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# Results of the collecting trips of the Hungarian Natural History Museum in Chiapas, Mexico, in 2000–2001: Mammalia, Reptilia, Amphibia

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**Abstract** – The results of two collecting trips to Chiapas, Mexico, in 2000 and 2001 are summarized in the form of species lists. The vertebrate specimens (mammals, amphibians, and reptiles) deposited in the HNHM are enumerated, together with the exact collecting localities. Altogether, the trips resulted in 173 mammal and 55 herpetological specimens. They belong to 59 and 32 species, respectively, of which 32 mammal and 14 amphibian and reptile species are new to the collections of the museum. Brief characterization of the vegetation types, and descriptions of the collecting methods are also given.

**Key words** – Mammals, amphibians, reptiles, vegetation types, collecting methods, Chiapas, Mexico.

## INTRODUCTION

The Hungarian–Mexican zoological co-operation started in 1995 when a two-year project was awarded by the bilateral agreement between the governments of the two countries. This first project primarily aimed at the study of the correlation between the Mexican oribatid mite fauna and the vegetation. Two collecting trips were carried out in 1996 and 1997, and the preliminary results were published in two papers (BORHIDI *et al.* 1996, BORHIDI & MAHUNKA 1997). The material collected during the trips (mainly epiphyllous mosses and lichens, as well as different representatives of soil arthropods) has been deposited in the Hungarian Natural History Museum (HNHM), Budapest.

Based on the contacts established by this project, a second co-operation was launched in 2000, when another two-year project, this time between the HNHM and the El Colegio de la Frontera Sur (ECOSUR, San Cristóbal de Las Casas, Chiapas), was granted by the Hungarian–Mexican Intergovernmental Science and Technology Co-operation Programme. The project was entitled "Biodiversity of terrestrial vertebrates and soil dwelling arthropods of different forest types in Chiapas, Mexico", and was composed of two study trips by scientists of both sides to the partner country. The aim of the project was to explore a series of Mexican forest types with respect of their mammal, amphibian and reptile fauna, as well as to exchange museum vertebrate specimens and soil arthropod samples for later taxonomical and systematic analyses.

Present amphibian, reptile and mammal investigations were connected to the existing projects in Mexico, organised by ECOSUR. Biodiversity surveys of certain terrestrial animal groups (Vertebrata: Amphibia, Reptilia, Mammalia; Arthropoda: Acari, Chilopoda, Diplopoda, Coleoptera, etc.) may serve as a scientific basis for appropriate nature conservation measures, and clarify the state of the complex forest ecosystems in different geographical regions of Chiapas State (Central Plateau, Sierra Madre, Coastal Region, Central Depression). The great majority of the Mexican fauna in the above mentioned groups is still poorly known, and their study can produce new taxonomical, systematic and ecological results.

The host institution ECOSUR was founded in 1994 as a regional center for interdisciplinary research, with an emphasis on resolving the problems arising from development, poverty, and biodiversity conservation issues in the frontier region of Southern Mexico. In function, ECOSUR works in strategically distributed units in the four southeastern states of Mexico: Chiapas, Tabasco, Campeche and Quintana Roo. Research activities in ECOSUR concentrate on three critical themes of the region: Biodiverstiy Conservation and Ecology, Alternative Production Systems, and Human Health and Population. In the last five years the ECOSUR team of this co-operation project worked in two protected areas in southern Chiapas: Lagos de Montebello National Park, and El Triunfo Biosphere Reserve. Their goal is to assess the effects of different land use activities and the impact of fragmentation, as well as to propose a biodiversity-monitoring programme for these areas (HORVÁTH *et al.* 2001, MUÑOZ *et al.* 2000, 2002).

## STUDY SITES AND METHODS

Beside several other localities where a maximum of two days were spent with collecting, two areas were more thoroughly sampled.

The Lagos de Montebello National Park is situated close to the Guatemalan border, on the Central Plateau, within the transition zone between the Lacandon Tropical Rainforest and the Central Highlands of Chiapas State. Due to its geographical and ecological position, the area is characterized by a high level of biodiversity and a great number of endemism (HORVÁTH *et al.* 2001). It also serves as refuge for a variety of vegetation types, like pine-oak-liquidambar forest, pine-oak forest and tropical mountain rainforest (CARLSON 1954, BREEDLOVE 1981). However, in the protected and adjacent natural areas the expansion of agricultural activities and the increasing exploitation of natural resources have caused fragmentation, loss of natural habitats, thus endangering the exceptionally high biodiversity of the whole area (MARCH & FLAMENCO 1996).

The El Triunfo Biosphere Reserve is situated in the southeastern mountain chain of the state (Sierra Madre de Chiapas). The area is one of the few, still widely extended, only slightly disturbed cloud forest reserves in Mexico, where a wide variety of endemic species, as well as many threatened species occur (BREEDLOVE 1981, LONG & HEATH 1991). However, as in other protected areas in Chiapas, the vegetation cover becomes more and more fragmented due to human activity: this zone is one of the most important coffee production sites in Chiapas and in the entire country. The effect of this process on the richness and composition of biodiversity is still poorly known (MOGUEL & TOLEDO 1999, GREENBERG *et al.* 1997).

## *Vegetation types at the study sites*

1. Pine forest (San Cristóbal de Las Casas, Lagos de Montebello National Park: Bosque Azul)
2. Pine-oak forest (San Cristóbal de Las Casas: Molino de Los Arcos; Rancho Muxcak; Ocosingo; Tonina)
3. Pine-oak-liquidambar forest (Lagos de Montebello N.P.: Bosque Azul, Vivero Forestal)
4. Oak forest (San Franciso Cave; Tenam Puente)
5. Oak-pine forest (Teopisca: Panteon Cave).
6. Tropical mountain rainforest (Lagos de Montebello N.P.: Bosque Azul, Grutas)
7. Evergreen tropical rainforest (Lagos de Montebello N.P.: El Corchal; Solo Dios; El Aguacero, Cañón del Rio La Venta; Misol-Ha)
8. Tropical semi-deciduous forest (El Chorreadero; Los Laguitos Cave; Cañon del Sumidero; Sima de Las Cotorras; 10 km N of Arriaga)
9. Tropical cloud-forest (El Pozo; Finca Santa Cruz; Nicolás Bravo 1)
10. Coffee plantation shaded with native tree species (Nicolás Bravo 1; Nicolás Bravo 2: Rancho La Soledad)
11. Coffee plantation shaded with *Inga* sp (Finca Santa Cruz)
12. Secondary growth tropical rainforest (Palenque N.P.)
13. Secondary shrub (Mapastepec; Rancho Muxcak; 5 km before the Altamirano-Ocosingo junction)
14. Abandoned pasture land (Rancho Muxcak)

## *Collecting methods*

The vertebrates (amphibians, reptiles and small mammals) were collected by means of folding Sherman and Tomahawk traps; drift fences; mist-nets at ground and canopy levels; active searching with manual capture.

Apart from the material collected by the research team, vertebrate specimens were acquired by exchange with ECOSUR and Museo de Zoológia of the Universidad de Ciencias y Artes de Chiapas (UNICACH).

To collect invertebrates, the following devices and methods were used: light traps; white sheet illuminated with mercury-vapour lamps; litter and soil samples extracted in Berlese-funnel; soil saturation with formaldehide solution.

## RESULTS

From the material collected the vertebrates have already been determined. In the course of the identification the following literature was used: Mammals: HALL 1981, REID 1997, ALVAREZ *et al.* 1994, MEDELLÍN *et al.* 1997. Amphibians and reptiles: CASAS-ANDREU & MCCOY 1979, FLORES-VILLELA 1993, ALVAREZ DEL TORO 1982.

## MAMMALIA

Before the two-year ECOSUR-HNHM joint project Mexican mammals were represented in the HNHM collection only by 26 specimens representing 20 species. During the project altogether 158 mammalian individuals were collected and further 15 specimens were exchanged; these altogether belong to 59 species of which 32 (marked in the list with *) are new for the HNHM.

### DIDELPHIMORPHIA
### Didelphidae

*Didelphis virginiana* KERR, 1792 – Tuxtla Gutiérrez, Cerro Mactumatzá, 4 km S of Tuxtla Gutiérrez, 13 April 1999.

**Marmosa mexicana* MERRIAM, 1897 – Municipio Escuintla, Ejido San Juan Panama, 11 June 2000.

### INSECTIVORA
### Soricidae

*Cryptotis parva* (SAY, 1823) – Municipio La Independencia, Lagos de Montebello NP., 18 July 1996.

**Sorex veraepacis* ALSTON, 1877 – Municipio La Concordia, Finca Santa Cruz, 15°48'N 93°04'W, 1350 m, 27 March 2000.

## CHIROPTERA
## Emballonuridae

*Balantiopteryx plicata* PETERS, 1867 – Tuxtla Gutiérrez, Los Laguitos Cave, 16°47'N 93°09'W, 730 m, 16 March 2000.

*Saccopteryx bilineata* (TEMMINCK, 1838) – Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 28 September 2001.

## Mormoopidae

**Mormoops megalophylla* (PETERS, 1864) – Tuxtla Gutiérrez, El Chorreadero, 16°45'N 92°58'W, 800 m, 15 March 2000; Tuxtla Gutiérrez, Los Laguitos Cave, 16°47'N 93°09'W, 730 m, 16 March 2000.

**Pteronotus davyi* GRAY, 1838 – Tuxtla Gutiérrez, Los Laguitos Cave, 16°47'N 93°09'W, 730 m, 16 March 2000.

*Pteronotus parnelli* (GRAY, 1843) – Municipio La Trinitaria, San Fransico Cave, 16°05'N 92°02'W, 1700 m, 7 March 2000; 22 September 2001.

## Phyllostomidae
## Phyllostominae

**Micronycteris microtis* MILLER, 1898 – Municipio Arriaga, 10 km N of Arriaga, 16°20'N 93°53'W, 650 m, 24 September 2001; Municipio Motozintla, between Huixtla and Motozintla, 15°19'N 92° 17'W, 700 m, 29 September 2001.

## Glossophaginae

*Anoura geoffroyi* GRAY, 1838 – Municipio La Independencia, Lagos de Montebello NP., Bosque Azul, Grutas, 16°08'N 91°43'W, 1450 m, 10 March 2000; Municipio La Trinitaria, Lagos de Montebello NP., Vivero Forestal, 16°07'N 91°43'W, 1450 m, 11 March 2000; Municipio Teopisca, Panteón Cave, 10°33'N 92°30'W, 1850 m, 10 October 2001.

**Glossophaga commissarisi* GARDNER, 1962 – Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 27 September 2001.

*Glossophaga soricina* (PALLAS, 1766) – Municipio La Trinitaria, San Fransico Cave, 16°05'N 92°02'W, 1700 m, 7 March 2000; 22 September 2001; Tuxtla Gutiérrez, Los Laguitos Cave, 16°47'N 93°09'W, 730 m, 16 March 2000; Municipio Mapastepec, Nicolás Bravo 1, 15°32'N 92°48'W, 1250 m, 25 September 2001; Municipio Ocozocoautla, El Aguacero, Cañon del Rio La Venta, 16°46'N 93°32'W, 450 m, 6 October 2001.

**Leptonycteris curasoae* MILLER, 1900 – Tuxtla Gutiérrez, Los Laguitos Cave, 16°47'N 93°09'W, 730 m, 16 March 2000.

## Carolliinae

*Carollia brevicauda* (SCHINZ, 1821) – Municipio Ocozocoautla, El Aguacero, Cañon del Rio La Venta, 16°46'N 93°32'W, 450 m, 6 October 2001; Municipio Salto de Agua, Misol-Ha, 17°23'N 91°60'W, 250 m, 11 October 2001; Municipio Palenque, Palenque NP., 17°29'N 92°02'W, 60 m, 12 October 2001.

*Carollia perspicillata* (LINNAEUS, 1758) – Municipio Salto de Agua, Misol-Ha, 17°23'N 91°60'W, 250 m, 11 October 2001.

*Carollia subrufa* (HAHN, 1905) – Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 27 September 2001.

## Stenodermatinae

**Artibeus aztecus* K. ANDERSEN, 1906 – Municipio La Trinitaria, near Hidalgo, Rancho Muxcak, 16°06'N 91°46'W, 1490 m, 8 March 2000.

*Artibeus jamaicensis* LEACH, 1821 – Municipio La Trinitaria, San Fransico Cave, 16°05'N 92°02'W, 1700 m, 7 March 2000; 22 September 2001; Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 27 September 2001; Municipio Ocozocoautla, El Aguacero, Cañon del Rio La Venta, 16°46'N 93°32'W, 450 m, 6 October 2001.

*Artibeus lituratus* (OLFERS, 1818) – Municipio La Concordia, Finca Santa Cruz, 15°48'N 93°04'W, 1350 m, 24 March 2000; Tuxtla Gutiérrez, Cerro Mactumatzá, 2.5 km S, 3 km E of Tuxtla Gutiérrez, 845 m, 1 June 2001; Municipio de Tonalá, Puerto Arista, Campamento Tortugero, 15°57N 93°50'W, 0 m, 24 September 2001; Municipio Ocozocoautla, El Aguacero, Cañon del Rio La Venta, 16°45'N 93°32'W, 650 m, 6 October 2001.

**Artibeus phaeotis* (MILLER, 1902) – Municipio Salto de Agua, Misol-Ha, 17°23'N 91°60'W, 250 m, 11 October 2001.

**Artibeus toltecus* (SAUSSURE, 1860) – Municipio Salto de Agua, Misol-Ha, 17°23'N 91°60'W, 250 m, 11 October 2001.

**Centurio senex* GRAY, 1842 – Tuxtla Gutiérrez, Cerro Mactumatzá, 2.5 km S, 3 km E of Tuxtla Gutiérrez, 845 m, 1 June 2001.

**Platyrrhinus helleri* (PETERS, 1866) – Municipio Marquéz de Comillas, Rio Lagartos, 4 May 2000.

*Sturnira lilium* (E. GEOFFROY, 1810) – Municipio La Trinitaria, near Hidalgo, Rancho Muxcak, 16°06'N 91°46'W, 1490 m, 8 March 2000; Municipio La Trinitaria, San Francisco Cave, 16°05'N 92°02'W, 1700 m, 22 September 2001; Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 27 September 2001.

**Sturnira ludovici* ANTHONY, 1924 – Municipio La Trinitaria, near Hidalgo, Rancho Muxcak, 16°06'N 91°46'W, 1490 m, 8 March 2000; Municipio La Independencia, Lagos de Montebello NP., Bosque Azul, Grutas, 16°08'N 91°43'W, 1450 m, 10 March 2000; Municipio La Concordia, Finca Santa Cruz, 15°48'N 93°04'W, 1350 m, 24–25 March 2000; Municipio La Independencia, Lagos de Montebello NP., Grutas, 16°08'N 91°43'W 1450 m, 4 October 2001; Municipio Teopisca, Panteon Cave, 10°33'N 92°30'W, 1850 m, 10 October 2001.

*Uroderma bilobatum* PETERS, 1866 – Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 27 September 2001.

## Desmodontinae

*Desmodus rotundus* (E. GEOFFROY, 1810) – Municipio La Trinitaria, San Fransico Cave, 16°05'N 92°02'W, 1700 m, 7 March 2000; Municipio La Independencia, Lagos de Montebello NP., Bosque Azul, Grutas, 16°08'N 91°43'W, 1450 m, 10 March 2000; Municipio La Independencia, Lagos de Montebello NP., Grutas, 16°08'N 91°43'W 1450 m, 4 October 2001.

**Diphylla ecaudata* SPIX, 1823 – Municipio La Independencia, Lagos de Montebello NP., Bosque Azul, Grutas, 16°08'N 91°43'W, 1450 m, 10 March 2000; Municipio La Trinitaria, San Francisco Cave, 16°05'N 92°02'W, 1700 m, 22 September 2001.

## Natalidae

**Natalus stramineus* GRAY, 1838 – Tuxtla Gutiérrez, Los Laguitos Cave, 16°47'N 93°09'W, 730 m, 16 March 2000.

## Vespertilionidae

*Eptesicus brasiliensis* (DESMAREST, 1819) – Municipio Mapastepec, Nicolas Bravo 1, 15°32'N 92°48'W, 1250 m, 25 September 2001.

*Eptesicus fuscus* (BEAUVOIS, 1796) – Municipio Teopisca, Panteon Cave, 10°33'N 92°30'W, 1850 m, 10 October 2001.

**Myotis elegans* HALL, 1962 – Municipio Mapastepec, Nicolas Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 27 September 2001.

**Myotis fortidens* MILLER et ALLEN, 1928 – Municipio de Tonalá, Puerto Arista, Campamento Tortugero, 15°57'N 93°50'W, 0 m, 24 September 2001.

*Myotis nigricans* (SCHINZ, 1821) – Municipio La Trinitaria, Lagos de Montebello NP., Bosque Azul, 16°08'N 91°44'W, 1400 m, 9 March 2000.

**Myotis velifer* – Municipio Teopisca, Panteon Cave, 10°33'N 92°30'W, 1850 m, 29 September 2000.

*Rhogeessa tumida* H. ALLEN, 1866 – Municipio La Trinitaria, Rancho Las Palomas, 700 m, 9 June 2001.

## Molossidae

**Molossus ater* E. GEOFFROY, 1805 – Municipio Villaflores, Villaflores, 16°14'N 93°22'W, 17 September 2001.

*Tadarida brasiliensis* (I. GEOFFROY, 1824) – Municipio La Trinitaria, San Fransico Cave, 16°05'N 92°02'W, 1700 m, 7 March 2000; 22 September 2001.

## CARNIVORA
### Canidae

*Urocyon cinereoargenteus* (SCHREBER, 1775) – Municipio Ocozocoautla, Ejido Manuel Velasco Suárez, 2 June 2001; Municipio Ocosingo, 16°57'N 91°58'W, 1200 m, 11 October 2001.

### Mustelidae

*Mustela frenata* LICHTENSTEIN, 1831 – Municipio La Trinitaria, between Trinitaria and Montebello, 26 May 2001.

## Artiodactyla
### Tayassuidae

*Pecari tajacu* (LINNAEUS, 1758) – Municipio Mapastepec, Santa Rita Las Flores, 15 km N 6 km E of Mapastepec, 500 m, 27 Nov. 1990.

### Cervidae

*Mazama americana* (ERXLEBEN, 1777) – Municipio Mapastepec, Santa Rita Las Flores, 15 km N 6 km E of Mapastepec, 500 m, 28 Nov. 1990.

## RODENTIA
### Heteromyidae

**Heteromys desmarestianus* GRAY, 1868 – Municipio La Concordia, Finca Santa Cruz, 15°48'N 93°04'W, 1350 m, 23–26 March 2000; Municipio Mapastepec, Nicolás Bravo 1, 15°32'N 92°48'W, 1250 m, 25 September 2001.

**Liomys salvini* (THOMAS, 1893) – Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 27 September 2001.

### Muridae
### Sigmodontinae

**Baiomys musculus* (MERRIAM, 1892) – Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 28 September 2001.

**Oligoryzomys fulvescens* (SAUSSURE, 1860) – Municipio La Trinitaria, near Hidalgo, Rancho Muxcak, 16°06'N 91°46'W, 1490 m, 7 March 2000; Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 28 September 2001.

**Oryzomys alfaroi* (J. A. ALLEN, 1891) – Municipio La Independencia, Lagos de Montebello NP., Bosque Azul, Grutas, 16°08'N 91°43'W, 1450 m, 10 March 2000.

**Oryzomys couesi* (ALSTON, 1877) – Municipio La Trinitaria, near Hidalgo, Rancho Muxcak, 16°06'N 91°46'W, 1490 m, 7 March 2000.

**Oryzomys rostratus* MERRIAM, 1901 – Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 28 September 2001.

**Peromyscus melanophrys* (COUES, 1874) – Municipio Tuxtla Gutiérrez, Tuxtla Gutiérrez, 16°45'N 93°07'W, 535 m, 26 July 2000.

**Peromyscus mexicanus* (SAUSSURE, 1860) – Municipio La Trinitaria, near Hidalgo, Rancho Muxcak, 16°06'N 91°46'W, 1490 m, 7 March 2000; Municipio La Trinitaria, Lagos de Montebello NP., Bosque Azul, on the way to Yalmuz, 16°08'N 91°44'W, 1400 m, 9–11 March 2000; Municipio Berriozábal, El Pozo, 16°51'N 93°19'W, 1100 m, 17 March 2000; Municipio La Concordia, Finca Santa Cruz, 15°48'N 93°04'W, 1350 m, 23–26 March 2000; Municipio Mapastepec, Nicolás Bravo 1, 15°32'N 92°48'W, 1250 m, 25 September 2001; Municipio Ocozocoautla, El Aguacero, Cañon del Rio La Venta, 16°45'N 93°32'W, 650 m, 6 October 2001.

*Peromyscus zarhynchus* MERRIAM, 1898 – Municipio La Independencia, Lagos de Montebello NP., Grutas, 16°08'N 91°43'W 1450 m, 4 October 2001.

**Reithrodontomys mexicanus* (SAUSSURE, 1860) – Municipio La Independencia, Lagos de Montebello NP., Bosque Azul, Grutas, 16°08'N 91°43'W, 1450 m, 10 March 2000; Municipio La Concordia, Finca Santa Cruz, 15°48'N 93°04'W, 1350 m, 23–24 March 2000.

**Reithrodontomys sumichrasti* (SAUSSURE, 1861) – Municipio La Trinitaria, near Hidalgo, Rancho Muxcak, 16°06'N 91°46'W, 1490 m, 7 March 2000; Municipio La Trinitaria, Lagos de Montebello NP., Bosque Azul, on the way to Yalmuz, 16°08'N 91°44'W, 1400 m, 10 March 2000.

**Scotinomys teguina* (ALSTON, 1877) – Municipio Berriozábal, El Pozo, 16°51'N 93°19'W, 1100 m, 18 March 2000.

*Sigmodon hispidus* SAY et ORD, 1825 – Municipio La Trinitaria, near Hidalgo, Rancho Muxcak, 16°06'N 91°46'W, 1490 m, 7 March 2000.

**Tylomys nudicaudus* (PETERS, 1866) – Municipio Mapastepec, Nicolás Bravo 1, 15°32'N 92°48'W, 1250 m, 27 March 2001.

## Agoutidae

*Agouti paca* (LINNAEUS, 1766) – Municipio Mapastepec, Santa Rita Las Flores, 15 km N 6 km E of Mapastepec, 6 May 1991.

## REPTILIA AND AMPHIBIA

Altogether 55 specimens of reptiles and amphibians were collected. They belong to at least 31 species, of which 1 family (Xantusiidae), 7 genus (*Dermophis, Cnemidophorus, Lepidophyma, Dryadophis, Ninia, Thamnophis, Cerrophidion*)

and 14 species (marked in the list with asterisk) are new to the collection of the HNHM.

## SQUAMATA: SAURIA

### Gekkonidae

*Hemidactylus frenatus* SCHLEGEL, 1836 – Municipio Salto de Agua, Misol-Ha, 17°23'N 91°60'W, 250 m, 11 October 2001.

### Iguanidae

*Anolis* sp. – Municipio La Trinitaria, Lagos de Montebello NP., Vivero Forestal, 16°07'N 91°43'W, 1450 m, 11 March 2000; Municipio La Concordia, Finca Santa Cruz, 15°48'N 93°04'W, 1350 m, 23–27 March 2000; Municipio Mapastepec, Nicolás Bravo 1, 15°32'N 92°48'W, 1250 m, 25 September 2001; Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 27–28 September 2001; Municipio Ocozocoautla, El Aguacero, Cañon del Rio La Venta, 16°45'N 93°32'W, 650 m, 6 October 2001.

**Anolis crassulus* COPE, 1864 – Municipio La Concordia, Finca Santa Cruz, 15°48'N 93°04'W, 1350 m, 23–27 March 2000.

*Basiliscus vittatus* WIEGMANN, 1828 – Municipio La Concordia, on the way to Santa Cruz, 15°50'N 92°57'W, 28 March 2000; Municipio Palenque, Palenque NP., 17°29'N 92°02'W, 60 m, 12 October 2001.

*Cnemidophorus* sp. – Municipio Ocozocoautla, El Aguacero, Cañon del Rio La Venta, 16°45'N 93°32'W, 650 m, 6 October 2001.

*Sceloporus* sp. – Municipio Mapastepec, Nicolas Bravo 1, 15°32'N 92°48'W, 1250 m, 25 September 2001.

**Sceloporus taeniocnemis* COPE, 1885 – Municipio La Concordia, Finca Santa Cruz, 15°48'N 93°04'W, 1350 m, 23–27 March 2000.

*Sceloporus variabilis* WIEGMANN, 1834 – Municipio La Trinitaria, Lagos de Montebello NP., Vivero Forestal, 16°07'N 91°43'W 1450 m, 11 March 2000; Municipio Berriozábal, El Pozo, 16°51'N 93°19'W, 1100 m, 17 March 2000.

### Scincidae

*Sphenomorphus* sp. – Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 27–28 September 2001.

*Sphenomorphus assatus* (COPE, 1864) – Municipio La Trinitaria, Lagos de Montebello NP., El Corchal, 16°07'N 91°43'W, 1450 m, 11 March 2000; Municipio La Concordia, Finca Santa Cruz, 15°48'N 93°04'W, 1350 m, 23–27 March 2000.

## Xantusiidae

**Lepidophyma smithii* BOCOURT, 1876 – Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 27–28 September 2001.

# SQUAMATA: SERPENTES

## Boidae

*Boa constrictor* (LINNAEUS, 1758) – Municipio Mapastepec, Mapastepec, 15°26'N 92°53'W, 40 m, 27 September 2001.

## Colubridae

**Dryadophis melanolomus* COPE, 1868 – Municipio La Concordia, Solo Dios, 15°46'N 92°58'W, 900 m, 23 March 2000.

**Drymobius margaritiferus* (SCHLEGEL, 1837) – Municipio Altamirano, 5 km before the Altamirano-Ocosingo junction, 16°47'N 92°09'W, 1250 m, 11 October 2001.

**Ninia diademata* BAIRD et GIRARD, 1853 – Municipio La Trinitaria, Lagos de Montebello NP., Vivero Forestal, 16°07'N 91°43'W, 1450 m, 11 March 2000.

**Ninia sebae* (DUMÉRIL, BIBRON et DUMÉRIL, 1854) – Municipio Venustiano Carranza, Soyatitán, 25 May 2001.

**Thamnophis proximus* (SAY, 1823) – Chiapas, Municipio La Trinitaria, near Hidalgo, Rancho Muxcak, 16°06'N 91°46'W, 1490 m, 7 March 2000.

## Elapidae

**Micrurus elegans* (JAN, 1858) – Municipio Berriozábal, El Pozo, 16°51'N 93°19'W, 1100 m, 17 March 2000.

## Viperidae

**Cerrophidion tzotzilorum* (CAMPBELL, 1985) – San Cristóbal de Las Casas, Colonia Ojo de Agua, Periférico Norte, 2200 m, 11. April 1994.

## GYMNOPHIONA
## Caeciliidae

**Dermophis mexicanus* (DUMÉRIL et BIBRON, 1841) – Ocozocoautla, Ejido Cuauhtemoc, Reserva El Ocote, 600 m, June 1994.

## CAUDATA
## Plethodontidae

*Bolitoglossa* sp. – Municipio Coapilla, Rio Negro, 4 km N of Coapilla, 1750 m, 23 March 2000.

## ANURA
## Leptodactylidae

*Eleutherodactylus* sp. – Municipio Mapastepec, Nicolás Bravo 1, 15°32'N 92°48'W, 1250 m, 25 September 2001; Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 27–28 September 2001; Municipio Ocozocoautla, El Aguacero, Cañon del Rio La Venta, 16°45'N 93°32'W, 650 m, 6 October 2001.

**Eleutherodactylus rhodopis* (COPE, 1867) – Municipio Coapilla, Rio Negro, 4 km N of Coapilla, 1750 m, 23 March 2000.

## Bufonidae

*Bufo* sp. – Municipio Palenque, Palenque NP., 17°29'N 92°02'W, 60 m, 12 October 2001.

**Bufo canaliferus* COPE, 1877 – Municipio Mapastepec, Nicolás Bravo 2, Rancho La Soledad, 15°28'N 92°50'W, 375 m, 27–28 September 2001.

*Bufo marinus* LINNAEUS, 1758 – Municipio La Trinitaria, Lagos de Montebello NP., Vivero Forestal, 16°07'N 91°43'W 1450 m, 1400 m, 4 October 2001.

*Bufo valliceps* WIEGMANN, 1833 – Municipio La Concordia, Finca Santa Cruz, 15°48'N 93°04'W, 1350 m, 23–27 March 2000; Municipio Ocozocoautla, El Aguacero, Cañon del Rio La Venta, 16°45'N 93°32'W, 650 m, 6 October 2001.

## Hylidae

**Hyla loquax* GAIGE et STUART, 1934 – Municipio La Trinitaria, Lagos de Montebello NP., Vivero Forestal, 16°07'N 91°43'W 1450 m, 11 March 2000.

*Smilisca* sp. – Municipio La Trinitaria, Lagos de Montebello NP., Vivero Forestal, 16°07'N 91°43'W 1450 m, 1400 m, 4 October 2001; Municipio Palenque, Palenque NP., 17°29'N 92°02'W, 60 m, 12 October 2001.

## Ranidae

*Rana* sp. – Municipio La Concordia, Finca Santa Cruz, 15°48'N 93°04'W, 1350 m, 23–27 March 2000.

*Rana maculata* BrOCCHI, 1877 – Tuxtla Gutiérrez, El Chorreadero, 16°45'N 92°58'W, 800 m, 15 March 2000.

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