

CATALOGO DE LOS DIPTERA  
DE NICARAGUA.  
4. CULICIDAE (NEMATOCERA).

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**Resumen.**

Este catálogo presenta las 40 especies de Culicidae (Diptera : Nematocera) reportadas de Nicaragua. Para cada especie se cita la sinonimia, la distribución geográfica, los hospederos, las enfermedades transmitidas y los enemigos naturales. La bibliografía conocida está agregada.

**Abstract.**

This catalogue presents the 40 species of Culicidae (Diptera : Nematocera) reported from Nicaragua. The geographical distribution, synonyms, hosts, diseases transmitted and natural enemies are given for each species. A bibliography of the Nicaraguan species is included.

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## Introducción.

Los Culicidae forman una familia numerosa de Diptera Nematocera. Las larvas son acuáticas, los adultos pueden ser identificados por la venación alar presentando escamas y la proboscis larga. Son importantes a nivel médico por ser vectores de muchas enfermedades tropicales.

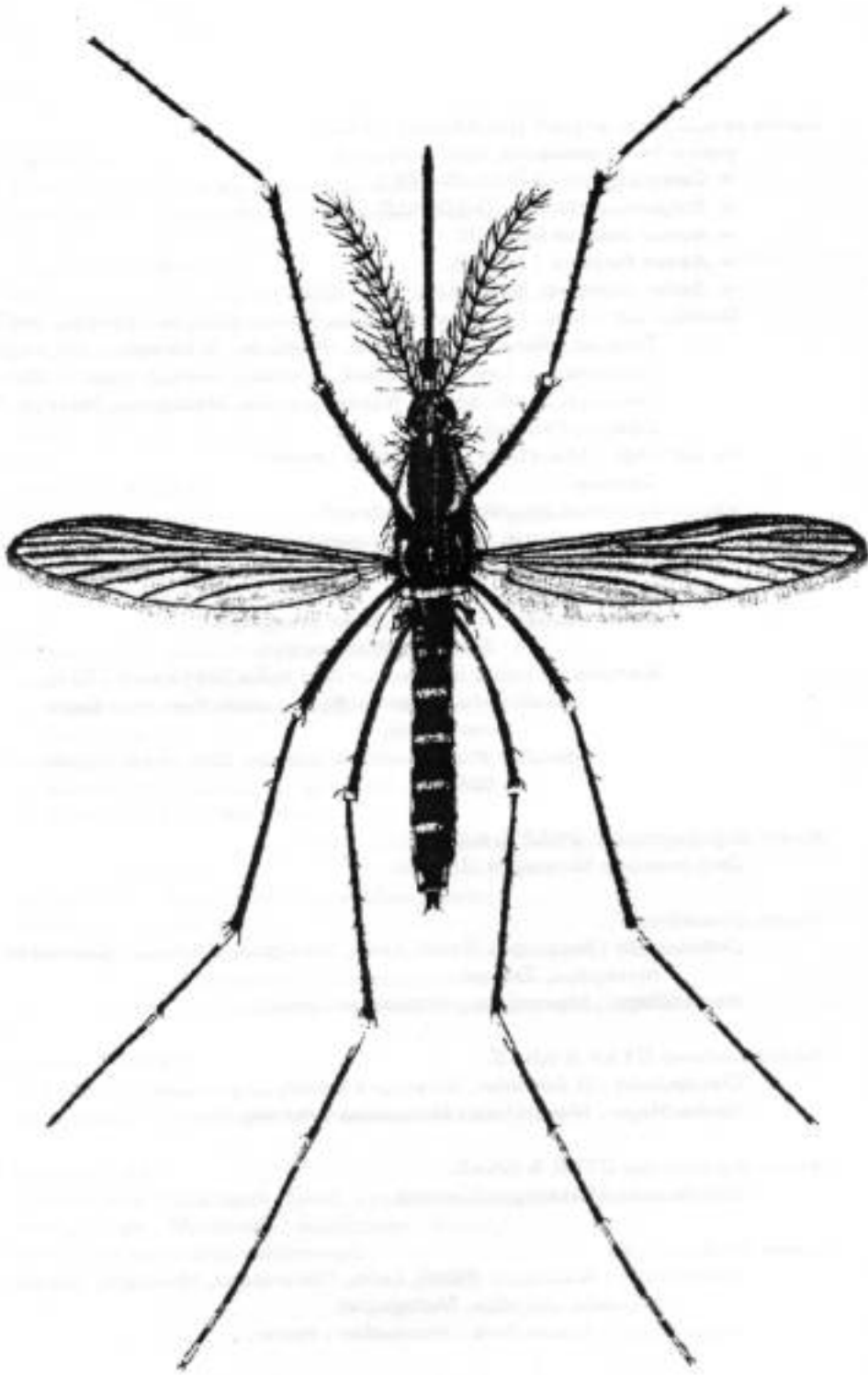
Las larvas de zancudos se encuentran en muchos tipos de aguas, por ejemplo en charcos, huecos o recipientes artificiales, cada especie tiene un tipo de agua característico donde se reproduce. Los huevos son dejados en paquetes sobre la superficie del agua. Las larvas comen algas y materia vegetal en decomposición. Las larvas respiran principalmente a la superficie, ayudándose muchas veces de un sifón. Las pupas son acuáticas y al contrario de los otros insectos, son bastante activas. Respiran en la superficie del agua con dos órganos parecidos a unas trompetitas que poseen sobre el torax. Los adultos se mantienen cerca de su lugar de crianza. Son principalmente nocturnos y descansan durante el día. Las hembras son hematófagas y los machos comen néctar de flores. Se pueden reconocer los machos por las antenas plumosas. Los Culicidae son vectores de enfermedades tales como malaria, dengue, encefalitis, fiebre amarilla, etc. Muchas técnicas de lucha existen ya contra los zancudos, química, ambientales (secado de pantanos) y biológica (bacillus, otros culicidos, peces,...). También la gente puede protegerse con repelentes que se aplican sobre la piel o las ropas.

## Especies de Nicaragua.

*Aedeomyia squamipennis* (LYNCH-ARRIBALZAGA) 1878.

= *Aedes squamipennis* LYNCH-ARRIBALZAGA 1878.

Distribución : Cuba, México, Nicaragua (Chinandega, Rivas), Suramérica.



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*Aedes aegypti* (LINNAEUS), hembra.

*Aedes (Stegomyia) aegypti* (LINNAEUS) 1762.

yellow fever mosquito, tiger mosquito.

= *Culex aegypti* LINNAEUS 1762.

= *Stegomyia fasciata* THEOBALD.

= *Aedes calopus* MEIGEN.

= *Aedes fasciata* TAYLOR.

= *Aedes mosquito* ROBINEAU-DESVOIDY.

Distribución : Asia, Africa, USA, Cuba, Puerto Rico, Is. Vírgenes, Haití, Trinidad, México,

Guatemala, Honduras, El Salvador, Nicaragua (Chinandega, León, Chontales, Granada, Carazo,

Madriz, Managua, Jinotega, Estelí, Boaco, Nueva Segovia, Matagalpa, Masaya, Rivas,

Zelaya), Panamá.

Hematófago : Mammalia : Hominidae : *Homo*.

Cebidae.

Vector de (fiebre amarilla, yellow fever).

(dengue, break bone fever, quebradora).

(Filariosis humana).

Enemigos naturales :

DIP. Culicidae : *Toxorhynchites brevivalpis*.

*Toxorhynchites rutilus*.

Bacteria : *Bacillus sphaericus* (Ser.H-5a,5b) (Strain 1593).

*Bacillus thuringiensis thuringiensis* (Ser.H-1) (Beta-  
exotoxina).

*Bacillus thuringiensis israelensis* (Ser.H-14) (Strain ONR-  
60A).

*Aedes angustivittatus* DYAR & KNAB.

Distribución : Nicaragua (Zelaya).

*Aedes atropalpus*.

Distribución : Nicaragua (Estelí, León, Managua, Granada, Chontales,

Matagalpa, Zelaya).

Hematófago : Mammifera : Hominidae : *Homo*.

*Aedes epaticus* DYAR & KNAB.

Distribución : El Salvador, Nicaragua (Matagalpa, Rivas).

Hematófago : Mammifera : Hominidae : *Homo*.

*Aedes euplocamus* DYAR & KNAB.

Distribución : Nicaragua (Carazo).

*Aedes mediovittatus*.

Distribución : Nicaragua (Estelí, León, Chinandega, Managua, Masaya,

Granada, Juigalpa,

Matagalpa).

Hemetofago : Mammifera : Hominidae : *Homo*.

Aves.

Amphibia : rana, sapo.

*Aedes salinarius*.

Distribución : Nicaragua (León, Granada).

Hematófago : Mammifera : Hominidae : *Homo*.

*Aedes serratus* THEOBALD.

Distribución : El Salvador, Nicaragua (Matagalpa).

Hematófago : Mammifera : Hominidae : *Homo*.

Aves.

Reptilia.

Amphibia.

Vector de fiebre de Ilheus.

*Aedes sollicitans* WALKER.

Distribución : Nicaragua (León, Granada, Matagalpa).

Hematófago : Mammalia : Hominidae : *Homo*.

Vector de encefalitis del este.

dengue.

*Aedes (Ochlerotatus) taeniorhynchus* (WIEDEMANN) 1821.

black saltmarsh mosquito.

= *Culex taeniorhynchus* WIEDEMANN 1821.

= *Aedes niger* GILES.

= *Aedes portoricensis* LUDL.

= *Aedes damnosus* DYAR & KNAB.

= *Aedes pix* MARTINI 1935.

Distribución : USA, Cuba, Puerto Rico, México, Belize, Nicaragua

(Granada).

Hematófago : Mammalia : Hominidae : *Homo*.

Vector de dengue.

Enemigos naturales :

Fungi : *Culicinomyces clavisporus*.

Bacteria : *Bacillus thuringiensis israelensis* (Ser. H-14).

*Aedes terreus* WALKER.

Distribución : Nicaragua (Rivas).

Hematófago : Mammalia : Hominidae : *Homo*.

*Aedes triseriatus* SAY.

Distribución : Nicaragua (Estelí, León, Managua, Granada, Matagalpa).

Hematófago : Mammalia : Hominidae : *Homo*.

Vector de encefalitis californiana.

*Anopheles acuasalis* CURREY 1942.

= *Anopheles tarsimaculatus* GOELDI 1905.

= *Anopheles emilianus* KOMP 1941.

= *Anopheles delta* ANDUZE 1948.

= *Anopheles guarauno* ANDOZE 1948.

= *Anopheles guaruajensis* RAMOS 1942.

Distribución : Nicaragua (Zelaya, León, Chinandega, Rivas), Ecuador, Brasil,

Uruguay, Argentina.

Hematófago : Mammalia : Hominidae : *Homo*.

Vector de malaria.

filariasis de Bancroft.

*Anopheles (Nyssorhynchus) albimanus* WIEDEMANN 1821.

= *Anopheles argyrotarsis albipes* THEOBALD 1901.

= *Anopheles cubensis* AGRAMONTE 1900.

= *Nyssorhynchus cubensis*.

= *Anopheles dubius* THEOBALD; BLANCHARD 1905.

= *Anopheles gorgasi* DYAR & KNAB 1907.

= *Anopheles tarsimaculata* GOELDI 1905.

= *Anopheles trisignatus* HOFFMAN 1938.

Distribución : USA, Cuba, Dominica, México, Guatemala, El Salvador,

Honduras,

Nicaragua (Chinandega, León, Rivas, Zelaya), Costa

Rica, Panamá, Ecuador, Brasil.

Hematófago : Mammalia : Hominidae : *Homo*.

Vector de malaria.

Enemigos naturales :

Protozoario : Microsporidia : *Nosema stegomyia* (= *algerae*).

Bacteria : *Bacillus sphaericus* (Ser. H-5a,5b) (Strain 1881-48).



*Bacillus thuringiensis israelensis.*

Nematoda : Mermithidae : *Reesimermis* (= *Romanomermis*)

*culicivorax.*

Peces : *Gambusia affinis.*

*Poecilia sphenox.*

*Thilapia sp.*

*Anopheles apicimacula* DYAR & KNAB 1906.

Distribución : Nicaragua (Zelaya), Ecuador, Perú.

Hematófago : Mammalia : Hominidae : *Homo.*

Vector de malaria.

*Anopheles argyritarsis* ROBINEAU-DESVOIDY 1927.

= *Anopheles rooti* BRETHERS 1926.

Distribución : Nicaragua (Zelaya, Chinandega, Chontales, Managua,

Granada), Perú, Bolivia, Brasil, Paraguay, Uruguay,

Argentina.

Matagalpa,

Hematófago : Mammifera : Hominidae : *Homo.*

Vector de malaria.

*Anopheles crucians* WIEDEMANN 1828.

Distribución : USA, Caribe, El Salvador, Nicaragua (Zelaya).

Hematófago : Mammalia : Hominidae : *Homo.*

Enemigos naturales :

Nematoda : Mermithidae : *Reesimermis culicivorax*

(=*Romanomermis nielsenii*).

*Anopheles darlingi* ROOT 1926.

= *Anopheles paulistensis* GALVAO, LANE & CORREA 1937.

Distribución : México, Guatemala, Honduras, Nicaragua (Zelaya), Guyana,

Perú, Bolivia, Brasil, Paraguay, Argentina, Chile.

Ecuador,

Hematófago : Mammalia : Hominidae : *Homo.*

Vector de malaria.

filarias is de Bancroft.

*Anopheles eiseni* COQUILLET 1902.

= *Anopheles niveopalpis* LUDLOW 1919.

Distribución : México, Nicaragua (Zelaya).

*Anopheles hectoris* MIRA 1931.

Distribución : El Salvador, Nicaragua (Zelaya).

Hematófago : Mammalia : Hominidae : *Homo*.

Vector de malaria.

*Anopheles neivai* HOWARD, DYAR & KNAB 1917.

= *Anopheles hylephilus* DYAR & KNAB 1917.

Distribución : Nicaragua (Zelaya).

*Anopheles neomaculipalpus* CURRY 1931.

Distribución : El Salvador, Nicaragua (Zelaya), Bolivia, Brasil, Paraguay,  
Argentina.

Uruguay,

Hematófago : Mammalia : Hominidae : *Homo*.

*Anopheles (Anopheles) pseudopunctipennis pseudopunctipennis* THEOBALD.

= *Anopheles argentinus* BRETHERS 1912.

= *Anopheles bisignatus* HOFFMANN 1938.

= *Anopheles Perúvianus* TAMAYO 1907.

= *Anopheles tucumanus* LAHILLE 1912.

Distribución : México, Nicaragua (Rivas), Ecuador, Perú, Argentina.

Hematófago : Mammalia : Hominidae : *Homo*.

Vector de Malaria.

*Anopheles punctimacula* DYAR & KNAB 1906.

= *Anopheles male factor* DYAR & KNAB 1907.

= *Anopheles strigimacula* DYAR & KNAB 1907.

= *Anopheles venezuelae* EVANS 1922.

Distribución : Nicaragua (Zelaya), Costa Rica, Panamá, Colombia, Perú, Bolivia, Brasil, Uruguay.

Hematófago : Mammalia : Hominidae : *Homo*.

Vector de malaria.

*Anopheles strodei* ROOT 1926.

= *Anopheles evansae* UNTI 1945.

Distribución : Nicaragua (Zelaya), Bolivia, Brasil, Paraguay, Uruguay, Argentina.

Hematófago : Mammalia : Hominidae : *Homo*.

Vector de malaria.

*Anopheles vestitipennis*.

Distribución : El Salvador, Nicaragua (Zelaya).

Hematófago : Mammalia : Hominidae : *Homo*.

*Culex corniger* THEOBALD 1903.

= *Culex lactator* DYAR & KNAB.

= *Culex hassardi* GRABHAM.

= *Culex leucotelus* MAC CORMICK.

Distribución : Cuba, México, Nicaragua (Chinandega, Chontales, Estelí, Matagalpa, Zelaya), Uruguay.

*Culex (Culex) coronator* DYAR & KNAB.

Distribución : México, Nicaragua (Chinandega, León, Estelí, Granada, Chontales, Matagalpa, Carazo, Rivas, Zelaya).

Hematófago : Mammifero : Hominidae : *Homo*.

*Culex daumastocampa* DYAR & KNAB.

Distribución : Nicaragua (Zelaya).

*Culex declarator* DYAR & KNAB.

Distribución : Nicaragua (Rivas).

*Culex (Melanconion) erraticus* DYAR & KNAB.

Distribución : USA, México, Nicaragua (Chinandega, Rivas, Zelaya).

Hematófago : Mamífero : Hominidae : *Homo*.

*Culex imitator* THEOBALD.

Distribución : Nicaragua (Zelaya).

*Culex (Culex) interrogator* DYAR & KNAB.

Distribución : México, Nicaragua (Chinandega).

*Culex mollis* DYAR & KNAB.

Distribución : Nicaragua (Chinandega).

*Culex (Culex) nigripalpus* THEOBALD 1901.

= *Culex similis* THEOBALD.

= *Culex palus* PALOS.

Distribución : USA, Cuba, México, Nicaragua (Rivas, Estelí, León,

Chontales, Matagalpa, Zelaya).

Hematófago : Mammalia : Hominidae : *Homo*.

Enemigos naturales :

Bacteria : *Bacillus sphaericus* (Ser. H-5a-5b) (strain 1593).

*Culex pilosus* (DYAR & KNAB) 1906.

= *Mochlostyrax pilosus* DYAR & KNAB 1906.

= *Culex ignobilis* DYAR & KNAB.

= *Culex cubensis* DYAR & KNAB.

= *Culex jamaicensis* GRABHAM.

= *Culex floridanus* DYAR & KNAB.

= *Culex agitator* DYAR & KNAB.

Distribución : USA, Cuba, Jamaica, Nicaragua (Zelaya).

*Culex (Culex) pipiens quinquefasciatus* (SAY) 1828.

southern house mosquito.

= *Culex pipiens fatigans* WIEDEMAN 1828.

= *Culex quinquefasciatus*.

= *Culex fatigans*.

Managua,

= *Culex cubensis* BIGOT.

Distribución : Asia, Hawaii, USA, Cuba, Puerto Rico, México, Guatemala, El Salvador,  
Honduras, Nicaragua (Chinandega, Rivas, Carazo, Zelaya), Costa Rica, Panamá, Colombia,  
Venezuela, Guiana francesa, Perú, Brasil.

Hematófago : Mammalia : Hominidae : *Homo*.

Equidae : *Equus*.

Aves (gallinas), *Cyanocitta*, *Mimus*, *Columba*, *Anser*, *Passer*.

Vector de *Brugia sp.*

*Dinofilaria immitis* (Filariosis canina).

*Wuchereria bancrofti* (Filariosis de Bancroft).

(Dengue).

(St.Luis encefalitis virus, encefalitis de San Luis).

(Venezuelan equine encephalomyelitis virus).

(Venezuelan equine encephalitis).

Enemigos naturales :

Peces : *Gambusia affinis*.

Nematoda : Mermithidae : *Reesimermis culicivorax*.

*Reesimermis nielseni*.

Bacteria : *Bacillus thuringiensis israelensis* (Ser.H-14) (Strain ONR-

60A).

*Bacillus sphaericus* (Ser.H-1a) (Strain SS-II-1 = WHO

1321).

(Ser.H-2) (Strain 1404) (Strain 1894).

(Ser.H-5a,5b) (Strain 1593) (Strain 1881)

(Strain 1691) (Strain 2013-6)

(Strain 2117-2).

(Ser.H-25) (Strain MR-4 = WHO 2297).

*Culex restuans* THEOBALD.

Distribución : USA, Nicaragua (Estelí, Jinotega, Matagalpa, Chontales,

Zelaya).

*Culex salinarius* COG.

Distribución : USA, Nicaragua (Granada, Rivas, Zelaya).

*Culex tarsalis* COG.

Distribución : USA, Nicaragua (Granada, Chontales, Managua, Matagalpa).

*Culex (Microculex) sp.*

Distribución : Nicaragua (Zelaya).

*Culex sp.*

Distribución : Nicaragua.

*Culiseta sp.*

Distribución : Nicaragua (Managua).

*Deinocerites epitedeus* KNAB.

Distribución : Nicaragua (Chinandega).

*Deinocerites pseudus* DYAR & KNAB.

Distribución : Nicaragua (Chinandega).

*Haemagogus anastasionis* DYAR.

= *Haemagogus dominguezi* DURET 1971.

Distribución : Curacao, Nicaragua.

*Haemagogus chalcospilans* DYAR.

Distribución : Nicaragua (Rivas).

*Haemagogus equinus* (THEOBALDT).

Distribución : Nicaragua (Rivas).

*Limatus durhami* THEOBALD 1901.

Distribución : Cuba, Trinidad, El Salvador, Nicaragua (Zelaya), Costa Rica, Panamá,  
Colombia, Venezuela, Guyana, Ecuador, Perú, Bolivia, Brasil.

*Megarhinus moctezuma* DYAR & KNAB.

Distribución : Nicaragua (Chinandega).

*Orthopodomyia kummi* EDWARDS.

Distribución : México, Nicaragua (Chinandega).

*Phoniomyia lassalli* (BONNE-WEPSTER & BONNE).

Distribución : Nicaragua (Zelaya).

*Psorophora (Grabhamia) confinnis* (LYNCH ARRIBALZAGA) 1891.

florida glade mosquito.

= *Taeniorhynchus confinnis* LYNCH ARRIBALZAGA 1891.

= *Psorophora jamaicensis* THEOBALD.

Distribución : USA, Cuba, Jamaica, México, El Salvador, Nicaragua (Granada,  
Estelí, Managua, Zelaya, Nueva Segovia, Chinandega, León, Granada, Masaya, Carazo, Chontales,  
Boaco, Matagalpa, Rivas).

Hematófago : Mammalia : Hominidae : *Homo*.

*Psorophora ferox* (HUMBOLDT) 1820.

= *Culex ferox* HUMBOLDT 1820.

= *Aedes sayi* DYAR & KNAB.

= *Aedes pazozi* DYAR & KNAB.

Distribución : USA, Cuba, Nicaragua (Chinandega).

Hematófago : Mammalia : Hominidae : *Homo*.

*Toxorhynchites (Lynchiella) rutilus rutilus* (COQUILLET).

Distribución : El Salvador, Nicaragua (Estelí, León, Managua, Granada).

Depredador de DIP. Culicidae : *Aedes aegypti*.

*Uranotaenia geometrica* THEOBALD.

Distribución : Nicaragua (Zelaya).

*Uranotaenia lowii* THEOBALD 1901.

= *Uranotaenia continentalensis* DYAR & KNAB.

= *Uranotaenia minuta* THEOBALD.

= *Uranotaenia monilis* SH. & P.

Distribución : Cuba, Nicaragua (Rivas).

*Wyeomyia celaenocephala* (DYAR & KNAB).

Distribución : Nicaragua (Zelaya).

*Wyeomyia circumcincta* (DYAR & KNAB).

Distribución : Nicaragua (Zelaya).

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Larvae of Alberta Tanyderidae (Diptera: Nematocera). *Quaestiones Entomologicae* 12: 219–237. Google Scholar. Foote, B. A., 1995. Intraspecific relations of predaceous larvae of the subfamily Chaoborinae (Diptera, Culicidae). Report 1 (In Russian with English summary). *Entomological Review*, Washington 38: 453–462. Google Scholar. Les Dixidae du sud-ouest de la France (Nematocera) (*Dixa puberula* Loew, 1849). Écologie, microhabitat et intérêt pratique pour le pistage des pollutions per les stations touristiques de montagne). *Bulletin de la Société d'Histoire Naturelle de Toulouse* 115: 242–268. Google Scholar. The Nematocera (the name means "thread-horns") are a suborder of elongated flies with thin, segmented antennae and mostly aquatic larvae. Major families in the suborder include the mosquitoes, crane flies, gnats, black flies, and a group of families described as midges. The Nematocera typically have fairly long, fine, finely-jointed antennae. In this they differ from the most familiar flies, the suborder Brachycera (the name means "short-horns"), which includes the house flies, blow flies and many Downloads: Publications on Nematocera. Adler\_Crosskey\_2012. *World Blackflies (Diptera: Simuliidae): A comprehensive revision of the taxonomic and geographical inventory* [2012]. Present version downloaded from <http://www.clemson.edu/cafls/departments/esps/biomia/pdfs/blackflyinventory.pdf> on 10.06.2012. License Utrio, P., 1976. Identification key to Finnish mosquito larvae (Diptera, Culicidae). - *Annales Agriculturae Fenniae* 15: 128-136. License