

# Appendix: species list for the Crato Formation

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## Arachnida

### Araneae

Araneomorphae

Araneoidea

Familia *incertae sedis*

*Cretaraneus* Selden, 1990

*Cretaraneus martinsnetoi* Mesquita, 1996

Mygalomorphae

Dipluridae

Diplurinae

*Cretadiplura ceara* Selden in Selden *et al.*, 2006

*Dinodiplura ambulacra* Selden in Selden *et al.*, 2006

### Chelonethi = Scorpiones

Chactoidea

Chactidae

*Araripescorpius ligabuei* Campos, 1986

Scorpionoidea

Hemiscorpiidae

Hormurinae

*Protoischnurus axelrodorum* Carvalho and Lourenço, 2001

**Acari**

Parasitengona

Erythraeoidea

?Erythraeidae

*Pararainbowia martilli* Dunlop, 2007**Solifugae**

Ceromidae

*Cratosolpuga wunderlich* Selden in Selden and Shear, 1996**Uropygi/Thelyphonida**

?Thelyphonidae

?Mastigoproctinae

*Mesoproctus rowlandi* Dunlop, 1998**Amblypygi**

Neoamblypygi

?Phrynidae

*Britopygus weygoldti* Dunlop and Martill, 2002**Crustacea****Decapoda**

Caridea

Familia *incertae sedis**Beurlenia araripensis* Martins-Neto and Mezzalira, 1991**Ostracoda***Theriosynoecum silvai* (Silva, 1978)*Theriosynoecum munizi* (Silva, 1978)*Theriosynoecum quadrinodosa* (Silva, 1978)*Harbinia micropapillosa* (Bate, 1972)*Harbinia angulata angulata* (Krömmelbein and Weber, 1971)*Darwinula martinsi* Silva, 1978*Cyrpridea araripensis* Silva, 1978*Brasacypris* sp.*Candona* sp.*Zonocypris*(?) sp.

**Conchostraca***Cyzicus codoensis* (Cardoso, 1962)*Cyzicus brauni* (Cardoso, 1962)*Cyzicus pricei* (Cardoso, 1966)**Chilopoda****Scolopendromorpha**

Scolopendridae

Sterropristinae

cf. *Rhysida*Subfamilia *incertae sedis**Cratoraricus oberlii* Wilson, 2003*Velocipede bettimari* Martill and Barker, 1998**Scutigleromorpha**

Scutigleridae

*Fulmenocursor tenax* Wilson, 2001**Hexapoda = insecta**

‘APTERYGOTA’

**Diplura**

Japygoidea

Familia *incertae sedis**Ferrojapyx vivax* Wilson and Martill, 2001**Zygentoma**

Lepismatidae

*Lepismatidae* gen. spec. ‘Araripe’ Sturm, 1998**Pterygota****Stem group Ephemeroptera**

Panephemeroptera

Ephemerontoidea

Ephemeronta

Reticulata

## Heptabanchia

## Cretereismatidae fam. nov.

(diagnosis as type genus since monotypic; see description in this volume)

*Cretereisma antiqua* Willmann, this volume*Cretereisma schwickertorum* Willmann, this volume**Ephemeroptera**

## †Hexagenitidae

*Protoligoneuria limai* Demoulin, 1955*Cratohexagenites longicercus* Staniczek, this volume*Cratohexagenites minor* Staniczek, this volume

## Oligoneuriidae

*Colocrus indicum* McCafferty, 1990*Colocrus? magnum* Staniczek, this volumeEphemeroidea (*sensu* McCafferty, 1991)

## Potamanthidae?

*Olindinella gracilis* Martins-Neto and Caldas, 1990

## Euthyplociidae

*Pristiplocia rupestris* McCafferty, 1990

Gen. et sp. nov.

## Ephemeridae

*Australiephemera revelata* McCafferty, 1990*Microephemera neotropica* McCafferty, 1990*Cratonympha microcelata* Martins-Neto and Caldas, 1990

## Polymitarcyidae?

*Caririnympa mandibulata* Martins-Neto and Caldas, 1990

## Baetiscidae

*Protobaetisca bechlyi* Staniczek, this volume

+several as-yet-unnamed genera and species

Ephemeroptera *incertae sedis**Costalimella nordestina* Martins-Neto, 1996*Costalimella zuechii* Zamboni, 2001Insecta *incertae sedis**Caririephemera marquesi* Zamboni, 2001**Odonata**

## Zygoptera

Familia *incertae sedis* (probably Hemiphlebiidae)*Cretarchistigma? essweini* Bechly, 1998

## Hemiphlebiidae Tillyard, 1926

*Parahemiphlebia cretacica* Jarzembowski *et al.*, 1998

*Parahemiphlebia mickoleiti* Bechly, 1998

*Parahemiphlebia* spec. nov. (?) Bechly, 1998

Protoneuridae

Isostictinae

†Eoprotoneurini

*Eoprotoneura hyperstigma* Carle and Wighton, 1990

Thaumatoneuridae

Thaumatoneurinae

†Euarchistigmatini

*Euarchistigma atrophium* Carle and Wighton, 1990

*Euarchistigma marialuiseae* Bechly, this volume

‘Anisozygoptera’

†Stenophlebioptera

†Stenophlebiidae

*Cratostenophlebia schwickerti* Bechly, this volume

Anisoptera

†Nothomacromiidae Carle, 1995 (stat. rest.)

*Nothomacromia sensibilis* (Carle and Wighton, 1990)

†Aeschnidiidae

*Wightonia araripina* Carle in Carle and Wighton, 1990

*Santanoptera gabotti* Martill and Nel, 1996

†Cretapetaluridae

*Cretapetalura brasiliensis* Nel *et al.*, 1998

*Eotanypteryx paradoxa* Bechly, this volume

†Liupanshaniidae

*Paramesuropetala gigantea* Bechly *et al.*, 2001

*Araripeliupanshania annesuseae* Bechly *et al.*, 2001

Gomphaeschnidae

†Gomphaeschnaoidinae

*Gomphaeschnaoides obliquus* (Wighton, 1987)

*Gomphaeschnaoides petersi* Bechly *et al.*, 2001

*Gomphaeschnaoides betoreti* Bechly *et al.*, 2001

*Gomphaeschnaoides magnus* Bechly *et al.*, 2001

*Progomphaeschnaoides ursulae* Bechly *et al.*, 2001

*Progomphaeschnaoides staniczeki* Bechly *et al.*, 2001

*Paramorbaeschna araripensis* Bechly *et al.*, 2001

*Anomalaeschna berndschusteri* Bechly *et al.*, 2001

†Araripegomphidae

*Araripegomphus cretacicus* Nel and Paicheler, 1994

*Araripegomphus andreneli* Bechly, 1998

*Araripegomphus hanseggeri* Bechly, 2000

*Araripegomphus* sp. nov. (?) Bechly, 1998

†Proterogomphidae

## †Cordulagomphinae

*Cordulagomphus tuberculatus* Carle and Wighton, 1990*Cordulagomphus fenestratus* Carle and Wighton, 1990*Cordulagomphus winkelhoferi* Bechly, this volume*Cordulagomphus hanneloreae* Bechly, this volumeSubgenus *Procordulagomphus* Nel and Escuillié, 1994*Cordulagomphus (Procordulagomphus) xavieri* Nel and Escuillié, 1994*Cordulagomphus (Procordulagomphus) senckenbergi* Bechly, 1998*Cordulagomphus (Procordulagomphus) primaerensis* Petrulевичius and Martins-Neto, 2006*Cordulagomphus (Procordulagomphus) michaeli* Bechly, this volume

## Lindeniiidae

## Lindeniiinae

*Cratolindenia knuepfae* Bechly, 2000

## †Araripephlebiidae

*Araripephlebia mirabilis* Bechly, 1998

## †Araripechlorogomphidae

*Araripechlorogomphus muratai* Bechly and Ueda, 2002

## †Araripebellulidae

## †Araripebellulinae

*Araripebellula martinsnetoi* Nel and Paicheler, 1994*Cratocordulia borschukewitzi* Bechly, 1998

+ eight undescribed genera and species of uncertain familial affinity

**Dermaptera**

## Forficulina

## Anisolabididae

*Cratoborellia gorbi* Haas, this volume

## Labiduridae

*Caririlabia berghoffi* Haas, this volume*Caririlabia brandaoi* Martins-Neto, 1990

## Eudermaptera

## Spongiphoridae

*Cretolabia cearae* Popham, 1990*Kotejalabis haeuseri* Haas, this volume*Kotejalabis goethitica* Engel and Chatzimanolis, 2005**Dictyoptera****Mantodea***Santanmantis axelrodi* Grimaldi, 2003

+ an unnamed species

**'Blattaria'**

## †Mesoblattinidae

Undescribed sp of? Mesoblattina

## †Raphidiomimidae

Undescribed sp.

## †Umenocoleoidea

## †Cratovitismidae fam. nov.

*Cratovitisma oldreadi* Bechly, this volume

## †Umenocoleidae

*Ponopterix axelrodi* Vršanský and Grimaldi in Vršanský, 1999a*Ponopterix maxima* Bechly, this volume

## †Blattulidae

*Elisama americana* Vršanský, 2002

## Blattellidae

'*Mesoblattina*' *limai* Pinto and Purper, 1986

Undescribed gen. et sp. nov. A

## Blattidae

*Mesoblattinopsis schneideri* Pinto, 1989Familia *incertae sedis*

Undescribed gen. et sp. nov. B

**Isoptera**

## Mastotermitidae

*Cratomastotermes wolfschwenningeri* Bechly, this volume

## Termopsidae

## Cretatermitinae

*Nordestinatermes araripena* (Krishna, 1990)*Nordestinatermes obesa* Martins-Neto *et al.*, 2006*Cretatermes pereirai* Fontes and Vulcano, 1998Subfamilia *incertae sedis**Mariconitermes talicei* Fontes and Vulcano, 1998

## Hodotermitidae?

## Caatingatermitinae

*Caatingatermes megacephalus* Martins-Neto *et al.*, 2006*Araripetermes nativa* Martins-Neto *et al.*, 2006

## Kalotermitidae

*Cratokalotermes santanensis* Bechly, this volume

## Rhinotermitidae

*Cretarhinotermes novaolindense* Bechly, this volume

**Orthoptera****Chresmododea**

*Chresmoda* sp. nov.

**Phasmatodea**

Aerophasmatidae

Cretophasmatinae

*Cretophasma araripensis* Martins-Neto, 1989

**Orthoptera**

Ensifera

Baissogryllidae

*Caririgryllus elongatus* Martins-Neto, 1991

*Caririgryllus pilosus* Martins-Neto, 1991

*Caririgryllus arthaudi* Martins-Neto, 1991

*Caririgryllus mesai* Martins-Neto, 1991

*Caririgryllus brevipterus* Martins-Neto, 2002

*Cearagryllus monstruosus* Martins-Neto, 1991

*Cearagryllus robustus* Martins-Neto, 1991

*Cearagryllus gorochovi* Martins-Neto, 1991

*Cearagryllus perforatorius* Martins-Neto, 1991

*Cearagryllus poliacanthus* Martins-Neto, 1991

*Cearagryllus microcephalus* Martins-Neto, 1991

*Cearagryllus revelatus* Martins-Neto, 1998

*Cearagryllus previstus* Martins-Neto, 1998

*Santanagryllus hesselae* Martins-Neto, 1991

*Castillogryllus complicatus* Martins-Neto, 1995

*Notocearagryllus dutrae* Martins-Neto, 1998

*Notocearagryllus leipnitzi* Martins-Neto, 2002

*Olindagryllus obliteratedus* Martins-Neto, 1998

*Olindagryllus rotundus* Martins-Neto, 1998

Gryllidae

*Araripegryllus caposae* Martins-Neto, 1987

*Araripegryllus femininus* Martins-Neto, 1991

*Araripegryllus mariano* Martins-Neto, 1991

*Araripegryllus nanus* Martins-Neto, 1991

*Araripegryllus serrilhatu* Martins-Neto, 1991

*Araripegryllus spinosus* Martins-Neto, 1991

*Brontogryllus excelsus* Martins-Neto, 1991

*Cratogryllus pentagonalis* Martins-Neto, 1991



*Cratogryllus guimaraesae* Martins-Neto, 1991  
*Cratogryllus ciguelli* Martins-Neto, 1991  
*Nanoararipegryllus pigamaeus* Martins-Neto, 2002

## Gryllotalpidae

*Archaeogryllotalpoides ornatus* Martins-Neto, 1991  
*Palaeoscapteriscops cretacea* Martins-Neto, 1991  
*Cratotetraspinus fossorius* (Martins-Neto, 1995)

## Hagloidea incertae sedis

*Cratohagloipsis santanaensis* Martins-Neto, 1991  
*Kevania araripensis* Martins-Neto, 1991

## Ensifera incertae sedis

*Phasmomimella? araripensis* Martins-Neto, 1991

## Caelifera

## Elcanidae

*Cratoelcana damianii* Martins-Neto, 1991  
*Cratoelcana zessini* Martins-Neto, 1991

## Locustopseidae

*Cratozeunerella neotropica* Martins-Neto, 1998  
*Cratozeunerella amedegnatoi* Martins-Neto, 1998  
*Cratozeunerella godoi* Martins-Neto, 2003  
*Cratozeunerella nervosa* Martins-Neto, 2003  
*Cratozeunerella soaresi* Martins-Neto, 2003  
*Cratozeunerella titanella* Martins-Neto, 2003  
*Cratolocustopsis cretacea* Martins-Neto, 2003  
*Cratolocustopsis araripensis* Martins-Neto, 2003  
*Cratolocustopsis contumax* Martins-Neto, 2003  
*Zessinia pulcherrima* Martins-Neto, 1990  
*Zessinia caririensis* Martins-Neto, 1990  
*Zessinia reticulata* Martins-Neto, 1990  
*Zessinia petruleviciusi* Martins-Neto, 2003  
*Zessinia vikingi* Martins-Neto, 2003  
*Locustrix gallegoi* Martins-Neto, 2003  
*Locustrix audax* Martins-Neto, 2003

## Bouretidae (possible junior synonym of Tetrigidae)

*Bouretia elegans* Martins-Neto, 2001

## Araripe locustidae

*Araripe locusta longinota* Martins-Neto, 1995  
*Araripe locusta brevis* Martins-Neto, 1995

## Tridactylidae

*Cratodactylus ferreirai* Martins-Neto, 1990  
*Cratodactylus kellneri* Martins-Neto, 1990

## Proscopiidae

Gen. et sp. nov. Heads, 2008

**Hemiptera****Cicadomorpha**

## †Palaeontinidae

- Parawonnacottella araripensis* Ueda, 1997  
*Parawonnacottella penneyi* Menon *et al.*, 2005  
*Cratocossus magnus* Martins-Neto, 1998  
*Baeocossus fortunatus* Menon and Heads, 2005  
*Colossocossus loveridgei* Menon *et al.*, 2005  
*Colossocossus rugosa* Menon *et al.*, 2005  
*Colossocossus bechlyi* Menon and Heads, 2005  
*Colossocossus giganticus* Menon and Heads, this volume

## Tettigarctidae

## Cicadoprosobolinae

- Architettix compacta* Hamilton, 1990  
*Tettagalma striata* Menon, 2005

## †Cercopionidae

- Cercopion reticulata* Hamilton, 1990

## Cicadellidae

## Cicadellinae

- Proerrhomini Hamilton, 1990  
*Proerrhomus rugosus* Hamilton, 1990

## Ledrinae

- Paracarsonini Hamilton, 1990  
*Paracarsonus aphrodoides* Hamilton, 1990  
*Platyjassites inflatifrons* Hamilton, 1990

## Lineage Ulopidae+ Aetalionidae+ Melizoderidae+ Membracidae

## Hallicini

- Hallex xestocephalus* Hamilton, 1990  
*Hallex gongrogony* Hamilton, 1990  
*Hallex brevipes* Hamilton, 1990  
*Hallex laticeps* Hamilton, 1990  
*Hallex gracilior* Hamilton, 1990

## Myerslopiidae

## Ovojassini

- Ovojassus concavifer* Hamilton, 1990  
*Ovojassus minor* Hamilton, 1990

**Fulgoromorpha**

## Achilidae

- Acixiites immodesta* Hamilton, 1990  
*Acixiites costalis* Hamilton, 1990

## Cixiidae

*Cretofennahia cretacea* (Martins-Neto, 1988)

Lalacidae

Protodelphacinae

Protodelphacini

*Protodelphax chamus* Hamilton, 1990

*Protodelphax macroceps* Hamilton, 1990

*Protodelphax miles* Hamilton, 1990

*Protodelphax rhinion* Hamilton, 1990

Ancoralinae

Ancoralini

*Ancorale flaccidum* Hamilton, 1990

*Ancorale aschemon* Hamilton

Kinnarocixiini

*Kinnarocixius quassus* Hamilton, 1999

*Kinnarocixius* sp. (probably a distinct genus)

Lalacinae

Lalacini

*Lalax mutabilis* Hamilton, 1990

*Patulopes setosa* Hamilton, 1990

*Patulopes myndoides* Hamilton, 1990

Carpopodini

*Carpopodus difficilis* Hamilton, 1990

*Carpopodus* sp. A Hamilton, 1990

*Carpopodus* sp. B Hamilton, 1990

*Psestocixius fuscus* Hamilton, 1990

*Psestocixius delphax* Hamilton, 1990

*Vulcanoia membranosa* Martins-Neto, 1988

*Vulcanoia apicalis* Hamilton, 1990

*Vulcanoia acuceps* Hamilton, 1990

Familia *incertae sedis* (Boreoscytidae?)

*Megaleurodes megocellata* Hamilton, 1990

## Coleorrhyncha

Pelordioidea

†Progonocimicidae

Undescribed spp.

## Heteroptera

Nepomorpha (Hydrocorisae)

Belostomatidae

## Belostomatinae

*Araripebelostomum martinsnetoi* Nel and Paicheler, 1992*Neponymphes godoi* Zamboni, 2001 (probably a nymph of *Araripebelostomum*)*Paranoika placida* Zamboni, Martins-Neto and Popov, 2002

## Lethocerinae

*Lethocerus vetus* Nel and Waller, 2006

## Nepidae

Undescribed spp.

## Naucoridae

*Cratocora crassa* Ruf *et al.*, 2005*Cratopelocoris carpinteroi* Ruf *et al.*, 2005

## Notonectidae

## Notonectinae

? *Canteronecta* sp.

## Corixidae

## †Velocorixinae

sp. with aff. *Rhomboidella*

## Gelastocoridae

## Nerthrinae

*Cratonerthra corinthiana* Ruf *et al.*, 2005*Cratonerthra estevezae* Ruf *et al.*, 2005

## †Pseudonerthridae

*Pseudonerthra gigantea* Ruf *et al.*, 2005

## Gerromorpha (Amphibicorisae)

## Hydrometridae

*Cretaceometra brasiliensis* Nel and Popov, 2000*Incertametra santanensis* Goodwyn, 2002

## Veliidae

Undescribed sp.

## Mesoveliidae

Undescribed sp.

## Leptopodomorpha

## Archegocimicidae?

Undescribed sp.

## Pentatomomorpha

## Pachymeridiidae

*Cratocoris shevchenkoae* Martins-Neto, Popov and Zamb, 1999

Undescribed sp.

## Alydidae

Undescribed spp.

## Coreidae

Undescribed spp.

## Aradidae

## Mezirinae

Undescribed sp.

## Cydniidae

## Amnestinae?

*Laticutella santosi* Pinto and Ornellas, Martins Neto and C., 1994

## Cimicomorpha

Familia *incertae sedis*

Undescribed sp.

Heteroptera *incertae sedis**Cratogocimex popovi* Martins Neto, 2002

+ several undescribed genera and species of bugs

**Holometabola**

## Neuropterida

**Schwickertoptera Bechly, this volume**

## Rafaeliidae

*Rafaelia maxima* Nel *et al.* 2005*Rafaelia minima* Nel *et al.* 2005**Raphidioptera**

## Raphidiomorpha

## Baissopteridae

*Austroraphidia brasiliensis* (Nel, Séméria and Martins-Neto, 1990)*Baissoptera pulchra* (Martins-Neto and Nel, 1992)*Baissoptera brasiliensis* Oswald, 1990Familia *incertae sedis**Arariperaphidia rochai* Martins-Neto and Vulcano, 1989**Megaloptera**

Undescribed spp.

**Neuroptera/Planipennia**

## Myrmeleontiformia

## Psychopsidae

*Pulchroptilonia espatifata* Martins-Neto, 1997 (family assignment doubtful)

## Nemopteridae

- Roesleriana exotica* Martins-Neto and Vulcano, 1989  
*Cratonemopteryx robusta* Martins-Neto and Vulcano, 1989  
*Cratonemopteryx audax* Martins-Neto, 1995  
*Cratonemopteryx speciosa* Martins-Neto and Vulcano, 1997  
*Krila pilosa* Martins-Neto, 1992

## Ascalaphidae

- Cratoscalapha electroneura* Martins-Neto and Vulcano, 1997

## Myrmeleontidae

- Pseudonymphes araripensis* Martins-Neto and Vulcano, 1989  
*Pseudonymphes ponomarenkoi* Martins-Neto, 1995  
*Pseudonymphes brunherottae* Martins-Neto, 1994  
*Pseudonymphes zambonii* Martins-Neto, 1998

## Araripeneuridae

- Araripeneura regia* Martins-Neto and Vulcano, 1989  
*Araripeneura gracilis* Martins-Neto and Vulcano, 1989  
*Blittersdorfia pleoneura* Martins-Neto and Vulcano, 1989  
*Blittersdorfia volkheimeri* Martins-Neto and Vulcano, 1989  
*Blittersdorfia dicotomica* Martins-Neto, 1990  
*Blittersdorfia polyplusia* Martins-Neto, 1997  
*Blittersdorfia pulcherrima* Martins-Neto and Vulcano, 1997  
*Caldasia cretacea* Martins-Neto and Vulcano, 1989  
*Caririneura microcephala* Martins-Neto and Vulcano, 1989  
*Caririneura damianii* Martins-Neto, 1992  
*Caririneura crassatella* Martins-Neto, 1992  
*Caririneura nemopteroides* Martins-Neto, 2002  
*Cratoalloneura acuminata* Martins-Neto, 1992  
*Cratoneura longissima* Martins-Neto, 1992  
*Cratoneura pulchella* Martins-Neto, 1992  
*Cratoneura dividens* Martins-Neto, 1994  
*Paracaririneura priscila* Martins-Neto and Vulcano, 1997  
*Cratopteryx robertosantosi* Martins-Neto and Vulcano, 1989  
*Bleyeria nordestina* Martins-Neto, 1995

## Makarkiniidae

- Makarkinia adamsi* Martins-Neto, 1995

## Babinskaiidae

- Babinskia pulchra* Martins-Neto and Vulcano, 1989  
*Babinskia formosa* Martins-Neto and Vulcano, 1989  
*Neliana maculata* Martins-Neto, 1992  
*Neliana impolluta* Martins-Neto, 1997

## Palaeoleontidae

- Baisopardus araripensis* Martins-Neto, 1992  
*Baisopardus polyhymnia* Martins-Neto, 1997  
*Baisopardus gigas* Martins-Neto and Vulcano, 1997

- Baisopardus cryptohymen* Heads *et al.*, 2005  
*Paraneurastenyx ascalaphix* Martins-Neto, 1995  
*Parapalaeoleon magnus* Menon and Makarkin, 2008

## Hemerobiiformia

## Ithonidae

- Principiala incerta* Makarkin and Menon, 2007

## Osmylidae

- Nuddsia longiantennata* Menon and Makarkin, 2008

## Sisyridae

- Cratosysirops gonzagai* Martins-Neto, 1997

## Berothidae

- Araripeberotha martinsi* Martins-Neto and Vulcano, 1990  
*Caririberotha fairchildi* Martins-Neto and Vulcano, 1990

## Allopteridae

- Kareninia breviptera* Martins-Neto, 1997  
*Armandochrysopa borschukewitzi* Nel *et al.*, 2005  
*Triangulochrysopa formosa* Menon and Makarkin, 2008

## Limaïidae

- Limaia conspicua* Martins-Neto and Vulcano, 1989  
*Limaia adicotomica* Martins-Neto, 1997  
*Mesypochrysa criptovenata* Martins-Neto and Vulcano, 1989  
*Mesypochrysa confusa* Martins-Neto and Vulcano, 1989  
*Araripechrysa magnifica* Martins-Neto and Vulcano, 1989  
*Cratochrysa willmanni* Martins-Neto, 1994  
*Cratochrysa sublapsa* Martins-Neto, 1997  
*Cratochrysa martinsnetoi* Nel *et al.*, 2005

## Coleoptera

## Archostemata

## cf. Ommatidae

- Undescribed sp.

## cf. Cupedidae

- Undescribed sp.

## Adephaga

## Dytiscidae

- Undescribed spp.

## Carabidae

## Cicindelinae

- Oxycheilopsis cretacicus* Cassola and Werner, 2004

## Subfamilia incertae sedis

- Alexcarabus megagnathus* Martins-Neto, 2002

## Polyphaga

## Staphylinidae

*Caririderma pilosa* Martins-Neto, 1990*Cratophyllina minuscula* Martins-Neto, 2002

+undescribed spp.

## Scarabaeidae

## Aphodiinae

Undescribed spp.

Subfamilia *incertae sedis*

Undescribed spp.

## Hydrophilidae

Undescribed larva

## Buprestidae

Undescribed spp.

## Dryopidae

Undescribed sp.

## Elateridae

Undescribed spp.

## Trogossitidae

?Peltinae

Undescribed sp.

## Nitidulidae

Undescribed spp.

## Cucujidae

Undescribed sp.

## Tenebrionidae

Possible undescribed sp.

## ?Pyrochroidae

*Crataceimelittomoides cearensis* Vulcano and Pereira, 1987 (probably *nomen nudum*)

## Chrysomelidae

?Eumolpinae

Undescribed sp.

Subfamilia *incertae sedis*

Undescribed sp.

## Curculionoidea

## Nemonychidae

Rhinorhynchinae

Rhinorhynchini

*Cratomacer immerses* Zherikhin and Gratshev, 2004*Cratomacer ephippiger* Zherikhin and Gratshev, 2004

## Belidae

?Pachyurinae

?Pachyurini



*Davidibelus cearensis* Zherikhin and Gratschev, 2004

?Oxycoryninae

Undescribed sp.

?Eccoparthridae

*Martinsnetoa dubia* Zherikhin and Gratschev, 2004

Brentidae?

Eurhynchinae

*Axelrodiellus ruptus* Zherikhin and Gratschev, 2004

## Hymenoptera

‘Symphyta’

Anaxyelidae (or Sepulcidae?)

Syntexinae

*Prosyntexis gouleti* Darling and Sharkey, 1990

*Prosyntexis legitima* Martins-Neto, Melo and Prezoto, 2007

Siricidae

Undescribed sp.

Apocrita/Parasitica

Ephialtitidae

*Cratephialtites kourios* (originally described in the genus *Karatous*)

?Ichneumonoidea

Undescribed sp.

Proctotrupidae

*Protoprocto asode*

Mesoserphidae

Undescribed sp.

Apocrita/Aculeata

Pompilidae

?Pompilinae

Undescribed sp.

Formicidae

Myrmeciinae

*Cariridris bipetiolata* Brandao *et al.*, 1989

Tiphiidae

*Architiphia rasnitsyni* Darling and Sharkey, 1990

Sapygidae

Fedtschenkiinae André, 1903

*Cretofedtschenkia santanensis* Osten, this volume

Vespoidea

Scoliidae

?Proscoliinae

*Cretaproscolia josai* Rasnitsyn and Martínéz-Delclòs, 1999

†Archaeoscoliinae Rasnitsyn, 1993

*Cretoscolia brasiliensis* Osten, this volume

Vespidae

Undescribed sp.

Apoidea

†Angarosphecidae

*Cretosphex parvus* Darling and Sharkey, 1990

*Cretosphex magnus* Darling and Sharkey, 1990

*Mesorhopalosoma ceareae* Darling and Sharkey, 1990

*Cretobestiola* sp. nov.

Ampulicidae

Undescribed sp.

Apidae?

Undescribed sp.

## Mecoptera

Panorpoidea?

Undescribed sp.

Bittacidae

Undescribed sp.

## Diptera

Tipulomorpha

Limoniidae

*Cratotipula latialata* Ribeiro and Martins-Neto, 1999

*Okrenomyia araripensis* Ribeiro and Krzemiski, 2000

Culicomorpha

Culicoidea

?Chironomidae

Undescribed sp.

?Simuliidae

*Cretaceosimulium araripense* Vulcano, 1985 (probably nomen nudum)

Psychodomorpha

Tanyderidae?

*Megapsychoda araripina* Azar and Nel, 2002

Bibionomorpha

Mycetophilidae

Macrocerinae?

Undescribed sp.

## Sciaridae or Sciaroidea

Undescribed sp.

## Bibionidae?

Undescribed sp.

## Stratiomyomorpha

## Cratomyiidae

*Cratomyia macrorrhyncha* Mazzarolo and Amorim, 2000*Cratomyoides cretacicus* Willkommen, this volume

## Asilomorpha

## Mydidae

*Cretomydas santanensis* Willkommen, this volume

## Therevidae (?)

*Cratotabanus stenomyomorphus* Martins-Neto and Santos, 2004

## Asilidae

*Araripogon axelrodi* Grimaldi, 1990

Unnamed new species (possibly Therevidae?)

## Tabanomorpha

## Tabanoidea

## Rhagionidae?

Undescribed sp.

## Tabanidae

*Cratotabanus stenomyomorphus* Martins-Neto and Santos, 1994

Undescribed sp.

**Trichoptera**

## Leptoceridae

*Araripleptocerus primaevus* Martins-Neto, 2001Familia *incertae sedis**Raptortrichops sukatsheva* Martins-Neto, 2001*Senka crassatella* Martins-Neto, 2001

## 'Spicipalpia'

## Hydroptilidae

*Cratorella magna* Martins-Neto, 2001*Cratorella media* Martins-Neto, 2001*Cratorella minuta* Martins-Neto, 2001*Cratorella feminina* Martins-Neto, 2001**Lepidoptera**

## Micropterygidae

*Parasabatinca caldasae* Martins-Neto and Vulcano, 1989

## Undopterygidae

*Undopterix caririensis* Martins-Neto and Vulcano, 1989

Familia *incertae sedis*

*Gracilepteryx pulchra* Martins-Neto and Vulcano, 1989

Eolepidopterigidae

*Xena nana* Martins-Neto, 1999

*Psamateia calipsa* Martins Neto, 2002

## Vertebrata

### Actinopterygii

Neopterygii

Holostei

Semionotiformes

Semionotidae

*Lepidotes* sp.

*Araripelepidotes* sp.

Halecomorphi

Amiiformes

Amiidae

Vidalaminae

Gen et sp. nov.

Ionoscopiformes

Ophiopsidae

*Placidichthys bidorsalis* Brito, 2000

Teleostei

Aspidorhynchidae

*Vinctifer longirostris* Santos, 1990

Ichthyodectiformes

Ichthyodectoidei

Cladocyclidae

*Cladocyclus gardneri* Agassiz, 1841

Ostariophysi

Gonorynchiformes

Chanidae

*Dastilbe crandalli* Jordan, 1910

Othophysi

Familia *incertae sedis*

*Santanichthys* sp.

### Sarcopterygii

Actinistia

Mawsoniidae

*Axelrodichthys* sp.

**Lissamphibia**

Salientia

Anura

Leptodactylidae

*Araripehrynus placidoi* Leal and Brito, 2006

Pipoidea Gray, 1825

Gen et sp. nov.

**‘Reptilia’****Testudines**

Pleurodira

Pelomedusoides

Araripemydidae

*Araripemys barretoii* Price, 1973*Araripemys arturi* Fielding, Martill and Naish, 2005

Diapsida

**Lepidosauria**

Squamata

Familia *incertae sedis**Olindalacerta brasiliensis* Evans and Yabumoto, 1998*Tijubina ponteii* Bonfim Jr and Marques, 1997**Archosauria****Crocodyliformes**

Mesoeucrocodylia

Neosuchia

Susisuchidae

*Susisuchus anatoceps* Salisbury, Frey and Martill, 2003

Notosuchia

Araripesuchidae

cf. *Araripesuchus* Price, 1959**Pterosauria**

Pterodactyloidea

Ornithocheiroidea

Ornithocheiridae

*Arthurdactylus conandoylei* Frey and Martill, 1994

*Ludodactylus sibbicki* Frey *et al.*, 2003

*Brasileodactylus* sp.

Lophocratia

Azhdarchoidea

Tapejaridae

*Ingridia imperator* (Campos and Kellner, 1997)

*Ingridia navigans* (Frey *et al.*, 2003a)

?Tupuxuaridae

'*Tupuxuara*' sp. nov.

**Dinosauria**

Theropoda

?Spinosauroidea

Isolated tooth

**Aves**

?Euenantiornithiformes

Undescribed sp. and numerous feathers

**Flora**

**Algae**

*Botryococcus* sp.

**Dinoflagellata**

*Subtilisphaera senegalensis*

**Vascular plants**

Taxa based on macrophytes.

**Pteridospermae**

Equisetales

*Equisetum* sp.

Isoetales

*Isoetites* cf. *choffati*

Filicales

Schizaeaceae

*Ruffordia goepperti* Seward, 1961

## Gymnospermae

Cycadales

Undescribed spp.

Bennettitales

cf. *Williamsonia*

Caytoniales

Undescribed sp.

Araucariaceae

*Brachyphyllum castilhoi* Duarte, 1985

*Brachyphyllum obesum* Heer, 1875

*Araucaria* sp.

Resin

Cheirolepidiaceae

*Lindleycladus*

*Tomaxellia* sp.

Czekanowskiales

?Gymnospermae

*Novaolindia dubia* Kunzmann, Mohr and Bernardes-de-Oliveira, 2007

## Gnetales

Welwitschiaceae

*Welwitschiella austroamericana* Dilcher, Bernardes-de-Oliveira, Pons and Lott, 2005

*Welwitschiophyllum brasiliense* Dilcher, Bernardes-de-Oliveira, Pons and Lott, 2005

*Welwitschiostrobus murili* Dilcher, Bernardes-de-Oliveira, Pons and Lott, 2005

*Priscowelwitschia* Dilcher, Bernardes-de-Oliveira, Pons and Lott, 2005

Ephedraceae

Taxon A

Taxon B

Taxon C

Taxon D

Taxon E

Taxon F

Taxon G

Taxon H

**Angiospermae**

## Monocotyledons

*Araripia florifera* Mohr and Eklund, 2003*Klitzschophyllites flabellata* (Mohr and Rydin, 2002)*Cratonia cotyledon* Rydin, Mohr and Friis, 2003*Trifurcatia flabellata* Mohr and Rydin, 2002*Endressinia brasiliiana* Mohr and Bernardes-de-Oliveira, 2004

## Dicotyledons

?Nymphaeales

Magnolialea

Angiosperm A

Angiosperm B

Eudicots

?Proteales

Angiosperm C

Plant taxa based on pollen and spores (listed alphabetically).

**Spores***Appendicisporites* sp.*Baculatisporites* sp.*Balmeisporites* sp.*Bellisporites pallezens* (Bolshovitina, 1956) Pocock, 1970*Boseisporites* sp. Lima, 1979*Bullasporis aequatorialis* Krutzsch, 1959*Ceratosporites parvus* Brenner, 1963*Cicatricosisporites breavilaesuratus* (Couper, 1958) Kemp, 1970*Cicatricosisporites orbiculatus* Singh, 1964*Cicatricosisporites subrotundus* Brenner, 1963*Cicatricosisporites venustus* Déak, 1963*Cingulatisporites psilatus* Groot and Penny, 1960*Collarisporites fuscus* Déak, 1964*Concavissimisporites punctatus* (Delcourt and Sprumont, 1955) Brenner, 1963*Convencosisporites platyverrucosus* Brenner, 1963*Crybelosporites pannuceus* (Brenner, 1963) Srivastava, 1975*Cyathidites minor* Couper, 1953*Deltoidospora* sp.*Densoisporites velatus* (Weyland and Krieger, 1953) Krasnova, 1961*Distaltriangulisporites* sp.*Dictyophyllidites* sp.*Foveotriletes subtriangularis* Brenner, 1963*Granulatisporites* sp.



*Intervlobites* sp.  
*Klukisporites* sp.  
*Leptolepidites verrucatus* Couper, 1953  
*Lycopodiumsporites* sp. 1  
*Lycopodiumsporites* sp. 2  
*Matonisporites equiexinus* Couper, 1958  
*Matonisporites silvai* Lima, 1979  
*Paxillitriteles* sp.  
*Reticulisporites* sp.  
*Retitriteles* sp.  
*Sergipea variverrucata* (Regali, Uesugui and Santos, 1974) Regali, 1987  
*Sergipea* sp.  
*Trilobosporites humilis* Delcourt and Sprumont, 1955  
*Uvaesporites glomeratus* Döring, 1965  
*Verrucosisporites* sp.

### Pollen

*Afropollis* aff. *jardinus* Doyle *et al.*, 1982  
*Alisporites* sp.  
*Applanopsis dampieri* (Balme, 1957) Döring, 1961  
*Applanopsis segmentatus* (Balme, 1957) Pons, 1988  
*Applanopsis trilobatus* (Balme, 1957) Döring, 1961  
*Applanopsis trubatus* (Balme, 1957) Dörhöffer, 1977  
*Araucariacites australis* Cookson, 1947  
*Bennettitaepollenites* sp. Lima, 1978  
*Callialasporites* sp.  
*Classopollis noeli* Reyre, 1970  
*Clavatipollenites hughesii* Couper, 1958  
*Cretacaeiporites* sp.  
*Cycadopites* sp.  
*Elaterocolpites* sp.  
*Elateroplicites* sp.  
*Elaterosporites* sp.  
*Ephedripites* sp.  
*Equisetosporites ambiguus* (Hedlund, 1966) Singh, 1983  
*Equisetosporites reyrei* Lima, 1980  
*Equisetosporites subcircularis* Lima, 1980  
*Eucommiidites* sp. Kemp, 1970  
*Exesipollenites tumulus* Balme, 1957  
*Foveotricolpites* sp.  
*Galeacornea* sp.

*Gnetaceaepollenites barghoornii* (Pocock, 1964) Lima, 1980  
*Gnetaceaepollenites boltenhagenii* Dejax, 1985  
*Inaperturopollenites dubius* (Potonie and Venitz, 1934) Pflug and Thompson 1953  
*Penetetrapites mollis* Hedlund and Norris, 1968  
cf. *Penetetrapites incipiens* Lima, 1978  
*Podocarpidites* sp.  
*Protopinus* sp.  
*Psilatricolpites psilatus* Pierce, 1961  
*Psilatricolpites* sp.  
*Retimonocolpites dividuus* Pierce, 1961  
cf. *Retimonocolpites* sp. 2 Doyle *et al.*, 1977  
*Rousea* sp.  
*Senegalosporites* sp.  
*Sergipea* sp.  
*Singhia* sp.  
*Sofrepites* sp.  
*Spheripollenites scabratus* (Couper, 1958) Pocock, 1970  
*Steevesipollenites* sp.  
*Stellatopollis araripensisdensiornatus* (Lima 1976) Lima 1978  
*Stellatopollis barghoornii* Doyle, 1975  
*Striatopollis* sp.  
*Tetracolpites* sp.  
*Tricolpites micromunus* (Groot and Pennt, 1960) Singh, 1971  
*Tricolpites* sp.  
*Tucanopollis* sp.  
*Vitreisporites* sp.

## Algae

*Chomotriletes* sp.  
*Maranhites* sp.  
*Ovoidites* sp.