

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.

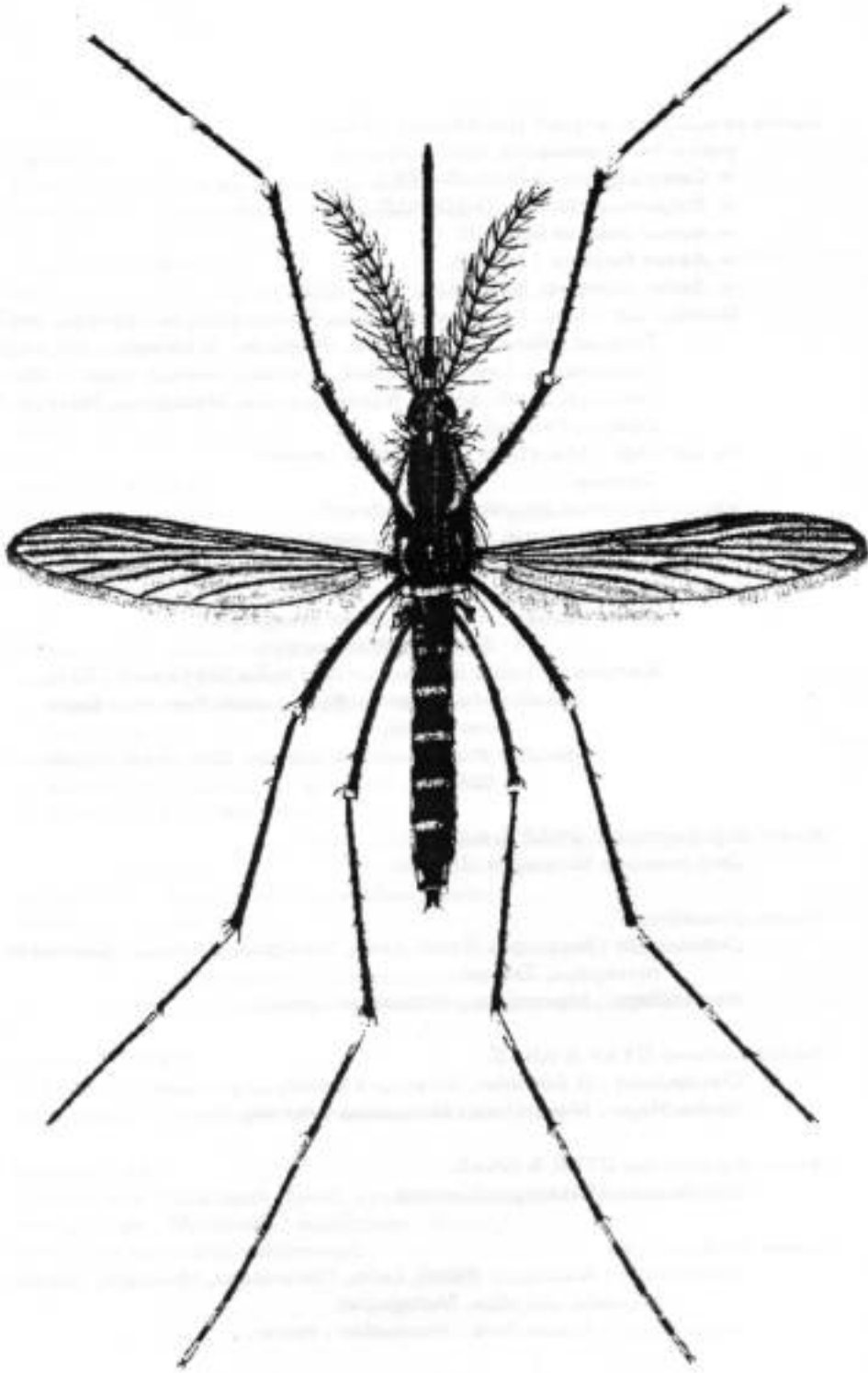
Las larvas de zancudos se encuentran en muchos tipos de aguas, por ejemplo en charcos, huecos o recipientes artificiales, cada especie tiene un tipo de agua característico donde se reproduce. Los huevos son dejados en paquetes sobre la superficie del agua. Las larvas comen algas y materia vegetal en 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).

Hematofago : 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,

Matagalpa,

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

Argentina.

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,

Ecuador,

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

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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Psychodidae (Diptera) de la Bosnie centrale. Bulletin scientifique Conseil des Academies des Sciences et des Arts de la RSF de Yougoslavie, Section A " Zagreb, 12: 315-316. Krek S. 1970. Global diversity of dipteran families (Insecta Diptera) in freshwater (excluding Simuliidae, Culicidae, Chironomidae, Tipulidae and Tabanidae). Hydrobiologia, 595: 489-519. <https://doi.org/10.1007/s10750-007-9127-9> Wagner R. & Joost W. 1986. Further records of moth-flies (Diptera, Psychodidae) from the Armenian SSR. In: Carles-Tolra Hjorth-Andersen M. (Coord.). Catalogo de los Diptera de Espana, Portugal y Andorra (Insecta). Monografias S.E.A., 8: 65-69. Zaragoza: Sociedad Entomologica Aragonesa. Looking for Nematocera? Find out information about Nematocera. A series of dipteran insects in the suborder Orthorrhapha; adults have antennae that are usually longer than the head, and the flagellum consists of 10-65 Explanation of Nematocera. Notas sobre Ceratopogonidae (Diptera: Nematocera) de la Republica Argentina: Nuevos aportes al conocimiento del genero Dasyhelea Kieffer. Biting midges (Diptera: Ceratopogonidae) from Martin Garcia Island, Argentina. These authors show Insecta class occupying the first place as in species term (75.7%) as in individual's term (76.4%) and that Diptera species (12.3%) present are among the Nematocera, Tipulidae, Sciaridae and Cecidomyidae and more precisely Dolichopeza sp. Este catálogo presenta las 3 especies de Simuliidae (Diptera : Nematocera) reportadas de Nicaragua. Para cada especie se cita la sinonimia y la distribución geográfica. La bibliografía conocida esta agregada. Abstract. This catalogue presents the 3 species of Simuliidae (Diptera : Nematocera) reported from Nicaragua. The geographical distribution and synonyms are given for each species. Resumen. Este catálogo presenta las 10 especies de Isoptera (3 familias) reportadas de Nicaragua. Para cada una se da también la sinonimia, la repartición geográfica y las plantas hospederas. Una bibliografía de las especies conocidas de Nicaragua es agregada. Abstract. This catalogue presents the 10 species of Isoptera (3 families) presently known from Nicaragua. Brazilian Anopheles darlingi Root (Diptera: Culicidae) clusters by major biogeographical region. PLoS One. 2015;10:e0130773. Wood DM, Borkent A. Phylogeny and classification of the Nematocera. In: McAlpine JF, Wood DM, editors. Manual of Nearctic Diptera, vol. 3. Hull: Research Branch Agriculture Canada Monograph No. 32, Canadian Government Publishing Centre; 1989. Forattini OP, Rabello EX, Cotrim MD. Catálogo das coleções entomológicas da Faculdade de Saúde Pública da Universidade de São Paulo (1ª Série) Culicidae, vol. 4. São Paulo: Universidade de São Paulo, Faculdade de Saúde Pública; 1970. Google Scholar. 37. Forattini OP, Rabello EX, Cotrim MD. Culicidae are the most prolific disease vectors within the order Diptera, and can transmit a range of parasites (e.g. Plasmodium relictum), viruses (alphaviruses, flaviviruses, etc. From: Advances in Marine Biology, 2019. Suborder Nematocera. Culicidae " Mosquitoes inhabit a wide variety of lentic (standing water) aquatic systems and are generally not found in lotic or running water systems unless it is along the littoral areas of slow moving rivers. Larval mosquito habitats have been classified based on a scheme that encompasses a spectrum from customary larger water bodies of conventional limnology to smaller, more specialized ones lending themselves to general micro-limnological use (Table 2). Container habitats provide more specialized systems for other mosquito taxa.