field by placing the specimen in a glass vial of water and alcohol and cooking the specimen using a cigarette lighter. For long-term preservation we recommend 70-80% ethanol. Vials containing the specimens should be properly labeled with collection information and stored long-term within cabinets to avoid the damaging effects of light.

Adults of Megaloptera and Sisyridae can either be preserved in alcohol (70-80% ethanol) or pin-mounted and preserved in a dry state. With the spongillafly, because of their small size, it is simplest to preserve the specimens in alcohol. If specimens are pinned, the wings should be spread and dried [not necessary for alderflies] so that they are easily examined. There are advantages and disadvantages to both alcohol and dry preservation. Disadvantages of dry preservation are that the abdomens, which are very soft, will shrivel and the parts of the insect such as the antennae and legs become brittle and can break off if not handled properly. For information on the proper pinning techniques and storage of dried specimens consult a general entomology text such as Borror et al., (1989). Specific techniques on mounting and preserving Neuroptera are detailed in the paper of Agnew (1983).

Examining Specimens: A quality stereomicroscope with proper lighting is best for sorting and identification of specimens. The magnification needed will depend on the size of the specimen and structures being examined. The highest magnification (50-60X) will be necessary when identifying spongillafly and when examining genitalia of adult Sialidae. Otherwise, 40X or less is sufficient. Petri dishes and Syracuse watch glasses work well for viewing specimens in alcohol, and jeweler's forceps, dissecting pins, and microdissecting scissors are useful for manipulating and removing structures for closer examination. Adjusting the intensity and angle of the light source is extremely important in getting the best view possible.

Viewing genitalic structures is best done after the removal and clearing of the abdominal terminalia in a 10% potassium hydroxide (KOH) solution. For identification of *Sialis* adults this is strongly recommended and details of the procedure are presented in the *Sialis* species identification notes. Cleared genitalia, or any other dissected structures, can be placed in glycerin on a depression slide for excellent viewing. To store dissected structures they should be placed in microvials and kept with the specimens. For a pinned specimen, the microvial containing glycerin and the dissected structure is retained with the specimen by pinning it through the stopper.

Identification Suggestions: After running a specimen through the keys we recommend reading the diagnosis and identification notes before arriving at a final determination. Also we encourage consulting other taxonomic references referred to in the guide. If, after careful examination a question still remains as to the taxonomic identity, the identification should be left at the taxonomic level (e.g., family or genus) for which no doubt exists. Often questions concerning taxonomic identity can be answered through consulting a reference collection of correctly identified specimens. By having quality reference specimens one can compare the specimen in question with specimens of known identity. Another option is to consult a taxonomist specializing in the taxa of interest. In any case, for QA/QC purposes voucher specimens should be kept so that identifications can be checked later.

Rearing: Laboratory rearing of larvae to adults may be of interest to those doing biology and life history studies and in cases where adults are needed for species identification. This is the situation among *Sialis* species where larval identifications to species are often not possible. Rearing larvae to adults requires providing Megaloptera and aquatic Neuroptera 2 different microcosms— aquatic and terrestrial. The aquatic microcosm is needed for completion of larval growth and the terrestrial microcosm is needed for the pupal and adult stages.

To rear megalopterans, larvae can be kept individually in rearing cups or other suitable containers provisioned with natural substrate. Water should be from the natural habitat and should be kept well aerated. Larvae not fully mature will require feeding [for diet items refer to Biology and Ecology Notes] to complete their growth and development. Last instars should be closely observed for signs they are ready to pupate. Azam and Anderson (1969) reported that *Sialis* larvae will stop feeding, become sluggish, and curl up on their sides indicating that they are ready to leave the water and pupate. If this behavior is observed, the larva should be removed from the water and placed in a container of soil where pupation and adult emergence can take place. Contreras-Ramos & Harris (1998) reported that it is possible to induce pupation in corydalid larvae (last instars) by placing field-collected specimens in soil containers. Pupation can be expected to last about 1-3 weeks depending on the species and environmental conditions.

Laboratory rearing of spongillafly larvae involves maintaining not only the spongillafly but also the sponge host. The sponge is required substrate and food source for larvae to complete their growth. Poirrier (1969) got best results by keeping a few small sponges in shallow stacking dishes filled with habitat water. Larvae will remain attached and feed on the sponge until ready to pupate at which time they will leave the sponge and swim about by flexing their abdomens. Once this behavior was observed Poirrier (1969) transferred larvae to dry Petri dishes containing a wet artificial sponge to maintain moisture. No soil is needed since spongillafly pupate above ground. He reported that larvae within a few hours begin cocoon construction and adult emergence is about one week later.

Part I. MEGALOPTERA

Megaloptera (“megalo”= large + “ptera” = wing) is a very small and primitive order of holometabolous (undergo complete metamorphosis) insects comprised of approximately 300 species worldwide. The order is split into 2 distinct and quite dissimilar families– Sialidae “alderflies” and Corydalidae “dobsonflies and fishflies”. In North America above Mexico, 2 families, 8 genera, and 46 species are known (Evans & Neunzig, 1996), and within Florida the fauna consists of a smaller subset of the eastern North America species, including 9 species within 4 genera and 2 families (see Appendix A). The taxonomy for most taxa is fairly well known, especially for the North American fauna, but there still remains significant gaps in our knowledge concerning basic biology/ecology and geographic distributions for many species. In Florida, this is especially true of the family Sialidae for which adults collections are few and far between.

The larval stage of megalopterans is aquatic and found in diverse habitats including: small streams, rivers, marshes, ponds, lakes, and reservoirs. The larvae are generalist predators and in some instances detritivores; consequently they occupy a variety of niches and important links in aquatic food webs. Larvae obtain oxygen primarily from dissolved oxygen present in the water and are useful as biological indicators of water quality. Additionally, because females typically lay their eggs on riparian vegetation, megalopterans may be especially sensitive to landuse practices involving removal of shoreline vegetation.

Megalopteran larvae molt numerous times exhibiting 8-12 instars before larval development is complete. Last instars leave the water and pupate in moist bank areas such as in the soil, under moss, or under bark of decaying logs. Adults are generally weak fliers, often nocturnal, and usually live for only a week or so. Eggs are normally laid in large groups on objects above the water surface so that first instars fall into the water upon hatching. Depending upon the species and climate restraints, the life cycle requires anywhere from 1-5 years to complete.

Megalopterans have captured the interest of biologists for centuries. Linnaeus, the father of biological nomenclature, first described *Corydalis cornutus* (as *Hemerobius cornutus*) in his famous 10th edition of *Systema Naturae* (1758). He characterized the species by the striking sexual dimorphism seen in the long, tusk-like mandibles of males (Fig. 2). Latreille in 1802 erected a new order, Megaloptera, simultaneously moving *H. cornutus* to a new genus, *Corydalis*, making *C. cornutus* the type species. Since these early beginnings, the study of megalopterans has been the interest of taxonomist and ecologist alike. For field enthusiasts, collecting these insects is relatively easy because of their abundance and large size. The larvae reside aquatically on a variety of benthic substrates and can be handpicked or collected with various sampling equipment such as aquatic dipnets, Surber and Hess samplers, and artificial substrates. Adults reside mostly on riparian vegetation near the larval habitats and can be collected in these areas by use of sweep nets or by drawing the adults to a light source during nighttime.

MORPHOLOGY

A general knowledge of megalopteran morphology is necessary for accurate identification. The external morphology of the larva and adult is herein briefly discussed to facilitate users of this guide in specimen identification. A representative larva and adult is shown for each of the 2 families (Corydalidae and Sialidae).

Larva (Late Instar): [Refer to Fig. 1] Megalopteran larvae are rather large and easily recognized insects. The larvae are slightly flattened and have anteriorly directed mouthparts (prognathous). The head antero-laterally possesses 4-5 segmented setaceous antennae and eyes (groups of stemmata). The mouthparts (chewing type) consist of a dorsal snout-like labrum and pairs of strong mandibles and maxillae used for grasping and handling prey. The mandibles of corydalids are robust whereas sialid mandibles are more sickle-shaped.

The prothorax is heavily sclerotized with the pronotum relatively large and subrectangular. Each thoracic segment bears a pair of well developed legs consisting of 5 segments (coxa, trochanter, femur, tibia, tarsus). Tarsi are 1-segmented and at the apex bear a pair of hook-shaped tarsal claws. Legs of corydalids are stout and subequal in length. Sialid legs are relatively long and slender with the prothoracic legs being somewhat shorter than the meso- and metathoracic legs.

The megalopteran abdomen is soft-bodied and composed of 10 segments. Segments 1-8 (Corydalidae) or segments 1-7 (Sialidae) each bears a pair of lateral gill filaments used in the uptake of dissolved oxygen. In members of the Corydalidae subfamily Corydalinae respiration is further enhanced by the presence of large gill tufts arising ventrally near the lateral filaments. The lateral filaments of sialids are 4-5 segmented whereas lateral filaments of corydalids are 1-2 segmented. Corydalids possess spiracles dorsally near the base of each lateral filament providing an effective means of obtaining atmospheric oxygen. In some genera of Corydalidae the spiracles on segment 8 are located more towards the midline at the ends of tubes whose size and location is useful for distinguishing genera and in some cases species. Within Corydalidae abdominal segment 10 is divided into a pair of anal prolegs, each with a pair of anal claws and a lateral filament. In contrast, sialids have the 10th segment elongated into a median caudal filament.

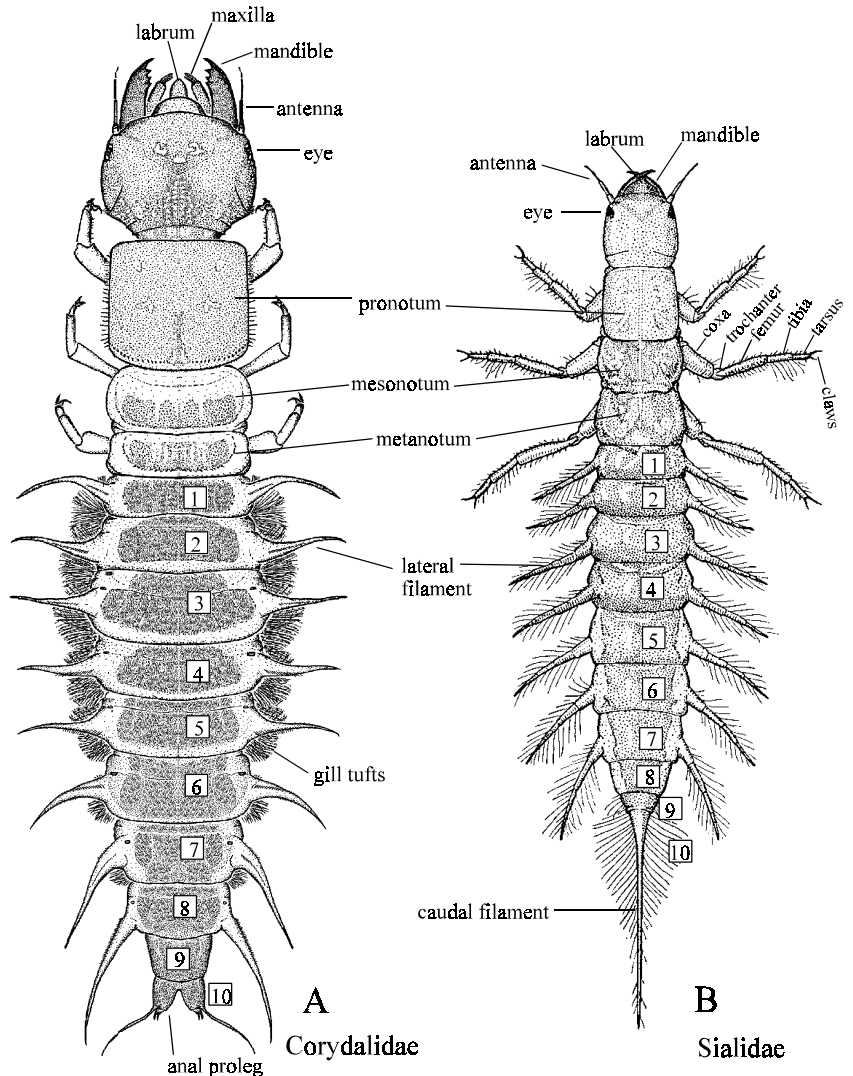


Fig. 1 Morphology of megalopteran larvae A. *Corydalis cornutus*; B. [modified from Ross (1937)]

Adult: [Refer to Figs. 2, 3] Adult megalopterans are rather unusual looking insects often drawing shock from the first time observer because of their large size and in some genera (e.g., *Corydalus*) menacing looks. Adults of Megaloptera, along with the closely related orders Neuroptera (lacewings, antlions, spongillaflies, etc.) and Raphidioptera (snakeflies), possess 2 pairs of membranous wings with numerous branching of longitudinal veins and many cross veins present in between the costal and subcostal veins (Fig. 48). Megalopteran wings differ from these orders in that the hindwings have a wider base and enlarged anal area (Figs. 14, 27, 29) that is folded fan-wise when the insect is at rest.

As with the larvae, adults of the 2 families of Megaloptera (Sialidae and Corydalidae) are easily distinguished. Alderflies (Sialidae) lack ocelli and have bi-lobed 4th tarsal segments (Fig. 10) in contrast to dobsonflies and fishflies (Corydalidae) which possess ocelli (Figs. 18, 20) and non-bilobed 4th tarsal segments (Fig. 12). Additionally, alderflies are quite compact and robust with the prothorax as wide as the head, as compared to corydalids, which are longer and more slender and with the prothorax being narrower than the head.

Antennae are long and may be a variety of types including filiform, serrate (Fig. 18), and pectinate (Fig. 20). Within Corydalidae antennal structure is sometimes sexually dimorphic and may be useful in species identification. The head capsule often has large spots or stripes of contrasting color. The mouthparts are of the chewing type, and the mandibles of males of some dobsonflies (e.g., *Corydalus* species) are disproportionately enlarged. Maxillary and labial palpi are present. Large compound eyes are present and as mentioned ocelli may be present (Corydalidae) or absent (Sialidae).

The thorax is comprised of 3 segments: the pro-, meso-, and metathorax. Each segment bears a pair of well developed legs each with 5-segmented tarsi and a pair of apical claws. The wings arise from the meso- and metathorax and are folded back over the abdomen extending well past the tip of the abdomen. The forewings and hindwings are suboval and similar in size and shape except that the hindwings are usually slightly shorter than the forewings and have an enlarged anal area. The wings are grayish brown to dark brown and in the corydalids variously patterned with white spots.

The abdomen comprised of 10 segments is soft-bodied and subcylindrical. Among the different species there occurs a variety of different male and female reproductive structures on the terminal segments. Differences in the genitalia are often useful in identification and for alderflies provide the most reliable means of species identification.

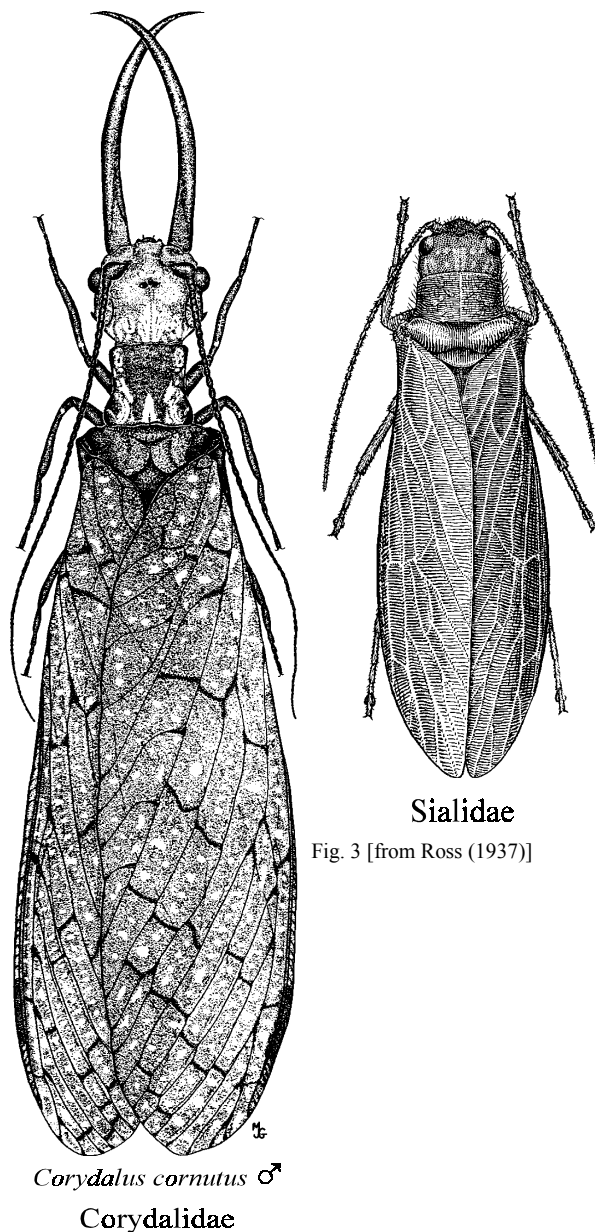


Fig. 2 [from Glorioso (1981)]

Fig. 3 [from Ross (1937)]

**KEY TO FAMILIES AND GENERA FOR LARVAE OF
MEGALOPTERA OF FLORIDA**

1. Abdomen with single long caudal filament; abdominal segments 1-7 with pairs of 4-5 segmented lateral filaments (Fig 4) Sialidae; *Sialis* (p. 26)

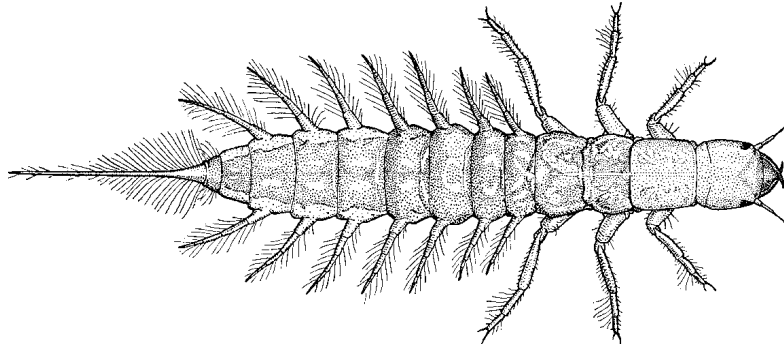


Fig. 4 [from Ross (1937)]

- Apex of abdomen bearing 2 anal prolegs, each possessing pair of claws (Fig. 5); abdominal segments 1-8 with pairs of 1-2 segmented lateral abdominal filaments (Fig. 5)
..... Corydalidae 2

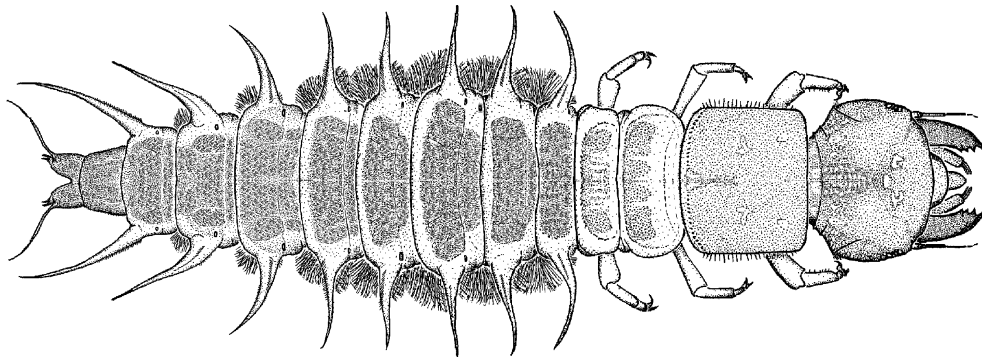


Fig. 5

- 2(1) Lateral abdominal filaments with ventral gill tufts (Fig. 6)
..... *Corydalis* (p. 16); *C. cornutus* (L)

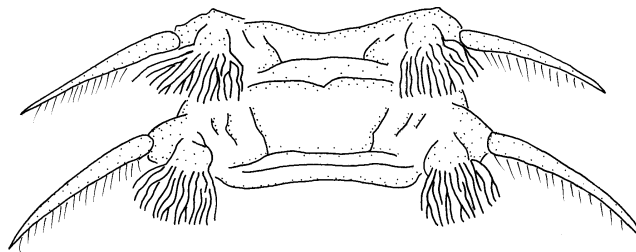


Fig. 6 [redrawn from Cuyler (1958)]

Lateral abdominal filaments without ventral gill tufts (Fig. 7) 3

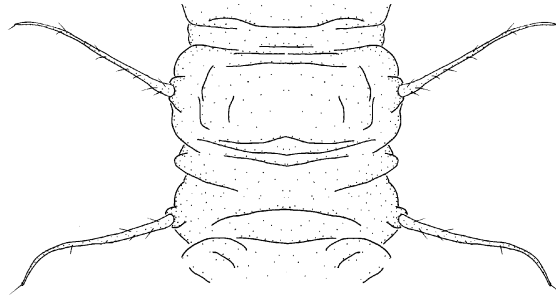


Fig. 7 [redrawn from Cuyler (1958)]

3(2) Respiratory tubes of abdominal segment 8 at least twice as long as segment and unequal in length (Fig. 8) *Chauliodes* (p. 14)

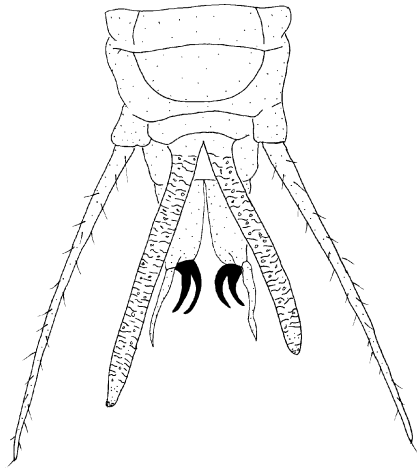


Fig. 8 [redrawn from Cuyler (1958)]

Respiratory tubes much less than twice as long as segment and equal in length (Fig. 9)
..... *Nigronia* (p. 21)

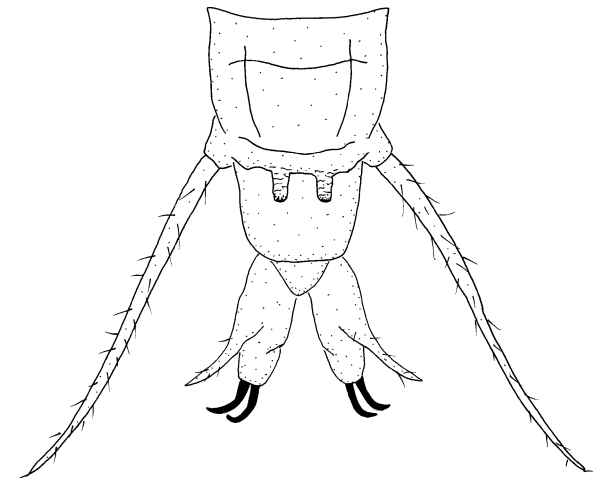


Fig. 9 [redrawn from Cuyler (1958)]

KEY TO FAMILIES AND GENERA FOR ADULTS OF
MEGALOPTERA OF FLORIDA

- 1 Ocelli absent; 4th tarsomere bilobed (Fig. 10); total length (head to wing tip) less than 18mm,
body form compact (Fig. 11) Sialidae; *Sialis* (p. 27)

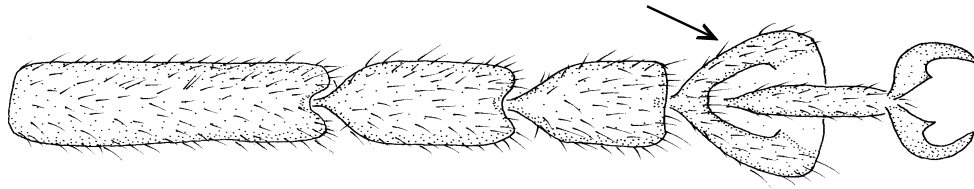


Fig. 10

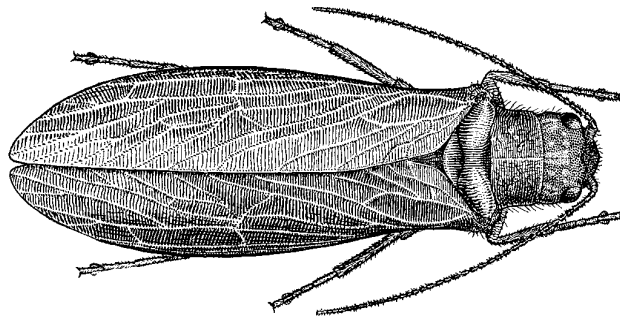


Fig. 11 [from Ross (1937)]

- Ocelli present; 4th tarsomere not bilobed (Fig. 12); total length greater than 20mm, body form
not compact, relatively slender (Fig. 2) Corydalidae 2

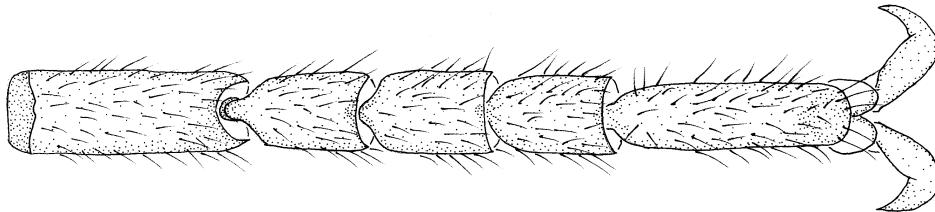


Fig. 12

- 2(1) Forewing with small white spots in many cells (Fig. 13); total length (from head to wing tip) greater than 60mm *Corydalis* (p. 16); *C. cornutus* (L.)

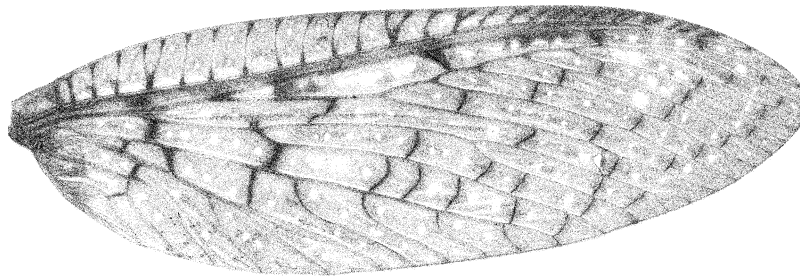


Fig. 13

Forewing without small white spots in many cells; total length less than 55mm 3

- 3(2) Wings pale gray-brown, mottled with alternating dark and light areas on veins of forewings (Fig. 14) *Chauliodes* (p. 15)

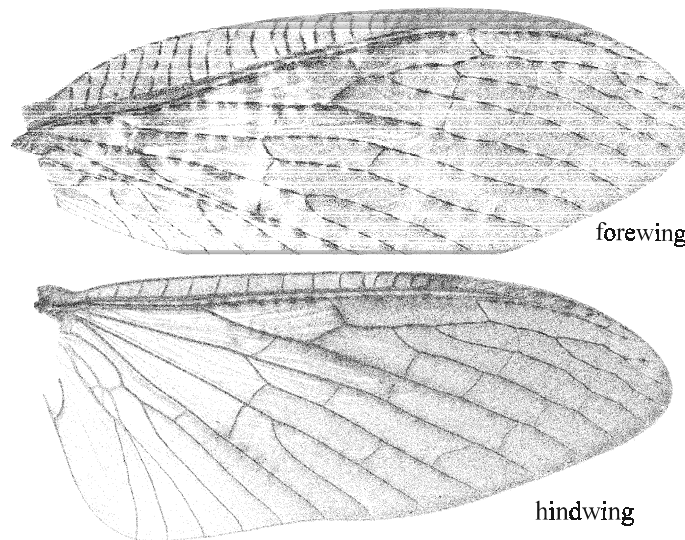


Fig. 14 *Chauliodes pectinicornis*

Wings dark brown to black, patterned with white (Figs. 27, 29) *Nigronia* (p. 22)

FAMILY CORYDALDAE

The megalopteran family Corydalidae, widespread throughout the world, has 7 genera and 22 species known from North America, North of Mexico (Evans & Neunzig, 1996). In eastern North America we have only: *Chauliodes* (2 spp.), *Corydalus* (1 sp.), *Neohermes* (3 spp.), and *Nigronia* (2 spp.). Except for *Neohermes*, which apparently does not occur in Florida, the other genera and species have all been documented within the state. Corydalids are found throughout much of Florida in a wide range of both lotic (*Corydalus*, *Nigronia*) and lentic (*Chauliodes*) habitats.

The family is divided into 2 subfamilies: Corydalinae (dobsonflies) and Chauliodinae (fishflies). Corydalid larvae are characterized by the presence of 1-2 segmented lateral filaments on abdominal segments 1-8 and segment 10, which is divided into a pair of anal prolegs each bearing a pair of hook-shape claws (Fig. 5). In the subfamily Corydalinae, larvae have ventral gill tufts arising at the bases of the lateral filaments (Fig. 6). Adult corydalids differ from sialids in that they are larger (>20mm in length), possess ocelli (Figs. 18, 20), and have non-bilobed fourth tarsomeres (Fig. 12).

Genus *Chauliodes* Latreille

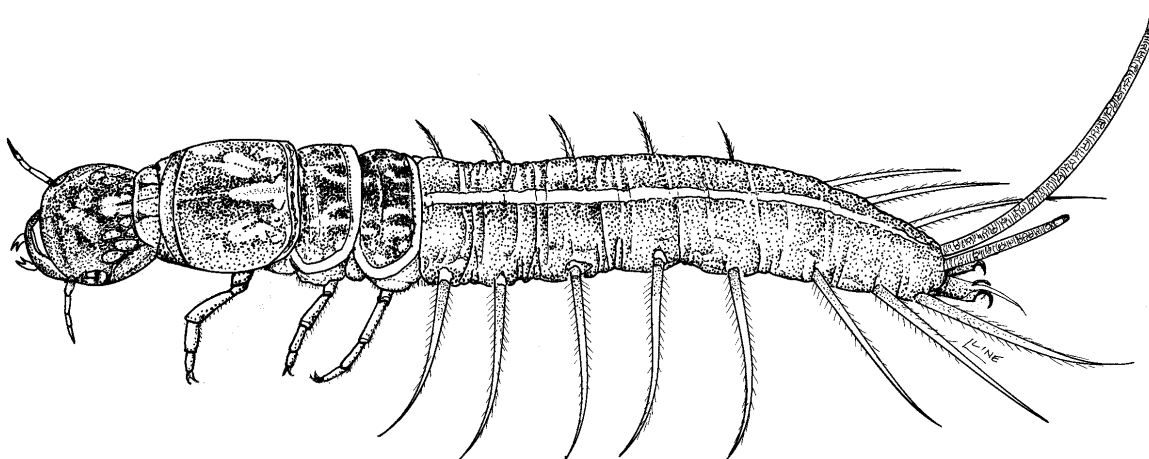


Fig. 15 *Chauliodes pectinicornis*. Florida: Liberty County, Little Sweetwater Creek, 11.iii.1994. Illustrated by Laura Line.

DIAGNOSIS: Members of the genus *Chauliodes* are distinguished from other eastern North America corydalid genera by the following combination of characters: **Larva:** [Fig. 15] lateral abdominal filaments without ventral gill tufts (Fig. 7); spiracles of abdominal segment 8 set on long tubes of unequal length (Fig. 8); dorsum of abdomen with longitudinal stripe(s) (Figs. 16, 17); body length up to 38mm. **Adult:** wings pale gray-brown, mottled with alternating dark and light areas on veins of forewings (Fig. 14); body length (not including wings) 21-46mm.

NOTES:

Species Identification— *Chauliodes* species are easily identified with the naked eye in the larval and adult stages. Unlike other corydalid genera, *Chauliodes* larvae possess a pair of long respiratory tubes of unequal length on abdominal segment 8. Cuyler (1958) was the first to rear and associate the larval, pupal, and adult stages and provide detailed larval descriptions. The 2

species can be distinguished by their characteristic pattern of abdominal coloration that is maintained through the later instars, pupal and adult stages. *Chauliodes pectinicornis* has a well defined median yellow stripe (Fig. 17), whereas *C. rastricornis* possesses a parallel series of narrow, poorly defined, dark stripes (Fig. 16). Adults are also easily distinguished by the color pattern on the posterior half of the head capsule. *Chauliodes rastricornis* has dark markings on a light background (Fig. 18) and *C. pectinicornis* has the reverse pattern of light yellow markings on a dark background (Fig. 20). Adult males are easily separated based on the structure of the anal plates (Figs. 19, 21) [figured also in Hazard (1960) and Stark & Lago (1983)]. Much of the taxonomic literature prior to Cuyler (1958) incorrectly describes *C. rastricornis* adults as having serrate antennae, while in fact the antennae are sexually dimorphic—males possess pectinate antennae and females have serrate antennae (Fig. 18). This has often led to misidentifications and confusion of male *C. rastricornis* with *C. pectinicornis* in which both sexes have pectinate antennae (Fig. 20).

The eggs, egg mass, and first instar of *C. pectinicornis* were described by Baker & Neunzig (1968). The uncovered egg mass is composed of 1 layer of ranks or diagonal rows of an average of 525 eggs per mass. The eggs of *Chauliodes* are distinguished from other corydalid eggs by the presence of minute peltate processes on the dorsum.

Distribution— This Nearctic fishfly genus contains only 2 species (*C. pectinicornis* and *C. rastricornis*). Both species are found throughout the central and eastern United States and extending into parts of southern Canada (Hazard, 1960; Tarter et al., 1976). Within Florida, both species are widespread—occurring throughout the panhandle and south on the peninsula as far as Highlands and DeSoto counties.

Biology and Ecology— Unlike other corydalids, *Chauliodes* larvae typically live in lentic habitats including: marshes, woodland swamps, ponds, lakes, and still areas associated with streams. Neunzig & Baker (1991) noted that both species occur most abundantly in bodies of water having deep layers of debris and decaying logs. They also noted that *C. pectinicornis* seems to prefer shaded, woodland habitats while *C. rastricornis* occurs most frequently in open sunny areas. The microhabitat preferences are not well known but larvae probably burrow into mud, debris accumulations, and under loose bark of submerged branches and logs. Presumably, the long, contractile respiratory tubes are used in these low dissolved O₂ conditions to obtain atmospheric oxygen. In a sphagnum bog in West Virginia *Chauliodes* larvae were reported to occur in purple pitcher plants (*Sarracenia purpurea*) (Hamilton et al., 1996).

Larvae of *Chauliodes* feed on a wide range of material including detritus and algae, and small prey including rotifers, cladocerans, copepods, ostracods, amphipods, and insects such as immature odonates and dipterans (Dolin & Tarter, 1981). Larvae leave the water to pupate and may be found in moist habitats such as under bark or inside decaying logs and stumps. The adults are nocturnal and live for only a few days to a week, during which time the adults mate and lay their eggs on objects above the larval habitat.

Life histories for *Chauliodes* species are poorly understood and information is largely based on casual field observations. The only detailed life history study was that of Dolin & Tarter (1981) on *C. pectinicornis* and *C. rastricornis* populations in a West Virginia swamp. Contrary to the general belief that *Chauliodes* undergo a 2-3 yr life cycle, Dolin & Tarter (1981) concluded that both species are univoltine, based on frequency histograms of head width. In the populations they studied, *C. rastricornis* pupated and emerged in April and May, while *C.*

pectinicornis pupated and emerged during June and July. Larvae of both species that were reared to adults required an average of 10-12 days time for pupation.

Larval collections of *Chauliodes* from Florida are scant compared to the numerous adult collections. *Chauliodes rastricornis* is the more common of the 2 species and adults have been collected year-round in Florida, whereas adults of *C. pectinicornis* have been collected primarily during Spring and Summer months (Tarter et al., 1977). Adults are readily drawn to light in areas near the larval habitats. Porch and house lights will attract adults, which sometimes can be found during the day resting on window screens.

ADDITIONAL REFERENCES: Davis (1903); Cuyler (1958); Hazard (1960); Baker & Neunzig (1968); Stark & Lago (1983); Neunzig & Baker (1991).

KEY TO SPECIES FOR LARVAE OF *CHAULIODES*

1. Mid-dorsal abdominal line black (Fig. 16) *Chauliodes rastricornis* Rambur

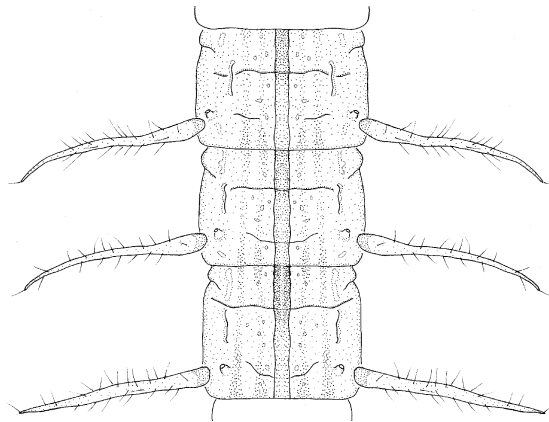


Fig. 16

- Mid-dorsal abdominal line yellow (Fig. 17) *Chauliodes pectinicornis* (L.)

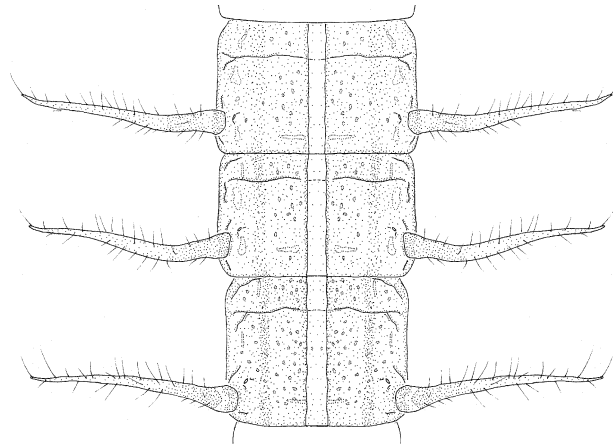


Fig. 17

KEY TO SPECIES FOR ADULTS OF *CHAULIODES*

1. Head posteriorly patterned with dark brown markings on a yellow background (Fig. 18); abdominal mid-dorsal stripe brown; male anal plates broadly triangular (Fig. 19); female antennae serrate (Fig. 18), male antennae pectinate *Chauliodes rastricornis* Rambur

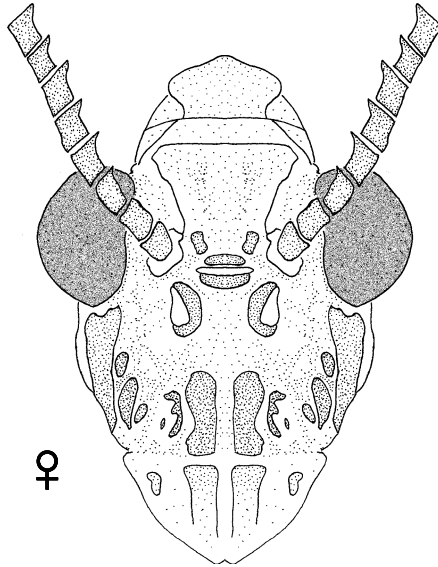


Fig. 18

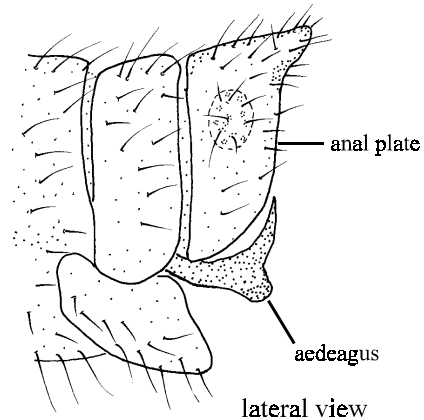


Fig. 19

- Head posteriorly patterned with yellow markings on a dark brown background (Fig. 20); abdominal mid-dorsal stripe yellow; male anal plates angled to narrow elongate apex (Fig. 21); female and male antennae pectinate (Fig. 20) *Chauliodes pectinicornis* (L.)

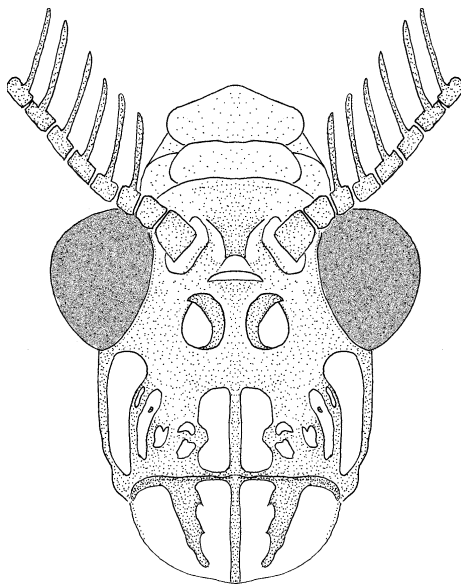


Fig. 20

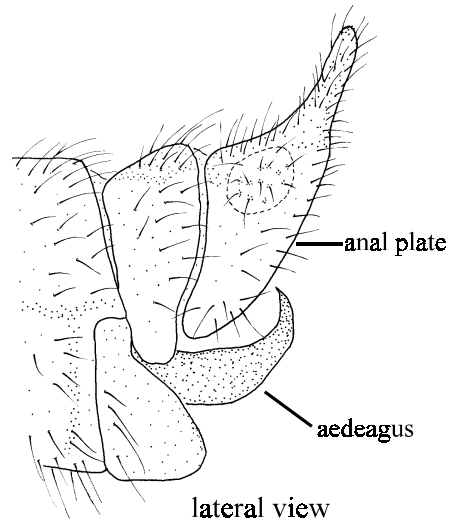


Fig. 21

Genus *Corydalus* Latreille

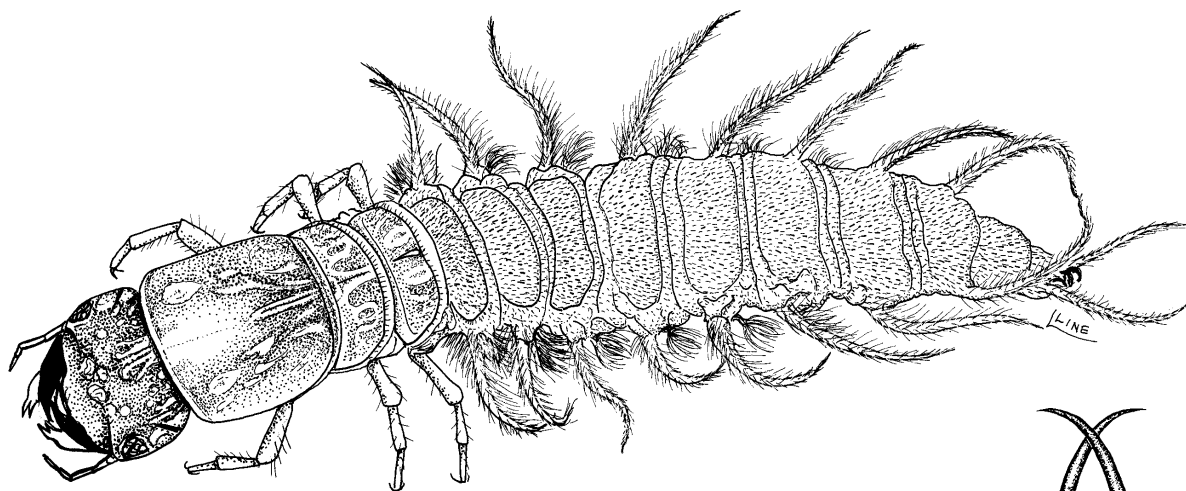


Fig. 22 *Corydalus cornutus*. Florida: Alachua County, Gainesville, Possum Creek. Illustrated by Laura Line.

DIAGNOSIS: *Corydalus* is distinguished from other eastern North American corydalid genera by the following combination of characters:

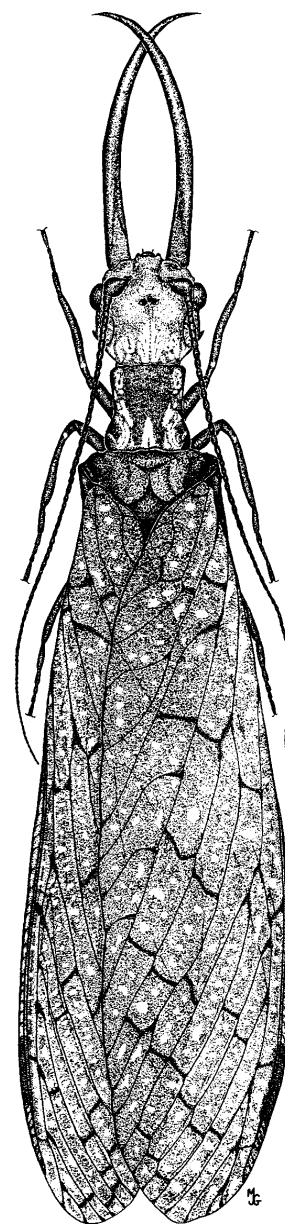
Larva: [Fig. 22] lateral abdominal filaments with ventral gill tufts (Fig. 6); body length up to 70mm. **Adult:** [Fig. 23] forewing with small white spots in many cells (Fig. 13); male mandibles elongated; body length (not including wings) 48-60mm.

NOTES:

Species Identification— The majority of *Corydalus* species have been described in the adult stage only. However, since just one species, the well known *C. cornutus*, occurs in Florida, the generic characteristics are sufficient for use in species determination. In Florida, the larva is most likely to be confused with *Nigronia*; larvae of both genera have a very similar dorso-ventrally flattened body form and dark brown, rough integument. However, in *Corydalus* the presence of ventral gill tufts on the abdominal segments and lack of respiratory tubes on abdominal segment 8 allows for easy separation of the 2 genera. [NOTE: ventral gill tufts are lacking in first instar *C. cornutus* (Riley, 1879; Baker & Neunzig, 1968)].

The egg mass, eggs, and first instar of *C. cornutus* were described in detail by Baker & Neunzig (1968). The egg masses, which possess a tough, chalky-white covering, are frequently visible underneath and on the sides of bridges crossing streams and rivers. Even after the larvae have hatched out, the outlines of the nickel-size egg masses remain for quite some time. The oval, slightly convex egg mass is composed of 3 layers of eggs, averaging 1080 eggs/mass (Baker & Neunzig, 1968).

In Florida, adult *Corydalus* are most easily confused with those of *Chauliodes*. The forewings of *Corydalus* possess small white spots within many cells (Fig. 13), whereas the white areas on the forewings of



Corydalus cornutus ♂

Fig. 23 [from Glorioso (1981)]

Chauliodes occur primarily on the wing veins (Fig. 14). To best see the wing characteristics it is necessary to spread the fore- and hindwings apart. Adult *Corydalus* are among the largest of all Florida's aquatic insects, with wingspans up to 6 inches. Males of *Corydalus* are also readily recognized for their bizarre, extremely long sickle-shaped mandibles (Fig. 23). For a complete systematic treatment of the adults in the genus we recommend the excellent monograph of Contreras-Ramos (1998).

Distribution– Unlike the fishfly genera *Chauliodes* and *Nigronia*, which are confined to North America, the dobsonfly genus *Corydalus* is largely Neotropical. Of the 30 described species only *Corydalus cornutus* extends its range into eastern North America (Contreras-Ramos, 1998). It is widespread from Texas and New Mexico, north and east throughout the Midwest and eastern United States and into parts of southeastern Canada. In Florida *C. cornutus* occurs throughout the panhandle and on the peninsula extending into parts of southern Florida. It is fairly ubiquitous and can be found in just about all streams and rivers, except those where current velocity and dissolved oxygen levels are low. Snags within areas of fast flow are favored microhabitats.

Biology and Ecology– The dobsonfly *Corydalus cornutus* is one of the most spectacular and fascinating stream insects within Florida as well as eastern North America. Furthermore, the high abundance and biomass production of the predatory larvae makes this species a particularly important biotic component of many lotic ecosystems. Because of these characteristics, *C. cornutus* has been the subject of more life history and secondary production studies than has any other megalopteran. The larvae, known as hellgrammites, are prized as bait by fishermen, even being harvested and sold in some places by commercial bait dealers (Nielsen & Orth, 1988).

A number of excellent studies have revealed a great deal about *C. cornutus* life history, secondary production and energetics across a wide expanse of its geographic range. These studies indicated that growth and voltinism is temperature dependent; southern populations typically undergo a 1-year life cycle (Brown & Fitzpatrick, 1978; Epperson & Short, 1987; Short et al., 1987; Bowles, 1990), while populations in more northern latitudes have a 2- or 3-year life cycle (Roell & Orth, 1991). Based on size classes observed, these studies indicated that larvae pass through 10-11 instars. The predatory larvae feed on a wide array of invertebrate prey items. Stewart et al. (1973) found that in the Brazos River (Texas) larvae fed on a large number of different aquatic insect groups with filter-feeding caddisflies (*Cheumatopsyche*, *Hydropsyche*) and dipterans (*Simulium*) accounting for about 70 percent of the total number of individuals consumed. In riffle habitats sampled in the Guadalupe River, Texas, secondary production was among the highest recorded for any single species of aquatic insect (Epperson & Short, 1987). This is particularly impressive given the trophic position of *C. cornutus* as a secondary consumer (predator). Within most of its range *C. cornutus* is found most abundantly under stones in riffle areas. However, in Florida where such microhabitats are rare, *C. cornutus* is most abundantly encountered on snags in areas of swift flow. Benke et al. (1984) sampled snag habitats in the Satilla River, Georgia and found that *C. cornutus* is one of the top predators species in terms of its biomass production.

Corydalus cornutus cohorts show rather asynchronous development, as evidenced by the extended emergence period, which in Florida can last from late Spring to late Summer. As a result of the extended recruitment, larvae of a wide range of sizes are often collected together. For example, on February 25 in the upper Suwannee River we collected 13 larvae from Hester-Dendy multiplate samplers ranging in length from 10-45 mm. Brown & Fitzpatrick (1978)

showed that the larval growth rate is greatest when water temperatures are between 15-30°C and essentially no growth occurs during the winter when temperatures are below 10°C. Therefore, larvae which are recruited in the Fall can be expected to pass through the winter as early instars while those larvae recruited in the summer have time to complete most of their growth prior to winter conditions.

Upon *C. cornutus* completing its larval development, the last instar leaves the water to pupate in bankside soil, under logs or stones (Davis, 1903). The pupal period lasts for a little over a week, depending on environmental conditions, and the adult emerges at night with mating occurring soon after. Mating behavior of captive individuals was observed and described by Parfin (1952). The male mandibles she discovered are used to establish contact with the female and are used to fight off approaching males. The mandibles are not used to grip the female, rather they are laid over the wings of the female prior to and after copulation. Within a few days of mating, females deposit the eggs usually in 2 batches on objects above the stream (Brown & Fitzpatrick, 1978); eggs require about 2 week incubation time before the newly hatched larvae fall into the stream, thus completing the life cycle. There is not a diapause during any of the life stages.

ADDITIONAL REFERENCES: Davis (1903); Baker & Neunzig (1968); Glorioso (1981); Neunzig & Baker (1991); Contreras-Ramos (1998); Contreras-Ramos & Harris (1998).

Genus *Nigronia* Banks

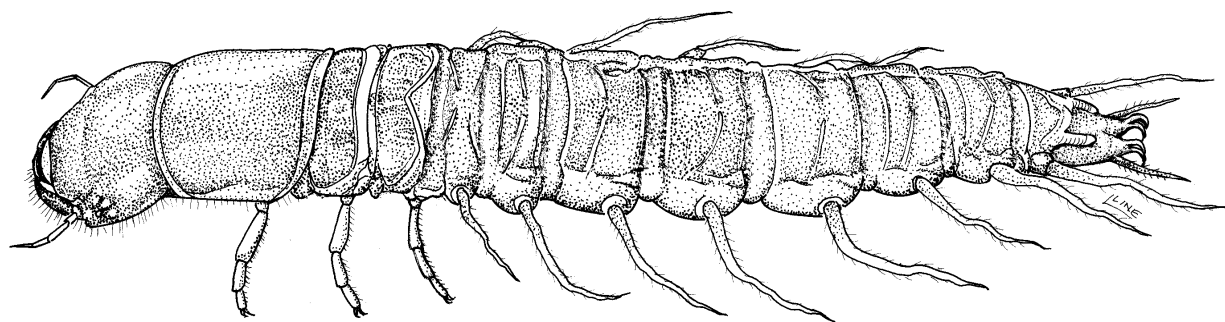


Fig. 24 *Nigronia serricornis*. Florida: Gadsden County, headwaters Quincy Creek, 27.i.1994. Illustrated by Laura Line.

DIAGNOSIS: Members of the genus *Nigronia* are distinguished from other eastern North America corydalid genera by the following combination of characters: **Larva:** [Fig. 24] lateral abdominal filaments without ventral gill tufts (Fig. 7); spiracles of abdominal segment 8 set on short tubes of equal length (Fig. 9); dorsum of abdomen dark brown without longitudinal stripes; body length up to 33mm. **Adult:** wings dark brown, patterned with white spots at some crossveins, and sometimes with broad white band across middle of each wing (Figs. 27, 29); body length 10-34mm.

NOTES:

Species Identification— Separation of both adults and late-instar larvae of *N. serricornis* and *N. fasciatus* can be made with confidence by examining the characters presented in the following keys. Accurate larval descriptions of the 2 species are given in Hazard (1960), Cuyler (1965), and Neunzig (1966). With the exception of very early instars, larvae can be distinguished based on the position and length of the respiratory tubes on the 8th abdominal segment. The respiratory tubes of *N. serricornis* (Fig. 25) are widely separated and usually shorter than the tubes of *N. fasciatus*, which nearly touch at their bases (Fig. 26).

Eggs, egg masses, and first instars were described by Baker & Neunzig (1968). They found that the eggs and first instars of the two species are morphologically indistinguishable. As in *N. serricornis*, the respiratory tubes of first instar *N. fasciatus* are widely separated, unlike the approximate position in subsequent instars. Egg masses of both species, as described by Baker & Neunzig (1968), are uncovered and usually composed of two layers of eggs arranged in diagonal rows with most of the eggs being deposited in the bottom layer. Eggs are about 1.5 mm long, oblong in shape, and have a smooth chorion; average number of eggs/mass is roughly 600-800.

Adults of *N. serricornis* and *N. fasciatus* are easily separated based on wing coloration. *Nigronia fasciatus* has a wide white band across the middle of each wing and a large white area on the anal lobe of the hindwing (Fig. 27), whereas *N. serricornis* has only a narrow white band on the forewing and the anal lobe of hindwing is dark brown (Fig. 29). Adult morphology of both species has been most thoroughly studied by Hazard (1960) and Stark & Lago (1983). Hazard found *N. serricornis* to be an unusually variable species, especially in terms of the pattern of white coloration on the forewings. However, in Florida populations we do not see this variability and wing coloration patterns conform closely to what is shown in the figures. Females of the 2 species both have serrate antennae and very similar genitalia. Males can be separated based on subtle differences of the genitalia [illustrated in Stark & Lago (1983)] and sexually dimorphic antennal structure that is serrate in male *N. serricornis* (Fig. 30) and an oddly modified pectinate form in male *N. fasciatus* (Fig. 28).

Distribution– This eastern Nearctic genus contains only 2 species (*N. fasciatus* and *N. serricornis*). *Nigronia serricornis* has been reported from 30 states (Tarter et al., 1976) as well as southeastern Canada (Hazard, 1960). Similarly, *Nigronia fasciatus* was reported from 23 eastern states but unlike *N. serricornis*, not from the upper Midwest or southern Canada. Caldwell (1976) found *Nigronia* to be largely absent from Coastal Plain Georgia, and in northern Georgia he reported that *N. serricornis* was more widespread than *N. fasciatus*, which was restricted primarily to smaller streams with good to excellent water quality. Neunzig (1966) noted similar differences in the preferred habitats of the 2 species: *N. fasciatus* dwelling in small cool headwater streams and *N. serricornis* inhabiting mainly larger streams and small rivers. Caldwell (1976) reported that neither species was collected from seriously degraded streams.

The presence of southern disjunct populations of *Nigronia* species in Florida fits the pattern common to many insects closely associated with intact broadleaf forests and clean water habitats that are prevalent in parts of North Florida but quite scarce in southern Alabama and Georgia. In Florida, *N. serricornis* is widespread across the western panhandle eastward to Burnt Mill Creek in the St. Marks Basin. Within this area, *Nigronia serricornis* occurs in numerous small to medium size streams and rivers that flow through broadleaf forests. In ravine ecosystems it is more common than the widespread and more tolerant *Corydalus cornutus*. Interestingly, *Nigronia* species have not been collected from eastern areas of the panhandle or peninsular Florida in recent times. Isolated populations, yet undiscovered, may occur in small woodland streams of North Central Florida. Hazard (1960) recorded a single male of *Nigronia fasciatus* collected from Alachua County in 1924 and so it is possible that *Nigronia fasciatus*, as well as *N. serricornis*, did occur at one time in North Central Florida. Our only other records (see Appendix B) of *Nigronia fasciatus* are 2 adults collected from Torreya State Park in Liberty County and 1 larva that we collected within The Nature Conservancy Apalachicola Bluffs and Ravines Preserve from a small and short (only about 150m long) steephead stream that flows over steep stair-step terrain before cascading into the Apalachicola River. Other nearby ravine streams yielded only *N. serricornis*.

Biology and Ecology– Knowledge of *Nigronia* spp. life histories is limited and no studies have been conducted on Southeastern Coastal Plain populations. A 3-yr life cycle was postulated for *Nigronia fasciatus* in a West Virginia population showing 3 distinct size classes presumed to represent discrete cohorts that reach maturity in the 3rd year (Tarter et al., 1975). Adult emergence appeared to be synchronized as evidenced by the observed flight season that lasted only about 10 days. Oviposition occurred in the afternoon when egg masses were laid on the underside of leaves overhanging the stream. Egg masses that were taken to the laboratory hatched in 14 days. Hazard (1960) reported similar life history findings for *Nigronia serricornis* in Ohio. Exact number of instars has never been determined. Larvae are predatory and consume a variety of arthropods including crustaceans and insect larvae (e.g., dipterans, caddisflies, mayflies, and even other *Nigronia*) (Tarter et al., 1975). Snags and leaf packs are the best substrate types to target when searching for larvae. Last instars of both species pupate within a few feet of the stream in shallow earthen cells under moss, stones, or debris (Neunzig, 1966; Tarter et al., 1975). Unlike *Chauliodes* and *Corydalus*, *Nigronia* adults are diurnal and during their flight season (April and May in Florida) can be spotted flying around streams. Additionally, the short-lived adults are drawn to light, thereby are easily captured at night.

ADDITIONAL REFERENCES: Davis (1903); Hazard (1960); Cuyler (1965); Neunzig (1966); Baker & Neunzig (1966); Stark & Lago (1983); Neunzig & Baker (1991).

KEY TO SPECIES FOR LARVAE OF *NIGRONIA*

[modified from Neunzig (1966)]

1. Respiratory tubes of abdominal segment 8 widely separated (Fig. 25)
..... *Nigronia serricornis* (Say)

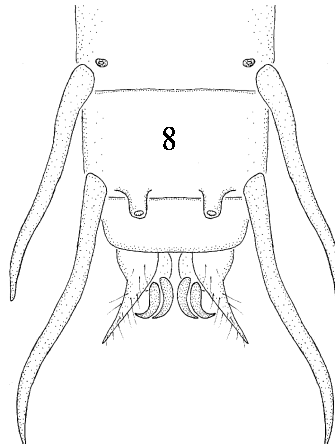


Fig. 25

- Respiratory tubes of abdominal segment 8 nearly touching at base (Fig. 26)
..... *Nigronia fasciatus* (Walker)

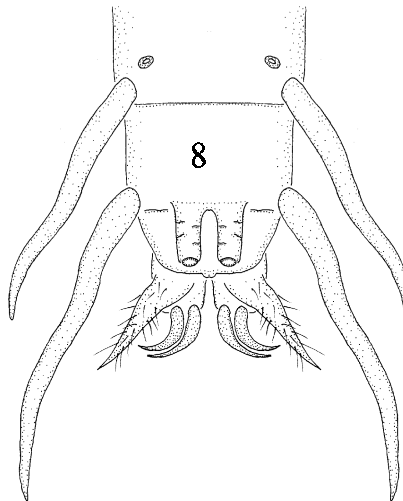


Fig. 26

KEY TO SPECIES FOR ADULTS OF *NIGRONIA*

[modified from Hazard (1960)]

1. Wings with large white areas more or less continuous, especially across the middle (Fig. 27); anal area of hindwing white (Fig. 27); male antennae modified pectinate (Fig. 28); female antennae serrate *Nigronia fasciatus* (Walker)

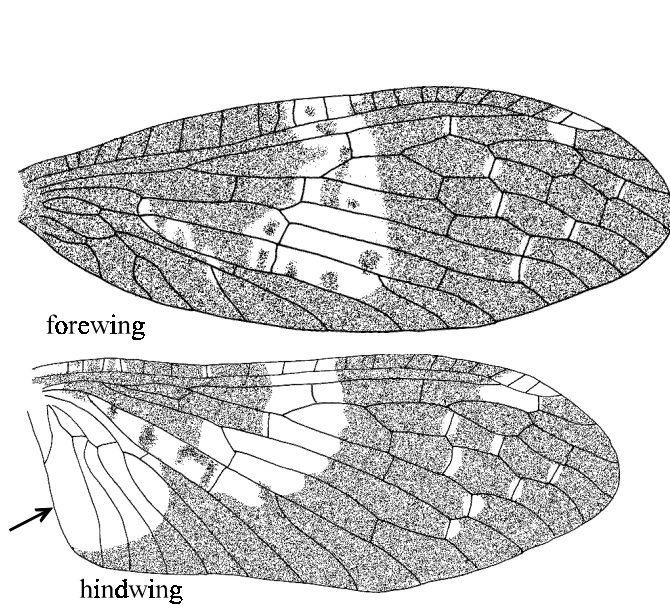


Fig. 27

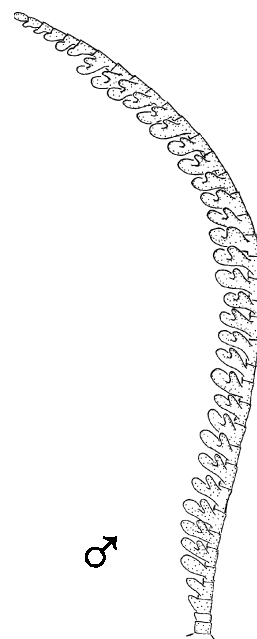


Fig. 28

- Wings with white spots isolated often associated with crossveins (Fig. 29); anal area of hindwing brown (Fig. 29); male and female antennae serrate (Fig. 30) *Nigronia serricornis* (Say)

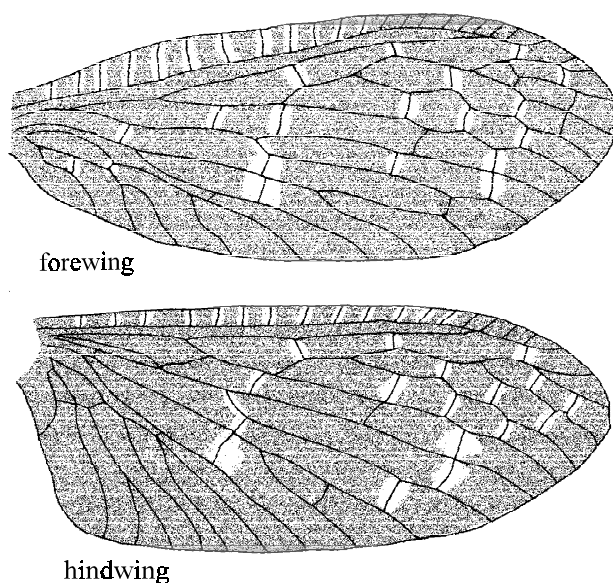


Fig. 29



Fig. 30

FAMILY SIALIDAE

The megalopteran family Sialidae contains 6 genera, but only the genus *Sialis* (including *Protosialis* Weele) is found in the New World. These insects are commonly referred to as alderflies because the adults frequent alder trees (*Alnus*). Alderflies can be found in and around a variety of lotic and lentic habitats and all life stages are closely associated with water. Larvae live in water, pupae occur in moist bank areas, and adults stay very close to water during their short life when mating and oviposition occurs on vegetation or other objects above the water's surface.

The larvae and adults are easily identified at the generic level but species identification is often problematic as discussed below. Larvae of *Sialis* are campodeiform and quite distinctive in having segmented lateral gills and a median caudal filament. Because of similar body form and presence of lateral abdominal gills, *Coptotomus* (Coleoptera: Dytiscidae) larvae are sometimes confused with *Sialis* when picking through benthic samples. Alderfly adults are generally dark brown with a broad head and thorax. The wings are coffee color and membranous, without scales or hairs, and are held in a tent-like fashion similar to caddisflies. Adults are quite uncommon in collections due to their short lifespan and habit of flying only short distances.

Genus *Sialis* Latreille

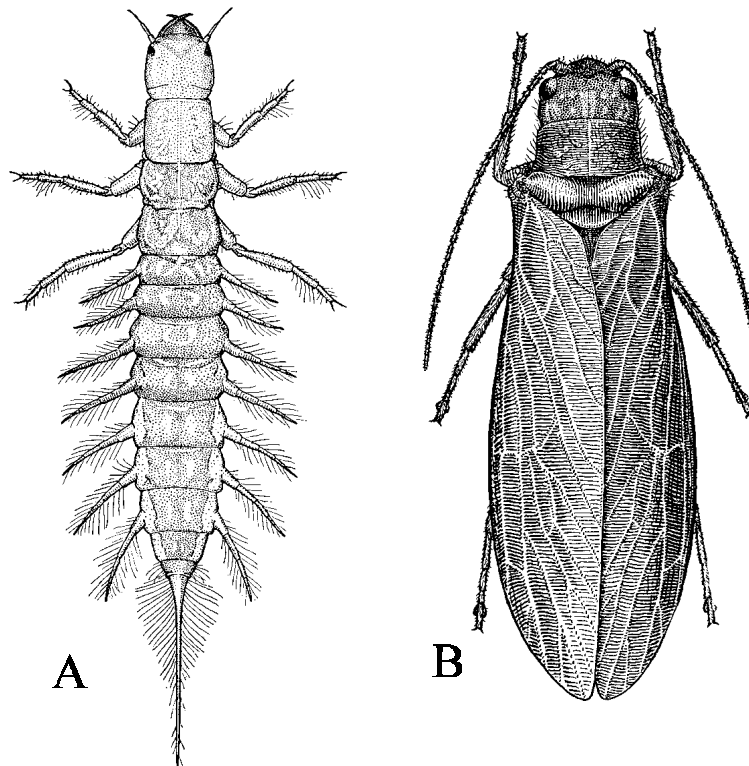


Fig. 31 [from Ross (1937)] – *Sialis* A. larva; B. adult

DIAGNOSIS: Members of the genus *Sialis*, or alderflies, are distinguished from other North American megalopterans by the following combination of characters: **Larva:** [Fig. 31A] abdomen with single long caudal filament; anal prolegs absent; abdominal segments 1-7 with pairs of 4-5 segmented lateral filaments; total length (excluding caudal filament) up to 17mm. **Adult:** [Fig. 31B] ocelli absent; 4th tarsomere bilobed, 5th tarsomere inserted near base (Fig. 10); body compact, total length (head to wing tip) 8-17mm.

NOTES:

Species Identification– Determining species identity for *Sialis* specimens is difficult and most reliably done when based on adult males. The adults are broad, usually very dark in color, and quite similar in general appearance between species (Fig. 31B). Larvae are even more conservative in specific morphological differences and without associated adults, usually can be identified only to genus. *Sialis* eggs show species-specific differences. Descriptions of the eggs and a key to eggs of eastern species were provided by Canterbury & Neff (1980).

Descriptions and a key to the larvae of eastern North America species were provided by Canterbury (1978). *Sialis americana* and *S. glabella*, which comprise the *americana* group, differ in that the larval mandibles possess an additional tooth (Fig. 32) (Cuyler, 1956; Canterbury, 1978). Canterbury (1978) separated the larvae of remaining species largely based on pigmentation differences. Complicating the situation, we found that coloration is obscured in older specimens and those that have not been properly fixed. Due to the difficulty of separating species based on the coloration patterns, we feel it is best to leave larval identifications at genus, except in the case of *S. americana*, which has mandibles with 3-subapical teeth (Fig. 32).

Sialis adults can be identified to species through careful examination of the genitalia. Ross (1937) provided descriptions and a key for adults of 19 of the 24 Nearctic species. Most literature prior to Ross (1937) recognized only 3 Nearctic species, and most currently recognized species were grouped under *S. infumata*. Taken from Ross (1937), the adult key presented below can be used to identify the species that are known from Florida. However, because of the likelihood of additional species being found in the state, we recommend further consulting: Ross (1937), Townsend (1939), Flint (1964), Stark & Lago (1980), and Whiting (1991a; 1994). Adult genitalia are best viewed after clearing. This is done by cutting off the abdominal terminalia and soaking it overnight in a 10% potassium hydroxide (KOH) solution. The cleared terminalia should be rinsed in distilled water and can then be viewed in glycerin. Pin-mounted specimens and those in alcohol can be treated in the same manner. Cleared genitalia should be stored in a microvial that is kept with the remaining specimen.

Distribution– Containing about 60 species distributed across the Holarctic and parts of the Neotropics, *Sialis* is the most speciose megalopteran genus. The genus is represented transcontinentally in the United States and Canada by 24 nominal species (Whiting 1991b; 1994), but within Florida, only 4 species are presently known (*S. americana*, *S. itasca*, *S. joppa*, *S. vagans*). *Sialis* is distributed throughout all of North Florida and on the peninsula is known from as far South as Highlands County where we examined *S. americana* larvae collected from Carter Creek within the Kissimmee River Basin. Larvae of *Sialis* can be found in association with mud-litter substrates from a wide array of Florida's aquatic habitats including: ponds, lakes and reservoirs, small streams and rivers. Owing to the difficulty of identifying larvae to species and the lack of adult collections, species diversity in Florida is poorly understood. However, based on the data we do have, it appears that *S. americana* is the most widespread and the only species known to occur on the peninsula. The other species are known from only a few adults collected from isolated panhandle localities: *S. itasca* (Lake Talquin, Gadsden Co.), *S. joppa* (Torreya State Park, Liberty Co.), and *S. vagans* from 3 stream localities [See Appendix B] in the western panhandle. Based on the common occurrence of *Sialis* larvae throughout much of Florida, it is likely that these species have a much more widespread distribution. Future efforts to collect adults may lead to the discovery of new state records and is critical to gaining basic understanding of species diversity and geographic distribution patterns.

Biology and Ecology– Larvae of *Sialis* prefer soft substrates (mud, silt, detritus) with plant debris accumulations (Canterbury, 1978); there the larvae burrow and feed on detritus, as well as invertebrate prey such as chironomids, tubificid worms, and ostracods (Woodrum & Tarter, 1973; Lilly et al., 1978). Many species are associated with specific waterbody types, for instance *S. joppa* is found primarily in small streams, whereas *S. itasca* is associated with lakes; other species such as *S. americana* and *S. vagans* are known from both lakes and streams. Pollution tolerance apparently also varies considerably according to species; one species, *S. aequalis* lives in acid mine streams of very low pH (Tarter & Woodrum, 1972; Woodrum & Tarter, 1973).

Life histories have been studied for a number of *Sialis* species (see Azam & Anderson, 1969; Pritchard & Leischner, 1973; Woodrum & Tarter, 1973; Lilly et al., 1978), although there have been no studies conducted on southeastern Coastal Plain populations. These studies indicated that *Sialis* larvae generally pass through 8-10 instars and typically complete their life cycle in 1 year. In Spring last instars exit the water and pupate in moist soil within a few meters of water's edge. Woodrum & Tarter (1973) reported that *S. aequalis* larvae made a night-time mass exodus from the study stream, with the entire population moving to pupation sites in less than a week. The pupal stage lasts about 1-3 weeks. Adults live for only a few days and stay close to water. Adults are most active during the day but they are attracted to light at night and can be collected in this way. Soon after mating the female oviposits an egg mass of several hundred eggs on stems, twigs, or leaves of vegetation overhanging the water (Canterbury & Neff, 1980). Eggs within the mass are cylindrical and have a prominent micropylar process; the egg mass is uncovered and eggs are laid in an upright or horizontal array depending on the species. After about 1-2 weeks the larvae hatch out and fall into the waterbody, thus completing the life cycle.

Larval collections taken in Florida during the early summer reveal only early instars. Late instars do not appear until the Fall and Winter months, an indication that *Sialis* populations in Florida complete their life cycle in one year or less. Adults collected in Florida were taken during March (*S. vagans*), April (*S. itasca*), May (*S. americana* and *S. joppa*), and September (*S. americana*). Adults of *S. americana* were taken in both May and September in central Florida indicating that populations there may be bivoltine. A seasonal emergence succession of species has been noted by others including Ross (1937). Obtaining adults of a particular population of *Sialis* requires precise timing because of the short flight season resulting from a synchronized life cycle and short-lived adult stage.

ADDITIONAL REFERENCES: Ross (1937); Townsend (1939); Cuyler (1956); Flint (1964); Canterbury (1978); Canterbury & Neff (1980); Stark & Lago (1980); Stange (1990); Whiting (1991a; 1994).

KEY TO SPECIES FOR LARVAE OF FLORIDA *SIALIS*
[modified from Canterbury (1978)]

1. Mandibles each with 3 subapical teeth (Fig. 32) *Sialis americana* (Rambur)

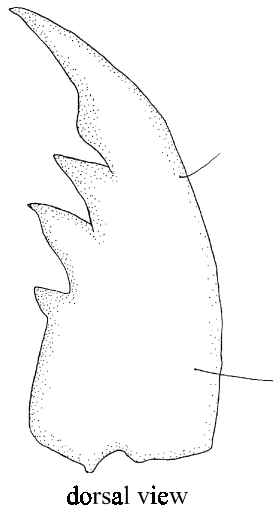


Fig. 32

- Mandibles each with 2 subapical teeth (Fig. 33), minute 3rd tooth sometimes faintly present *Sialis* spp. (*S. joppa*, *S. itasca*, *S. vagans*)

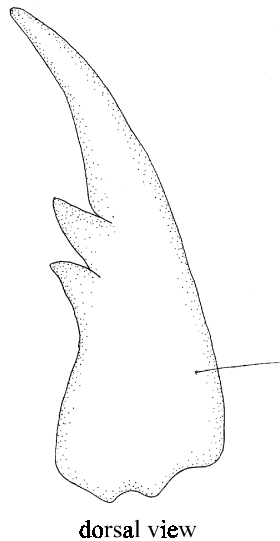


Fig. 33

KEY TO SPECIES FOR ADULTS OF FLORIDA *SIALIS*

[modified from Ross (1937)]

1. General color yellowish brown; tibiae and tarsi darker than femora, almost black; male genital hooks long, finger-like (Figs. 34, 35); female sternites as shown in Figure 36
..... *Sialis americana* (Rambur)

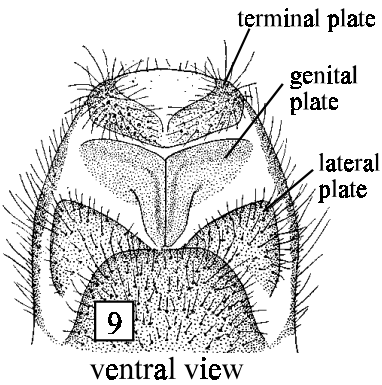


Fig. 34 [from Ross (1937)]

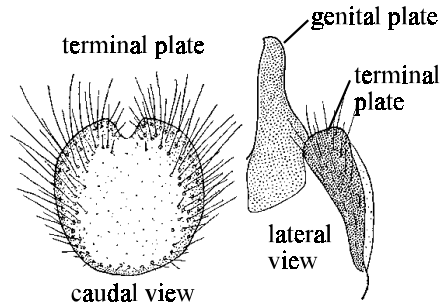


Fig. 35 [from Ross (1937)]

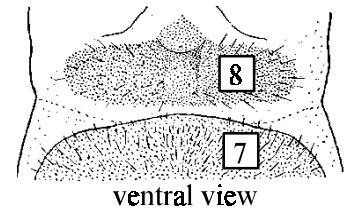


Fig. 36 [from Ross (1937)]

General color dark brown to black; tibiae and tarsi same color or paler than femora; male genital hooks either short or long and whip-like; female sternites not as above 2

- 2(1) Male 9th sternite produced into flap covering most of genitalia (Figs. 37, 38); female 8th sternite narrow and divided into 2 separate lobes by a median division (Fig. 39)
..... *Sialis vagans* Ross

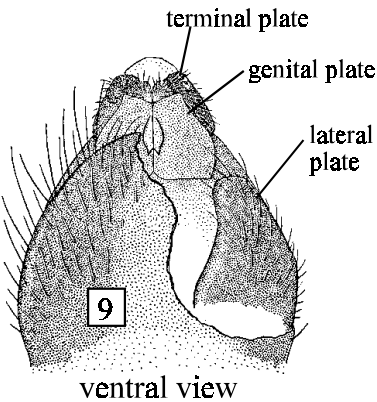


Fig. 37 [from Ross (1937)]

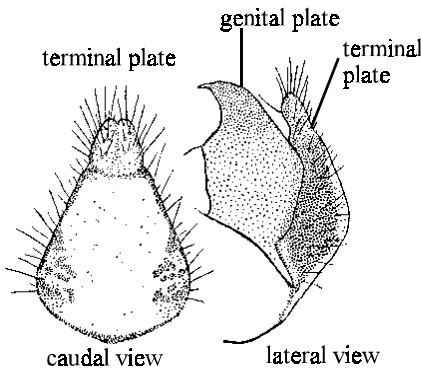


Fig. 38 [from Ross (1937)]

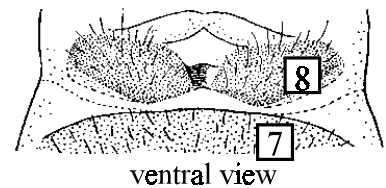


Fig. 39 [from Ross (1937)]

Male 9th sternite not produced into flap covering most of genitalia; female 8th sternite either wider or not divided into two separate parts 3

- 3(2) Male genital hooks long and whip-like, extending forward between lateral plates (Figs. 40, 41); female 8th sternite flat, not tilted so that apical margin is raised (Fig. 42); bursa copulatrix with finger-like terminal process (Fig. 42) *Sialis itasca* Ross

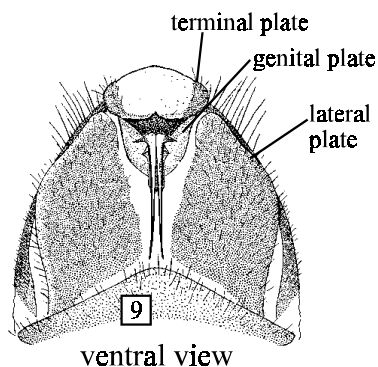


Fig. 40 [from Ross (1937)]

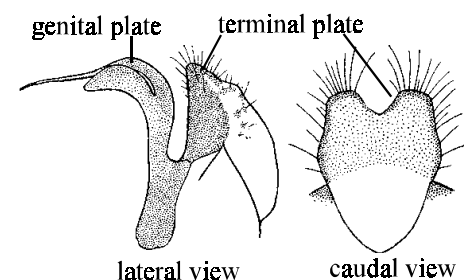


Fig. 41 [from Ross (1937)]

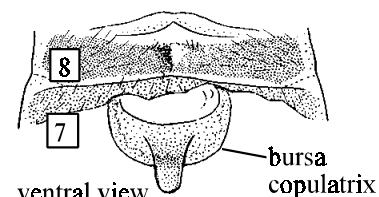


Fig. 42 [from Ross (1937)]

- Male genital hooks short, not extending forward between lateral plates (Figs. 43, 44); female 8th sternite tilted so that apical margin is raised (Fig. 45); bursa copulatrix with terminus triangular (Fig. 45) *Sialis joppa* Ross

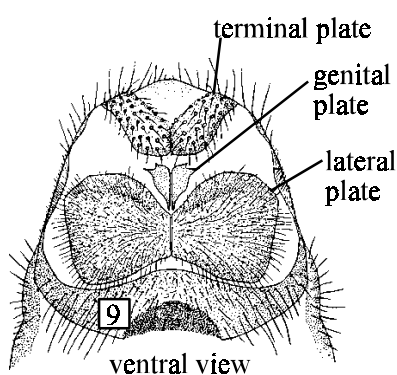


Fig. 43 [from Ross (1937)]

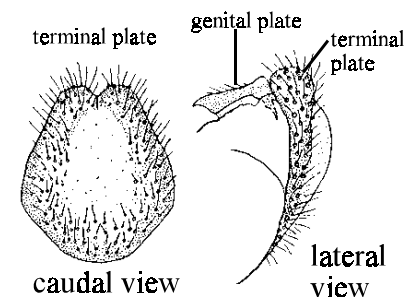


Fig. 44 [from Ross (1937)]

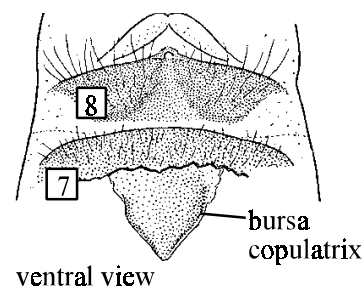


Fig. 45 [from Ross (1937)]

Part II. **AQUATIC NEUROPTERA**

FAMILY SISYRIDAE

The insect order Neuroptera contains approximately 4000 species within 17 families. The families comprise terrestrial insects (e.g., lacewings, antlions, owlflies, etc.) with the exception of those in the family Sisyridae, commonly referred to as “spongillaflies” because of the parasitic association of the larvae with freshwater sponges (Family: Spongillidae).

Neuropteran biology is in some ways quite uniform across the order. Members of most families, including Sisyridae, have 3 larval instars, unlike the megalopterans that have 8 or more. Neuropteran larvae are all fluid-feeding carnivores with suctorial mouthparts consisting of grooved mandibles and maxillae that form feeding tubes. The alimentary tract of neuropteran larvae is closed off behind the midgut, and the hindgut and Malpighian tubules are modified in the last instar to produce silk. Larval fecal material is stored in the midgut until the adult stage when the newly emerged adult eliminates a fecal pellet.

Worldwide Sisyridae contain approximately 60 described species placed within 4 genera. This number is increasing as new species are still being discovered, particularly in South America where species diversity is the highest. In North America above Mexico the fauna includes only 6 species, 3 species in the genus *Climacia* and 3 species of *Sisyra* (Penny et al., 1997). In Florida and the southeastern United States only 3 species in 2 genera occur (*Climacia areolaris*, *Sisyra apicalis*, *Sisyra vicaria*). All 3 species are widespread in both northern and southern Florida and may occur in both lotic and lentic habitats wherever freshwater sponges are present. For all 3, species identification is relatively straightforward since differentiating characteristics are known for both the larvae and adults.

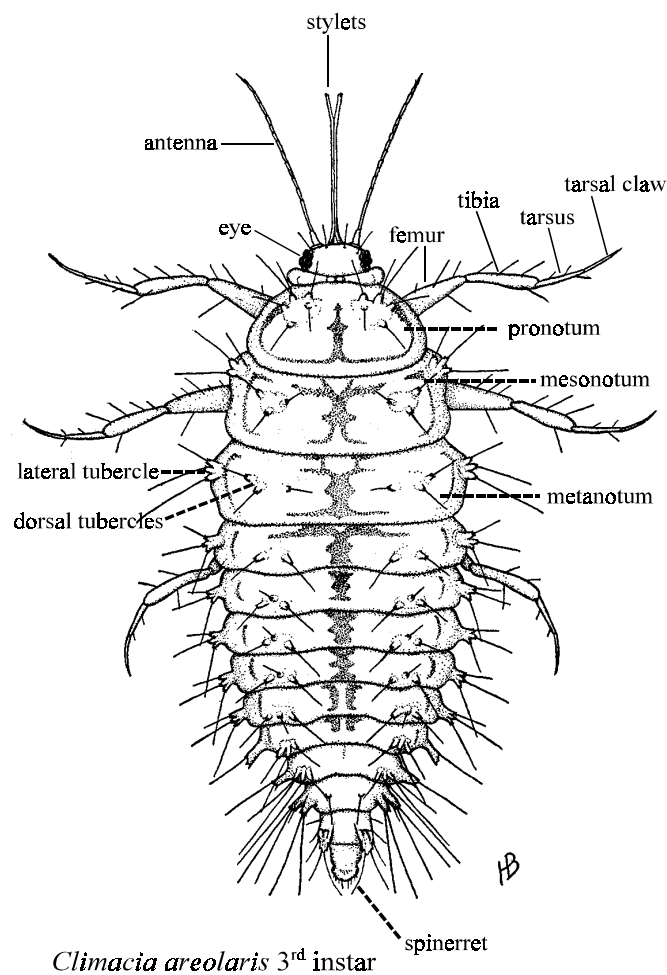
Spongillafly larvae, as already mentioned, are parasites on freshwater sponges and along with a few other insects such as sponge-feeding caddisflies and dipterans, have successfully exploited this food resource and microhabitat. It appears that a sponge host is obligatory for larval development, although there have been a few reports that larvae also feed on bryozoans and algae. Pupation, adult emergence, mating, and oviposition occur terrestrially near the larval habitats. There appears to be anywhere from 2 to 5 or more generations per year depending on species and climatic conditions.

Spongillaflies are among the smallest and most cryptic of aquatic insects. Larvae are usually overlooked during aquatic collecting because of their patchy benthic distribution and small size. They are best found by first locating freshwater sponges and then careful examination for spongillaflies. Removing the sponges from the water and letting them dry out will cause the larvae to crawl about and become easier to spot. Terrestrial forms are not observed often because emergence of larvae from the water, cocoon construction, adult emergence, mating, feeding, and oviposition generally occur during the night. Adults are readily attracted to ultraviolet light and light-trapping near aquatic habitats in Florida during the Spring and Summer often yields adults, usually in small numbers. Adults may also be collected by sweeping riparian vegetation.

MORPHOLOGY

A general knowledge of spongillafly morphology is necessary for accurate identification. The external morphology of the larva and adult is herein briefly discussed to facilitate users of this guide in specimen identification. For much more detailed accounts see Brown (1952) and Parfin & Gurney (1956).

Larva (3rd Instar): [Refer to Fig. 46] Spongillafly larvae are distinctive and easily separated from other insects given their unique morphological adaptations associated with feeding upon freshwater sponges. Mature larvae are small (about 4mm long), soft-bodied, and fusiform in shape. The body color varies and may be whitish, green, or brown, dependant probably upon diet. Among the distinctive characteristics are the mouthparts; the mandibles and maxillae are modified into long stylets that are closely appressed to form parallel tubes which the larva uses to insert and suck up fluids from its sponge host. The stylets extend far anteriorly, often with a downward curve. Lateral to the stylets are multi-segmented filiform antennae that extend out about as far as the stylets. Labial and maxillary palpi are absent. The thorax bears 3 pairs of well developed legs each consisting of a coxa, trochanter, femur, tibia, and tarsus. The tarsus is 1-segmented and apically bears a single slender claw. Other obvious larval characteristics are the setiferous tubercles on the thorax and abdomen. Tubercles are arranged both dorsally on either side of the midline, as well as laterally. Generally the setae are in groups of 3 so that there are 3 dorsal setae arranged on individual tubercles and 3 lateral setae either coming off individual tubercles or projecting off a single lateral tubercle. Thus there is a possible total of 6 setae/segment on each side. The dorsal tubercles may or may not have a well-defined associated sclerite. The exact location of setae and structure of the tubercles is of value in determining genus and species identity. The first abdominal segment bears on each side 2 instead of 3 dorsal setae. The position and number of setae is also modified at the posterior abdominal segments. The last abdominal segment is somewhat elongated and possesses the spinneret which is used in extruding silk for cocoon construction. Abdominal segments 1-7 bear segmented tracheal gills folded ventrally.

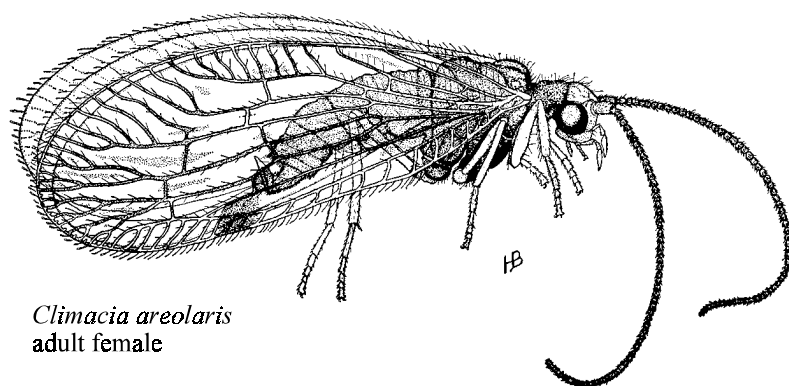


Climacia areolaris 3rd instar

Fig. 46 [modified from Brown (1952)]

Adult: [Refer to Figs. 47, 48] Spongillafly adults are small (4-7mm in length) dull-colored insects superficially looking like small caddisflies in that the wings often have hairs and are held in a tent-like manner over the body. Adults, as generally characteristic of Neuroptera, have fore- and hindwings of similar size and shape with numerous costal cross veins on the forewings. Wings are oval with numerous forked veins near the margins; macrotrichia are distributed primarily along the wing veins and at the margins. Wings may or may not be distinctively patterned. Spongillaflies are most likely to be confused with small members of the neuropteran family Hemerobiidae (brown lacewings). Hemerobiids differ from sisyrids in having many forked costal crossveins whereas sisyrid costal crossveins are unforked. Spongillafly adults have large compound eyes but lack ocelli. The antennal flagellum is moniliform, rather long and setose. Maxillary palpi are 5-segmented and labial palpi 3-segmented, both have expanded apical segments; well developed mandibles are present. Legs are cursorial with 5-segmented tarsi each possessing a pair of curved claws.

The abdomen is soft-bodied consisting of 10 segments. Tergites and sternites of some segments are lightly to moderately sclerotized. At the end of the female abdomen is found a well developed tubular ovipositor (Fig 60) that extends dorsally when at rest. The male possesses various structures associated with mating, most conspicuous is the 10th sternum that is modified into a pair of claspers (Figs. 63, 67).



Climacia areolaris
adult female

Fig. 47 [from Brown (1952)]

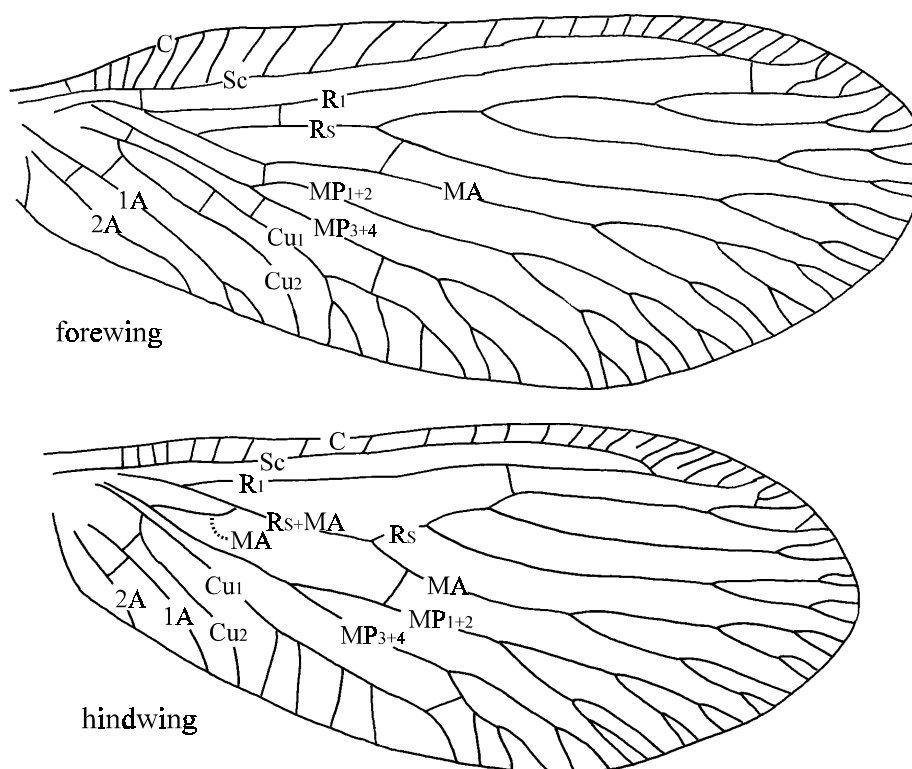


Fig. 48 [redrawn from Parfin & Gurney (1956)] Wing venation of *Sisyra vicaria*.
Abbreviations: C = costa; Sc = subcosta; R = radius; Rs = radial sector; MA = anterior media; MP = posterior media; Cu = cubitus; A = anal.

KEY TO GENERA AND SPECIES FOR LARVAE OF SISYRIDAE OF FLORIDA

[modified from Poirrier & Arceneaux (1972)]

1. Abdominal segment 8 with dorsal pair of long setae (Fig. 49) and ventral pair of setae raised on small tubercles (Fig. 50); setae on thoracic nota set on prominent tubercles with small apical spines (Fig. 51) *Climacia areolaris* (Hagen)

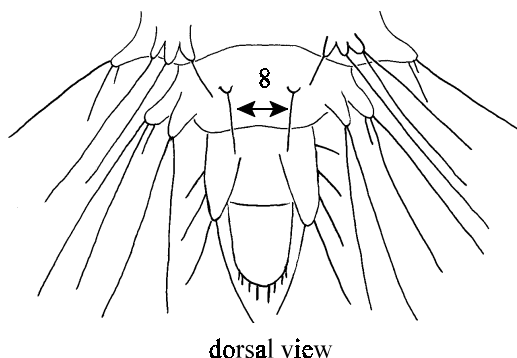


Fig. 49 [redrawn from Brown (1952)]

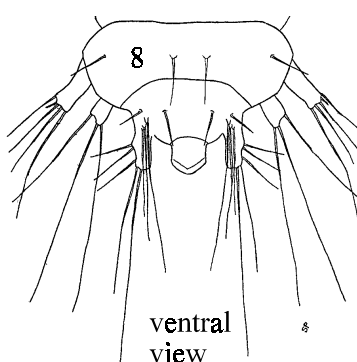


Fig. 50 [from Parfin & Gurney (1956)]

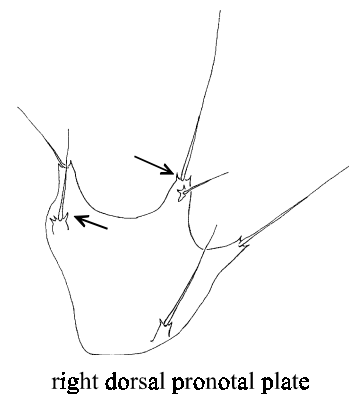


Fig. 51 [redrawn from Parfin & Gurney (1956)]

- Abdominal segment 8 without dorsal pair of setae (Fig. 52), ventral pair of setae sessile (Fig. 53); setae on thoracic nota set on slightly produced tubercles without small apical spines (Fig. 54) *Sisyra* 2

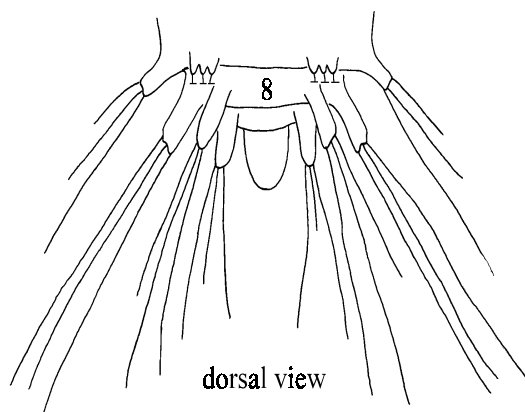


Fig. 52 [redrawn from Parfin & Gurney (1956)]

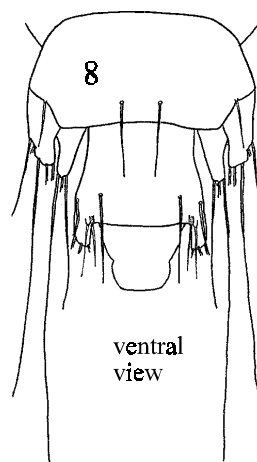


Fig. 53 [from Parfin & Gurney (1956)]

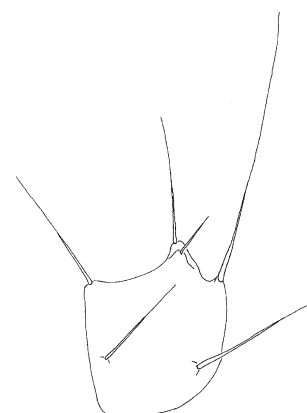


Fig. 54 [redrawn from Parfin & Gurney (1956)]

- 2(1) Gills of abdominal segment 1 with basal hook-like extension (Fig. 55); 3 setae of 5th lateral abdominal tubercle arranged on 2 projections (Fig. 56)

..... *Sisyra vicaria* (Walker)

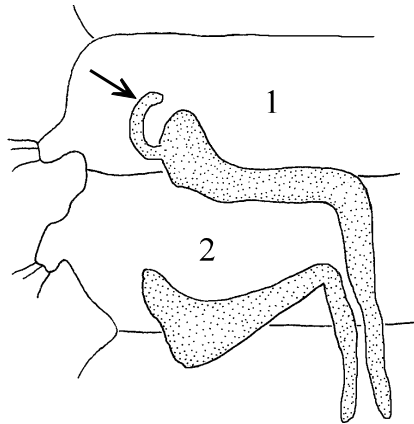


Fig. 55 [redrawn from Parfin & Gurney (1956)]

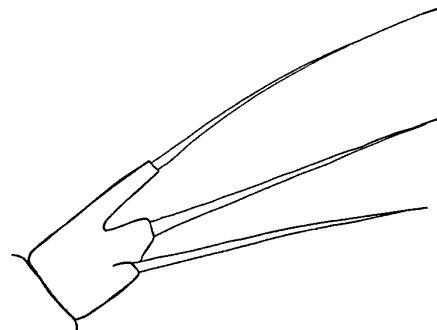


Fig. 56 [from Poirrier & Arceneaux (1972)]

- Gills of abdominal segment 1 without basal hook-like projection; 3 setae of 5th lateral abdominal tubercle arranged with 2 sessile and 1 on projection (Fig. 57)

..... *Sisyra apicalis* Banks

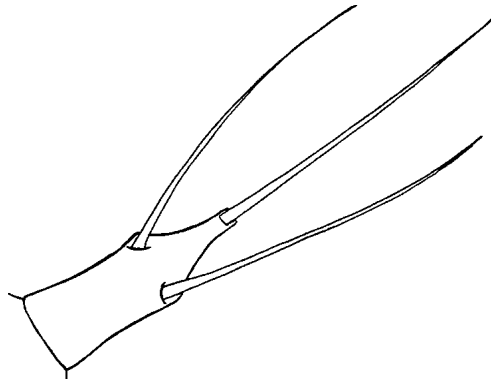


Fig. 57 [from Poirrier & Arceneaux (1972)]

KEY TO GENERA AND SPECIES FOR ADULT SISYRIDAE OF FLORIDA

[based on Parfin & Gurney (1956)]

1. Forewings distinctly patterned with large dark brown and pale yellow markings (Fig. 58); antennae unicolored brown or blackish, occasionally slightly lighter apically; male and female terminalia as shown in Figures 59, 60 *Climacia areolaris* (Hagen)

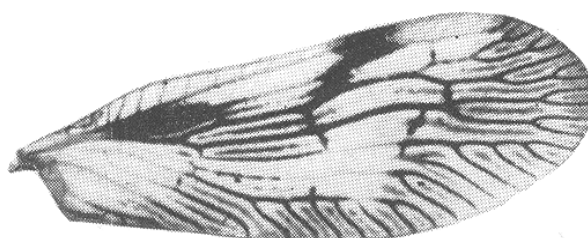


Fig. 58 [from Parfin & Gurney (1956)]

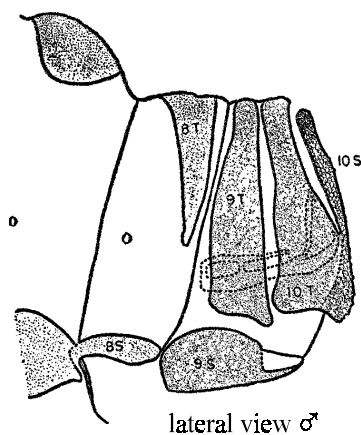


Fig. 59 [from Parfin & Gurney (1956)]

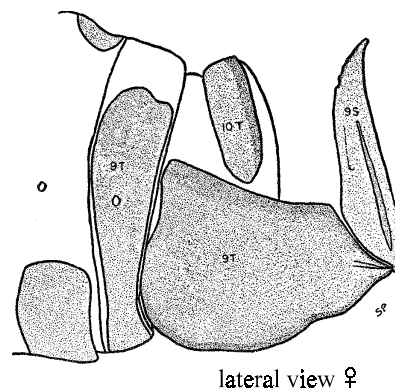


Fig. 60 [from Parfin & Gurney (1956)]

Forewings smoky-brown, not patterned with large dark brown and pale yellow markings (Figs. 61, 65); antennae distinctly bicolored, brown and yellow *Sisyra* 2

- 2(1) Total length (head to wing tip) greater than 5mm; antennal scape and pedicel dark brown with remaining segments yellow, rarely basal third dark and apical two thirds yellow; forewing R_s with 3 major branches (Fig. 61); forewing lacking distinct dark streaks between veins; male claspers short, curved sharply inward (Fig. 62) *Sisyrha vicaria* (Walker)

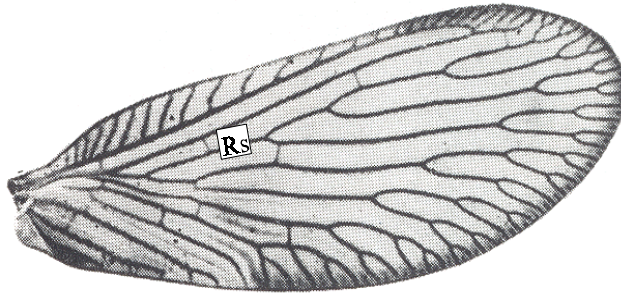


Fig. 61 [from Parfin & Gurney (1956)]

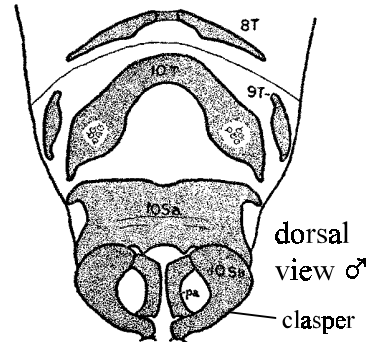


Fig. 62 [from Parfin & Gurney (1956)]

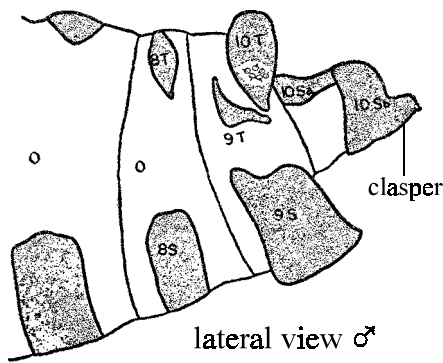


Fig. 63 [from Parfin & Gurney (1956)]

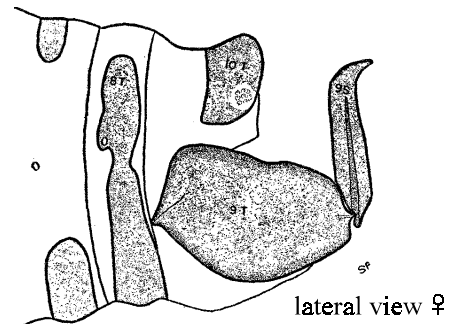


Fig. 64 [from Parfin & Gurney (1956)]

- Total length less than 5mm; antennae with basal half and apical 3-5 segments of antennae dark brown, intervening segments yellow; forewing R_s with 2 major branches (Fig. 65); forewing with distinct dark streaks between veins (Fig. 65); male claspers elongate, curved gently inward (Fig. 66) *Sisyrha apicalis* Banks

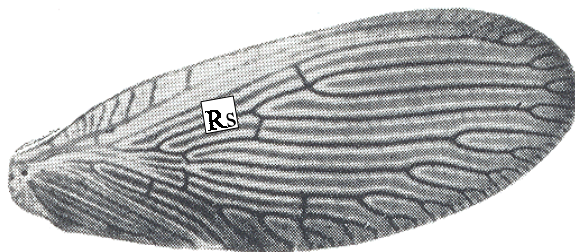


Fig. 65 [from Parfin & Gurney (1956)]

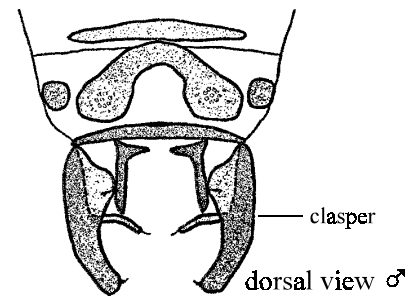


Fig. 66 [from Parfin & Gurney (1956)]

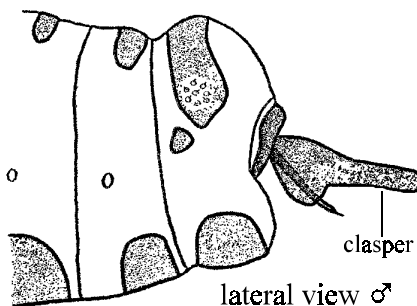


Fig. 67 [from Parfin & Gurney (1956)]

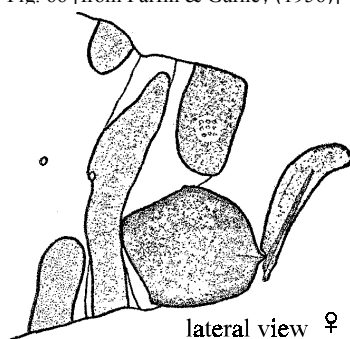


Fig. 68 [from Parfin & Gurney (1956)]

Genus *Climacia* McLachlan

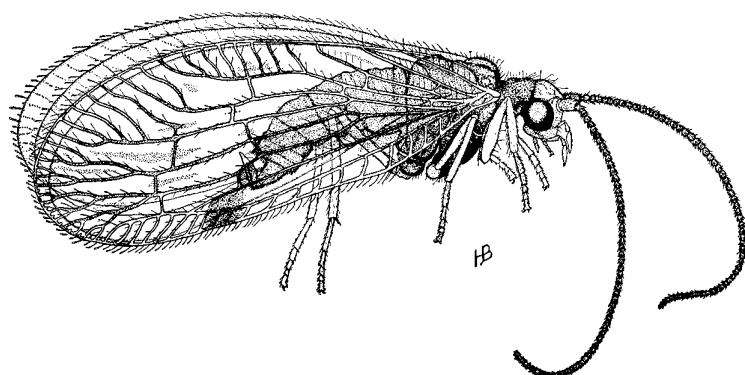


Fig. 69 [from Brown (1952)] – *Climacia areolaris* adult female

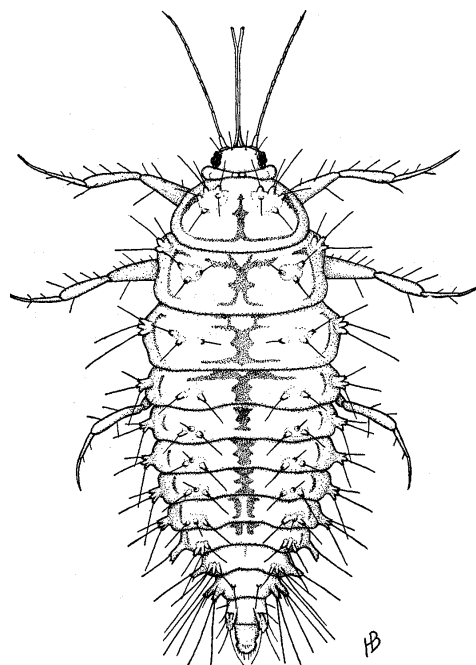


Fig. 70 [from Brown (1952)] – *Climacia areolaris* 3rd instar

DIAGNOSIS: *Climacia areolaris* is distinguished from *Sisyrha* species occurring in Florida by the following combination of characters: **Larva (3rd instar):** [Fig. 70] abdominal segment 8 with dorsal pair of long setae (Fig. 49) and ventral pair of setae raised on small tubercles (Fig. 50); setae on thoracic nota set on prominent tubercles with small apical spines (Fig. 51). **Adult:** [Fig. 69] forewings distinctly patterned with dark brown and pale yellow markings (Fig. 58); antennae unicolorous dark brown.

NOTES:

Species Identification– The immature stages of *Climacia areolaris* have been figured and described in detail by Brown (1952). As the insect matures from one instar to the next changes occur in the number of antennal segments and overall chaetotaxy. The last instar (3rd) has approximately 16 antennal segments, and the meso- and metanotum each has a group of 3 setae on either side of the midline (Fig. 70). Second instars possess 6-segmented antennae and the meso- and metanotum each has a group of 2 setae on either side of the midline. Third instars also differ from earlier instars by usually having a pattern of dark pigmentation centered along the mid-dorsal line (Fig. 70). First instars lack abdominal gills and possess fewer antennal segments and setae than later instars.

Climacia areolaris larvae (3rd instar) in general have more pronounced tubercles than *Sisyrha* species. Also, the pronounced thoracic tubercles with apical spines (Fig. 51) and presence of a dorsal pair of long setae on abdominal segment 8 (Fig. 49) allow for fairly easy separation of *C. areolaris* from *Sisyrha* species. Adults of *Climacia areolaris* are easily distinguished from adults of *Sisyrha* by the characteristic pattern of maculations on the forewings (Fig. 58).

Distribution– *Climacia* is a New World genus diversified the greatest in South America where 13 of the 19 known species occur (Flint, 1998). East of the Mississippi River there is only a single species, *C. areolaris*, which is widespread and common throughout the region. The original description of this species by Hagen (1861) was based on specimens collected in Florida, probably North Florida according to Parfin & Gurney (1956). *Climacia areolaris* has been collected throughout the state from Escambia County in the far western panhandle to Dade

County in South Florida (see Appendix B). Larval collections are rare and came from only a few small creeks, but the numerous adult collections indicate they are widespread and fairly common insects.

Biology and Ecology– The general biology and ecology of *Climacia areolaris* is relatively well known and accounts for most of what is known concerning spongillafly biology on the whole. Besides describing the morphology of all immature stages, Brown (1952) presented observations on larval, pupal, and adult behavior. Additionally, Parfin & Gurney (1956) summarized the life history traits of *C. areolaris* as well as other sisyrids. *Climacia areolaris*, as with other sisyrids and many other neuropterans, has only 3 instars. Growth and development can be quite rapid and there are several generations per year (multivoltine). Brown (1952) postulated in his study conducted at Lake Erie, that there were 3 or more generations/year, and White (1976) presented evidence of 5 generations/year in Lake Texoma, Texas and Oklahoma.

Collection localities indicate that this species is found in a wide range of lotic and lentic habitats, potentially wherever freshwater sponges occur. The vast majority of specimens included in this study were adults taken at night using ultraviolet-blacklights. The flight season is quite long because of the multiple generations; adults in Florida have been collected from March to mid-November. Although adults are often taken in light traps, larvae are not collected with great frequency. This may be due to their small size and habit of staying with their sponge host. We have found that larvae are gregarious and when examining snags colonized with sponges we find some sponges will have a number of larvae feeding close together, while many sponges will have no sisyrids. This patchy microdistribution helps to account for the infrequent larval collections.

Larvae of *C. areolaris* have a wide host range and may parasitize any number of spongillid species. Poirrier (1969) and Poirrier & Arceneaux (1972) listed 7 sponge host species from collections in Louisiana. Larvae are most commonly found attached to the outside of the sponge but may also enter cavities and feed within the sponge. Second and 3rd instars are quite sedentary and tend to remain on their host as long as it is alive (Brown, 1952).

After the 3rd instar has fed and grown sufficiently, it leaves the sponge by crawling or swimming to an emergent object; the larva will then crawl, at night, out of the water and seek a suitable pupation site, which may include plant stems, leaves, or various other shoreline objects (Brown, 1952). The larva after selecting a pupation site, proceeds to spin an elaborate silken cocoon by means of the spinneret. Within the cocoon the larva pupates and during this stage is vulnerable to attack from parasitic wasps (Pteromalidae) (Brown, 1951).

Pupation lasts approximately 5-6 days ending when the pharate adult bites its way out of the cocoon and the adult emerges. Shortly after eclosion, the adult, as typical of neuropterans, deposits a fecal pellet. Adults can live for several weeks, spending their time on riparian vegetation where they forage for food that includes pollen and aphids (Pupedis, 1987). Males provide females with additional food resources by depositing a spermatophore with the female after successfully copulating. The female lays small batches of eggs in depressions of objects overhanging water; the eggs are covered with a sheet of silk (Brown, 1952).

Eggs require about 8-10 days before hatching, at which time the larva forces its way out of the egg and silken tent by means of an egg burster structure. The first instar walks or randomly jumps about until falling into the water (Pupedis, 1986) thus beginning the aquatic phase.

ADDITIONAL REFERENCES: Brown (1952); Parfin & Gurney (1956); Poirrier & Arceneaux (1972); Pupedis (1980); Lago (1981).

Genus *Sisyra* Burmeister

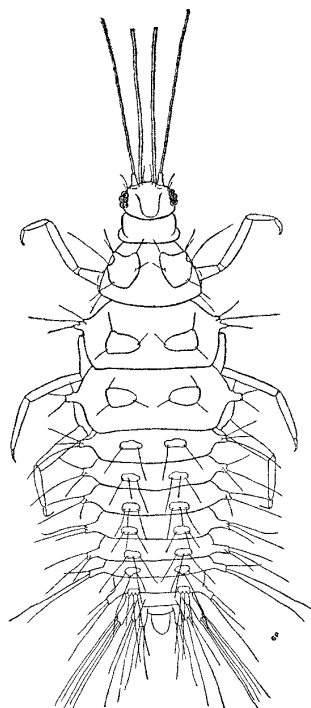


Fig. 71 [from Parfin & Gurney (1956)] – *Sisyra vicaria* 3rd instar

DIAGNOSIS: *Sisyra* species are distinguished from *Climacia areolaris* by the following combination of characters: **Larva (3rd instar):** [Fig. 71] abdominal segment 8 without dorsal pair of long setae (Fig. 52), and with ventral pair of setae sessile (Fig. 53); setae on thoracic nota set on slightly produced tubercles without small apical spines (Fig. 54). **Adult:** forewings smoky-brown without distinct maculations (Figs 61, 65); antennae bi-colored yellow and brown.

NOTES:

Species Identification– Extensive laboratory rearing of field collected spongilla fly larvae on their sponge hosts was reported by Poirrier (1969) and Poirrier & Arceneaux (1972). These studies resulted in a number of new host records as well as larva/adult associations and a larval key for all 4 spongilla fly species present in the southern United States. Previously the larva of *S. apicalis* was unknown. The 2 Florida species of *Sisyra* (*S. apicalis* and *S. vicaria*) can be separated using characters presented in the preceding key that was adapted from Poirrier & Arceneaux (1972). Unlike *S. apicalis*, *S. vicaria* (3rd instars) have a basal hook-like extension on the gills of the first abdominal segment (Fig. 55). Additionally, larvae of the 2 species are also distinguished by the morphology of the lateral abdominal tubercles [see preceding key].

Adult taxonomy was thoroughly treated by Parfin & Gurney (1956). Adults of *Sisyra* can be distinguished based on size as well as differences in wing venation, antennal coloration, and genitalic structures. *Sisyra apicalis* is the smaller of the 2 species and is less than 5mm in length from head to the wing tips; *S. vicaria* is greater than 5mm long. An adult female we collected from Eglin Air Force Base has characters intermediate between the 2 species suggesting that hybridization may occur.

Distribution– The genus *Sisyra* is distributed worldwide, including 8 species known from the New World. In North America there are only 3 nominal species, of which 2 occur in Florida (*S. apicalis* and *S. vicaria*). *Sisyra apicalis* has been recorded from Panama, Brazil, Cuba, as well as Florida, Georgia, Mississippi, and Louisiana. *Sisyra vicaria* is widespread occurring over much of the eastern half of the United States, southern Canada, and the Pacific Northwest. In Florida *Sisyra* species have been collected far less often than the common *Climacia areolaris*. *Sisyra apicalis* in-state distribution ranges from North Florida all the way into the Florida Keys where it was reported from Big Pine Key. *Sialis vicaria* is also widespread throughout the state but seems not to extend as far South, our southern-most record being from a marsh in Lee County.

Biology and Ecology– There have been no detailed life history studies done on *S. apicalis* or *S. vicaria* but from what is known, their general biology and ecology appears to be quite similar to that of *Climacia areolaris*. Like *C. areolaris*, both *S. apicalis* and *S. vicaria* have a wide host range of sponge species, and in Louisiana both *S. apicalis* and *S. vicaria* occurred at times sympatrically upon the same hosts (Poirrier, 1969; Poirrier & Arceneaux, 1972). The Louisiana collection records came from various swamps, sloughs, bayous, and streams. In Florida, larval collections are few and no specific host associations are known. We collected a larva of *S. vicaria* from the upper Aucilla River where the stream is rather swampy and very tannic. Also, we examined larvae from Little Haw Ck., Flagler County and a marsh in Lee County. The sole larva of *S. apicalis* that we examined had only the locality label of S.W. Florida. Adults of both species in Florida were collected primarily during the Spring, although some collections were also made in September and October indicating that *S. apicalis* and *S. vicaria* may be bivoltine, most likely with Spring-recruited larvae maturing during the Summer and emerging in the early Fall. Adults have been taken from widespread localities near varied lotic and lentic habitats [See Appendix B].

ADDITIONAL REFERENCES: Parfin & Gurney (1956); Poirrier & Arceneaux (1972); Pupedis (1980); Lago (1981).

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APPENDIX A: CHECKLIST OF FLORIDA MEGALOPTERA AND AQUATIC NEUROPTERA

The Megaloptera fauna of Florida presently includes 9 species representing 4 genera and 2 families. The spongilla fly fauna comprises 3 species representing 2 genera. The arrangement of taxa in this checklist follows the scheme of classification used by Penny et al. (1997).

Florida Distribution: PAN= **panhandle**; PEN= **peninsula**. We define the Florida panhandle as all areas of northern Florida to the North and West of the basins drained by the St. Johns, Oklawaha, and Withlacoochee rivers. The peninsula comprises the above mentioned basins and all others to the South.

Florida Distribution

Order Megaloptera

Family Corydalidae

Subfamily Corydalinae

- | | |
|-----------------------------------|----------|
| 1) <i>Corydalus cornutus</i> (L.) | PAN, PEN |
|-----------------------------------|----------|

Subfamily Chauliodinae

- | | |
|--|-----------|
| 2) <i>Chauliodes pectinicornis</i> (L.) | PAN, PEN |
| 3) <i>Chauliodes rastricornis</i> Rambur | PAN, PEN |
| 4) <i>Nigronia fasciatus</i> (Walker) | PAN, PEN* |
| 5) <i>Nigronia serricornis</i> (Say) | PAN |

Family Sialidae

- | | |
|--|----------|
| 6) <i>Sialis americana</i> (Rambur) | PAN, PEN |
| 7) <i>Sialis joppa</i> Ross | PAN |
| 8) <i>Sialis itasca</i> Ross [New State Record] | PAN |
| 9) <i>Sialis vagans</i> Ross | PAN |

Order Neuroptera

Family Sisyridae

- | | |
|--------------------------------------|----------|
| 1) <i>Climacia areolaris</i> (Hagen) | PAN, PEN |
| 2) <i>Sisyra apicalis</i> Banks | PAN, PEN |
| 3) <i>Sisyra vicaria</i> (Walker) | PAN, PEN |

* The only record of *Nigronia fasciatus* from the Florida peninsula comes from the thesis of Hazard (1960) in which he reports a single male he examined that was collected in Alachua County in 1924. There have been no recent collections of this species from peninsular Florida.

APPENDIX B: DATABASE OF FLORIDA MEGALOPTERA AND AQUATIC NEUROPTERA

Appendix B is a series of data tables that were extracted from our specimen database on the spatial distribution and seasonality of the 12 Megaloptera and Sisyridae species known from Florida. The tables are arranged alphabetically by family and genus; a separate table is presented for each genus. In all, there are 1184 collection records compiled in the tables. The information sources we used to gather these data include the following: 1) specimens loaned to us and examined during the course of preparing the guide; 2) specimens we examined within collections at Florida A&M University (FAMU) and the Florida State Collection of Arthropods (FSCA) in Gainesville; and 3) records gleaned from the scientific literature. With respect to all three of these sources, the data tables are a survey, and although not a completely exhaustive account, the records provide thorough documentation of where and when specimens of the various species have been collected in the state. Searching the data tables is a good way to see where the species have occurred and the times of year that one could expect to find adults and larvae. The tables are also useful for comparing recent specimen collections within a particular waterbody or basin, to what has been collected there historically. Furthermore, these tables provide an inventory of the FAMU collections, which may be of interest for those wishing to borrow specimens for systematic studies.

Data fields for each genus table include: **Species** (scientific names, arranged alphabetically); **Basin** (USGS basin where the collection was made); **Waterbody** (name of the river, stream, or lake where the specimens were collected); **County** (county where collected); **Stage** (life stage, L= larva; A= adult); **Date Coll.** [the month, day, and year the specimens were collected (if the record indicated a range of dates, one month or less, over which time the specimens were collected, then a mid-date was used)]; **Source** [source of collection records, this includes: literature records enclosed in parentheses (see Literature Cited section for complete citation); the names of the Florida Department of Environmental Protection (FDEP) district offices and people that loaned us the specimens; and names of the museums where the specimens are housed, either collections of FAMU or the FSCA]; **Locality description** (information on the exact location of the collection site). Additional modifiers next to FAMU in the Source field (e.g., FAMU-Eglin Study or FAMU ORB (Ochlockonee River Basin) Study, etc., refers to the specific research projects for which the specimens were collected.

The veracity and completeness of the following data were dependent on the amount of information presented with collection accounts and the locality labels of the given sources. In many cases, collection information is vague as to exact collection locality, and often in the older collections, collection locality was described by only state and county name, and nearest town.

Florida Megaloptera

Family: Corydalidae

Genus: *Chauliodes* Table 1-1

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
Chauliodes	St. Johns R (Lower)		Clay	L	4/8/1997	FDEP-Tallahassee	Penny Farms Retirement Center Reference Stream
Chauliodes	St. Johns R (Upper)	Econlochatchee R	Orange	L	9/15/1992	FDEP-Tallahassee	
Chauliodes pectinicornis				A		(Davis, 1903)	Florida
Chauliodes pectinicornis			Alachua	A	5/8/1934	FSCA	Gainesville
Chauliodes pectinicornis			Alachua	A	4/20/1978	FSCA	Gainesville, Doyle Conner Bldg.
Chauliodes pectinicornis			Alachua	A	6/8/1978	FSCA	Gainesville
Chauliodes pectinicornis			Alachua	A	7/22/1979	FSCA	Gainesville, Beville Heights
Chauliodes pectinicornis			Alachua	A	6/14/1980	FSCA	Gainesville, Beville HTS
Chauliodes pectinicornis			Alachua	A	7/1/1980	FSCA	Gainesville, Beville HTS
Chauliodes pectinicornis			Alachua	A	5/6/1984	FSCA	Gainesville
Chauliodes pectinicornis			Alachua	A	5/24/1989	FSCA	4 mi N of Lacrosse. J. & E. Ranch
Chauliodes pectinicornis			DeSoto	A	4/10/1952	(Hazard, 1960)	Ft. Ogden
Chauliodes pectinicornis			Highlands	A	7/12/1949	FSCA	Sebring
Chauliodes pectinicornis			Highlands	A	8/13/1964	FSCA	Sebring
Chauliodes pectinicornis			Jefferson	A	7/2/1958	FSCA	Monticello
Chauliodes pectinicornis	Apalachicola R		Liberty	A	5/18/1966	FSCA	Torrey State Park
Chauliodes pectinicornis	Apalachicola R		Liberty	A	8/20/1978	FSCA	Torrey State Park
Chauliodes pectinicornis	Apalachicola R	Beaver Dam Ck	Liberty	A	6/24/1996	FAMU Ravine Study	lower end, ABRP Preserve, 5 km N Bristol
Chauliodes pectinicornis	Apalachicola R	Camel Lake	Liberty	A	5/16/1971	FSCA	Apalachicola National Forest. Pitcher Plant
Chauliodes pectinicornis	Apalachicola R	Little Sweetwater Ck	Liberty	A	6/24/1996	FAMU Ravine Study	upper end, ABRP, 5 km N Bristol
Chauliodes pectinicornis	Apalachicola R	Little Sweetwater Ck	Liberty	L	3/11/1994	FAMU Ravine Study	near confluence w/Apalach. R, ABRP
Chauliodes pectinicornis	Aucilla R	Aucilla R	Madison	L	2/25/1975	FDEP-Jacksonville	at US Hwy 27 near Lamont
Chauliodes pectinicornis	Blackwater R		Okaloosa	A	5/22/1978	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes pectinicornis	Blackwater R	Blackwater R	Okaloosa	A	5/29/1970	FAMU	Bryant bridge, 2.5 mi W Holt
Chauliodes pectinicornis	Blackwater R	Blackwater R	Okaloosa	A	7/10/1974	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes pectinicornis	Blackwater R	Blackwater R	Okaloosa	A	5/12/1975	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes pectinicornis	Blackwater R	Blackwater R	Okaloosa	A	5/2/1978	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes pectinicornis	Blackwater R	Blackwater R	Okaloosa	A	5/7/1979	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes pectinicornis	Blackwater R	Blackwater R	Okaloosa	A	5/12/1979	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes pectinicornis	Blackwater R	Lake Carr	Santa Rosa	A	5/24/1971	FSCA	Blackwater R. State Forest. Holt Fish Hatchery
Chauliodes pectinicornis	Chipola R	Bridge Ck	Jackson	A	5/4/1995	FAMU	@ Hwy 71
Chauliodes pectinicornis	Choctawhatchee R	Seven Runs Ck	Walton	A	6/21/1971	FAMU	at Hwy. 81
Chauliodes pectinicornis	Escambia R	Pritchett Mill Branch (Trib)	Escambia	L	7/22/1997	FDEP-Pensacola	@ Tedler Rd. Section #11
Chauliodes pectinicornis	Hillsborough R		Hillsborough	A	4/25/1996	FDEP-Orlando	Residence, NE Plant City
Chauliodes pectinicornis	Ochlockonee R		Gadsden	A	4/12/2001	FAMU	4 mi S Quincy off Hwy 267A
Chauliodes pectinicornis	Ochlockonee R		Gadsden	A	7/1/2001	FAMU	4 mi S Quincy off Hwy 267A
Chauliodes pectinicornis	Ochlockonee R	FAMU Farm Stream	Gadsden	L	10/14/1992	FAMU Biotic Index Study	near lower end
Chauliodes pectinicornis	Pensacola Bay	Judges Branch	Santa Rosa	L	6/13/2001	FDEP-Pensacola	Sterling Fibers
Chauliodes pectinicornis	St. Marks R		Wakulla	A	5/5/1980	FAMU	St. Marks Natl. Wild. Refuge, 2nd bridge S Newport on
Chauliodes rastricornis				A		(Davis, 1903)	western Florida
Chauliodes rastricornis			Alachua	A	4/27/1954	FSCA	

Florida Megaloptera

Family: Corydalidae

Genus: *Chauliodes* Table 1-2

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
Chauliodes rastricornis			Alachua	A	7/27/1955	FSCA	
Chauliodes rastricornis			Alachua	A	9/25/1955	FSCA	Gainesville
Chauliodes rastricornis			Alachua	A	3/15/1956	FSCA	Gainesville, Plant Board Lab.
Chauliodes rastricornis			Alachua	A	7/8/1956	FSCA	Gainesville
Chauliodes rastricornis			Alachua	A	1/23/1957	FSCA	
Chauliodes rastricornis			Alachua	A	4/9/1957	FSCA	
Chauliodes rastricornis			Alachua	A	6/6/1957	FSCA	
Chauliodes rastricornis			Alachua	A	6/21/1957	FSCA	
Chauliodes rastricornis			Alachua	A	9/6/1972	FSCA	Gainesville, Doyle Conner Bldg.
Chauliodes rastricornis			Alachua	A	9/12/1972	FSCA	Gainesville, Doyle Conner Bldg
Chauliodes rastricornis			Alachua	A	10/27/1972	FSCA	Archer Rd. Lab. "U" of Florida
Chauliodes rastricornis			Alachua	A	10/20/1973	FSCA	San Felasco Hammock, 5 mi SW Alachua
Chauliodes rastricornis			Alachua	A	1/18/1975	FSCA	Gainesville, Doyle Conner Bldg.
Chauliodes rastricornis			Alachua	A	1/27/1975	FSCA	2 miles N Gainesville, in cypress dome
Chauliodes rastricornis			Alachua	A	4/8/1978	FSCA	Gainesville, Doyle Conner Bldg
Chauliodes rastricornis			Alachua	A	4/14/1978	FSCA	Gainesville
Chauliodes rastricornis			Alachua	A	4/29/1978	FSCA	Gainesville
Chauliodes rastricornis			Alachua	A	4/28/1979	FSCA	Gainesville, Beville Heights
Chauliodes rastricornis			Alachua	A	6/17/1979	FSCA	Gainesville, Beville Heights
Chauliodes rastricornis			Alachua	A	3/23/1982	FSCA	Gainesville
Chauliodes rastricornis			Alachua	A	4/6/1985	FSCA	Gainesville
Chauliodes rastricornis			Alachua	A	2/13/2038	FSCA	Gainesville
Chauliodes rastricornis			Baker	A	4/14/1960	FSCA	Glen St. Mary
Chauliodes rastricornis			Baker	A	4/18/1960	FSCA	Glen St. Mary
Chauliodes rastricornis			Baker	A	4/15/1978	FSCA	Olustee
Chauliodes rastricornis			Dixie	A	9/8/1958	FSCA	Cross City
Chauliodes rastricornis			Duval	A	4/24/1986	FSCA	Jacksonville
Chauliodes rastricornis			Highlands	A	12/25/1951	FSCA	Sebring
Chauliodes rastricornis			Highlands	A	5/26/1957	FSCA	Archbold Biological Station
Chauliodes rastricornis			Highlands	A	5/3/1974	FSCA	Highlands Hammock St. Park
Chauliodes rastricornis			Highlands	A	4/1/1978	FSCA	Archbold Biological Station
Chauliodes rastricornis			Highlands	A	4/18/1978	FSCA	Archbold Biological Station
Chauliodes rastricornis			Hillsborough	A	8/13/1983	FSCA	Tampa, University of South Florida
Chauliodes rastricornis			Hillsborough	A	3/24/1984	FSCA	Tampa, University of South Florida
Chauliodes rastricornis			Hillsborough	A	9/7/1984	FSCA	Tampa, University of South Florida
Chauliodes rastricornis			Hillsborough	A	12/16/1984	FSCA	Tampa, University of South Florida
Chauliodes rastricornis			Hillsborough	A	9/7/1992	FSCA	Hillsborough River State Park
Chauliodes rastricornis			Lake	A	12/27/1961	FSCA	Leesburg
Chauliodes rastricornis			Leon	A	8/29/1967	FSCA	Tall Timbers Research Station
Chauliodes rastricornis			Nassau	A	3/18/1992	FSCA	Ft. Clinch State Park
Chauliodes rastricornis			Orange	A	4/6/1947	FSCA	Orlando

Florida Megaloptera

Family: Corydalidae

Genus: *Chauliodes* Table 1-3

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Chauliodes rastricornis</i>			Orange	A	4/27/1971	FAMU	Winter Park
<i>Chauliodes rastricornis</i>			Orange	A	10/16/1971	FSCA	Plymoth
<i>Chauliodes rastricornis</i>			Orange	A	3/22/1976	FSCA	Orlando
<i>Chauliodes rastricornis</i>			Putnam	A	4/20/1973	FSCA	2 mi S. Welaka
<i>Chauliodes rastricornis</i>			Putnam	A	3/9/1986	FSCA	3 mi S Melrose
<i>Chauliodes rastricornis</i>			Putnam	A	3/19/1986	FSCA	Welaka For. Cons. Sta. St. Johns floodplain, hydric han
<i>Chauliodes rastricornis</i>			Putnam	A	3/19/1986	FSCA	Welaka For. Cons. Sta., live oak-cabbage palm hammo
<i>Chauliodes rastricornis</i>			Sarasota	A	6/21/1973	FSCA	Myakka River State Park
<i>Chauliodes rastricornis</i>			Sarasota	A	7/25/1976	FAMU	Myakka River St. Pk.
<i>Chauliodes rastricornis</i>			Seminole	A	7/14/1959	FSCA	
<i>Chauliodes rastricornis</i>			St. Johns	A	4/20/1969	FSCA	St. Augustine Beach
<i>Chauliodes rastricornis</i>		Big Swamp Marsh	Polk	L	3/30/1989	FDEP-Punta Gorda	Herbaceous wetland
<i>Chauliodes rastricornis</i>		Brooker Creek Preserve	Pinellas	A	12/8/2001	J.H. Epler	Brooker Ck Preserve, light at manager's house
<i>Chauliodes rastricornis</i>		Lake Iamonia	Leon	A	9/23/1986	FSCA	Tall Timbers Research Station
<i>Chauliodes rastricornis</i>		Lake Placid	Highlands	A	4/28/1947	(Hazard, 1960)	
<i>Chauliodes rastricornis</i>		Newnans Lake	Alachua	A	7/30/1978	FSCA	Windsor
<i>Chauliodes rastricornis</i>		Peace R	DeSoto	L	3/29/1984	FDEP-Punta Gorda	at Brownville
<i>Chauliodes rastricornis</i>		Red Water Lake	Putnam	A	7/23/1960	FSCA	
<i>Chauliodes rastricornis</i>		Redwater Lake	Putnam	A	12/18/1988	FSCA	
<i>Chauliodes rastricornis</i>		Shingle Ck	Orange	L	6/13/1974	FDEP-Punta Gorda	at Taft-Vineland Rd. Sta. 76
<i>Chauliodes rastricornis</i>		Wright Lake	Franklin	A	4/19/1971	FSCA	Apalachicola National Forest
<i>Chauliodes rastricornis</i>	Apalachicola R		Liberty	A	5/19/1971	FSCA	Torreya State Park
<i>Chauliodes rastricornis</i>	Apalachicola R	Beaver Dam Ck	Liberty	A	3/22/1995	FAMU Ravine Study	lower end, ABRP, 5 km N Bristol
<i>Chauliodes rastricornis</i>	Apalachicola R	Crooked Ck	Gadsden	A	4/1/1999	FAMU Ravine Study	CR 270, 10 km W of Greensboro
<i>Chauliodes rastricornis</i>	Apalachicola R	Flat Ck	Gadsden	A	4/18/1995	FAMU Ravine Study	CR270A, 8 km S of Chattahoochee
<i>Chauliodes rastricornis</i>	Apalachicola R	Kelley Branch	Liberty	A	3/22/1995	FAMU Ravine Study	upper end, ABRP, 5 km N Bristol
<i>Chauliodes rastricornis</i>	Apalachicola R	Little Sweetwater Ck	Liberty	A	4/7/1994	FAMU Ravine Study	near confluence w/Apalach. R. ABRP, 3 mi N Bristol
<i>Chauliodes rastricornis</i>	Apalachicola R	Little Sweetwater Ck	Liberty	A	3/22/1995	FAMU Ravine Study	ABRP, 5 km N Bristol
<i>Chauliodes rastricornis</i>	Apalachicola R	Little Sweetwater Ck	Liberty	A	4/1/1999	FAMU Ravine Study	at head, ABRP, 5 km N Bristol
<i>Chauliodes rastricornis</i>	Apalachicola R	Rock Ck	Liberty	A	4/9/1998	FAMU Ravine Study	lower end, Torreya State Park
<i>Chauliodes rastricornis</i>	Apalachicola R	Rock Ck	Liberty	A	4/1/1999	FAMU Ravine Study	upper end, Torreya State Park
<i>Chauliodes rastricornis</i>	Apalachicola R	unnamed ravine stream	Liberty	A	3/22/1995	FAMU Ravine Study	just NE of bluff overlook, ABRP, 5 km N Bristol
<i>Chauliodes rastricornis</i>	Aucilla R	Aucilla R	Jefferson/Taylor	A	10/14/1993	FAMU	C257, 8 mi S of Lamont
<i>Chauliodes rastricornis</i>	Aucilla R	Aucilla R	Madison	L	2/25/1975	FDEP-Jacksonville	at US Hwy 27 near Lamont
<i>Chauliodes rastricornis</i>	Aucilla R	Welaunee Ck	Jefferson	L	7/19/1995	FDEP-Tallahassee	
<i>Chauliodes rastricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	7/10/1974	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Chauliodes rastricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	3/20/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Chauliodes rastricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	4/14/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Chauliodes rastricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	4/15/1977	FAMU	at bank, FAMU Biol. Sta. 4.5 mi NW Holt
<i>Chauliodes rastricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	4/16/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Chauliodes rastricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	4/16/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt

Florida Megaloptera

Family: Corydalidae

Genus: *Chauliodes* Table 1-4

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	4/20/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	4/21/1977	FAMU	at Bryant Br. 3 NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	4/21/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	4/23/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	4/28/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	5/1/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	5/2/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	5/4/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	5/6/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	4/30/1978	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	5/2/1978	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	5/12/1979	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	4/25/1980	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	5/2/1980	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Blackwater R	Blackwater R	Okaloosa	A	4/23/1981	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Chauliodes rastricornis	Escambia R	Escambia R	Escambia	L	1/23/1979	FDEP-Pensacola	Upper Bluffs
Chauliodes rastricornis	Escambia R	Hall Branch	Escambia	L	7/29/1997	FDEP-Pensacola	@ Hawks Road
Chauliodes rastricornis	Hillsborough R	Crystal Springs	Pasco	L	3/12/1996	FDEP-Orlando	Hillsborough R @ Crystal Springs
Chauliodes rastricornis	Hillsborough R	Trout Ck	Hillsborough	L	8/19/1995	FDEP-Orlando	at Flatwoods Park, leaf pack
Chauliodes rastricornis	Ochlockonee R		Gadsden	A	4/24/2001	FAMU	128 Hawthorn Lane, 4 mi S Quincy off Hwy 267A
Chauliodes rastricornis	Ochlockonee R		Gadsden	A	2/1/2002	FAMU	128 Hawthorn Lane, 4 mi S Quincy off Hwy 267A
Chauliodes rastricornis	Ochlockonee R		Leon	A	7/17/1992	FSCA	0.5 mi E of Ochlockonee R. I-10
Chauliodes rastricornis	Santa Fe R	Santa Fe R	Union	A	4/20/1986	FSCA	Hwy 241, 1 km N
Chauliodes rastricornis	Santa Fe R	Santa Fe R	Union	A	4/21/1986	FSCA	Hwy 241, 1 km N.
Chauliodes rastricornis	Santa Fe R	Santa Fe R	Union	A	4/25/1986	FSCA	Hwy 241, 1 km N
Chauliodes rastricornis	St. Johns R (Upper)	Roberts Branch	Seminole	A	3/22/2002	FAMU	at Curryville Rd, SE of Chuluota
Chauliodes rastricornis	St. Marks R		Wakulla	A	5/5/1980	FAMU	St. Marks Natl. Wildl. Refuge, 2nd br. S Newport on SR
Chauliodes rastricornis	St. Marks R	Black Ck	Leon	A	4/4/1998	FAMU	Hwy. 364
Chauliodes rastricornis	St. Marks R	Lake Munson	Leon	L	8/17/1987	FDEP-Tallahassee	

END OF DATA TABLE

Florida Megaloptera

Family: Corydalidae

Genus: *Corydalus* Table 2-1

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Corydalus cornutus</i>						(Glorioso, 1981)	[no specific localities given]
<i>Corydalus cornutus</i>			Alachua	A	5/25/1933	(Contreras-Ramos, 1998)	Gainesville, Devils Mill Hopper, clinging to rocks
<i>Corydalus cornutus</i>			Alachua	A	6/14/1980	(Contreras-Ramos, 1998)	Gainesville, Beville Hts.
<i>Corydalus cornutus</i>			Alachua	A	7/2/1980	(Contreras-Ramos, 1998)	Gainesville, Beville Hts.
<i>Corydalus cornutus</i>			Columbia	A	5/19/1980	(Contreras-Ramos, 1998)	Lake City
<i>Corydalus cornutus</i>		Deserter Ck	Walton	L	11/9/1970	FAMU	at Hwy 285
<i>Corydalus cornutus</i>	Apalachicola R		Gadsden	A	6/3/1953	(Contreras-Ramos, 1998)	Chattahoochee
<i>Corydalus cornutus</i>	Apalachicola R		Gadsden	A	7/22/1992	(Contreras-Ramos, 1998)	5 mi S Snead, Aspalga Landing
<i>Corydalus cornutus</i>	Apalachicola R		Liberty	A	5/18/1966	(Contreras-Ramos, 1998)	Torreya State Park
<i>Corydalus cornutus</i>	Apalachicola R		Liberty	A	5/20/1966	(Contreras-Ramos, 1998)	Torreya State Park
<i>Corydalus cornutus</i>	Apalachicola R		Liberty	A	5/16/1968	(Contreras-Ramos, 1998)	Torreya State Park
<i>Corydalus cornutus</i>	Apalachicola R		Liberty	A	6/15/1974	(Contreras-Ramos, 1998)	Torreya State Park
<i>Corydalus cornutus</i>	Apalachicola R		Liberty	A	8/8/1975	(Contreras-Ramos, 1998)	Torreya State Park
<i>Corydalus cornutus</i>	Apalachicola R	Apalachicola R	Gulf	L	6/15/1983	FDEP-Pensacola	Buoy 40, Mile 11
<i>Corydalus cornutus</i>	Apalachicola R	Apalachicola R	Liberty	L	2/29/1972	FAMU	at Estifanulga boat landing
<i>Corydalus cornutus</i>	Apalachicola R	Apalachicola R	Liberty	L	7/8/1972	FAMU	at Hwy 20, Bristol
<i>Corydalus cornutus</i>	Apalachicola R	Chattahoochee Lake	Gadsden	A	8/8/1975	(Contreras-Ramos, 1998)	near dam
<i>Corydalus cornutus</i>	Apalachicola R	Crooked Ck	Gadsden	A	6/7/1999	FAMU Ravine Study	CR 270, 10 km W of Greensboro
<i>Corydalus cornutus</i>	Apalachicola R	Flat Ck	Gadsden	A	6/7/1999	FAMU Ravine Study	CR 270A, 8 km S of Chattahoochee
<i>Corydalus cornutus</i>	Apalachicola R	Flat Ck	Gadsden	L	11/2/1996	FAMU Ravine Study	CR 270A
<i>Corydalus cornutus</i>	Apalachicola R	N. Mosquito Ck	Gadsden	L	6/2/1994	FDEP-Pensacola	@ C-379B
<i>Corydalus cornutus</i>	Apalachicola R	North Mosquito Ck	Gadsden	L	10/16/1971	FAMU	2.4 mi N of Mt. Pleasant, on St. Rd. 379
<i>Corydalus cornutus</i>	Apalachicola R	Sweetwater Ck	Liberty	A	6/24/1996	FAMU Ravine Study	CR 270, 15 km N Bristol
<i>Corydalus cornutus</i>	Apalachicola R	Sweetwater Ck	Liberty	L	7/8/1992	FDEP-Pensacola	@ SR270
<i>Corydalus cornutus</i>	Apalachicola R	Yon Ck	Gadsden	L	2/6/1996	FDEP-Pensacola	I-10
<i>Corydalus cornutus</i>	Aucilla R	Aucilla R	Jefferson/Madison	L	10/28/1992	FAMU Biotic Index	at US Hwy 90
<i>Corydalus cornutus</i>	Aucilla R	Aucilla R	Jefferson/Taylor	L	6/19/1991	FAMU Biotic Index	at US Hwy 98
<i>Corydalus cornutus</i>	Aucilla R	Aucilla R	Jefferson/Taylor	L	8/21/1991	FAMU Biotic Index	at US Hwy 98
<i>Corydalus cornutus</i>	Aucilla R	Aucilla R	Jefferson/Taylor	L	10/22/1991	FAMU Biotic Index	at US Hwy 98
<i>Corydalus cornutus</i>	Aucilla R	Aucilla R	Jefferson/Taylor	L	8/19/1992	FAMU Biotic Index	at US Hwy 98
<i>Corydalus cornutus</i>	Aucilla R	Aucilla R	Jefferson/Taylor	L	2/18/1993	FAMU Biotic Index	at US Hwy 98
<i>Corydalus cornutus</i>	Aucilla R	Wacissa R	Jefferson	L	9/11/1980	FAMU	at Goosepasture Pk, Buckeye Cellulose Co.
<i>Corydalus cornutus</i>	Blackwater R		Santa Rosa	L	4/13/1973	FAMU	1st stream NW of Riley Landing, 3 mi NW of Holt
<i>Corydalus cornutus</i>	Blackwater R	Ates Ck	Okaloosa	L	4/17/1971	FAMU	below Lake Carr, 4 mi NW of Holt
<i>Corydalus cornutus</i>	Blackwater R	Beaver Ck	Okaloosa	L	2/20/1998	FDEP-Pensacola	Beaver Ck. Rd
<i>Corydalus cornutus</i>	Blackwater R	Big Juniper Ck	Santa Rosa	L	2/10/1978	FDEP-Pensacola	Hwy 4
<i>Corydalus cornutus</i>	Blackwater R	Big Juniper Ck	Santa Rosa	L	5/2/1980	FAMU	1 mi N St. Hwy 4
<i>Corydalus cornutus</i>	Blackwater R	Big Juniper Ck	Santa Rosa	L	12/9/1998	FDEP-Pensacola	below Springhill Road
<i>Corydalus cornutus</i>	Blackwater R	Blackwater R	Okaloosa	A	6/8/1980	(Contreras-Ramos, 1998)	Fla. A & M Research Sta. Blackwater River State Forest
<i>Corydalus cornutus</i>	Blackwater R	Blackwater R	Okaloosa	L	4/29/1967	FAMU	4.5 mi NW of Cannon Town
<i>Corydalus cornutus</i>	Blackwater R	Blackwater R	Okaloosa	L	7/10/1967	FAMU	4.5 mi NW of Cannon Town

Florida Megaloptera

Family: Corydalidae

Genus: *Corydalus* Table 2-2

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	1/29/1971	FAMU	Peaden Bridge, 4.5 mi NW of Cannon Town
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	1/30/1971	FAMU	Cotton Bridge, 5.5 mi NW Good Hope
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	1/31/1971	FAMU	at Bryant Bridge, 3 mi NW of Holt
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	4/17/1971	FAMU	Cotton Brdg 5.5 mi NW Good Hope
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	6/5/1971	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	9/3/1971	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	4/8/1972	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	4/22/1972	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	4/27/1972	FAMU	Kennedy Bridge, 6 mi W of Blackman
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	5/9/1972	FAMU	at Bryant Bridge, 3 mi NW Holt
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	5/3/1974	FAMU	Cotton Bridge, 5.5 mi NW Good Hope
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	4/15/1977	FAMU	Peaden Br., 4.5 mi NW of Cannon Town
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	4/17/1977	FAMU	Kennedy Br. 6 mi W of Blackman
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	4/29/1977	FAMU	Peaden Br., 4.5 mi NW of Cannon Town
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	5/7/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	7/28/1977	FAMU	at Kennedy Bridge
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	7/28/1981	FAMU	at Kennedy Br., 6 mi W of Blackman
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	11/2/1981	FDEP-Pensacola	Hwy 4
Corydalus cornutus	Blackwater R	Blackwater R	Okaloosa	L	6/10/1999	FDEP-Pensacola	Deadhead Pine
Corydalus cornutus	Blackwater R	Blackwater R	Santa Rosa	L	4/21/1972	FAMU	Riley Landing, 3 mi NW of Holt
Corydalus cornutus	Blackwater R	Blackwater R	Santa Rosa	L	4/27/1972	FAMU	Riley Bluff, 3 mi NW of Holt
Corydalus cornutus	Blackwater R	Blackwater R	Santa Rosa	L	7/28/1977	FAMU	Cotton Brdg 5.5 mi NW Good Hope
Corydalus cornutus	Blackwater R	Boggy Hollow Ck	Okaloosa	L	2/26/1998	FDEP-Pensacola	Looney Rd
Corydalus cornutus	Blackwater R	Bone Ck	Okaloosa	A	6/12/1988	(Contreras-Ramos, 1998)	2 mi. N Holt
Corydalus cornutus	Blackwater R	Coon Camp Branch	Santa Rosa	L	8/5/1999	FDEP-Pensacola	@ North River Road
Corydalus cornutus	Blackwater R	East Fork Coldwater Ck	Santa Rosa	L	12/9/1998	FDEP-Pensacola	below Springhill Rd
Corydalus cornutus	Blackwater R	Long Branch	Okaloosa	L	2/19/1998	FDEP-Pensacola	below Martin Mill Rd. Sect. 20
Corydalus cornutus	Blackwater R	Manning Ck	Santa Rosa	L	7/16/1998	FDEP-Pensacola	@ CR 87
Corydalus cornutus	Blackwater R	Mare Branch	Santa Rosa	L	3/2/1998	FDEP-Pensacola	@ Mattie Kennedy Rd.
Corydalus cornutus	Blackwater R	Mare Ck	Okaloosa	L	2/9/2000	FDEP-Pensacola	Ford
Corydalus cornutus	Blackwater R	Muddy Branch	Okaloosa	L	2/27/1998	FDEP-Pensacola	Hwy 4
Corydalus cornutus	Blackwater R	Panther Ck	Okaloosa	L	5/12/1992	FDEP-Pensacola	@ Golan Church Rd
Corydalus cornutus	Blackwater R	Panther Ck	Okaloosa	L	8/18/1992	FDEP-Pensacola	J.R. Barnhill Rd. Golan
Corydalus cornutus	Blackwater R	Panther Ck	Okaloosa	L	8/11/1994	FDEP-Pensacola	@ Barnhill Rd
Corydalus cornutus	Blackwater R	Panther Ck	Okaloosa	L	7/17/1995	FDEP-Pensacola	@ Barnhill Rd
Corydalus cornutus	Blackwater R	Panther Ck	Okaloosa	L	2/22/1996	FDEP-Pensacola	@ Barnhill Rd
Corydalus cornutus	Blackwater R	Panther Ck	Okaloosa	L	2/24/1998	FDEP-Pensacola	Sherman Kennedy Rd
Corydalus cornutus	Blackwater R	Reedy Ck	Santa Rosa	L	12/7/2000	FAMU	Overstreet Rd. 2 mi E Belandville, Blackwater R. St. For
Corydalus cornutus	Blackwater R	Riley Branch	Santa Rosa	L	8/11/1999	FDEP-Pensacola	below N. River Rd Ford
Corydalus cornutus	Blackwater R	Sweetwater Ck	Santa Rosa	L	4/29/1994	FDEP-Pensacola	near Cedar Ck
Corydalus cornutus	Blackwater R	Tarkiln Head		L	8/12/1998	FDEP-Pensacola	mouth

Florida Megaloptera

Family: Corydalidae

Genus: *Corydalus* Table 2-3

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Corydalus cornutus</i>	Blackwater R	Turkey Ck	Santa Rosa	L	7/15/1999	FDEP-Pensacola	above Amos Cabniss Rd
<i>Corydalus cornutus</i>	Blackwater R	West Fork Coldwater Ck	Santa Rosa	L	8/19/1998	FDEP-Pensacola	@ Walling Road
<i>Corydalus cornutus</i>	Chipola R	Bridge Ck	Jackson	L	8/20/1992	FDEP-Pensacola	SR 71
<i>Corydalus cornutus</i>	Chipola R	Bridge Ck	Jackson	L	8/20/1992	FDEP-Pensacola	SR 71
<i>Corydalus cornutus</i>	Chipola R	Chipola R	Calhoun	L	7/7/1974	FAMU	at Hwy 20
<i>Corydalus cornutus</i>	Chipola R	Chipola R	Calhoun	L	5/10/1983	FDEP-Pensacola	B-27
<i>Corydalus cornutus</i>	Chipola R	Chipola R	Calhoun	L	5/4/1995	FAMU	boat ramp 5 km W of Altha, riffle area mid-stream
<i>Corydalus cornutus</i>	Chipola R	Ten Mile Ck	Calhoun	L	8/20/1992	FDEP-Pensacola	SR 73
<i>Corydalus cornutus</i>	Chipola R	Ten Mile Ck	Calhoun	L	8/20/1992	FDEP-Pensacola	SR 73
<i>Corydalus cornutus</i>	Chipola R	Ten Mile Ck	Calhoun	L	2/21/1994	FDEP-Pensacola	SR 73
<i>Corydalus cornutus</i>	Chipola R	Ten Mile Ck	Calhoun	L	8/26/1994	FDEP-Pensacola	Hwy 73
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Alaqua Ck	Walton	L	8/19/1992	FDEP-Pensacola	Pine Allen Bridge
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Alaqua Ck	Walton	L	2/6/1995	FDEP-Pensacola	Pine Allen Bridge
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Alaqua Ck	Walton	L	8/13/1997	FDEP-Pensacola	Forest Oak Rd
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Alaqua Ck	Walton	L	3/6/2001	FDEP-Pensacola	Forest Oak Rd. ER201
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Blount Mill Ck	Walton	L	10/17/1970	FAMU	2nd bridge on dirt rd., N of Hwy. 282 & Portland Rd.
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Bullhide Ck	Walton	L	10/3/2000	FDEP-Pensacola	ER 280
<i>Corydalus cornutus</i>	Choctawhatchee Bay	East Turkey Ck	Okaloosa	L	7/10/2000	T. Thom-Eglin AFB	Eglin Air Force Base Rd. 626
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Juniper Ck Trib.	Okaloosa	L	9/5/1999	FDEP-Pensacola	B-43 Pit
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	5/3/1971	FAMU	at Hwy 20
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Little Rocky Ck	Okaloosa	L	6/26/2000	T. Thom-Eglin AFB	Eglin Air Force Base Rd. 434
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Little Rocky Ck	Okaloosa	L	6/26/2000	T. Thom-Eglin AFB	Eglin Air Force Base Rd. 515
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Oakie Ck	Walton	L	4/12/2001	FAMU Eglin Study	BR-208, Eglin Air Force Base
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Open Branch	Walton	L	7/13/2000	FDEP-Pensacola	below ER 214/374
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Rocky Ck	Walton	L	11/22/1970	FAMU	(Mud Landing) at Eglin AFB dirt Rd.
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Rocky Ck	Walton	L	3/10/1982	FDEP-Pensacola	@ ER 200, Old Jackson Trl.
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Rocky Ck	Walton	L	7/29/1998	FDEP-Pensacola	@ ER 201
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Rocky Ck	Walton	L	7/18/2000	FDEP-Pensacola	above ER 214/374
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Rocky Ck	Walton	L	7/20/2000	FDEP-Pensacola	below ER 214/374
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Swift Ck	Okaloosa	L	7/11/2000	FDEP-Pensacola	below RR trestle ER626
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Turkey Ck	Okaloosa	L	8/16/1967	FAMU	on Rocky Bayou Road, about 3 mi E of Niceville
<i>Corydalus cornutus</i>	Choctawhatchee Bay	Turkey Ck	Okaloosa	L	4/12/2001	FAMU Eglin Study	Eglin Air Force Base, BR-232
<i>Corydalus cornutus</i>	Choctawhatchee R	Black Ck	Walton	L	9/5/1970	FAMU	1st bridge W of Bruce on Hwy 20
<i>Corydalus cornutus</i>	Choctawhatchee R	Black Ck	Walton	L	6/20/1971	FAMU	1st bridge W of Bruce on Hwy 20
<i>Corydalus cornutus</i>	Choctawhatchee R	Black Ck	Walton	L	2/28/1994	FDEP-Pensacola	Hwy 20
<i>Corydalus cornutus</i>	Choctawhatchee R	Black Ck	Walton	L	7/18/1995	FDEP-Pensacola	Hwy 20
<i>Corydalus cornutus</i>	Choctawhatchee R	Black Ck	Walton	L	2/27/1996	FDEP-Pensacola	@ SR 20
<i>Corydalus cornutus</i>	Choctawhatchee R	Blue Ck	Holmes	L	12/5/1994	FDEP-Pensacola	@ 90
<i>Corydalus cornutus</i>	Choctawhatchee R	Bruce Ck	Walton	L	7/28/1998	FDEP-Pensacola	@ SR 81
<i>Corydalus cornutus</i>	Choctawhatchee R	E. Pitman Ck	Holmes	L	8/12/1994	FDEP-Pensacola	@ SR 177A
<i>Corydalus cornutus</i>	Choctawhatchee R	Hurricane Ck	Holmes	L	4/8/1994	FDEP-Pensacola	SR 2A

Florida Megaloptera

Family: Corydalidae

Genus: *Corydalus* Table 2-4

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Corydalus cornutus</i>	Choctawhatchee R	Limestone Bridge Ck	Walton	L	7/14/1998	FDEP-Pensacola	@ Beck Ridge Road
<i>Corydalus cornutus</i>	Choctawhatchee R	Limestone Ck (Trib.)	Walton	L	4/7/1994	FDEP-Pensacola	@ Beck Ridge Rd.
<i>Corydalus cornutus</i>	Choctawhatchee R	Little Crooked Ck	Bay	L		FDEP-Pensacola	@ SR 79
<i>Corydalus cornutus</i>	Choctawhatchee R	Natural Bridge Ck	Walton	L	1/19/1982	FDEP-Pensacola	Hwy 2
<i>Corydalus cornutus</i>	Choctawhatchee R	Natural Bridge Ck	Walton	L	8/24/1994	FDEP-Pensacola	CR 181
<i>Corydalus cornutus</i>	Choctawhatchee R	Sandy Ck	Holmes	L	12/13/1970	FAMU	at Hwy 90 in Ponce De Leon
<i>Corydalus cornutus</i>	Choctawhatchee R	Sandy Ck	Walton	L	8/20/1992	FDEP-Pensacola	183-C
<i>Corydalus cornutus</i>	Choctawhatchee R	Sandy Ck	Walton	L	2/6/1995	FDEP-Pensacola	SR 183
<i>Corydalus cornutus</i>	Choctawhatchee R	Sandy Ck	Walton	L	7/11/1995	FDEP-Pensacola	183-C
<i>Corydalus cornutus</i>	Choctawhatchee R	Sandy Ck	Walton	L	2/22/1996	FDEP-Pensacola	183-C
<i>Corydalus cornutus</i>	Escambia	Little Pine Barren Ck	Escambia	L	7/20/1998	FDEP-Pensacola	above SR 99
<i>Corydalus cornutus</i>	Escambia	Mitchell Ck	Escambia	L	8/10/1994	FDEP-Pensacola	US29
<i>Corydalus cornutus</i>	Escambia R	Bell Ck	Santa Rosa	L	2/13/1998	FDEP-Pensacola	Mineral Springs Rd
<i>Corydalus cornutus</i>	Escambia R	Brickton Ck	Escambia	L	1/23/2001	FDEP-Pensacola	below Brickton Rd, Molino
<i>Corydalus cornutus</i>	Escambia R	Escambia R	Escambia	L	11/16/1981	FDEP-Pensacola	ER 4 above Esc. CR.
<i>Corydalus cornutus</i>	Escambia R	Molino Branch	Escambia	L	11/17/1998	FDEP-Pensacola	@ Brickyard Road
<i>Corydalus cornutus</i>	Escambia R	Moore Ck	Santa Rosa	L	7/16/1998	FDEP-Pensacola	SR 197
<i>Corydalus cornutus</i>	Escambia R	Pine Barren Ck	Escambia	L	8/21/1996	FDEP-Pensacola	Lambert Rd
<i>Corydalus cornutus</i>	Escambia R	Sandy Hollow Ck	Santa Rosa	L	1/25/2001	FDEP-Pensacola	below Sandy Hollow Road
<i>Corydalus cornutus</i>	Flint R	Sanborn Ck	Decatur	A	6/21/2000	FAMU	Int. Paper Southland Exp. Forest, nr. Faceville, Georgia
<i>Corydalus cornutus</i>	Hillsborough R	Hillsborough R	Hillsborough	L	5/24/1995	FDEP-Orlando	Hillsborough River State Park; rapids
<i>Corydalus cornutus</i>	Hillsborough R	Hillsborough R	Pasco	A	7/9/1986	(Contreras-Ramos, 1998)	Co. rd., 2 mi S Zephyrhills, 0.25 mi N Crystal Springs P.
<i>Corydalus cornutus</i>	Kissimmee R		Orange	A	6/24/1988	(Contreras-Ramos, 1998)	Walt Disney World
<i>Corydalus cornutus</i>	Manatee R	Manatee R	Manatee	L	2/2/1994	FDEP-Tallahassee	
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Decatur	L	8/14/1991	FAMU Biotic Index	Georgia St. Rd. 241, 3.5 km W of Attapulgis
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Decatur	L	10/15/1991	FAMU Biotic Index	Georgia St. Rd. 241, 3.5 km W of Attapulgis
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Decatur	L	12/7/1992	FAMU Biotic Index	Georgia St. Rd. 241, 3.5 km W of Attapulgis
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Decatur	L	2/11/1993	FAMU Biotic Index	Georgia St. Rd. 241, 3.5 km W of Attapulgis
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Decatur	L	9/28/1993	FAMU Biotic Index	Georgia St. Rd. 241, 3.5 km W of Attapulgis
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Decatur	L	4/19/1994	FAMU Biotic Index	Georgia St. Rd. 241, 3.5 km W of Attapulgis
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Decatur	L	7/26/1994	FAMU Biotic Index	Georgia St. Rd. 241, 3.5 km W of Attapulgis
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	GA:Decatur	L	6/2/1994	FDEP-Pensacola	@ Thomas Rd, DeCatur, GA
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Gadsden	L	10/7/1981	FDEP-Pensacola	C 159
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Gadsden	L	3/24/1986	FAMU ORB Study	CR-159 @ bridge, 4 mi NW Havana
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Gadsden	L	5/23/1986	FAMU ORB Study	CR-159, 4 mi NW Havana
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Gadsden	L	6/4/1986	FAMU ORB Study	CR-159 @ bridge, 4 mi NW Havana
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Gadsden	L	7/7/1986	FAMU ORB Study	CR-159 @ bridge, 4 mi NW Havana
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Gadsden	L	8/14/1986	FAMU ORB Study	3 mi NW Havana, C-159
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Gadsden	L	9/16/1986	FAMU ORB Study	CR-159 @ bridge, 4 mi NW Havana
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Gadsden	L	8/17/1987	FAMU ORB Study	CR-159, 4 mi NW Havana
<i>Corydalus cornutus</i>	Ochlockonee R	Attapulgis Ck	Gadsden	L	12/2/1987	FAMU ORB Study	CR-159, 4 mi NW Havana

Florida Megaloptera

Family: Corydalidae

Genus: *Corydalus* Table 2-5

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	12/17/1987	FAMU ORB Study	CR-159 @ bridge
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	5/25/1988	FAMU ORB Study	CR-159 @ bridge, 4 mi NW Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	6/23/1988	FAMU ORB Study	CR-159 @ bridge, 4 mi NW Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	7/19/1988	FAMU ORB Study	CR-159 @ bridge, 4 mi NW Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	8/18/1988	FAMU ORB Study	CR-159 @ bridge, 4 mi NW Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	9/21/1988	FAMU ORB Study	CR-159 @ bridge, 4 mi NW Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	6/12/1991	FAMU Biotic Index	St. Rd. 159, 6.5 km NW of Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	8/14/1991	FAMU Biotic Index	St. Rd. 159, 6.5 km NW of Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	8/14/1991	FAMU Biotic Index	St. Rd. 159, 6.5 km NW of Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	2/12/1992	FAMU Biotic Index	St. Rd. 159, 6.5 km NW of Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	6/10/1992	FAMU Biotic Index	St. Rd. 159, 6.5 km NW of Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	10/14/1992	FAMU Biotic Index	St. Rd. 159, 6.5 km NW of Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	12/7/1992	FAMU Biotic Index	St. Rd. 159, 6.5 km NW of Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	4/7/1993	FAMU Biotic Index	St. Rd. 159, 6.5 km NW of Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	9/28/1993	FAMU Biotic Index	St. Rd. 159, 6.5 km NW of Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	4/19/1994	FAMU Biotic Index	St. Rd. 159, 6.5 km NW of Havana
Corydalus cornutus	Ochlockonee R	Attapulgis Ck	Gadsden	L	7/26/1994	FAMU Biotic Index	SR 159, 6.5 km NW of Havana
Corydalus cornutus	Ochlockonee R	Bear Ck	Gadsden	L	12/21/1968	FAMU	dirt road at bridge, 8 mi S of Hwy 268, 1 mi N of Hwy 65
Corydalus cornutus	Ochlockonee R	Bear Ck	Gadsden	L	2/22/1969	FAMU	dirt road, 8 mi S of Hwy 268, 1 mi N of Hwy 65C
Corydalus cornutus	Ochlockonee R	Bear Ck	Gadsden	L	5/23/1994	FDEP-Pensacola	CR-267
Corydalus cornutus	Ochlockonee R	Camp Ck	Gadsden	L	9/24/1986	FAMU ORB Study	CR-@bridge
Corydalus cornutus	Ochlockonee R	Camp Ck	Gadsden	L	1/14/1987	FAMU ORB Study	C-274 (Bridge)
Corydalus cornutus	Ochlockonee R	Camp Ck	Gadsden	L	8/17/1987	FAMU ORB Study	CR-@bridge, 8 mi SW of Quincy
Corydalus cornutus	Ochlockonee R	Camp Ck	Gadsden	L	9/2/1987	FAMU ORB Study	C-274 (bridge)
Corydalus cornutus	Ochlockonee R	Camp Ck	Gadsden	L	12/3/1987	FAMU ORB Study	C-274 (bridge)
Corydalus cornutus	Ochlockonee R	Camp Ck	Gadsden	L	2/8/1988	FAMU ORB Study	C-274 (Bridge)
Corydalus cornutus	Ochlockonee R	Camp Ck	Gadsden	L	4/13/1988	FAMU ORB Study	C-274 (bridge)
Corydalus cornutus	Ochlockonee R	Camp Ck	Gadsden	L	4/13/1988	FAMU ORB Study	C-274 (bridge)
Corydalus cornutus	Ochlockonee R	Camp Ck	Gadsden	L	6/14/1988	FAMU ORB Study	C-274(Bridge)
Corydalus cornutus	Ochlockonee R	FAMU Farm Stream	Gadsden	L	9/14/1995	FAMU Biotic Index	near lower end
Corydalus cornutus	Ochlockonee R	Little Attapulgis Ck	Decatur	L	10/22/1987	FAMU ORB Study	Georgia St. Rd. 241 @ bridge, 2.3 mi SW Attapulgis
Corydalus cornutus	Ochlockonee R	Little Attapulgis Ck	Decatur	L	11/18/1987	FAMU ORB Study	Georgia SR-241 @ bridge, 2.3 mi SW Attapulgis
Corydalus cornutus	Ochlockonee R	Little Attapulgis Ck	Decatur	L	2/2/1988	FAMU ORB Study	Georgia St. Rd. 241 @ bridge, 2.3 mi SW Attapulgis
Corydalus cornutus	Ochlockonee R	Little Attapulgis Ck	Decatur	L	2/29/1988	FAMU ORB Study	Georgia St. Rd. 241 @ bridge, 2.3 mi SW Attapulgis
Corydalus cornutus	Ochlockonee R	Little Attapulgis Ck	Decatur	L	3/22/1988	FAMU ORB Study	Georgia St. Rd. 241 @ bridge, 2.3 mi SW Attapulgis
Corydalus cornutus	Ochlockonee R	Little Attapulgis Ck	Decatur	L	4/27/1988	FAMU ORB Study	Georgia St. Rd. 241 @ bridge, 2.3 mi SW Attapulgis
Corydalus cornutus	Ochlockonee R	Little Attapulgis Ck	Decatur	L	5/25/1988	FAMU ORB Study	Georgia St. Rd. 241 @ bridge, 2.3 mi SW Attapulgis
Corydalus cornutus	Ochlockonee R	Little Attapulgis Ck	Decatur	L	5/26/1988	FAMU ORB Study	Georgia St. Rd. 241 @ bridge, 2.3 mi SW Attapulgis
Corydalus cornutus	Ochlockonee R	Little Attapulgis Ck	Decatur	L	6/23/1988	FAMU ORB Study	Georgia St. Rd. 241 @ bridge, 2.3 mi SW Attapulgis
Corydalus cornutus	Ochlockonee R	Little Attapulgis Ck	Decatur	L	7/19/1988	FAMU ORB Study	SR-241 @ bridge, 2.3 mi SW Attapulgis
Corydalus cornutus	Ochlockonee R	Little Attapulgis Ck	Decatur	L	8/18/1988	FAMU ORB Study	Georgia St. Rd. 241 @ bridge, 2.3 mi SW Attapulgis

Florida Megaloptera

Family: Corydalidae

Genus: *Corydalus* Table 2-6

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
Corydalus cornutus	Ochlockonee R	Little Attapulcus Ck	Decatur	L	9/21/1988	FAMU ORB Study	Georgia St. Rd. 241 @ bridge, 2.3 mi SW Attapulcus
Corydalus cornutus	Ochlockonee R	Little Attapulcus Ck	Decatur	L	3/29/1989	FAMU ORB Study	Georgia St. Rd. 241 @ bridge, 2.3 mi SW Attapulcus
Corydalus cornutus	Ochlockonee R	Little R	Gadsden	L	9/23/1987	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	3/24/1986	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	5/1/1986	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	5/25/1986	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	8/14/1986	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	9/16/1986	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	10/25/1986	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	3/24/1987	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	6/29/1987	FAMU ORB Study	CR-268 @ bridge, 6.5 mi SE Quincy
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	8/17/1987	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	12/17/1987	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	12/17/1987	FAMU ORB Study	C-268 (Bridge)
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	1/29/1988	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	4/27/1988	FAMU ORB Study	CR-268 @ bridge, 6.5 mi SE Quincy
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	5/25/1988	FAMU ORB Study	S-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	5/26/1988	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	6/23/1988	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	8/18/1988	FAMU ORB Study	SR-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	9/21/1988	FAMU ORB Study	CR-268 @ bridge, 6.5 mi SE Quincy
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	9/21/1988	FAMU ORB Study	S-12 @ bridge, 5 mi SW Havana
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	8/27/1991	FAMU Biotic Index	at US Hwy 90
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	2/12/1992	FAMU Biotic Index	at US Hwy 90
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	8/12/1992	FAMU Biotic Index	at US Hwy 90
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	10/14/1992	FAMU Biotic Index	at US Hwy 90
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	10/14/1992	FAMU Biotic Index	at US Hwy 90
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	12/7/1992	FAMU Biotic Index	at US Hwy 90
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	2/11/1993	FAMU Biotic Index	at US Hwy 90
Corydalus cornutus	Ochlockonee R	Little River	Gadsden	L	4/7/1993	FAMU Biotic Index	at US Hwy 90
Corydalus cornutus	Ochlockonee R	Monroe Ck	Gadsden	L	6/4/1967	FAMU	at bridge on St. Hwy. 268
Corydalus cornutus	Ochlockonee R	Monroe Ck	Gadsden	L	6/6/1967	FAMU	at bridge on St. Hwy. 268
Corydalus cornutus	Ochlockonee R	Ochlockonee R	Leon	L	10/15/1980	FAMU	downstream of Tower Rd. N of Tallahassee
Corydalus cornutus	Ochlockonee R	Ocklawaha Ck	Gadsden	L	4/9/1967	FAMU	at bridge on Hwy 267, 11 mi S of Quincy
Corydalus cornutus	Ochlockonee R	Ocklawaha Ck	Gadsden	L	8/10/1986	FAMU ORB Study	SR-267 @ bridge, 10 mi S of Quincy
Corydalus cornutus	Ochlockonee R	Ocklawaha Ck	Gadsden	L	3/12/1987	FAMU ORB Study	SR-267 @ bridge, 10 mi S of Quincy
Corydalus cornutus	Ochlockonee R	Ocklawaha Ck	Gadsden	L	10/12/1988	FAMU ORB Study	S-267 (bridge)
Corydalus cornutus	Ochlockonee R	Ocklawaha Ck	Gadsden	L	5/23/1994	FDEP-Pensacola	CR 267
Corydalus cornutus	Ochlockonee R	Polk Ck	Leon	L	10/20/1969	FAMU	Hwy 20
Corydalus cornutus	Ochlockonee R	Quincy Ck	Gadsden	L	10/18/1983	FDEP-Pensacola	above SR 267
Corydalus cornutus	Ochlockonee R	Quincy Ck	Gadsden	L	9/23/1987	FAMU ORB Study	Winkley Branch, SR-12, 3.5 mi E Quincy

Florida Megaloptera

Family: Corydalidae

Genus: *Corydalus* Table 2-7

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
Corydalus cornutus	Ochlockonee R	Quincy Ck	Gadsden	L	1/22/1988	FAMU ORB Study	Winkley Branch, SR-12, 3.5 mi E Quincy
Corydalus cornutus	Ochlockonee R	Quincy Ck	Gadsden	L	3/22/1988	FAMU ORB Study	Winkley Branch, SR-12, 3.5 mi E Quincy
Corydalus cornutus	Ochlockonee R	Quincy Ck	Gadsden	L	6/23/1988	FAMU ORB Study	Winkley Branch, SR-12, 3.5 mi E Quincy
Corydalus cornutus	Ochlockonee R	Quincy Ck	Gadsden	L	7/19/1988	FAMU ORB Study	Winkley Branch, SR-12, 3.5 mi E Quincy
Corydalus cornutus	Ochlockonee R	Quincy Ck	Gadsden	L	8/18/1988	FAMU ORB Study	Winkley Branch, SR-12, 3.5 mi E Quincy
Corydalus cornutus	Ochlockonee R	Quincy Ck	Gadsden	L	9/21/1988	FAMU ORB Study	Winkley Branch, SR-12, 3.5 mi E Quincy
Corydalus cornutus	Ochlockonee R	Richlander Ck	Gadsden	L	5/8/1967	FAMU	at bridge, 1 mi SW of Hwy 268, 4 mi S of Quincy
Corydalus cornutus	Ochlockonee R	Richlander Ck	Gadsden	L	8/2/1967	FAMU	at bridge on dirt road, 1 mi S of St. Hwy 268
Corydalus cornutus	Ochlockonee R	Richlander Ck	Gadsden	L	8/16/1967	FAMU	at bridge on dirt road, 1 mi S of St. Hwy 268
Corydalus cornutus	Ochlockonee R	Richlander Ck	Gadsden	L	9/21/1967	FAMU	at bridge on dirt road, 1 mi S of St. Hwy 268
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	5/8/1967	FAMU	at bridge on Hwy 65B, 7 mi S of Quincy
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	10/1/1967	FAMU	at 2nd br. SR-267, 6.5 mi S of Quincy
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	10/8/1967	FAMU	at bridge on dirt road, 6 mi S of Hwy 268
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	11/12/1967	FAMU	(Pig Landing) dirt rd. at bridge, 6 mi S of Hwy 268
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	1/21/1968	FAMU	on a dirt road at bridge 6 mi S of Hwy 268
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	7/9/1968	FAMU	at 2nd bridge on dirt road, 6 mi S of Hwy 268
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	8/13/1969	FAMU	on dirt road at bridge, 2 mi S of State Hwy. 274
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	8/29/1969	FAMU	on dirt road at bridge, 6 mi S of State Hwy. 268
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	9/11/1969	FAMU	on dirt road at bridge, 6 mi S of State Hwy. 268
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	11/6/1970	FAMU	on dirt road at bridge, 6 mi S of State Hwy. 268
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	10/27/1971	FAMU	on dirt road 6 mi S of Hwy 268
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	4/11/1972	FAMU	at Hwy 65B, 6 mi S of Quincy
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	7/31/1974	FAMU	at 2nd br. on Hwy. 65B, 6 mi S of St. Hwy. 268
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	4/3/1975	FAMU	2nd bridge Hwy 65B, 6 mi S State Hwy 268
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	5/12/1975	FAMU	br. 6mi SW of Hwy 268, on Hwy 65B
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	8/18/1986	FAMU ORB Study	C-274 (Bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	8/18/1986	FAMU ORB Study	C-65B (Bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	8/18/1986	FAMU ORB Study	C-65B (Bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	9/24/1986	FAMU ORB Study	CR-65B, 9.5 mi S Quincy
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	9/24/1986	FAMU ORB Study	SR-267 @ bridge, 6.7 mi S Quincy
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	10/29/1986	FAMU ORB Study	C-65B (Bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	12/3/1986	FAMU ORB Study	C-65B (Bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	1/14/1987	FAMU ORB Study	C-267 (Bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	2/24/1987	FAMU ORB Study	CR-65B (bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	7/10/1987	FAMU ORB Study	C-274 (bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	7/10/1987	FAMU ORB Study	S-267 (bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	9/2/1987	FAMU ORB Study	C-274 (bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	12/3/1987	FAMU ORB Study	C-274
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	12/3/1987	FAMU ORB Study	S-267 (bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	2/8/1988	FAMU ORB Study	C-274 (Bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	6/14/1988	FAMU ORB Study	C-274 (Bridge)

Florida Megaloptera

Family: Corydalidae

Genus: *Corydalus* Table 2-8

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	6/14/1988	FAMU ORB Study	S-267 (bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	7/15/1988	FAMU ORB Study	S-267 (bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	10/12/1988	FAMU ORB Study	S-267 (bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	10/12/1988	FAMU ORB Study	S-267 (bridge)
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck (trib.)	Gadsden	L	8/2/1967	FAMU	at bridge on St. Hwy 274, 3.25 mi S of Quincy
Corydalus cornutus	Ochlockonee R	Rocky Comfort Ck (trib.)	Gadsden	L	8/7/1967	FAMU	on dirt road (T1N, R4W, S62)
Corydalus cornutus	Ochlockonee R	Shaw Ck	Gadsden	L	2/9/1999	FDEP-Tallahassee	upstream of St. Rd. 12 bridge
Corydalus cornutus	Ochlockonee R	Telogia Ck	Gadsden	L		FAMU ORB Study	CR-65D, 2 mi SE Greensboro
Corydalus cornutus	Ochlockonee R	Telogia Ck	Gadsden	L	5/31/1988	FAMU ORB Study	CR-65D @ bridge, 2 mi SE Greensboro
Corydalus cornutus	Ochlockonee R	Willacoochee Ck	Gadsden	L	10/10/1978	FDEP-Pensacola	C 161
Corydalus cornutus	Ochlockonee R	Willacoochee Ck	Gadsden	L	3/3/1986	FAMU ORB Study	SR 65 + 65A @ bridge, 6.5 mi N Quincy
Corydalus cornutus	Ochlockonee R	Willacoochee Ck	Gadsden	L	7/7/1986	FAMU ORB Study	SR 65 + 65A @ bridge, 6.5 mi N Quincy
Corydalus cornutus	Ochlockonee R	Willacoochee Ck	Gadsden	L	11/25/1986	FAMU ORB Study	SR 65 + 65A @ bridge, 6.5 mi N Quincy
Corydalus cornutus	Ochlockonee R	Willacoochee Ck	Gadsden	L	3/24/1987	FAMU ORB Study	SR 65 + 65A @ bridge, 6.5 mi N Quincy
Corydalus cornutus	Ochlockonee R	Willacoochee Ck	Gadsden	L	6/23/1988	FAMU ORB Study	CR-161 @ bridge, 6 mi NE Quincy
Corydalus cornutus	Ochlockonee R	Willacoochee Ck	Gadsden	L	8/18/1988	FAMU ORB Study	CR-161 @ bridge, 6 mi NE Quincy
Corydalus cornutus	Ochlockonee R	Willacoochee Ck	Gadsden	L	9/21/1988	FAMU ORB Study	CR-161 @ bridge, 6 mi NE Quincy
Corydalus cornutus	Ochlockonee R	Willacoochee Ck	Gadsden	L	10/26/1988	FAMU ORB Study	CR-161 @ bridge, 6 mi NE Quincy
Corydalus cornutus	Ochlockonee R	Willacoochee Ck	Gadsden	L	2/27/1990	FAMU ORB Study	SR 65 + 65A @ bridge, 6.5 mi N Quincy
Corydalus cornutus	Ochlockonee R	Willacoochee Ck	Gadsden	L	4/8/1997	FDEP-Pensacola	C-161
Corydalus cornutus	Ochlockonee R	trib. Lake Talquin	Gadsden	L	3/12/1967	FAMU	7 mi S of Quincy on Hwy. 267
Corydalus cornutus	Ochlockonee R	trib. of Rocky Comfort Ck	Gadsden	L	8/16/1967	FAMU	3.25 mi SW of Quincy on Hwy 274
Corydalus cornutus	Oklawaha R		Alachua	A	5/16/1936	(Contreras-Ramos, 1998)	Gainesville
Corydalus cornutus	Oklawaha R		Alachua	A	6/30/1960	(Contreras-Ramos, 1998)	Gainesville
Corydalus cornutus	Oklawaha R		Alachua	A	6/19/1961	(Contreras-Ramos, 1998)	Gainesville
Corydalus cornutus	Oklawaha R		Alachua	A	6/8/1978	(Contreras-Ramos, 1998)	Gainesville
Corydalus cornutus	Oklawaha R		Alachua	A	6/21/1980	(Contreras-Ramos, 1998)	Gainesville
Corydalus cornutus	Oklawaha R	Hogtown Ck	Alachua	L	3/14/1996	FAMU	Gainesville, at 23rd Avenue
Corydalus cornutus	Oklawaha R	Hogtown Ck	Alachua	L	3/15/1996	FAMU	Gainesville, at 16th Avenue
Corydalus cornutus	Peace R	Horse Ck	DeSoto	L		FDEP-Punta Gorda	none
Corydalus cornutus	Pensacola Bay	East Bay R	Okaloosa	L	3/8/2001	FDEP-Pensacola	Above ER259 Bridge
Corydalus cornutus	Pensacola Bay	East Bay R	Okaloosa	L	3/13/2001	FDEP-Pensacola	below Live Oak Ck
Corydalus cornutus	Pensacola Bay	Live Oak Ck	Okaloosa	L	8/22/2000	FDEP-Pensacola	below borrow pit West of ER 181
Corydalus cornutus	Pensacola Bay	Panther Ck	Santa Rosa	L	8/24/2000	FDEP-Pensacola	Above ER 678
Corydalus cornutus	Pensacola Bay	Prairie Ck	Okaloosa	L	8/29/2000	FDEP-Pensacola	Above E.R. 678
Corydalus cornutus	Pensacola Bay	Turtle Ck	Okaloosa	L	8/1/2000	FDEP-Pensacola	below ER 181
Corydalus cornutus	Pensacola Bay	Turtle Ck	Okaloosa	L	8/1/2000	T. Thom-Eglin AFB	at powerline road near Eglin 181
Corydalus cornutus	Pensacola Bay	Turtle Ck	Okaloosa	L	8/8/2000	FDEP-Pensacola	below B-165 & ER 239
Corydalus cornutus	Perdido Bay	11 Mile Ck	Escambia	L	7/13/1995	FDEP-Pensacola	297
Corydalus cornutus	Perdido Bay	11 Mile Ck trib.	Escambia	L	2/26/1997	FDEP-Pensacola	@ Creekside Dr trib. to 11 mile Ck
Corydalus cornutus	Perdido Bay	8 Mile Ck	Escambia	L	3/5/1997	FDEP-Pensacola	above Klondike Rd

Florida Megaloptera

Family: Corydalidae

Genus: *Corydalus* Table 2-9

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Corydalus cornutus</i>	Perdido Bay	Bell Branch	Escambia	L	8/22/1997	FDEP-Pensacola	US 90
<i>Corydalus cornutus</i>	Perdido Bay	Devine Farm Ck	Escambia	L	2/27/1997	FDEP-Pensacola	BioRecon
<i>Corydalus cornutus</i>	Perdido Bay	Little River	AL:Baldwin	L		FDEP-Pensacola	Alabama, Hwy 59
<i>Corydalus cornutus</i>	Perdido R	Boggy Ck	Escambia	L	5/4/1992	FDEP-Pensacola	97A, Sandstone Waterfall
<i>Corydalus cornutus</i>	Perdido R	Boggy Ck	Escambia	L	8/10/1998	FDEP-Pensacola	C-97A
<i>Corydalus cornutus</i>	Perdido R	McDavid Ck	Escambia	L	8/17/1992	FDEP-Pensacola	C99 NS-B-10
<i>Corydalus cornutus</i>	Perdido R	McDavid Ck	Escambia	L	2/14/1994	FDEP-Pensacola	@ C99
<i>Corydalus cornutus</i>	Perdido R	McDavid Ck	Escambia	L	2/14/1994	FDEP-Pensacola	C99 B1O NS
<i>Corydalus cornutus</i>	Perdido R	McDavid Ck	Escambia	L	2/22/2001	FDEP-Pensacola	SR 99
<i>Corydalus cornutus</i>	Perdido R	Muscogee Ck	Escambia	L	3/6/1997	FDEP-Pensacola	@ SR 97
<i>Corydalus cornutus</i>	Perdido R	Perdido R	Escambia	L	11/3/1981	FDEP-Pensacola	
<i>Corydalus cornutus</i>	Perdido R	Perdido R	Escambia	L	8/17/1992	FDEP-Pensacola	Hwy 184
<i>Corydalus cornutus</i>	Perdido R	West Fork Boggy Ck	Escambia	L	8/10/1998	FDEP-Pensacola	below C 97A
<i>Corydalus cornutus</i>	Santa Fe R		Bradford	A	8/7/1945	(Contreras-Ramos, 1998)	Starke
<i>Corydalus cornutus</i>	Santa Fe R	Blues Ck	Alachua	L	2/1/1997	FAMU	NW Gainesville
<i>Corydalus cornutus</i>	Santa Fe R	Mill Ck	Alachua	A	6/4/1999	FAMU	Hwy 241, 3.5 mi N Alachua
<i>Corydalus cornutus</i>	Santa Fe R	Poe Springs	Alachua	A	7/12/1950	(Contreras-Ramos, 1998)	Poe Spr.
<i>Corydalus cornutus</i>	St. Andrews Bay	Econfina Ck	Bay	L	8/25/1992	FDEP-Pensacola	388
<i>Corydalus cornutus</i>	St. Andrews Bay	Econfina Ck	Bay	L	8/25/1992	FDEP-Pensacola	@ Scott Rd
<i>Corydalus cornutus</i>	St. Andrews Bay	Econfina Ck	Bay	L	8/25/1992	FDEP-Pensacola	Scott Rd
<i>Corydalus cornutus</i>	St. Andrews Bay	Econfina Ck	Bay	L	8/25/1994	FDEP-Pensacola	@ Scott Rd
<i>Corydalus cornutus</i>	St. Andrews Bay	Econfina Ck	Bay	L	7/9/1998	FDEP-Pensacola	@ Scott Rd
<i>Corydalus cornutus</i>	St. Andrews Bay	Econfina Ck	Bay	L	2/6/2001	FDEP-Pensacola	Scott Rd
<i>Corydalus cornutus</i>	St. Andrews Bay	S. F. Bear Ck	Bay	L	2/28/1994	FDEP-Pensacola	Ed Lee Rd.
<i>Corydalus cornutus</i>	St. Andrews Bay	S. F. Bear Ck	Bay	L	8/25/1994	FDEP-Pensacola	Ed. Lee Rd
<i>Corydalus cornutus</i>	St. Andrews Bay	S.F. Bear Ck	Bay	L	2/2/1999	FDEP-Pensacola	Ref. Site
<i>Corydalus cornutus</i>	St. Andrews Bay	Sandy Ck	Bay	L	8/4/1994	FDEP-Pensacola	Hwy 22
<i>Corydalus cornutus</i>	St. Johns R (Lower)		Duval	A	6/24/1980	(Contreras-Ramos, 1998)	Jacksonville, Univ. North Florida
<i>Corydalus cornutus</i>	St. Johns R (lower)	Gold Head Branch	Clay	A	6/27/1998	FAMU Ravine Study	Goldhead Branch State Park, near old mill trail crossing
<i>Corydalus cornutus</i>	St. Johns R (upper)	Econlockhatchee R	Seminole	L	5/12/2001	FAMU	@ Snowhill Rd. ~100m downstream of bridge
<i>Corydalus cornutus</i>	St. Johns R (upper)	Mormon Branch	Marion	L	3/23/2002	FAMU	Ocala National Forest, @ Hwy 19, upstream from bridge
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	6/8/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	7/26/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	8/1/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	8/8/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	8/29/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	11/1/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	12/3/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	10/20/1980	FAMU	St. Hwy 59, T1S-R3E-3
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	5/29/1991	FAMU Biotic Index	at Co. Rd. 59
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	5/29/1991	FAMU Biotic Index	at Co. Rd. 59

Florida Megaloptera

Family: Corydalidae

Genus: *Corydalus* Table 2-10

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	7/31/1991	FAMU Biotic Index	at Co. Rd. 59
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	10/10/1991	FAMU Biotic Index	at CR-59
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	12/3/1991	FAMU Biotic Index	at CR-59
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	2/5/1992	FAMU Biotic Index	at CR-59
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	4/1/1992	FAMU Biotic Index	at CR-59
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	6/3/1992	FAMU Biotic Index	at CR-59
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	8/5/1992	FAMU Biotic Index	at CR-59
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	9/29/1992	FAMU Biotic Index	at CR-59
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	9/29/1992	FAMU Biotic Index	at US Hwy 27
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	12/2/1992	FAMU Biotic Index	at CR-59
<i>Corydalus cornutus</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	4/1/1993	FAMU Biotic Index	at CR-59
<i>Corydalus cornutus</i>	St. Marks R	Fisher Ck	Leon	L	10/30/1996	FDEP-Pensacola	above SR 373
<i>Corydalus cornutus</i>	St. Marks R	McBride Slough	Wakulla	L	1/19/1980	FAMU	none
<i>Corydalus cornutus</i>	St. Marks R	McBride Slough	Wakulla	L	8/19/1999	FAMU	none
<i>Corydalus cornutus</i>	St. Marys R	St. Marys R	Baker	L	11/4/1974	FDEP-Jacksonville	North of Macclenny
<i>Corydalus cornutus</i>	Steinhatchee R	Econfina R	Taylor	L	8/21/1991	FAMU Biotic Index	at US Hwy 27
<i>Corydalus cornutus</i>	Steinhatchee R	Econfina R	Taylor	L	10/22/1991	FAMU Biotic Index	at Econfina Community
<i>Corydalus cornutus</i>	Steinhatchee R	Econfina R	Taylor	L	10/22/1991	FAMU Biotic Index	at US Hwy 98
<i>Corydalus cornutus</i>	Steinhatchee R	Econfina R	Taylor	L	2/19/1992	FAMU Biotic Index	at US Hwy 98
<i>Corydalus cornutus</i>	Steinhatchee R	Econfina R	Taylor	L	4/15/1992	FAMU Biotic Index	at US Hwy 98
<i>Corydalus cornutus</i>	Steinhatchee R	Econfina R	Taylor	L	6/17/1992	FAMU Biotic Index	at US Hwy 27
<i>Corydalus cornutus</i>	Steinhatchee R	Econfina R	Taylor	L	8/19/1992	FAMU Biotic Index	US Hwy 27
<i>Corydalus cornutus</i>	Steinhatchee R	Econfina R	Taylor	L	10/21/1992	FAMU Biotic Index	at US Hwy 98
<i>Corydalus cornutus</i>	Steinhatchee R	Fenholloway R	Taylor	L	12/6/1974	FAMU	at Hwy 27, approx. 7 mi E of Perry
<i>Corydalus cornutus</i>	Steinhatchee R	Fenholloway R	Taylor	L	9/29/1992	FAMU Biotic Index	at Fenholloway
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Columbia/Hamilton	L	6/26/1991	FAMU Biotic Index	7.5 km N of St. Rd. 6
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Columbia/Hamilton	L	6/26/1991	FAMU Biotic Index	7.5 km N of St. Rd. 6
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Columbia/Hamilton	L	12/17/1991	FAMU Biotic Index	7.5 km N of St. Rd. 6
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Columbia/Hamilton	L	2/26/1992	FAMU Biotic Index	7.5 km N of St. Rd. 6
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Columbia/Hamilton	L	6/24/1992	FAMU Biotic Index	7.5 km N of St. Rd. 6
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Columbia/Hamilton	L	2/25/1993	FAMU Biotic Index	7.5 km N of St. Rd. 6
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Hamilton/Suwannee	L	6/26/1991	FAMU Biotic Index	0.5 km E of US Hwy 129
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Hamilton/Suwannee	L	9/19/1991	FAMU Biotic Index	0.5 km E of US Hwy 129
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Hamilton/Suwannee	L	10/29/1991	FAMU Biotic Index	0.5 km E of US Hwy 129
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Hamilton/Suwannee	L	2/26/1992	FAMU Biotic Index	0.5 km E of US Hwy 129
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Hamilton/Suwannee	L	10/28/1992	FAMU Biotic Index	0.5 km E of US Hwy 129
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Hamilton/Suwannee	L	12/16/1992	FAMU Biotic Index	0.5 km E of US Hwy 129
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Hamilton/Suwannee	L	12/16/1992	FAMU Biotic Index	0.5 km E of US Hwy 129
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Hamilton/Suwannee	L	4/28/1993	FAMU Biotic Index	0.5 km E of US Hwy 129
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Madison/Suwannee	L	6/26/1991	FAMU Biotic Index	at Suwannee River State Park, 1 km N of US-90
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Madison/Suwannee	L	9/19/1991	FAMU Biotic Index	at Suwannee River State Park, 1 km N of US-90

Florida Megaloptera

Family: Corydalidae

Genus: *Corydalus* Table 2-11

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Madison/Suwannee	L	10/29/1991	FAMU Biotic Index	at Suwannee River State Park, 1 km N of US-90
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Madison/Suwannee	L	8/26/1992	FAMU Biotic Index	at Suwannee River State Park, 1 km N of US-90
<i>Corydalus cornutus</i>	Suwannee R	Suwannee R	Madison/Suwannee	L	10/28/1992	FAMU Biotic Index	at Suwannee River State Park, 1 km N of US-90
<i>Corydalus cornutus</i>	Suwannee R (Upper)	Suwannee R	Hamilton	A	7/6/1983	(Contreras-Ramos, 1998)	Rt. 6 overpass
<i>Corydalus cornutus</i>	Waccasassa R	Mule Ck	Levy	L	7/30/1977	FAMU	SR-19, 0.3 mi N of SR-326, near Gulf Hammock
<i>Corydalus cornutus</i>	Withlacoochee (North)	Withlacoochee R	Hamilton/Madison	L	6/26/1991	FAMU Biotic Index	3 km N of SR-6
<i>Corydalus cornutus</i>	Withlacoochee (North)	Withlacoochee R	Hamilton/Madison	L	6/26/1991	FAMU Biotic Index	3 km N of SR-6
<i>Corydalus cornutus</i>	Withlacoochee (North)	Withlacoochee R	Hamilton/Madison	L	6/26/1991	FAMU Biotic Index	3 km N of St. Rd. 6
<i>Corydalus cornutus</i>	Withlacoochee (North)	Withlacoochee R	Hamilton/Madison	L	8/28/1991	FAMU Biotic Index	3 km N of SR-6
<i>Corydalus cornutus</i>	Withlacoochee (North)	Withlacoochee R	Hamilton/Madison	L	8/28/1991	FAMU Biotic Index	3 km N of SR-6
<i>Corydalus cornutus</i>	Withlacoochee (North)	Withlacoochee R	Hamilton/Madison	L	10/29/1991	FAMU Biotic Index	3 km N of SR-6
<i>Corydalus cornutus</i>	Withlacoochee (North)	Withlacoochee R	Hamilton/Madison	L	12/17/1991	FAMU Biotic Index	3 km N of SR-6
<i>Corydalus cornutus</i>	Withlacoochee (North)	Withlacoochee R	Hamilton/Madison	L	4/22/1992	FAMU Biotic Index	3 km N of SR-6
<i>Corydalus cornutus</i>	Withlacoochee (North)	Withlacoochee R	Hamilton/Madison	L	10/28/1992	FAMU Biotic Index	3 km N of SR-6
<i>Corydalus cornutus</i>	Yellow R	Big Horse Ck	Okaloosa	L	8/18/1992	FDEP-Pensacola	SR 2
<i>Corydalus cornutus</i>	Yellow R	Big Horse Ck	Okaloosa	L	8/23/1994	FDEP-Pensacola	Hwy 2
<i>Corydalus cornutus</i>	Yellow R	Big Horse Ck	Okaloosa	L	1/30/1995	FDEP-Pensacola	Hwy 2
<i>Corydalus cornutus</i>	Yellow R	Big Horse Ck	Okaloosa	L	7/15/1998	FDEP-Pensacola	@ SR 2
<i>Corydalus cornutus</i>	Yellow R	Big Horse Ck	Okaloosa	L	2/8/2001	FDEP-Pensacola	SR 2
<i>Corydalus cornutus</i>	Yellow R	Big Swamp Ck	Walton	L	3/18/1999	FDEP-Pensacola	above McKee Rd
<i>Corydalus cornutus</i>	Yellow R	Bighouse Ck	Okaloosa	L	2/16/1994	FDEP-Pensacola	Hwy 2
<i>Corydalus cornutus</i>	Yellow R	Carr Springs Branch	Okaloosa	L	5/16/2000	T. Thom-Eglin AFB	Eglin Air Force Base Rd. 211
<i>Corydalus cornutus</i>	Yellow R	Davis Mill Ck	Okaloosa	L	8/5/1998	FDEP-Pensacola	@ Staff Rd
<i>Corydalus cornutus</i>	Yellow R	Gum Ck	Walton	L	4/24/1967	FAMU	on Hwy 331, 6 mi NW of DeFuniak Springs
<i>Corydalus cornutus</i>	Yellow R	Milligan Ck	Okaloosa	L	6/20/2000	T. Thom-Eglin AFB	Eglin Air Force Base Rd. 211
<i>Corydalus cornutus</i>	Yellow R	Murder Ck	Okaloosa	L	7/23/1998	FDEP-Pensacola	SR 85A
<i>Corydalus cornutus</i>	Yellow R	Pine Log Ck	Walton	L	2/16/1994	FDEP-Pensacola	Hwy 2
<i>Corydalus cornutus</i>	Yellow R	Silver Ck	Okaloosa	L	8/5/1998	FDEP-Pensacola	@ Staff Road
<i>Corydalus cornutus</i>	Yellow R	Titi Ck	Okaloosa	L	7/11/1985	FDEP-Pensacola	B-41
<i>Corydalus cornutus</i>	Yellow R	Turkey Ck	Walton	L	7/21/1998	FDEP-Pensacola	SR 2A
<i>Corydalus cornutus</i>	Yellow R	Weaver Ck	Santa Rosa	L	2/24/2000	FDEP-Pensacola	ER 736
<i>Corydalus cornutus</i>	Yellow R	Yellow R	Okaloosa	L	7/9/1985	FDEP-Pensacola	SR-2, B-36
<i>Corydalus cornutus</i>	Yellow R	Yellow River Trib.	Santa Rosa	L	7/6/2000	T. Thom-Eglin AFB	Eglin Air Force Base Rd. 211

END OF DATA TABLE

Florida Megaloptera

Family: Corydalidae

Genus: *Nigronia*

Table 3-1

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Nigronia</i>	Choctawhatchee Bay	Rogue Ck	Okaloosa	L	7/17/2000	T.Thom-Eglin AFB	Eglin Air Force Base Rd. 625
<i>Nigronia fasciatus</i>			Alachua	A	4/2/1924	(Hazard, 1960)	
<i>Nigronia fasciatus</i>	Apalachicola R		Liberty	A	5/6/1969	FSCA	Torreya State Park
<i>Nigronia fasciatus</i>	Apalachicola R		Liberty	A	5/1/1973	FSCA	Torreya State Park
<i>Nigronia fasciatus</i>	Apalachicola R	Unnamed ravine stream	Liberty	L	3/11/1994	FAMU Ravine Study (Penny et al., 1997)	just North of ABRP bluff overlook, 3 mi N of Bristol
<i>Nigronia serricornis</i>			Leon	A	4/15/2045	(Hazard, 1960)	
<i>Nigronia serricornis</i>			Okaloosa	A	5/11/1962	FSCA	Ocean City
<i>Nigronia serricornis</i>			Okaloosa	A	5/4/1963	FSCA	Ocean City
<i>Nigronia serricornis</i>		Black Ck	Leon	L	7/19/1995	FDEP-Tallahassee	
<i>Nigronia serricornis</i>		Black Ck	Liberty	A	5/18/1985	FSCA	near Sumatra, Apalach. Nat'l Forest Road 181-C
<i>Nigronia serricornis</i>		Bruce Ck	Walton	L	9/6/1990	FDEP-Tallahassee	
<i>Nigronia serricornis</i>		Juniper Ck	Okaloosa	A	5/4/1977	FAMU	at Red Rock
<i>Nigronia serricornis</i>		Titi Ck	Walton	L	7/28/2000	T.Thom-Eglin AFB	Eglin Air Force Base Rd. 409
<i>Nigronia serricornis</i>	Apalachicola R		Gadsden	A	5/22/1999	FAMU	Aspalaga Bluff, 0.6 mi E of boat landing, upland Oak/Pi
<i>Nigronia serricornis</i>	Apalachicola R	Beaver Dam Ck	Liberty	L	4/7/1994	FAMU Ravine Study	near confluence w/Apalch. R, ABRP, 3 mi N Bristol
<i>Nigronia serricornis</i>	Apalachicola R	Crooked Ck	Gadsden	A	4/18/1995	FAMU Ravine Study	CR 270, 10 km W of Greensboro
<i>Nigronia serricornis</i>	Apalachicola R	Kelley Branch	Liberty	L	3/11/1994	FAMU Ravine Study	upstream at culvert, ABRP, 3 mi N Bristol
<i>Nigronia serricornis</i>	Apalachicola R	Kelley Branch	Liberty	L	3/22/1995	FAMU Ravine Study	(upper end), ABRP, 5 km N Bristol
<i>Nigronia serricornis</i>	Apalachicola R	Little Sweetwater Ck	Liberty	A	4/1/1999	FAMU Ravine Study	at head, ABRP, 5 km N Bristol
<i>Nigronia serricornis</i>	Apalachicola R	Little Sweetwater Ck	Liberty	L	12/7/1994	FAMU Ravine Study	(upper end), ABRP, 3 mi N Bristol
<i>Nigronia serricornis</i>	Apalachicola R	Little Sweetwater Ck	Liberty	L	10/26/1995	FAMU Ravine Study	upper end, ABRP, 5 km N Bristol
<i>Nigronia serricornis</i>	Apalachicola R	Little Sweetwater Ck	Liberty	L	2/18/1999	FAMU Ravine Study	(at head), ABRP, 5 km N Bristol
<i>Nigronia serricornis</i>	Apalachicola R	Little Sweetwater Ck	Liberty	L	4/1/1999	FAMU Ravine Study	(at head), ABRP, 5 km N Bristol
<i>Nigronia serricornis</i>	Apalachicola R	Little Sweetwater Ck	Liberty	L	6/8/1999	FAMU Ravine Study	(at head), ABRP, 5 km N Bristol
<i>Nigronia serricornis</i>	Apalachicola R	Short Ck	Liberty	L	12/6/1995	FDEP-Pensacola	NE Torreya St. Park
<i>Nigronia serricornis</i>	Apalachicola R	Sweetwater Ck	Liberty	A	4/18/1995	FAMU Ravine Study	CR 270
<i>Nigronia serricornis</i>	Apalachicola R	Sweetwater Ck	Liberty	L	7/8/1992	FDEP-Pensacola	@ SR270
<i>Nigronia serricornis</i>	Blackwater R		Okaloosa	A	5/2/1975	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Ates Ck	Santa Rosa	A	4/17/1997	FDEP-Pensacola	above Bud Bass Rd
<i>Nigronia serricornis</i>	Blackwater R	Beaver Ck	Okaloosa	L	2/20/1998	FDEP-Pensacola	@ Beaver Ck Rd
<i>Nigronia serricornis</i>	Blackwater R	Big Coldwater Ck	Santa Rosa	L	11/23/1976	FDEP-Pensacola	just below confluence of E and W fork
<i>Nigronia serricornis</i>	Blackwater R	Big Juniper Ck	Santa Rosa	L	2/10/1978	FDEP-Pensacola	Hwy 4
<i>Nigronia serricornis</i>	Blackwater R	Big Juniper Ck	Santa Rosa	L	11/21/1996	FDEP-Pensacola	CR 191N
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A		FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	5/3/1974	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	5/4/1974	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	5/6/1976	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	5/6/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	5/8/1977	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	4/30/1978	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt

Florida Megaloptera

Family: Corydalidae

Genus: *Nigronia*

Table 3-2

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	5/2/1978	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	5/20/1978	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	5/7/1979	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	5/8/1979	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	4/25/1980	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	4/28/1981	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	A	5/9/1981	FAMU	FAMU Biol. Sta. 4.5 mi NW Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Okaloosa	L	7/28/1981	FAMU	Kennedy Bridge, 6 mi W of Blackman
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Santa Rosa	A	5/2/1980	FAMU	FAMU Field Stn. house, 3.5 mi W Holt
<i>Nigronia serricornis</i>	Blackwater R	Blackwater R	Santa Rosa	L	7/28/1977	FAMU	@ Cotton Bdge. 5.5 mi NW Good Hope
<i>Nigronia serricornis</i>	Blackwater R	Boggy Hollow Ck	Okaloosa	L	2/26/1998	FDEP-Pensacola	Looney Rd
<i>Nigronia serricornis</i>	Blackwater R	Bull Branch	Okaloosa	L	3/2/1998	FDEP-Pensacola	Eza Cook Rd
<i>Nigronia serricornis</i>	Blackwater R	Compton Branch	Okaloosa	L	8/12/1998	FDEP-Pensacola	Sec 22
<i>Nigronia serricornis</i>	Blackwater R	Manning Ck	Santa Rosa	L	7/16/1998	FDEP-Pensacola	@ CR 87
<i>Nigronia serricornis</i>	Blackwater R	Mare Branch	Okaloosa	L	3/2/1998	FDEP-Pensacola	@ Mattie Kennedy Rd.
<i>Nigronia serricornis</i>	Blackwater R	Mare Branch	Santa Rosa	L	2/17/1999	FDEP-Pensacola	Pine View Rd
<i>Nigronia serricornis</i>	Blackwater R	Muddy Branch	Okaloosa	L	2/27/1998	FDEP-Pensacola	Hwy 4
<i>Nigronia serricornis</i>	Blackwater R	Narrows Ck	Okaloosa	L	2/25/1998	FDEP-Pensacola	near mouth
<i>Nigronia serricornis</i>	Blackwater R	Oak Ck	Okaloosa	L	2/23/1998	FDEP-Pensacola	Sect. 3; dirt Road
<i>Nigronia serricornis</i>	Blackwater R	Panther Ck	Okaloosa	L	8/18/1992	FDEP-Pensacola	Golan
<i>Nigronia serricornis</i>	Blackwater R	Panther Ck	Okaloosa	L	3/14/1994	FDEP-Pensacola	@ Barnhill Rd
<i>Nigronia serricornis</i>	Blackwater R	Panther Ck	Okaloosa	L	7/17/1995	FDEP-Pensacola	@ Barnhill Rd
<i>Nigronia serricornis</i>	Blackwater R	Panther Ck	Okaloosa	L	3/3/1998	FDEP-Pensacola	Mattie Kennedy Rd
<i>Nigronia serricornis</i>	Blackwater R	Pyron Springs Branch	Okaloosa	L	2/25/1998	FDEP-Pensacola	Kilcrease Rd.
<i>Nigronia serricornis</i>	Blackwater R	Red Wash Branch	Okaloosa	L	3/4/1998	FDEP-Pensacola	@ mouth
<i>Nigronia serricornis</i>	Blackwater R	Reedy Ck	Santa Rosa	L	3/1/2000	FAMU	Blackwater R. St. For. @ Overstreet Rd. 3.3 mi E McClellan
<i>Nigronia serricornis</i>	Blackwater R	Reedy Ck	Santa Rosa	L	12/7/2000	FAMU	Overstreet Rd. 2 mi E Blandville, Blackwater R. St. For
<i>Nigronia serricornis</i>	Blackwater R	Rock Ck	Okaloosa	L	6/15/1994	FDEP-Pensacola	Sect. 9 E of Hurricane Lake
<i>Nigronia serricornis</i>	Blackwater R	Turkey Ck	Santa Rosa	L	7/15/1999	FDEP-Pensacola	above Amos Cabniss Rd
<i>Nigronia serricornis</i>	Blackwater R	West Fork Coldwater Ck	Santa Rosa	L	8/19/1998	FDEP-Pensacola	@ Walling Road
<i>Nigronia serricornis</i>	Chipola R	Bridge Ck	Jackson	L	8/20/1992	FDEP-Pensacola	SR 71
<i>Nigronia serricornis</i>	Chipola R	Juniper Ck	Calhoun	L	8/3/1970	FAMU	at Hwy 20
<i>Nigronia serricornis</i>	Chipola R	Ten Mile Ck	Calhoun	L	2/21/1994	FDEP-Pensacola	SR 73
<i>Nigronia serricornis</i>	Chipola R	Wildcat Ck	Calhoun	L	10/16/1970	FAMU	6 mi W of Blountstown on Hwy 20
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Alaqua Ck		L	3/10/1982	FDEP Pensacola	Pine Allen Bridge
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Alaqua Ck	Walton	L	3/2/1992	FDEP-Pensacola	Pine Allen Bridge
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Blount Ck	Walton	L	11/21/1998	FAMU Eglin Study	unnamed BR off BR-201, 1 mi NE of Pine Allen Bridge
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Blount Mill Ck	Walton	L	10/17/1970	FAMU	2nd bridge on dirt rd, N of Hwy 282 & Portland Rd
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Bullhide Ck	Walton	L	10/3/2000	FDEP-Pensacola	ER 280
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Juniper Ck	Okaloosa	A	5/21/1998	FAMU Eglin Study	Eglin AFB @ BR-221, 0.8 mi E of SR-85
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Juniper Ck	Okaloosa	A	4/8/1999	FAMU Eglin Study	at head, Eglin AFB, W side of BR-231, SE of Duke Field

Florida Megaloptera

Family: Corydalidae

Genus: *Nigronia*

Table 3-3

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Juniper Ck	Okaloosa	A	4/9/1999	FAMU Eglin Study	at head, Eglin AFB, W side of BR-231, SE of Duke Field
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Juniper Ck	Okaloosa	A	4/10/2001	FAMU Eglin Study	Eglin AFB, W side of BR-231, SE of Duke Field
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Juniper Ck	Okaloosa	L	10/28/1998	FAMU Eglin Study	at head, Eglin AFB, W side of BR-231, SE of Duke Field
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Juniper Ck Trib.	Okaloosa	L	9/5/1999	FDEP-Pensacola	B-43 Pit
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Juniper Ck Trib.	Okaloosa	L	1/18/2000	FDEP-Pensacola	B47 Bgd.
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	11/7/1970	FAMU	at Private rd. ~10 mi W of Hwy 81 (after bend in dirt rd.)
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	12/14/1970	FAMU	at Hwy 20
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	2/14/1971	FAMU	at Hwy 20
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	8/14/1971	FAMU	at Hwy 20
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	8/26/1971	FAMU	at Hwy 20, Freeport
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	1/8/1972	FAMU	at Hwy 20
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	1/27/1972	FAMU	at Hwy 20
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	6/10/1972	FAMU	at Hwy 20
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Lightwood Knot Ck	Okaloosa	L	8/6/1998	FDEP-Pensacola	headwaters
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Little Rocky Ck	Okaloosa	L	6/26/2000	T.Thom-Eglin AFB	Eglin Air Force Base Rd. 434
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Mill Ck	Okaloosa	L	8/13/1998	FDEP-Pensacola	Above, College Blvd
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Mill Ck	Okaloosa	L	7/29/1999	FDEP-Pensacola	Eglin Golf Course -- Upper Bridge
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Mill Ck	Okaloosa	L	7/25/2000	FDEP-Pensacola	Eglin Golf Course Hole #9
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Mill Ck	Okaloosa	L	7/25/2000	FDEP-Pensacola	Eglin Golf Course hole #13
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Rocky Ck	Walton	L	7/29/1998	FDEP-Pensacola	@ ER 201
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Rogue Ck	Okaloosa	A	4/7/1999	FAMU Eglin Study	Eglin AFB, 0.4 mi S of BR-232
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Rogue Ck	Okaloosa	L	3/20/1998	FAMU Eglin Study	Eglin AFB, 0.4 mi S of BR-232
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Turkey Ck	Okaloosa	A	5/21/1998	FAMU Eglin Study	Eglin AFB @ Base Rd 232
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Turkey Ck	Okaloosa	A	4/7/1999	FAMU Eglin Study	Eglin AFB, BR-637
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Turkey Ck	Okaloosa	A	5/2/2000	T.Thom-Eglin AFB	Eglin Air Force Base Rd. 626, riparian vegetation
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Turkey Ck (unnamed trib.)	Okaloosa	A	4/7/1999	FAMU Eglin Study	Eglin AFB, BR-639
<i>Nigronia serricornis</i>	Choctawhatchee Bay	Turkey Ck. (unnamed trib.)	Okaloosa	L	10/27/1998	FAMU Eglin Study	Eglin AFB, BR-639
<i>Nigronia serricornis</i>	Choctawhatchee R	Bay Branch	Walton	L	8/20/1996	FDEP-Pensacola	US 331
<i>Nigronia serricornis</i>	Choctawhatchee R	Black Ck	Walton	L	9/5/1970	FAMU	1st bridge W of Bruce on Hwy 20
<i>Nigronia serricornis</i>	Choctawhatchee R	Black Ck	Walton	L	9/19/1970	FAMU	Bridge at Hwy 20
<i>Nigronia serricornis</i>	Choctawhatchee R	Black Ck	Walton	L	5/3/1971	FAMU	1st bridge W of Bruce on Hwy 20
<i>Nigronia serricornis</i>	Choctawhatchee R	Black Ck	Walton	L	8/25/1992	FDEP-Pensacola	@ Hwy 20
<i>Nigronia serricornis</i>	Choctawhatchee R	Black Ck	Walton	L	2/28/1994	FDEP-Pensacola	Hwy 20
<i>Nigronia serricornis</i>	Choctawhatchee R	Black Ck	Walton	L	2/9/1995	FDEP-Pensacola	Hwy 20
<i>Nigronia serricornis</i>	Choctawhatchee R	Little Crooked Ck	Bay	L		FDEP-Pensacola	@ SR79
<i>Nigronia serricornis</i>	Choctawhatchee R	Mt. Sinai Branch	Walton	L	8/10/2000	FDEP-Pensacola	above ER 412 culvert
<i>Nigronia serricornis</i>	Choctawhatchee R	Natural Bridge Ck	Walton	L	2/1/1995	FDEP-Pensacola	Hwy 181
<i>Nigronia serricornis</i>	Choctawhatchee R	Panther Ck	Walton	L	8/20/1991	FDEP-Pensacola	SR 280
<i>Nigronia serricornis</i>	Choctawhatchee R	Pine Log Ck	Bay	L	9/18/1970	FAMU	Bridge at Hwy 79
<i>Nigronia serricornis</i>	Choctawhatchee R	Sandy Ck	Walton	L	2/6/1995	FDEP-Pensacola	SR 183
<i>Nigronia serricornis</i>	Choctawhatchee R	Sandy Ck	Walton	L	7/11/1995	FDEP-Pensacola	183

Florida Megaloptera

Family: Corydalidae

Genus: *Nigronia*

Table 3-4

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Nigronia serricornis</i>	Choctawhatchee R	Turkey Ck. (unnamed trib.)	Okaloosa	L	3/2/2000	FAMU Eglin Study	steephead off BR-639, Eglin AFB
<i>Nigronia serricornis</i>	Escambia R	Bell Ck	Santa Rosa	L	2/13/1998	FDEP-Pensacola	Mineral Springs Rd
<i>Nigronia serricornis</i>	Escambia R	Big Branch Branch	Escambia	L	12/9/1997	FDEP-Pensacola	below Brickyard Rd
<i>Nigronia serricornis</i>	Escambia R	Breastworks Branch	Escambia	L	3/18/1999	FDEP-Pensacola	above Breastworks Rd
<i>Nigronia serricornis</i>	Escambia R	Brickton Ck	Escambia	L	2/16/2000	FDEP-Pensacola	@ Brickton Road
<i>Nigronia serricornis</i>	Escambia R	Brickton Ck	Escambia	L	1/23/2001	FDEP-Pensacola	below Brickton Rd, Molino
<i>Nigronia serricornis</i>	Escambia R	McCostill Mill Ck	Santa Rosa	L	12/16/1997	FDEP-Pensacola	Ebenezer Church Rd
<i>Nigronia serricornis</i>	Escambia R	McCostill Mill Ck	Santa Rosa	L	1/25/1999	FDEP-Pensacola	@ Ebenezer Church Road
<i>Nigronia serricornis</i>	Escambia R	McCostill Mill Ck	Santa Rosa	L	1/25/1999	FDEP-Tallahassee	nr. Jay
<i>Nigronia serricornis</i>	Escambia R	McDavid Ck	Santa Rosa	L	2/17/1998	FDEP-Pensacola	Mineral Spring Rd
<i>Nigronia serricornis</i>	Escambia R	Mitchell Ck	Escambia	L	2/15/1994	FDEP-Pensacola	C 29
<i>Nigronia serricornis</i>	Escambia R	Mitchell Ck	Escambia	L	8/10/1994	FDEP-Pensacola	US29
<i>Nigronia serricornis</i>	Escambia R	Mitchell Ck	Escambia	L	1/24/1995	FDEP-Pensacola	Hwy 29
<i>Nigronia serricornis</i>	Escambia R	Mitchell Ck	Escambia	L	7/19/1995	FDEP-Pensacola	C 29
<i>Nigronia serricornis</i>	Escambia R	Mitchell Ck	Escambia	L	2/13/1996	FDEP-Pensacola	C 29
<i>Nigronia serricornis</i>	Escambia R	Mitchell Ck	Escambia	L	8/20/1997	FDEP-Pensacola	Camp Rd
<i>Nigronia serricornis</i>	Escambia R	Mt. Carmel Spring Branch	Santa Rosa	L	12/6/1997	FDEP-Pensacola	CR 55/ SR 89
<i>Nigronia serricornis</i>	Escambia R	Sandy Hollow Ck	Santa Rosa	L	1/25/2001	FDEP-Pensacola	below Sandy Hollow Road
<i>Nigronia serricornis</i>	Escambia R	Thomas Ck	Santa Rosa	L	4/29/1994	FDEP-Pensacola	@ Molino Bridge Rd
<i>Nigronia serricornis</i>	Ochlockonee R	Black Ck	Leon	L	5/11/1994	FDEP-Pensacola	@ 375
<i>Nigronia serricornis</i>	Ochlockonee R	Camp Ck	Gadsden	L		FAMU ORB Study	CR-274 @ bridge, 8 mi SW Quincy
<i>Nigronia serricornis</i>	Ochlockonee R	Camp Ck	Gadsden	L	8/18/1986	FAMU ORB Study	C-274 (Bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	Camp Ck	Gadsden	L	12/3/1986	FAMU ORB Study	C-274 (Bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	Camp Ck	Gadsden	L	10/12/1988	FAMU ORB Study	C-274 (bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	Camp Ck	Gadsden	L	10/12/1988	FAMU ORB Study	C-274 (bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	Camp Ck	Gadsden	L	10/12/1988	FAMU ORB Study	C-274 (bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	A	4/19/1994	FAMU Ravine Study	upper end, 4 mi N of Quincy, off Hwy. 267
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	A	5/17/1994	FAMU Ravine Study	upper end, 4 mi N of Quincy, off Hwy 267
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	A	3/30/1995	FAMU Ravine Study	near middle
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	A	3/30/1995	FAMU Ravine Study	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	A	4/23/1998	FAMU Emergence Study	near ravine head
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	A	4/22/1999	FAMU Emergence Study	70 meters downstream from ravine head
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	A	4/22/1999	FAMU Emergence Study	near ravine head
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	6/12/1991	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	6/12/1991	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	8/14/1991	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	8/14/1991	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	10/15/1991	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	12/5/1991	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	2/12/1992	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	4/8/1992	FAMU Biotic Index	near upper end

Florida Megaloptera

Family: Corydalidae

Genus: *Nigronia*

Table 3-5

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	6/10/1992	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	6/10/1992	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	8/12/1992	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	10/14/1992	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	10/14/1992	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	12/7/1992	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	2/11/1993	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	2/11/1993	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	4/7/1993	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	4/7/1993	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	9/28/1993	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	9/28/1993	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	1/27/1994	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	1/27/1994	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	8/18/1994	FAMU Ravine Study	near middle
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	8/18/1994	FAMU Biotic Index	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	3/30/1995	FAMU Ravine Study	near middle
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	3/30/1995	FAMU Ravine Study	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	9/14/1995	FAMU Ravine Study	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	L	6/18/1997	FAMU Ravine Study	near upper end
<i>Nigronia serricornis</i>	Ochlockonee R	Monroe Ck	Gadsden	L	6/20/1967	FAMU	at bridge on St. Hwy. 268
<i>Nigronia serricornis</i>	Ochlockonee R	Monroe Ck	Gadsden	L	2/19/1996	FAMU	CR 268
<i>Nigronia serricornis</i>	Ochlockonee R	Ocklawaha Ck	Gadsden	A	4/13/1999	FDEP-Orlando	SR 267
<i>Nigronia serricornis</i>	Ochlockonee R	Ocklawaha Ck	Gadsden	L		FAMU ORB Study	SR-267 @ bridge, 10 mi S Quincy
<i>Nigronia serricornis</i>	Ochlockonee R	Ocklawaha Ck	Gadsden	L		FAMU ORB Study	CR-65 @ bridge, 6.6 mi N Hosford
<i>Nigronia serricornis</i>	Ochlockonee R	Ocklawaha Ck	Gadsden	L	1/8/1986	FAMU ORB Study	S-65 (Bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	Ocklawaha Ck	Gadsden	L	9/4/1986	FAMU ORB Study	SR-267 @ bridge, 10 mi S Quincy
<i>Nigronia serricornis</i>	Ochlockonee R	Ocklawaha Ck	Gadsden	L	9/4/1986	FAMU ORB Study	S-267 (Bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	Ocklawaha Ck	Gadsden	L	12/16/1986	FAMU ORB Study	S-65 (Bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	Ocklawaha Ck	Gadsden	L	12/3/1987	FAMU ORB Study	S-267 (Bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	Ocklawaha Ck	Gadsden	L	6/14/1988	FAMU ORB Study	S-65 (bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	Ocklawaha Ck	Gadsden	L	12/15/1988	FAMU ORB Study	S-267 (bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	Ocklawaha Ck	Gadsden	L	2/23/2000	FAMU	Hwy 267
<i>Nigronia serricornis</i>	Ochlockonee R	Polk Ck	Leon	L		FAMU	Hwy 20
<i>Nigronia serricornis</i>	Ochlockonee R	Richlander Ck	Gadsden	L	7/19/1967	FAMU	at bridge on dirt road, 1 mi S of St. Hwy 268
<i>Nigronia serricornis</i>	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	10/1/1967	FAMU	at 2nd bridge on St. Hwy. 267, 6.5 mi S of Quincy
<i>Nigronia serricornis</i>	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	10/25/1968	FAMU	at 2nd bridge on dirt road, 6 mi S of State Hwy 268
<i>Nigronia serricornis</i>	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	9/24/1986	FAMU ORB Study	S-12 (Bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	12/3/1987	FAMU ORB Study	S-267 (bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	4/13/1988	FAMU ORB Study	C-274 (bridge)
<i>Nigronia serricornis</i>	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	12/15/1988	FAMU ORB Study	S-267 (bridge)

Florida Megaloptera

Family: Corydalidae

Genus: *Nigronia*

Table 3-6

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Nigronia serricornis</i>	Ochlockonee R	Rocky Comfort Ck (trib.)	Gadsden	L	7/20/1967	FAMU	on dirt road (T1N, R4W, S62)
<i>Nigronia serricornis</i>	Ochlockonee R	Smith Ck	Wakulla	L	5/11/1994	FDEP-Pensacola	@ CR-375
<i>Nigronia serricornis</i>	Ochlockonee R	Unnamed Ck	Liberty	L	2/13/1973	FAMU	approx. 1 mi W of Ochlockonee R at Hwy 20
<i>Nigronia serricornis</i>	Ochlockonee R	Willacoochee Ck	Gadsden	L	7/18/1967	FAMU	at bridge on Hwy. 167, 6 mi NE of Quincy
<i>Nigronia serricornis</i>	Ochlockonee R	Willacoochee Ck	Gadsden	L	8/14/1986	FAMU ORB Study	SR 65 + 65A @ bridge, 6.5 mi N Quincy
<i>Nigronia serricornis</i>	Pensacola Bay	Catfish Branch	Santa Rosa	L	2/10/2000	FDEP-Pensacola	below Ford
<i>Nigronia serricornis</i>	Pensacola Bay	Pace Mill Ck	Santa Rosa	L	7/8/1998	FDEP-Pensacola	above US 90
<i>Nigronia serricornis</i>	Pensacola Bay	William Ck	Santa Rosa	L	7/27/1995	FDEP-Pensacola	above Hwy 98
<i>Nigronia serricornis</i>	Perdido Bay	8 Mile Ck	Escambia	L	3/5/1997	FDEP-Pensacola	above Klondike Rd
<i>Nigronia serricornis</i>	Perdido Bay	Coffee Ck	Escambia	L	2/12/1996	FDEP-Pensacola	above landfill
<i>Nigronia serricornis</i>	Perdido Bay	Coffee Ck	Escambia	L	3/4/1997	FDEP-Pensacola	above landfill
<i>Nigronia serricornis</i>	Perdido Bay	Soldier Ck	AL:Baldwin	L	3/5/1996	FDEP-Pensacola	Alabama CR 97
<i>Nigronia serricornis</i>	Perdido Bay	Tate Ck	Escambia	L	2/24/1997	FDEP-Pensacola	N. of Royale Rd. & SR 186
<i>Nigronia serricornis</i>	Perdido R	Beaver Pond Ck	Escambia	L	6/16/1995	FDEP-Pensacola	near I-10
<i>Nigronia serricornis</i>	Perdido R	Bell Branch	Escambia	L	8/22/1997	FDEP-Pensacola	US 90
<i>Nigronia serricornis</i>	Perdido R	Bell Ck	Escambia	L	2/28/1997	FDEP-Pensacola	N. of US 90 at mouth
<i>Nigronia serricornis</i>	Perdido R	Boggy Ck	Escambia	L	8/10/1998	FDEP-Pensacola	C-97A
<i>Nigronia serricornis</i>	Perdido R	McDavid Ck	Escambia	L	4/27/1992	FDEP-Pensacola	@ Hwy 99
<i>Nigronia serricornis</i>	Perdido R	McDavid Ck	Escambia	L	8/10/1998	FDEP-Pensacola	B-100; CR 99
<i>Nigronia serricornis</i>	Perdido R	McDavid Ck	Escambia	L	2/22/2001	FDEP-Pensacola	SR 99
<i>Nigronia serricornis</i>	Perdido R	Mucogee Ck	Escambia	L	3/6/1997	FDEP-Pensacola	@ SR 97
<i>Nigronia serricornis</i>	Perdido R	Reststop Run	Escambia	L	2/14/1996	FDEP-Pensacola	above Beaver Pond
<i>Nigronia serricornis</i>	Perdido R	Rock House Branch	Escambia	L	8/15/1997	FDEP-Pensacola	@ Rock House Rd
<i>Nigronia serricornis</i>	St. Andrews Bay	Econfina Ck	Bay	L	8/25/1992	FDEP-Pensacola	@ Scott Rd
<i>Nigronia serricornis</i>	St. Andrews Bay	S. F. Bear	Bay	L	2/28/1994	FDEP-Pensacola	Ed Lee Rd
<i>Nigronia serricornis</i>	St. Andrews Bay	S.F. Bear Ck	Bay	L	2/2/1999	FDEP-Pensacola	Ref. Site
<i>Nigronia serricornis</i>	St. Andrews Bay	Sandy Ck	Bay	L	8/4/1994	FDEP-Pensacola	SR 22
<i>Nigronia serricornis</i>	St. Andrews Bay	Sandy Ck	Bay	L	2/27/1996	FDEP-Pensacola	SR 22
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	7/26/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	8/1/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	8/8/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	8/29/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	10/4/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	11/26/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	12/3/1979	FAMU	St. Hwy 59, T1S-R3E-3
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	1/29/1980	FAMU	St. Hwy 59, T1S-R3E-3
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	5/29/1991	FAMU Biotic Index	at Co. Rd. 59
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	5/29/1991	FAMU Biotic Index	at US Hwy 27
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	7/31/1991	FAMU Biotic Index	at Co. Rd. 59
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	7/31/1991	FAMU Biotic Index	at Co. Rd. 59
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	7/31/1991	FAMU Biotic Index	at US Hwy 27

Florida Megaloptera

Family: Corydalidae

Genus: *Nigronia*

Table 3-7

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	10/10/1991	FAMU Biotic Index	at Co. Rd. 59
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	10/10/1991	FAMU Biotic Index	at Co. Rd. 59
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	10/10/1991	FAMU Biotic Index	at US Hwy 27
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	4/1/1992	FAMU Biotic Index	at Co. Rd. 59
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	4/1/1992	FAMU Biotic Index	at Co. Rd. 59
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	8/5/1992	FAMU Biotic Index	at Co. Rd. 59
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	9/29/1992	FAMU Biotic Index	at Co. Rd. 59
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	9/29/1992	FAMU Biotic Index	at Co. Rd. 59
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	9/29/1992	FAMU Biotic Index	at US Hwy 27
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	12/2/1992	FAMU Biotic Index	at Co. Rd. 59
<i>Nigronia serricornis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	4/1/1993	FAMU Biotic Index	at Co. Rd. 59
<i>Nigronia serricornis</i>	Yellow R	Baggett Ck, Freeman Spring	Okaloosa	L	3/20/2001	FDEP-Pensacola	Freeman Farm
<i>Nigronia serricornis</i>	Yellow R	Bighouse Ck	Okaloosa	L	2/16/1994	FDEP-Pensacola	Hwy 2
<i>Nigronia serricornis</i>	Yellow R	Bottle Branch	Walton	L	3/23/1999	FDEP-Pensacola	below Campbell Sand Mine
<i>Nigronia serricornis</i>	Yellow R	Carr Springs Branch	Okaloosa	A	5/16/2000	T.Thom-Eglin AFB	Eglin Air Force Base Rd. 211
<i>Nigronia serricornis</i>	Yellow R	Carr Springs Branch	Okaloosa	L	5/16/2000	T.Thom-Eglin AFB	Eglin Air Force Base Rd. 211
<i>Nigronia serricornis</i>	Yellow R	Deadfall Ck	Okaloosa	L	7/25/1995	FDEP-Pensacola	
<i>Nigronia serricornis</i>	Yellow R	Double Head Branch	Santa Rosa	L		FDEP-Pensacola	Steephead @ SR-87
<i>Nigronia serricornis</i>	Yellow R	East Turkey Hen Ck	Okaloosa	A	5/21/1998	FAMU Eglin Study	at head, 0.3 km W of Eglin AFB Okaloosa Lookout Tower
<i>Nigronia serricornis</i>	Yellow R	East Turkey Hen Ck	Okaloosa	A	4/8/1999	FAMU Eglin Study	BR-601, Eglin AFB
<i>Nigronia serricornis</i>	Yellow R	East Turkey Hen Ck	Okaloosa	A	4/8/1999	FAMU Eglin Study	at head, 0.3km W of Okaloosa Lookout Tower
<i>Nigronia serricornis</i>	Yellow R	East Turkey Hen Ck	Okaloosa	A	4/10/2001	FAMU Eglin Study	at head, 0.3 km W of Eglin AFB Okaloosa Lookout Tower
<i>Nigronia serricornis</i>	Yellow R	East Turkey Hen Ck	Okaloosa	L	10/28/1998	FAMU Eglin Study	at head, 0.3 km W of Eglin AFB Okaloosa Lookout Tower
<i>Nigronia serricornis</i>	Yellow R	East Turkey Hen Ck	Okaloosa	L	6/17/1999	FAMU Eglin Study	at head, 0.3 km W of Okaloosa Lookout Tower
<i>Nigronia serricornis</i>	Yellow R	East Turkey Hen Ck	Okaloosa	L	3/2/2000	FAMU Eglin Study	at head, 0.3 km W of Okaloosa Lookout Tower
<i>Nigronia serricornis</i>	Yellow R	Gum Ck	Okaloosa	L	11/21/1996	FDEP-Pensacola	@ Old River Rd
<i>Nigronia serricornis</i>	Yellow R	Gum Ck	Walton	L	3/10/1999	FDEP-Pensacola	SR 83
<i>Nigronia serricornis</i>	Yellow R	Hickory Hammock Ck	Santa Rosa	L	3/7/2000	FDEP-Pensacola	Lower Coachman Rd
<i>Nigronia serricornis</i>	Yellow R	Hicks Ck	Santa Rosa	L	2/17/2000	FDEP-Pensacola	below confluence
<i>Nigronia serricornis</i>	Yellow R	Hicks South	Santa Rosa	L	2/15/2000	FDEP-Pensacola	steephead
<i>Nigronia serricornis</i>	Yellow R	Jacks Branch	Okaloosa	L	1/13/1997	FDEP-Pensacola	just below culvert
<i>Nigronia serricornis</i>	Yellow R	Long Ck	Walton	L	3/8/1999	FDEP-Pensacola	above Campground Rd
<i>Nigronia serricornis</i>	Yellow R	Murder Ck	Okaloosa	L	7/23/1998	FDEP-Pensacola	SR 85A
<i>Nigronia serricornis</i>	Yellow R	Pine Log Ck	Walton	L	5/13/1992	FDEP-Pensacola	Hwy 2
<i>Nigronia serricornis</i>	Yellow R	Trammel Ck	Okaloosa	L	7/31/1989	FDEP-Pensacola	C-4
<i>Nigronia serricornis</i>	Yellow R	Weaver Ck	Santa Rosa	L	2/24/2000	FDEP-Pensacola	below Eglin Rd. 726
<i>Nigronia serricornis</i>	Yellow R	William Branch	Okaloosa	L	2/20/1996	FDEP-Pensacola	W. fork above J.P. Adams Rd.
<i>Nigronia serricornis</i>	Yellow R	Williams Branch	Okaloosa	L	3/22/1995	FDEP-Pensacola	J.P. Adams Rd

END OF DATA TABLE

Florida Megaloptera

Family: Sialidae

Genus: *Sialis*

Table 4-1

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Sialis</i>	Apalachicola R		Gadsden	A	5/20/1999	FAMU	Aspalaga Bluff, 0.3 mi E boat landing, ravine
<i>Sialis</i>	Apalachicola R	Beaver Dam Ck	Liberty	A	8/30/1995	FAMU Apalach. Ravine Stu	lower end of creek, Apalach. Bluffs and Ravines Preser
<i>Sialis</i>	Apalachicola R	Little Sweetwater Ck	Liberty	L	3/11/1994	FAMU Apalach. Ravine Stu	near confluence w/Apalach. R
<i>Sialis</i>	Blackwater R	Blackwater R	Okaloosa	L	1/31/1971	FAMU	Kennedy Bridge, 6 mi W of Blackman
<i>Sialis</i>	Blackwater R	Blackwater R	Okaloosa	L	6/4/1971	FAMU	FAMU Biol. Sta. 4.5 mi NW of Holt
<i>Sialis</i>	Blackwater R	Bull Branch	Okaloosa	L	3/2/1998	FDEP-Pensacola	Eza Cook Rd
<i>Sialis</i>	Blackwater R	Clearwater R	Santa Rosa	L	7/11/1967	FAMU	Hwy 191 North of Milton
<i>Sialis</i>	Blackwater R	Cobb Branch	Santa Rosa	L	1/27/1999	FDEP-Pensacola	above Nowling Rd
<i>Sialis</i>	Blackwater R	Narrows Ck	Okaloosa	L	2/25/1998	FDEP-Pensacola	near mouth
<i>Sialis</i>	Blackwater R	Tarkiln Head	Santa Rosa	L	8/8/1996	FDEP-Pensacola	mouth Floradale
<i>Sialis</i>	Blackwater R	Tarkiln Head	Santa Rosa	L	8/12/1998	FDEP-Pensacola	mouth Floradale
<i>Sialis</i>	Choctawhatchee Bay	Alaqua Ck	Walton	L	6/19/1971	FAMU	1st bridge going E. on Hwy 282
<i>Sialis</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	6/23/1971	FAMU	at Hwy 20
<i>Sialis</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	8/14/1971	FAMU	at Hwy 20
<i>Sialis</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	8/26/1971	FAMU	at Hwy 20
<i>Sialis</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	6/10/1972	FAMU	at Hwy 20
<i>Sialis</i>	Choctawhatchee Bay	Lafayette Ck	Walton	L	8/17/1998	FDEP-Pensacola	@ Hwy 20
<i>Sialis</i>	Choctawhatchee R	Black Ck	Walton	L	2/28/1994	FDEP-Pensacola	Hwy 20
<i>Sialis</i>	Choctawhatchee R	Bruce Ck	Walton	L	7/13/1983	FDEP-Pensacola	below Showell Branch
<i>Sialis</i>	Choctawhatchee R	Camp Branch	Holmes	L	8/22/1996	FDEP-Pensacola	N. Fork
<i>Sialis</i>	Choctawhatchee R	Camp Branch North Fork	Holmes	L	8/22/1996	FDEP-Pensacola	Nebraska Ave.
<i>Sialis</i>	Choctawhatchee R	Seven Runs Ck	Walton	L	8/3/1970	FAMU	at Hwy 81
<i>Sialis</i>	Choctawhatchee R	Seven Runs Ck	Walton	L	1/9/1971	FAMU	at Hwy 81
<i>Sialis</i>	Choctawhatchee R	Seven Runs Ck	Walton	L	5/6/1971	FAMU	at Hwy 81
<i>Sialis</i>	Choctawhatchee R	Seven Runs Ck	Walton	L	6/21/1971	FAMU	at Hwy 81
<i>Sialis</i>	Escambia R	Big Escambia Ck	Escambia	L	7/22/1998	FDEP-Pensacola	@ Fanne Rd
<i>Sialis</i>	Escambia R	Brickton Branch	Escambia	L	12/9/1997	FDEP-Pensacola	Brickyard Rd
<i>Sialis</i>	Escambia R	Brickton Ck	Escambia	L	2/16/2000	FDEP-Pensacola	@ Briction Road
<i>Sialis</i>	Escambia R	Brickton Ck	Escambia	L	1/23/2001	FDEP-Pensacola	below Brickton Rd, Molino
<i>Sialis</i>	Escambia R	McDavid Ck	Santa Rosa	L	2/17/1998	FDEP-Pensacola	Mineral Spring Rd
<i>Sialis</i>	Escambia R	Mitchell Ck	Escambia	L	2/15/1994	FDEP-Pensacola	Hwy 29
<i>Sialis</i>	Escambia R	Mitchell Ck	Escambia	L	1/24/1995	FDEP-Pensacola	@ Hwy 29
<i>Sialis</i>	Escambia R	Molino Branch	Escambia	L	11/17/1998	FDEP-Pensacola	@ Brickyard Road
<i>Sialis</i>	Escambia R	Moore Ck	Santa Rosa	L	7/16/1998	FDEP-Pensacola	SR 197
<i>Sialis</i>	Escambia R	Prichard Mill Ck	Escambia	L	2/11/1998	FDEP-Pensacola	100 m below Dawson Rd
<i>Sialis</i>	Escambia R	Sandy Hollow Ck	Santa Rosa	L	1/25/2001	FDEP-Pensacola	below Sandy Hollow Ck Rd.
<i>Sialis</i>	Ochlockonee R	Attapulugus Ck	Georgia:Decatur	L	6/12/1991	FAMU Biotic Index Study	at Mill White Rd, 5 km W of Attapulugus
<i>Sialis</i>	Ochlockonee R	Attapulugus Ck	Georgia:Decatur	L	6/12/1991	FAMU Biotic Index Study	at St. Rd 241, 3.5 km W of Attapulugus
<i>Sialis</i>	Ochlockonee R	Attapulugus Ck	Georgia:Decatur	L	8/14/1991	FAMU Biotic Index Study	at St. Rd 241, 3.5 km W of Attapulugus
<i>Sialis</i>	Ochlockonee R	Attapulugus Ck	Georgia:Decatur	L	10/15/1991	FAMU Biotic Index Study	at Mill White Rd, 5 km W of Attapulugus
<i>Sialis</i>	Ochlockonee R	Attapulugus Ck	Georgia:Decatur	L	12/5/1991	FAMU Biotic Index Study	at Mill White Rd, 5 km W of Attapulugus

Florida Megaloptera

Family: Sialidae

Genus: *Sialis*

Table 4-2

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
Sialis	Ochlockonee R	Attapulgis Ck	Georgia:Decatur	L	2/12/1992	FAMU Biotic Index Study	at Mill White Rd, 5 km W of Attapulgis
Sialis	Ochlockonee R	Attapulgis Ck	Georgia:Decatur	L	6/10/1992	FAMU Biotic Index Study	at Mill White Rd, 5 km W of Attapulgis
Sialis	Ochlockonee R	Attapulgis Ck	Georgia:Decatur	L	10/14/1992	FAMU Biotic Index Study	at Mill White Rd, 5 km W of Attapulgis
Sialis	Ochlockonee R	Attapulgis Ck	Georgia:Decatur	L	12/7/1992	FAMU Biotic Index Study	at Mill White Rd, 5 km W of Attapulgis
Sialis	Ochlockonee R	Attapulgis Ck	Georgia:Decatur	L	2/11/1993	FAMU Biotic Index Study	at Mill White Rd, 5 km W of Attapulgis
Sialis	Ochlockonee R	Attapulgis Ck	Georgia:Decatur	L	6/16/1993	FAMU Biotic Index Study	at Mill White Rd, 5 km W of Attapulgis
Sialis	Ochlockonee R	Attapulgis Ck	Georgia:Decatur	L	1/27/1994	FAMU Biotic Index Study	at Mill White Rd, 5 km W of Attapulgis
Sialis	Ochlockonee R	Camp Ck	Gadsden	L	6/4/1986	FAMU ORB Study	CR-@bridge, 8 mi SW Quincy
Sialis	Ochlockonee R	Camp Ck	Gadsden	L	7/10/1987	FAMU ORB Study	C-274 (bridge)
Sialis	Ochlockonee R	FAMU Farm Stream	Gadsden	A	5/4/1999	FAMU Emergence Study	70 m downstream of ravine head
Sialis	Ochlockonee R	Lake Talquin	Leon	A	4/24/1983	FAMU	Pine Bluff
Sialis	Ochlockonee R	Lake Talquin	Leon	L	2/24/1975	FDEP-Jacksonville	
Sialis	Ochlockonee R	Ocklawaha Ck	Gadsden	L		FAMU ORB Study	CR-65 at bridge
Sialis	Ochlockonee R	Ocklawaha Ck	Gadsden	L	11/5/1986	FAMU ORB Study	S-65 (Bridge)
Sialis	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	10/25/1968	FAMU	at 2nd bridge on dirt road, 6 mi S of SR-268
Sialis	Ochlockonee R	Rocky Comfort Ck	Gadsden	L	7/10/1987	FAMU ORB Study	C-274 (bridge)
Sialis	Ochlockonee R	Rocky Comfort Trib	Gadsden	L	7/6/1967	FAMU	3.25 mi SW Quincy on Hwy. 274
Sialis	Ochlockonee R	Willacoochee Ck	Gadsden	L	8/14/1986	FAMU ORB Study	SR 65 + 65A @ bridge, 6.5 mi N Quincy
Sialis	Ochlockonee R	Willacoochee Ck	Gadsden	L	4/27/1988	FAMU ORB Study	CR-161 @ bridge, 6 mi NE Quincy
Sialis	Ochlockonee R	Willacoochee Ck	Gadsden	L	6/23/1988	FAMU ORB Study	CR-161 @ bridge, 6 mi NE Quincy
Sialis	Ochlockonee R	Willacoochee Ck	Gadsden	L	7/19/1988	FAMU ORB Study	CR-161 @ bridge, 6 mi NE Quincy
Sialis	Ochlockonee R	Willacoochee Ck	Gadsden	L	9/21/1988	FAMU ORB Study	CR-161 @ bridge, 6 mi NE Quincy
Sialis	Pensacola Bay	Catfish Branch	Santa Rosa	L	2/10/2000	FDEP-Pensacola	below Ford
Sialis	Pensacola Bay	Fundy Bayou Ck	Santa Rosa	L	2/8/2000	FDEP-Pensacola	@ ER 213
Sialis	Pensacola Bay	Jakes Bayou Ck	Santa Rosa	L	3/14/2000	FDEP-Pensacola	above I-10
Sialis	Pensacola Bay	Turtle Ck	Okaloosa	L		T. Thom-Eglin AFB	powerline road near Eglin Base Rd 181
Sialis	Pensacola Bay	William Ck	Santa Rosa	L	7/27/1995	FDEP-Pensacola	above Hwy 98
Sialis	Pensacola Bay	William Ck	Santa Rosa	L	2/27/1996	FDEP-Pensacola	Hwy 98
Sialis	Perdido Bay	Coffee Ck	Escambia	L	3/4/1997	FDEP-Pensacola	near mouth
Sialis	Perdido Bay	Tate Ck	Escambia	L	2/24/1997	FDEP-Pensacola	N. of Royale Rd and SR 186
Sialis	Perdido R	Alligator Ck	Escambia	L	7/8/1997	FDEP-Pensacola	Gibson Rd
Sialis	Perdido R	Alligator Ck	Escambia	L	7/9/1997	FDEP-Pensacola	Crabtree Church Rd
Sialis	Perdido R	Beaver Pond Ck	Escambia	L	6/16/1995	FDEP-Pensacola	I-10 Reststop
Sialis	Perdido R	West Fork Boggy Ck	Escambia	L	8/10/1998	FDEP-Pensacola	below C-97A
Sialis	St. Andrews Bay	S. F. Bear Ck	Bay	L	8/25/1994	FDEP-Pensacola	Ed Lee Rd.
Sialis	St. Andrews Bay	Sandy Ck	Bay	L	2/24/1994	FDEP-Pensacola	Hwy 22
Sialis	St. Marks R	Burnt Mill Ck	Jefferson	L	5/29/1991	FAMU Biotic Index Study	at US Hwy 27
Sialis	St. Marks R	Burnt Mill Ck	Jefferson	L	5/29/1991	FAMU Biotic Index Study	at US Hwy 27
Sialis	St. Marks R	Burnt Mill Ck	Jefferson	L	7/31/1991	FAMU Biotic Index Study	at US Hwy 27
Sialis	St. Marks R	Burnt Mill Ck	Jefferson	L	10/10/1991	FAMU Biotic Index Study	at US Hwy 27
Sialis	St. Marks R	Burnt Mill Ck	Jefferson	L	10/10/1991	FAMU Biotic Index Study	at US Hwy 27

Florida Megaloptera

Family: Sialidae

Genus: *Sialis*

Table 4-3

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Sialis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	12/3/1991	FAMU Biotic Index Study	at US Hwy 27
<i>Sialis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	2/5/1992	FAMU Biotic Index Study	at US Hwy 27
<i>Sialis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	8/5/1992	FAMU Biotic Index Study	at US Hwy 27
<i>Sialis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	8/5/1992	FAMU Biotic Index Study	at US Hwy 27
<i>Sialis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	9/29/1992	FAMU Biotic Index Study	at US Hwy 27
<i>Sialis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	12/2/1992	FAMU Biotic Index Study	at US Hwy 27
<i>Sialis</i>	St. Marks R	Burnt Mill Ck	Jefferson	L	8/11/1993	FAMU Biotic Index Study	at Co. Rd. 59
<i>Sialis</i>	St. Marks R	Fisher Ck	Leon	L	2/8/1975	FAMU	at Hwy 373, approx. 9 mi S.W. of Tallahassee
<i>Sialis</i>	St. Marks R	Fisher Ck	Leon	L	10/30/1996	FDEP-Pensacola	
<i>Sialis</i>	St. Marks R	Fisher Ck	Leon	L	10/30/1996	FDEP-Pensacola	0.25 mi upstream of Springhill Rd
<i>Sialis</i>	Steinhatchee R	Econfina R	Taylor	L	12/9/1992	FAMU Biotic Index Study	at US Hwy 27
<i>Sialis</i>	Steinhatchee R	Econfina R	Taylor	L	9/8/1993	FAMU Biotic Index Study	at US Hwy 27
<i>Sialis</i>	Steinhatchee R	Fenholloway R	Taylor	L	12/6/1974	FAMU	at Hwy 27, approx. 7 mi E of Perry
<i>Sialis</i>	Suwannee R	Suwannee R	Columbia/Hamilton	L	10/29/1991	FAMU Biotic Index Study	7.5 km N of St. Rd. 6
<i>Sialis</i>	Suwannee R	Suwannee R	Hamilton/Suwannee	L	10/29/1991	FAMU Biotic Index Study	0.5 km E of US Hwy 129
<i>Sialis</i>	Upper East Coast		St. Johns	A	4/15/1973	FAMU	Faver-Dykes St. Park
<i>Sialis</i>	Yellow R	Big Horse Ck	Okaloosa	L	7/15/1998	FDEP-Pensacola	@ SR 2
<i>Sialis</i>	Yellow R	Big Horse Ck	Okaloosa	L	2/8/2001	FDEP-Pensacola	SR 2
<i>Sialis</i>	Yellow R	Carr Springs Branch	Okaloosa	L	5/16/2000	T. Thom-Eglin AFB	Eglin Air Force Base Rd 211
<i>Sialis</i>	Yellow R	Hicks Ck	Santa Rosa	L	2/17/2000	FDEP-Pensacola	below Confluence
<i>Sialis</i>	Yellow R	Julian Mill Ck	Santa Rosa	L	8/18/1998	FDEP-Pensacola	Garnier Landing Rd [spelling ?]
<i>Sialis</i>	Yellow R	Juniper Ck	Okaloosa	L	11/21/1970	FAMU	0.25 mi W of Hwy. 85 and 0.5 mi N of Shoal R
<i>Sialis</i>	Yellow R	Long Ck	Walton	L	3/8/1999	FDEP-Pensacola	above Campground Rd
<i>Sialis</i>	Yellow R	Murder Ck	Okaloosa	L	7/23/1998	FDEP-Pensacola	SR 85A
<i>Sialis</i>	Yellow R	Titi Ck	Okaloosa	L	11/22/1970	FAMU	Eglin A.F.B. dirt Rd. No. 211
<i>Sialis</i>	Yellow R	Turkey Ck	Walton	L	7/21/1998	FDEP-Pensacola	SR 2A
<i>Sialis</i>	Yellow R	Turkey Gobbler Ck	Okaloosa	L	6/9/2000	T. Thom-Eglin AFB	Eglin Air Force Base Rd 215
<i>Sialis americana</i>			Alachua			(Tarter et al., 1978)	
<i>Sialis americana</i>			Alachua			(Whiting, 1991)	
<i>Sialis americana</i>			Alachua	A	6/4/1979	FSCA	Gainesville, Beville Heights
<i>Sialis americana</i>			Alachua	A	6/5/1979	(Stange, 1990)	Gainesville, Beville Heights
<i>Sialis americana</i>			Alachua	A	5/5/1994	FSCA	DPI Bldg-Gainesville
<i>Sialis americana</i>			Baker			(Whiting, 1991)	
<i>Sialis americana</i>			Baker	A	5/20/1960	FSCA	Macclenny
<i>Sialis americana</i>			Baker	A	5/22/1960	FSCA	Glen St. Mary
<i>Sialis americana</i>			Baker	A	5/16/1977	(Stange, 1990)	Jct. S-241E and Ocean Pond, Osceola Natl. Forest
<i>Sialis americana</i>			Baker	A	5/16/1977	FSCA	Osceola Natl. Forest, jct. S-241E & Ocean Pond
<i>Sialis americana</i>			Columbia			(Whiting, 1991)	
<i>Sialis americana</i>			Columbia/Baker	A	5/16/1977	FSCA	Osceola Natl. Forest nr. Rt. 90
<i>Sialis americana</i>			Highlands			(Whiting, 1991)	
<i>Sialis americana</i>			Marion			(Whiting, 1991)	

Florida Megaloptera

Family: Sialidae

Genus: *Sialis*

Table 4-4

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Sialis americana</i>			Marion	A	5/21/1974	(Stange, 1990)	Ross Prairie
<i>Sialis americana</i>			Marion	A	5/21/1975	FSCA	Ross Prairie (hammock)
<i>Sialis americana</i>			Okaloosa	A	5/23/1964	FSCA	Shalimar
<i>Sialis americana</i>			Orange	A	9/18/1991	FSCA	UCF, Orlando
<i>Sialis americana</i>			Orange	A	9/3/1992	FSCA	UCF, Orlando, Cypress Dome
<i>Sialis americana</i>			Orange	A	5/2/1994	FSCA	UCF, Orlando, Pond Pine Community
<i>Sialis americana</i>			Orange	A	5/18/1994	FSCA	UCF, Orlando, cypress dome
<i>Sialis americana</i>			Orange	A	5/23/1994	FSCA	UCF, Orlando, LLP-Sand Pine Turkey Oak
<i>Sialis americana</i>			Orange	A	5/27/1994	FSCA	UCF, Orlando, Pond Pine Community
<i>Sialis americana</i>			Santa Rosa	A	5/23/1962	FSCA	Jay
<i>Sialis americana</i>			Santa Rosa	A	6/23/1962	(Stange, 1990)	Jay
<i>Sialis americana</i>		Cypress wetland	Lake	L	10/13/1988	FDEP-Punta Gorda	Clermont
<i>Sialis americana</i>	Choctawhatchee R	Holmes Ck	Holmes/Jackson	L	3/27/1994	FAMU	at Hwy 2 bridge
<i>Sialis americana</i>	Kissimmee R	Carter Ck	Highlands	L	8/9/1979	FDEP-Punta Gorda	
<i>Sialis americana</i>	Ochlockonee R	Lake Talquin	Leon	L	2/24/1975	FDEP-Jacksonville	
<i>Sialis americana</i>	Oklawaha R	Bugg Springs Run	Lake	L	8/29/2001	FDEP-Orlando	
<i>Sialis americana</i>	St. Johns R (Upper)	Little Econlochatchee	Orange	L	9/15/1992	FDEP-Tallahassee	
<i>Sialis americana</i>	St. Marks R	Boliek's Pond	Leon	L	4/22/1974	FAMU	on Nat. Br. Rd., approx. 3 mi S.E. of Woodville
<i>Sialis americana</i>	St. Marks R	Boliek's Pond	Leon	L	12/17/1974	FAMU	on Nat. Br. Rd., approx. 3 mi S.E. of Woodville
<i>Sialis americana</i>	Suwannee R	Swift Ck	Hamilton	L	1/28/1975	FDEP-Jacksonville	at US Hwy 41
<i>Sialis itasca</i>	Ochlockonee R	Lake Talquin	Leon	A	4/17/1983	FAMU	Pine Bluff
<i>Sialis joppa</i>			Liberty			(Whiting, 1991)	
<i>Sialis joppa</i>	Apalachicola R		Liberty	A	5/13/1968	FSCA	Torreya State Park
<i>Sialis joppa</i>	Apalachicola R		Liberty	A	5/13/1968	(Stange, 1990)	Torreya State Park
<i>Sialis vagans</i>			Okaloosa			(Whiting, 1991)	
<i>Sialis vagans</i>	Blackwater R		Okaloosa	A	3/20/1979	FSCA	4.5 mi N Holt, FAMU Res. Sta. Blackwater River State F
<i>Sialis vagans</i>	Blackwater R		Okaloosa	A	3/20/1979	(Stange, 1990)	4.5 mi N Holt, Blackwater River State Forest
<i>Sialis vagans</i>	Choctawhatchee Bay	Lafayette Ck	Walton	A	3/29/1971	FAMU	at Hwy. 20
<i>Sialis vagans</i>	Yellow R	Gum Ck	Walton	A	3/10/1999	FDEP-Pensacola	SR-83

END OF DATA TABLE

Florida Neuroptera

Family: Sisyridae

Genus: *Climacia*

Table 5-1

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
Climacia areolaris						(Hagen, 1861)	Florida
Climacia areolaris						(Parfin & Gurney, 1956)	La Belle
Climacia areolaris						(Parfin & Gurney, 1956)	Lake Harney
Climacia areolaris						(Parfin & Gurney, 1956)	Lakeland (5 miles east of Big Creek)
Climacia areolaris						(Parfin & Gurney, 1956)	Punta Gorda
Climacia areolaris						(Parfin & Gurney, 1956)	West Palm Beach
Climacia areolaris			Alachua	A	6/3/1971	FSCA	Gainesville
Climacia areolaris			Alachua	A	10/7/1978	FSCA	Gainesville, DPI bldg.
Climacia areolaris			Alachua	A	11/15/1978	FSCA	Gainesville, Doyle Conner Bldg.
Climacia areolaris			Alachua	A	6/16/1980	FSCA	Gainesville, Beville Heights
Climacia areolaris			Baker	A	5/16/1963	FSCA	Olustee
Climacia areolaris			Baker	A	5/16/1977	FSCA	Osceola Nat. For., jct. S-241E & Ocean Pond
Climacia areolaris			Baker	A	6/2/1977	FSCA	Osceola Nat. For., East Forest Tower
Climacia areolaris			Baker	A	6/2/1977	FSCA	Osceola Nat. For., Ocean Pond campground
Climacia areolaris			Dade	A	4/8/1961	FSCA	Miami
Climacia areolaris			Dade	A	4/14/1968	FSCA	Goulds, Monkey Jungle
Climacia areolaris			Dade	A	5/2/1978	FSCA	Homestead, Fuch's Hammock
Climacia areolaris			Escambia	A	8/1/1961	FSCA	Pensacola
Climacia areolaris			Highlands	A	4/7/1961	FSCA	nr. Cornwell
Climacia areolaris			Highlands	A	8/4/1961	FSCA	Highlands Hammock State Park
Climacia areolaris			Leon	A	4/27/1975	FAMU	946 Millard St.
Climacia areolaris			Leon	A	5/13/1975	FAMU	946 Millard St.
Climacia areolaris			Leon	A	5/20/1975	FAMU	946 Millard St.
Climacia areolaris			Levy	A	6/18/1991	FSCA	4 mi SW Archer
Climacia areolaris			Liberty	A	5/20/1966	FSCA	Torreya State Park
Climacia areolaris			Liberty	A	5/8/1968	FSCA	Torreya State Park
Climacia areolaris			Orange	A	6/21/1983	FSCA	Plymouth
Climacia areolaris			Santa Rosa	A	6/30/1959	FSCA	Chumuckla, W Fla. Exp. Sta.
Climacia areolaris			Santa Rosa	A	5/2/1962	FSCA	Jay
Climacia areolaris			Santa Rosa	A	5/2/1962	FSCA	Jay
Climacia areolaris			Suwannee	A	3/29/1977	FSCA	Suwannee River State Park
Climacia areolaris			Suwannee	A	4/25/1977	FSCA	Suwannee R. State Park
Climacia areolaris		Lake Eaton	Marion	A	4/8/1975	FSCA	
Climacia areolaris		Lake Eaton	Marion	A	5/6/1975	FSCA	
Climacia areolaris		Lake Santa Fe	Alachua			(Parfin & Gurney, 1956)	
Climacia areolaris		Mud Lake	Marion	A	5/18/1975	FSCA	East shore
Climacia areolaris		Ortega R	Duval	A	5/15/1973	FSCA	near Jacksonville
Climacia areolaris		Red Water Lake	Putnam	A	5/27/1967	FSCA	Weems Property
Climacia areolaris	Apalachicola R		Liberty	A	7/4/1965	FSCA	Torreya State Park
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	7/21/1971	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	8/25/1971	FAMU	at Hwy. 20, Bristol

Florida Neuroptera

Family: Sisyridae

Genus: *Climacia*

Table 5-2

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	9/25/1971	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	6/14/1972	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	6/21/1972	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	6/27/1972	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	7/6/1972	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	7/26/1972	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	9/16/1972	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	9/24/1972	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	5/20/1973	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	6/11/1973	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	6/24/1973	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	7/15/1973	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	8/28/1973	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Apalachicola R	Liberty	A	10/10/1973	FAMU	at Hwy. 20, Bristol
Climacia areolaris	Apalachicola R	Beaver Dam Ck	Liberty	A	6/24/1996	FAMU Apalach. Ravine Stn	(lower end), ABRP, 5 km N of Bristol
Climacia areolaris	Apalachicola R	Crooked Ck	Gadsden	A	6/7/1999	FAMU Apalach. Ravine Stn	@ CR 270, 10 km W of Greensboro
Climacia areolaris	Apalachicola R	Owl Ck	Franklin	A	7/31/1971	FAMU	Hickory Landing, near Ft. Gadsden State Park
Climacia areolaris	Aucilla R	Aucilla R	Taylor/Jefferson	A	4/2/1972	FAMU	at Hwy 257
Climacia areolaris	Blackwater R		Okaloosa	A	8/9/1979	FSCA	FAMU Biol. Sta. 3 mi NW Holt
Climacia areolaris	Blackwater R		Okaloosa	A	6/12/1980	FSCA	4.5 mi NW Holt, Fla A&M Res. Sta. Blackwater R. State
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	6/5/1971	FAMU	FAMU Biol. Sta., 4.5 mi NW of Holt
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	4/22/1972	FAMU	FAMU Biol. Sta., 4.5 mi NW of Holt
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	7/23/1972	FAMU	at Riverside
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	5/17/1973	FAMU	FAMU Biol. Sta., 4.5 mi NW of Holt
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	7/10/1974	FAMU	at Riverside
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	7/20/1974	FAMU	FAMU Biol. Sta. 4.5 mi NW of Holt
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	8/22/1974	FAMU	FAMU Biol. Sta. 4.5 mi NW of Holt
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	8/22/1974	FAMU	at Riverside
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	8/23/1974	FAMU	FAMU Biol. Sta., 4.5 NW of Holt
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	5/4/1975	FAMU	FAMU Biol. Sta. 4.5 mi NW of Holt
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	3/4/1976	FAMU	FAMU Biol. Sta. 4.5 mi NW of Holt
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	4/29/1976	FAMU	FAMU Biol. Sta. 4.5 mi NW of Holt
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	7/15/1976	FAMU	FAMU Biol. Sta. 4.5 mi NW of Holt
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	5/12/1979	FAMU	FAMU Biol. Sta. 4.5 mi NW of Holt
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	10/18/1985	FAMU	
Climacia areolaris	Blackwater R	Blackwater R	Okaloosa	A	6/23/1997	FAMU	FAMU Strn. NW of Holt, on Cyrilla recemiflora (titi)
Climacia areolaris	Blackwater R	Blackwater R	Santa Rosa	A	8/7/1971	FAMU	Riley Landing, 3 mi NW Holt
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	9/17/1971	FAMU	at Hwy. 71 bridge
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	6/15/1972	FAMU	at Hwy 20
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	6/16/1972	FAMU	at Hwy 71, Scott's Ferry
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	6/22/1972	FAMU	at Hwy 20

Florida Neuroptera

Family: Sisyridae

Genus: *Climacia*

Table 5-3

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	6/28/1972	FAMU	at Hwy. 20
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	7/8/1972	FAMU	at Hwy. 20
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	7/11/1972	FAMU	at Hwy 71 bridge
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	8/31/1972	FAMU	at Hwy. 20
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	9/6/1972	FAMU	at Hwy. 71, Scott's Ferry
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	9/18/1972	FAMU	at Hwy. 71, Scott's Ferry
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	9/19/1972	FAMU	at Hwy. 20
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	10/3/1972	FAMU	at Hwy. 71, Scott's Ferry
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	6/19/1973	FAMU	at Hwy 20
Climacia areolaris	Chipola R	Chipola R	Calhoun	A	7/2/1973	FAMU	at Hwy 20
Climacia areolaris	Choctawhatchee Bay	Juniper Ck	Okaloosa	A	4/8/1999	FAMU Eglin Study	Eglin AFB, BR 221
Climacia areolaris	Choctawhatchee Bay	Little Alaqua Ck	Walton	A	6/25/1996	FAMU Eglin Study	5 km N of Portland, @ SR 282
Climacia areolaris	Choctawhatchee Bay	Pine Log Ck (trib.)	Bay	A	7/24/1971	FAMU	6 mi E. of Hwy. 79 in Pine Log St. Forest
Climacia areolaris	Choctawhatchee Bay	Turkey Ck	Okaloosa	A	5/21/1998	FAMU Eglin Study	@ Base Rd. 232, Eglin Air Force Base
Climacia areolaris	Choctawhatchee Bay	Turkey Ck	Okaloosa	A	6/15/1999	FAMU Eglin Study	@ BR-637, Eglin AFB
Climacia areolaris	Choctawhatchee Bay	Turkey Ck. (trib.)	Okaloosa	A	6/16/1999	FAMU Eglin Study	@ steephead off BR-639, Eglin AFB
Climacia areolaris	Choctawhatchee R		Washington	A	8/1/1971	FAMU	New Hope, Fla, store lights
Climacia areolaris	Choctawhatchee R	Choctawhatchee R	Walton	A	7/25/1971	FAMU	at Cowford Camp, S. of Hwy 20
Climacia areolaris	Choctawhatchee R	Choctawhatchee R	Walton	A	6/10/1972	FAMU	at Hwy 20, W. side of river
Climacia areolaris	Choctawhatchee R	Choctawhatchee R	Walton	A	9/1/1972	FAMU	at Hwy 20 (W. side of river)
Climacia areolaris	Fisheating Ck	Fisheating Ck	Glades	L	11/3/1980	FDEP-Punta Gorda	at Palmdale
Climacia areolaris	Flint R	Sanborn Ck	GA:Decatur	A	6/21/2000	FAMU	nr. Faceville, IP Southland Exp. Forest, South Gate Rd.
Climacia areolaris	Kissimmee R	Arbuckle Ck	Highlands	L	5/4/1983	FDEP-Punta Gorda	
Climacia areolaris	Ochlockonee R	Attapulgus Ck	Gadsden	L	12/2/1987	FAMU ORB Study	@ CR-159, 4 mi NW Havana
Climacia areolaris	Ochlockonee R	FAMU Farm Stream	Gadsden	A	10/6/1993	FAMU Ravine Study	near middle
Climacia areolaris	Ochlockonee R	Sopchoppy R	Wakulla	A	4/16/1972	FAMU	at Hwy 375
Climacia areolaris	St. Johns R (upper)	Econlockhatchee R	Seminole	A	5/12/2001	FAMU	@ Snowhill Rd. ~ 100m downstream of bridge
Climacia areolaris	St. Johns R (upper)	Roberts Branch	Seminole	A	5/12/2001	FAMU	@ Curryville Rd., SE of Chuluota
Climacia areolaris	Suwannee R		Suwannee	A	3/29/1977	FSCA	Suwannee R. St. Park
Climacia areolaris	Yellow R	East Turkey Hen Ck	Okaloosa	A	6/16/1999	FAMU Eglin Study	@ BR 601, Eglin AFB
Climacia areolaris	Yellow R	Shoal R	Okaloosa	A	7/21/1972	FAMU	at Cox Br. on Hwy 85

END OF DATA TABLE

Florida Neuroptera

Family: Sisyridae

Genus: *Sisyra*

Table 6-1

Species	Basin	Waterbody	County	Stage	Date Coll.	Source	Locality description
<i>Sisyra apicalis</i>						(Parfin & Gurney, 1956)	Fruitville
<i>Sisyra apicalis</i>						(Parfin & Gurney, 1956)	Palm Beach
<i>Sisyra apicalis</i>						(Parfin & Gurney, 1956)	Paradise Key
<i>Sisyra apicalis</i>						(Parfin & Gurney, 1956)	Winter Park
<i>Sisyra apicalis</i>				A	4/7/1951	FSCA	Paradise Key
<i>Sisyra apicalis</i>				L		FDEP-Punta Gorda	S.W. Fla. 1983
<i>Sisyra apicalis</i>			Dade	A	5/1/1983	FSCA	Chehika St. Rec. Area, 11 mi NW of Homestead
<i>Sisyra apicalis</i>			Hardee			(Parfin & Gurney, 1956)	
<i>Sisyra apicalis</i>			Marion			(Parfin & Gurney, 1956)	
<i>Sisyra apicalis</i>			Marion	A	9/26/1975	FSCA	Sharpe's Ferry
<i>Sisyra apicalis</i>			Monroe	A	5/26/1978	FSCA	Big Pine Key
<i>Sisyra apicalis</i>		Alligator Pond	Monroe	A	10/15/1980	FSCA	Big Pine Key
<i>Sisyra apicalis</i>		Ocean Pond	Baker	A	6/2/1977	FSCA	Osceola Nat. For., nr. Jct. S-241 & S-241E
<i>Sisyra apicalis</i>		Red Water Lake	Putnam	A	5/27/1967	FSCA	Weems Property
<i>Sisyra apicalis</i>	Apalachicola R	Beaver Dam Ck	Liberty	A	6/24/1996	FAMU Apalach. Ravine Stu	(lower end), Apalach. Bluffs and Ravines Preserve
<i>Sisyra apicalis</i>	Ochlockonee R	FAMU Farm Stream	Gadsden	A	10/6/1993	FAMU Ravine Study	near middle
<i>Sisyra vicaria</i>						(Parfin & Gurney, 1956)	Paradise Key
<i>Sisyra vicaria</i>			Alachua			(Parfin & Gurney, 1956)	
<i>Sisyra vicaria</i>			Alachua	A	5/7/1975	FSCA	Doyle Conner Building
<i>Sisyra vicaria</i>			Columbia	A	4/1/1970	FSCA	Lake City
<i>Sisyra vicaria</i>			Duval			(Parfin & Gurney, 1956)	Jacksonville
<i>Sisyra vicaria</i>			Highlands	A	9/2/1957	FSCA	Sebring
<i>Sisyra vicaria</i>			Highlands	A	4/29/1983	FSCA	Highlands Hammock State Park
<i>Sisyra vicaria</i>			Jackson	A	4/18/1963	FSCA	Florida Caverns State Park
<i>Sisyra vicaria</i>			Lee	L	10/23/1987	FDEP-Punta Gorda	herbaceous marsh
<i>Sisyra vicaria</i>			Liberty	A	4/17/1963	FSCA	Torreya State Park
<i>Sisyra vicaria</i>			Marion	A	3/31/1976	FSCA	Ocala Natl. Forest, Sharpe's Ferry
<i>Sisyra vicaria</i>			Okaloosa	A	4/17/1979	FSCA	FAMU Biological Station, 4.5 mi NW of Holt
<i>Sisyra vicaria</i>			Orange	A	3/18/1944	FSCA	Winter Park
<i>Sisyra vicaria</i>			Putnam	A	3/20/1967	FSCA	Welaka, U. of Fla. Cons. Reserve
<i>Sisyra vicaria</i>			Sarasota	A	5/9/1972	FSCA	Sarasota, 5 mi E., Stout Ranch
<i>Sisyra vicaria</i>			Suwannee	A	5/9/1977	FSCA	Suwannee R. State Park
<i>Sisyra vicaria</i>	Apalachicola R	Apalachicola R	Liberty	A	6/11/1973	FAMU	at Hwy 20, Bristol
<i>Sisyra vicaria</i>	Apalachicola R	Crooked Ck	Gadsden	A	6/7/1999	FAMU Apalach. Ravine Stu	@ CR 270, 10 km W of Greensboro
<i>Sisyra vicaria</i>	Apalachicola R	Rock Ck	Liberty	A	4/9/1998	FAMU Apalach. Ravine Stu	(upper end), Torreya State Park
<i>Sisyra vicaria</i>	Aucilla R	Aucilla R	Jefferson/Madison	L	4/28/1993	FAMU Biotic Index Study	at US Hwy 90
<i>Sisyra vicaria</i>	Ochlockonee R	Rocky Comfort Ck	Gadsden	A	2/28/1974	FAMU	at Hwy 65B, 6 mi S. of Quincy
<i>Sisyra vicaria</i>	St. Johns R (Lower)	Little Haw Ck	Flagler	L	11/17/1999	FDEP-Orlando	@ SR40
<i>Sisyra vicaria</i>	St. Marks R	Boliek's Pond	Leon	A	9/8/1974	FAMU	on Nat. Br. Rd., approx. 3 mi S.E. of Woodville
<i>Sisyra vicaria</i>	Yellow R	East Turkey Hen Ck	Okaloosa	A	4/8/1999	FAMU Eglin Study	@ BR-601, Eglin AFB

END OF DATA TABLE