

LISTS OF SPECIES

Checklist of polychaetes (Annelida: Polychaeta) from El Salvador, Eastern Pacific.

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Abstract: A checklist of polychaete species recorded from El Salvador in the Pacific coast of Central America is presented (13°44'39" N, 90°07'58" W to 13°30'10" N, 87°43'13" W), including mainly estuaries, sandy beaches and sublittoral environments from El Salvador, Eastern Pacific, is reported. The checklist comprises 121 species belonging to 80 genera in 35 families currently known from the area. We provided a synthesis of the taxonomical and ecological work carried out until now that could guide to future research.

Introduction

The annelid polychaetes, an important component in the benthic communities around the world (Salazar-Vallejo *et al.* 1989), can provide more than a third of the macroscopic species of soft bottoms (Knox 1977) and usually is the most abundant group, with higher species richness and frequency. However, it has a relatively low biomass and its species rarely are commercially exploited by mankind, not enough to charge the commercial importance of other dominant groups (crustaceans and mollusk).

From the ecological point of view their contribution is invaluable to the marine dynamic; polychaetes are part of any food web on which finally appear demersal species of great commercial value and their diverse lifestyles, eating habits, adaptations and evolutionary history are complementary elements of complexity for this group.

Despite the ecological importance of this group, its identification presents great difficulties (Fauchald 1977a; Salazar-Vallejo *et al.* 1989). According to Salazar-Vallejo and Londoño-Mesa (2004) the reasons are basically: 1) the release of the literature on the subject, and 2) lack of a manual or updated list of species in many regions.

We made this alphabetical compilation list of species registered and publications on them, included literature records (papers); it would be

useful for taxonomic and ecological studies in this part of the continent. No specimens were re-examined, but we have now added some minor modifications that could guide to future research, as many publications have inserted names considered questionable, misidentifications, synonymies and suggest to future revisions. Unpublished data (thesis and technical reports) which mention polychaetes are listed in additional references.

Species and families reported upon this checklist are a result of taxonomical and ecological surveys in mainly estuaries, sandy beaches and sublittoral environments of El Salvador, located on the Pacific coast of Central America, bordered by the Republic of Guatemala (13°44'39" N, 90°07'58" W) and the Republic of Honduras (13°30'10" N, 87°43'13" W) (Figure 1).

The material is currently deposited in Colección de Invertebrados Marinos of Universidad de El Salvador, where available deposit numbers are provided, Colección de Invertebrados No Artrópodos of Universidad Autónoma de Nuevo León, Escuela de Biología Universidad de El Salvador, Museum of Natural History of El Salvador, Senckenberg Museum, Frankfurt Germany, Zoology Museum University of Hamburg, Museo de Zoología de la Universidad de Costa Rica, and Museum of Comparative Zoology of Harvard University.

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List of species

Ampharetidae Malmgren, 1867

Isolda Müller, 1858

Isolda bipinnata (Fauchald, 1977) Molina and Vargas 1995

Amphinomidae Lamarck, 1818

Amphinome Brugière, 1789

Amphinome sp. Rivera and Romero (in press)

Deposit number: IM-An-Poly-Amp-001

Linopherus de Quatrefages, 1865

Linopherus kristiani (Salazar-Vallejo, 1987) Molina and Vargas 1995

Linopherus sp. Rivera and Romero (in press)

Deposit number: IM-An-Poly-Amp-002

Notopygos Grube, 1855

Notopygos ornata (Grube, 1856) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Amp-003

Pareurythoe Gustafson, 1930

Pareurythoe spirocirrata (Essenberg, 1917) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Amp-004

Aphroditidae Malmgren, 1867

Aphrodita Linnaeus, 1758

Aphrodita japonica (von Marenzeller, 1879) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Aph-001

Capitellidae Grube, 1862

Dasybranchus Grube, 1850

Dasybranchus lumbricoides (Grube, 1878) Molina and Vargas 1995

Deposit number: IM-An-Poly-Cap-002

Dasybranchus sp. Rivera and Romero (in press)

Deposit number: IM-An-Poly-Cap-003

Mediomastus Hartman, 1944

Mediomastus setosus (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Neonotomastus Fauchald, 1972

Neonotomastus sp. Rivera and Romero (in press)

Deposit number: IM-An-Poly-Cap-007

Notomastus Sars, 1850

Notomastus lobatus (Hartman, 1947) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Cap-008

Notomastus tenuis (Moore, 1909) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Cap-009

Chrysopetalidae Ehlers, 1864

Chrysopetalum Ehlers, 1864

Chrysopetalum macrophtalmum (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Cossuridae Day, 1963

Cossura Webster & Benedict, 1887

Cossura brunnea (Fauchald, 1972) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Cos-001

Cossura candida (Hartman, 1955) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Cos-002

Cossura rostrata (Fauchald, 1972) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Cos-003

Eulepethidae Chamberlin, 1919

Grubeulepis Pettibone, 1969

Grubeulepis mexicana (Berkeley & Berkeley, 1939) Molina and Vargas 1995

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Eunicidae Berthold, 1827

Eunice Cuvier, 1817

Eunice chikasi (De León-González *et al.* 2004) De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Eunice salvadorensis (De León-González *et al.* 2004) De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Eun-002 (paratype)

Flabelligeridae Saint-Joseph, 1894

Flabelligera Sars, 1829

Flabelligera affinis (Sars, 1829) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Fla-001

Glyceridae Grube, 1850

Glycera Savigny, 1818

Glycera convoluta (Keferstein, 1862) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Gly-001

Glycera oxycephala (Ehlers, 1887) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Gly-002

Hemipodus de Quatrefages, 1865

Hemipodus ciliatus (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Hemipodus pustulatus (Friedrich, 1956) Schuster 1957 (= *Hemipodia pustulata*)

Goniadidae Kinberg, 1865

Glycinde Müller, 1858

Glycinde paucignata (Hartmann-Schröder, 1959) Hartmann-Schröder 1959; Molina and Vargas 1995

Hesionidae Grube, 1850

Gyptis Marion & Bobretzky, 1875

Gyptis brevipalpa (Hartmann-Schröder, 1959) Hartmann-Schröder 1959; Molina and Vargas 1995

Hesione Blake, 1985

Hesione intertexta (Grube, 1878) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Hes-002

Hesionides Friedrich, 1937

Hesionides arenarius (Friedrich, 1937) Hartmann-Schröder 1959

Orseis Ehlers, 1864

Orseis brevis (Hartmann-Schröder 1959) Hartmann-Schröder 1959

Oxydromus Grube, 1855

Oxydromus brevipalpa (Hartmann-Schröder 1959) Hartmann-Schröder 1959

Podarke Ehlers, 1864

Podarke minuta (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Struwela Hartmann-Schröder, 1959

Struwela noodti (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Heterospionidae Hartman, 1963

Heterospio Ehlers, 1874

Heterospio sp. Rivera and Romero (in press)

Deposit number: IM-An-Poly-Het-001

Lumbrineridae Schmarda, 1861

Lumbrineris de Blainville, 1828

Lumbrineris magna-nuchalata (Hartmann-Schröder, 1959) Hartmann-Schröder 1959; Molina and Vargas 1995

Lumbrineris unciniger (Hartmann-Schröder, 1959) Hartmann-Schröder 1959; Molina and Vargas 1995

Lumbrineris sp. Schuster, 1957

Scoletoma de Blainville, 1828

Scoletoma crassidentata (Fauchald, 1970) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Lum-001

Scoletoma tetraura (Schmarda, 1861) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Lum-002

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Magelonidae Cunningham & Ramage, 1888

Magelona Müller, 1858

Magelona californica (Hartman, 1944) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Mag-001

Magelona pacifica (Monro, 1933) Molina and Vargas 1995; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Mag-002

Magelona papillicornis (Müller, 1858) Molina and Vargas 1995

Magelona tehuanaensis (Hernández-Alcantara & Solís-Weiss, 2000) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Mag-003

Maldanidae Malmgren, 1867

Asychis Kinberg, 1867

Asychis sp. Rivera and Romero (in press)

Deposit number: IM-An-Poly-Mal-001

Observation: we consider that this report needs newly revision.

Maldane Grube, 1860

Maldane sp. Rivera and Romero (in press)

Deposit number: IM-An-Poly-Mal-002

Nephtyidae Grube, 1850

Aglaophamus Kinberg, 1866

Aglaophamus verrilli (McIntosh, 1885) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Nep-001

Nephtys Cuvier, 1833

Nephtys brevibranchis (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Nephtys furcifera (Hartmann-Schröder, 1959) Hartmann-Schröder 1959; Molina and Vargas 1995

Nephtys incisa (Malmgren, 1865) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Nep-004

Nephtys oculata (Hartmann-Schröder, 1959) Hartmann-Schröder 1959; Molina and Vargas 1995

Nephtys simoni (Perkins, 1980) Rivera and Romero (in press)

Nephtys squamosa (Ehlers, 1887) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Nep-005

Nephtys sp. Schuster, 1957

Nereididae Johnston, 1865

Laonereis Hartman, 1945

Laonereis brunnea (Hartmann-Schröder, 1959) Hartmann-Schröder 1959; Molina and Vargas 1995

Neanthes Kinberg, 1866

Neanthes succinea (Frey & Leukart, 1847) Hartmann-Schröder 1959; Molina and Vargas 1995 (= *Nereis succinea* Monro, 1933)

Neanthes seridentata (Hartmann-Schröder, 1959) Hartmann-Schröder 1959; Molina and Vargas 1995

Neanthes sp. Rivera and Romero (in press)

Deposit number: IM-An-Poly-Ner-003

Onuphidae Kinberg, 1865

Americanuphis Fauchald, 1973

Americanuphis reesei (Fauchald, 1973) De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Onu-001

Diopatra Audouin & Milne-Edwards 1833

Diopatra farallonensis (Fauchald, 1968) De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Onu-002

Diopatra neotridens (Hartman, 1944b) De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Onu-003

Diopatra obliqua (Hartman, 1944b) De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Onu-004

Diopatra ornata (Moore, 1911) Molina and Vargas 1995; De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Onu-005

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Onuphidae Kinberg, 1865 (continued)

Diopatra Audouin & Milne-Edwards 1833 (continued)

Diopatra splendidissima (Kinberg, 1857) De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Onu-006

Diopatra tridentata (Hartman, 1944b) De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Onu-007

Kinbergonuphis Fauchald 1982

Kinbergonuphis cedroensis (Fauchald, 1982) De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Onu-010

Kinbergonuphis kristiani (De León-González *et al.* 2004) De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Onu-011 (paratype)

Kinbergonuphis pigmentata (Fauchald, 1982) De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Onu-012

Kinbergonuphis vermillonensis (Fauchald, 1982) De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Nothria Malmgren 1867

Nothria sp. Molina and Vargas 1995

Onuphis Audouin & Milne-Edwards 1833

Onuphis brevicirris (Hartmann-Schröder, 1959) Hartmann-Schröder, 1959 (= *Diopatra* sp. Fauchald, 1982)

Paradiopatra Ehlers, 1887

Paradiopatra barrazai (De León-González *et al.* 2004) De León-González *et al.* 2004; Rivera 2007; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Onu-013 (paratype)

Rhamphobranchium Ehlers, 1887

Rhamphobranchium hartmanae (Friedrich, 1956) Schuster 1957

Opheliidae Malmgren, 1867

Armandia Filippi, 1861

Armandia salvadoriana (Hartmann-Schröder, 1956) Hartmann-Schröder 1956; 1959; Molina and Vargas 1995

Orbiniidae Hartman, 1942

Haploscoloplos Monro, 1933

Haploscoloplos elongatus (Johnson, 1901) Molina and Vargas 1995

Orbinia de Quatrefages, 1865

Orbinia johnsoni (Moore, 1909) Schuster, 1957; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Orb-001

Scoloplos de Blainville, 1828

Scoloplos armiger (Müller, 1776) Hartmann-Schröder 1959

Scoloplos sp. Rivera and Romero (in press)

Oweniidae delle Chiaje, 1844

Owenia delle Chiaje, 1841

Owenia caudisetosa (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Paraonidae Cerruti, 1909

Aricidea Webster, 1879

Aricidea (Acmira) lopezi (Berkeley & Berkeley, 1956) Molina and Vargas 1995

Pectinariidae de Quatrefages, 1866

Lagis Malmgren, 1866

Lagis tenera (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Pectinaria Savigny, 1818

Pectinaria sp. Rivera and Romero (in press)

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Phyllococidae Ørsted, 1843

Anaitides Czerniavsky, 1882

Anaitides longipes (Kinberg, 1866) Rivera and Romero (in press)

Anaitides madeirensis (Lagerhans, 1880) Schuster 1957; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Phy-002

Eteone Savigny, 1818

Eteone aestuarina (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Phyllococe Savigny, 1818

Phyllococe panamensis (Treadwell, 1917) Molina and Vargas 1995

Phyllococe pseudoseriata (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Pilargidae Saint-Joseph, 1899

Ancistrostylis McIntosh, 1879

Ancistrostylis ocellata (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Loandalia Monro, 1936

Loandalia gracilis (Hartmann-Schröder, 1959) Hartmann-Schröder 1959; Molina and Vargas 1995

Sigambra Müller, 1858

Sigambra bassi (Hartman, 1945) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Pil-002

Sigambra ocellata (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Pisionidae Ehlers, 1901

Pisionidens Aiyar & Alikunhi, 1943

Pisionidens indica (Aiyar & Alikunhi, 1940) Hartmann-Schröder 1959

Polynoidae Malmgren, 1867

Eunoe Malmgren, 1865

Eunoe sp. Molina and Vargas 1995

Lepidonotus Leach, 1816

Lepidonotus crosslandi (Monro, 1928) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Pol-002

Mayella Hartmann-Schröder, 1959

Mayella articulata (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Sabellariidae Johnston, 1865

Idanthyrus Kinberg, 1867

Idanthyrus pennattus (Peters, 1855) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Saby-001

Sabellidae Malmgren, 1867

Chone Kröyer, 1856

Chone americana (Day, 1973) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Sabe-001

Chone minuta (Hartman, 1944) Molina and Vargas 1995

Potamilla Malmgren, 1866

Potamilla bioculata (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Serpulidae Johnston, 1865

Hydroides Gunnerus, 1768

Hydroides parvus (Treadwell, 1901) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Ser-001

Sigalionidae Kinberg, 1856

Sthenelais Kinberg, 1855

Sthenelais sp. Schuster, 1957

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Spionidae Grube, 1850

Dypolydora Bosc, 1802

Dipolydora socialis (Schmarda, 1861) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Spi-002

Malacoceros de Quatrefages, 1843

Malacoceros sp. Rivera and Romero (in press)

Nerinides Mesnil, 1896

Nerinides arenicola (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Paraprionospio Caullery, 1914

Paraprionospio pinnata (Ehlers, 1901) Molina and Vargas 1995; Rivera and Romero (in press)

Deposit number: IM-An-Poly-Spi-005

Scolelepis de Blainville, 1828

Scolelepis squamata (Müller, 1806) Rivera and Romero (in press)

Streblospio Webster, 1879

Streblospio sp. Hartmann-Schröder, 1959

Sternaspidae Carus, 1863

Sternaspis Otto, 1821

Sternaspis scutata (Ranzani, 1817) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Ster-001

Syllidae Grube, 1850

Eusyllis Malmgren, 1867

Eusyllis heterocirrata ? (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Eusyllis spirocirrata ? (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Exogone Ørsted, 1845

Exogone (Exogone) brevi antennata (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Odontosyllis Claparède, 1863

Odontosyllis brevipes (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Odontosyllis multidentatus (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Opisthosyllis Langerhans, 1879

Opisthosyllis arboricola (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Sphaerosyllis Claparède, 1863 (= *Erinaceusyllis* San Martín, 2005)

Erinaceusyllis centroamericana (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Typosyllis Langerhans, 1879 (= *Syllis* San Martín, 2003)

Syllis salina (Hartmann-Schröder, 1959) Hartmann-Schröder 1959

Terebellidae Grube, 1850

Polycirrus Grube, 1850

Polycirrus sp. Rivera and Romero (in press)

Deposit number: IM-An-Poly-Ter-001

Streblosoma Sars, 1872

Streblosoma verrilli (Treadwell, 1911) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Ter-002

Trichobranchidae Malmgren, 1866

Terebellides Sars, 1835

Terebellides reishi (Williams, 1984) Rivera and Romero (in press)

Deposit number: IM-An-Poly-Tri-001

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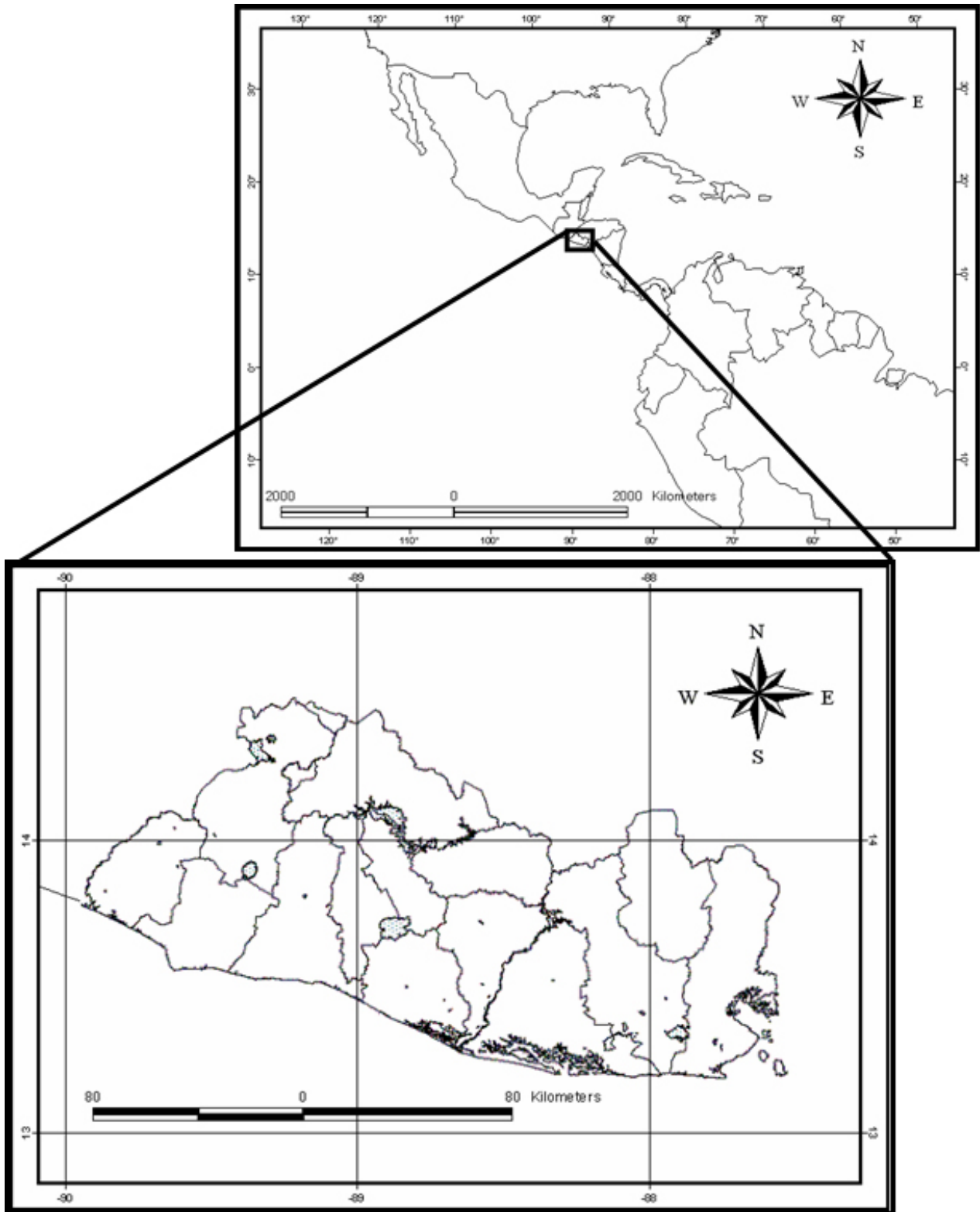


Figure 1. Location of El Salvador, Central America.

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Acknowledgements

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