

## **AMPHIBIANS AND REPTILES FROM THE WESTERN REGION OF SAUDI ARABIA**

**By**

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### **ABSTRACT**

*Six hundred and three specimens of Amphibia and 373 of Reptilia were collected at random during the past three years from several localities in Tihama, Hijaz and Asir sections of the Western region of the Kingdom of Saudi Arabia. Four anuran species belonging to the families; Bufonidae, Ranidae and Hylidae, 28 species of lizards belonging to the families, Gekkonidae, Lacertidae, Scincidae, Agamidae, Varanidae and Chamaeleontidae, and 15 species of snakes belonging to the families, Typhlopidae, Leptotyphlopidae, Colubridae, Elapidae and Viperidae were identified, recorded and mapped for distribution.*

### **INTRODUCTION**

Several species of Amphibia and Reptilia have been reported from different regions of Saudi Arabia including Al Rub Al Khali (the Empty Quarter) and Southern Hijaz (Parker, 1933, 1938), Central Arabia (Schmidt, 1941; El-Wailly and Al Uthman, 1971) and Riyadh and its Surroundings (Hussein, 1966). Hass (1957, 1961) and Hass and Battersby (1971) reported some amphibians and reptiles from different localities in Arabia. Gasperetti (1974, 1976, 1977), Mandaville (1967, 1974) and Leviton (1977 a,b) described several snake species from different localities in the Arabian Peninsula.

The herpetofauna of the Western region of the Kingdom is not well studied and information about its ecology and distribution is meagre. During the last three academic years, about 603 amphibian and 373 reptilian specimens were collected from different localities of the Western region of the Kingdom. Collections were made at random by local people in the areas or students of the Biology Department or by ourselves, either individually or in field trips for teaching purpose. Specimens were identified partly through the courtesy of Dr. E.N. Arnold of the British Museum (Natural History), Mr. John Gasperetti of the California Academy of Sciences, U.S.A. and by ourselves.

The present report is a list of the collected amphibian and reptilian species with notes on their behaviour and distribution.

### **GEOGRAPHICAL AND ECOLOGICAL ASPECTS**

Geomorphologically, the Western region of Saudi Arabia (as demarcated by heavy broken line in all maps) is divided into Northern section or Hijaz and Southern section or Asir. These sections form mountainous ranges bordering a narrow coastal belt along the Red Sea known as Tihama, reaching the highest peak near Abha (Jebel Sauda,

3,199 m.) and continuing into Yemen (Buttiker, 1979).

Climatologically, the coastal Tihama which is the hottest and driest area represents the Nubian-desert climatic pattern while the highlands represent the Ethiopian pattern (Batanouny, 1978). Buttiker (1979) reported that Jiddah and Jizan are amongst the hottest and humid cities along the Red Sea coast, the relative humidity generally being over 85%, but reaching a peak of 90 to 98% in July, August and September. The temperature in hot months may reach 49°C. According to Al Shalash (1973) and Batanouny (1978) rainfall is scanty all over the country and rarely exceeds an annual mean of 100 mm. However, the latter author mentioned that the average annual rainfall in Tihama is 22.6 mm at Al Wajh, 78.2 mm at Umm Luj, 19.5 mm at Al Lith and 30.5 at Jizan. Indeed these climatic variations are reflected on the behaviour and distribution of the fauna of the Western region of the country and particularly the ecology and distribution of the amphibians and reptiles, subject of the present study.

### AMPHIBIA

Collected specimens were four anuran species belonging to three families: Bufonidae, Ranidae and Hylidae.

#### Family BUFONIDAE

*Bufo Orientalis* Werner (Map 1)

*Bufo viridis* var *orientalis* Werner, 1895, Verh. Zool. bot. Ges. Wein, 45:20 - Maskat, Arabia.

*Bufo orientalis*, Parker, 1941, Brit. Mus. Exped. S.W. Arabia 1937-8, 1 : 6.

This is the common toad in the western region of Saudi Arabia, except in the north (E.N. Arnold, per. com.). It was obtained from Wadi Fatima, Zaymah, Al Taif, Abha, Khulays and Al Madinah. It was also recorded in Yemen (Schmidt, 1953) and southern Arabia (Minton, 1966).

#### Family RANIDAE

*Rana cyanophlyctis ehrenbergi* Peters (Map 1)

*Rana ehrenbergi* Peters, 1863, Monatsber. Akad. Wiss. Berlin, 1863:79-Arabia.

*Rana cyanophlyctis ehrenbergi* Parker, 1941, Brit. Mus. Exped. S.W. Arabia 1937-8, 1 : 6.

Seventy specimens were collected from Khulays and Usfan. This species occurs from Thailand to Nepal and Ceylon, thence north and west to eastern Iran (Minton, 1966). It was also recorded in Yemen (Schmidt, 1953).

*Rana ridibunda* Pallas (Map 1)

*Rana ridibunda* Palas, 1771, Reise versch. Prov. russ. Reich, 1; p. 458-Gurjew, north shore of the Caspian Sea.

*Rana esculenta* Linnaeus, Flower, 1933, Proc. Zoo. Soc. London, 1933 : p. 844.

Three specimens were collected from Al Ula. This lake frog is common in the central and eastern region of Saudi Arabia, and is believed to have entered Arabia through the north east (Arnold, per. com.). It is also abundant in North Africa, central and southern Europe and west Asia (Marx, 1968).

## Family HYLIDAE

*Hyla arborea savignyi* Audouin (Map 1)

*Hyla savignyi* Audouin, 1827, Descr. Egypt. Rept. Suppt., pl. 2, Fig. 13-Syria.

*Hyla arborea savignyi* Mertens, 1924, Abh. Ber. Mus. Magdeburg, 3 : 356.

Thirty-five specimens were collected from Abha, Baljarshi, Al Taif and Jiddah. This species extends into Arabia only down the western coastal mountains. Arnold (per. com.) suspects this sub-species to be a full species, i.e. *Hyla savignyi*.

## REPTILIA

### Order SQUAMATA

#### Suborder SAURIA

Collected specimens were 28 species belonging to six families; Gekkonidae, Lacer-  
tidae, Scincidae, Agamidae, Varanidae and Chamaeleontidae.

## Family GEKKONIDAE

*Bunopus blanfordi* (Strauch, 1887) (Map 1)

*Alsophylax blanfordi* Loveridge, 1947, Bull. Mus. Comp. Zool., 98 : p. 58.

*Bunopus blanfordi* Strauch, 1887, Mem. Acad. Imp. Sci. St. Petersbourg, (7),  
35 : p. 61-Egypt.

Three specimens were collected from under rocks at Al Ula in April 1978. The body length was between about 14.5 to 16 cm. This nocturnal insectivorous species is one of the desert ground geckos and has a widespread distribution over Arabia.

*Cytrodactylus scaber* (Heyden, 1827) (Map 2)

*Stenodactylus scaber* Heyden, 1827, in Ruppell, Atlas Reise Afrika, 1, Rept.,  
p. 15-vicinity of Tor, Sinai and Abyssinian coast.

*Gymnodactylus scaber* Dumeril and Bibron (part), 1836, Exp.Gen., 3 : p. 421.

Seven specimens were collected from beneath rocks in a field at Guba in the vicinity of Madinah during April and May 1977; five from a date garden at Badr on Jiddah-Madinah Road in April 1978, two from Jiddah in September, 1978 and five from Hadda on Jiddah - Mecca Road during March and April 1979. Body of moderate length, about 9.5 cm. This naked-toed gecko was also recorded in Riyadh (Hussein, 1966) and ranges from north western India eastward to Egypt and southward to Sudan (Marx, 1968).

*Hemidactylus flaviviridis* Ruppell (Map 2)

*Hemidactylus flaviviridis* Ruppell. 1835, Neue Wirbelthiere

Abyssiniens. Amph., p. 18, pl. 6, Fig. 2. Nassusa Island, Eritrea.

*Hemidactylus coctaei* Dumeril and Bibron, Boulenger, 1885, Cat. Liz. Brit. Mus.,  
1 : p. 137.

Twenty-four specimens were collected from inhabited houses in the vicinity of sea port at Jiddah in March, April and May 1976 and May and June 1977 and seven from Yanbu al Bahr in April 1978. This gecko is essentially an Indian and Pakistani species

with populations around the coasts of Arabia, especially in and around sea ports (E.N. Arnold, per. com.). The largest specimens of this species was about 22.5 cm. It has been reported from Ta'izz in Yemen (Schmidt, 1953).

*Hemidactylus turcicus turcicus* (Linnaeus) (Map 2)

*Lacerta turcuca* Linnaeus, 1758, *Syst. Nat.*, ed. 10, 1 : p. 202-Orient.

*Hemidactylus turcicus*, Boulenger, 1885, *Cat. Liz. Brit. Mus.*, 1 : p. 126.

*Hemidactylus turcicus turcicus* Mertens, 1925, *Abh. Senck. Naturf. Ges.*, 39 : 60.

Three specimens were collected from inhabited houses in the outskirts of Jiddah in May and June 1977; two from beneath rocks in King Abdul Aziz University campus in May 1978. The largest specimen was a male of about 19 cm. It was also recorded in Riyadh (Hussein, 1966) and Yemen, Southern Arabia (Schmidt, 1953). This species is a Mediterranean gecko and has been introduced elsewhere in Asia, Europe and New World (Loveridge, 1947).

*Ptyodactylus hasselquisti hasselquisti* (Donndorff) (Map 2)

*Lacerta hasselquisti* Donndorff, 1789, *Zool. Beytr.*, 3 : 133 - Palestine.

*Ptyodactylus hasselquisti hasselquisti* Schmidt, 1939, *Field Mus.*

*Nat. Hist., Zool. Ser.*, 24 : 56.

Thirteen specimens were collected from mountain areas and remains of deserted houses at Zaymah in March 1976, Wadi Fatimah in March and April 1978 and Al Taif April 1978, and five specimens from inhabited houses in Jiddah in July and August 1978. This fanfooted nocturnal gecko is common in the mountain areas of Arabia, mainly as a rock-dwelling species. The length of the largest specimen was about 18.5 cm. This species was recorded by Hussein (1966) in Riyadh and Schmidt (1953) in Yemen. It has related populations right across North Africa (E.N. Arnold, per. com.).

*Tarentola annularis annularis* (Geoffroy) (Map 3)

*Gekko annularis* Geoffroy, in Savigny, *Descr. Egypte*, 1 : p. 130-Egypt.

*Tarentola annularis* Boulenger, 1885, *Cat. Liz. Brit. Mus.*, 1 : p. 197.

*Tarentola annularis annularis* Loveridge, 1947, *Bull. Mus. Comp. Zool.*, 98; p. 323.

Two specimens (male and female) were found mating in a wall cleft of a deserted house at Wadi Fatimah in May 1976, three from Jiddah in August 1978 and two from an inhabited house at Rabigh in April 1978. The moderate length was about 17 cm. This Egyptian gecko has entered Saudi Arabia through Sinai, and has related populations in Eritrea, Ethiopia and Somaliland (Marx, 1968).

*Tarentola muritanica muritanica* (Linnaeus) (Map 3)

*Lacerta muritanica* Linnaeus, 1758, *Syst. Nat.*, ed. 10, 1 : 202- Muritanica.

*Tarentola muritanica* Gray, 1845, *Cat. Liz. Brit. Mus.*, p. 164.

*Tarentola muritanica muritanica* Mertens, 1925, *Abh. Senckenberg. naturf.*, p. 86.

Eight specimens of this wall gecko were collected from inhabited houses at Jeddah in March 1976, Rabigh in May 1977 and Yanbu al Bahr in May 1978. This species is characterised by its daytime activities. The largest specimen was 17.5 cm. in length. It is a conspicuous element of the Fauna of the countries and islands bordering the Mediter-

anean sea (Schmidt and Inger, 1961).

*Tropicolotes steudneri* (Peters)

(Map 3)

*Gymnodactylus steudneri* Peters, 1869, Monatsb. Akad. Wiss. Berlin, p. 788-Sennar.

*Tropicolotes steudneri* Boulenger, 1891, Trans. Zool. Soc. London. 13 : p. 108.

Two specimens of this Steudner's pigmy gecko were caught in the early morning among hummocks, in a locality 13 km. north of Duba in June 1977. The two specimens were about 6.5 and 7 cm. in length.

#### Family LACERTIDAE

*Acanthodactylus boskianus asper* (Audouin)

(Map 3)

*Lacerta aspera* Audouin, 1829, Descr. Egypte. Rept., Suppl., p. 173 pl. 1, Fig. 9-Egypt.

*Acanthodactylus boskianus* var. *asper*, Lataste, 1885. Ann. Mus. Eénova, 2 : p. 496.

Thirty-three specimens were collected from different localities along Jiddah-Mecca (Wadi Fatimah and Al Raisfa) and Jeddah-Medina (Masturah and Badr) roads during spring months of 1976, 1977 and 1978. The largest specimen was about 21.5 cm. in length. This diurnal sand lizard has a very wide distribution in Saudi Arabia especially in loose soil and sparse vegetation.

*Acanthodactylus cantoris arabicus* Boulenger

(Map 3)

*Acanthodactylus cantoris* var. *arabicus* Boulenger, 1918. Bull. Soc. Zool. France, 43 : 154-southern Arabia.

*Acanthodactylus cantoris arabicus* Parker, 1931. Ann. Mag. Nat. Hist., (1), 8 : p. 521.

Fifteen specimens of this lizard were collected from outskirts of Jiddah in April, May and June of 1977 and August and September of 1978. The moderate length was about 19.5 cm.

*Acanthodactylus arabicus schmidtii* Haas 1957

(Map 4)

Eighteen specimens of this lizard were collected from Wadi Fatimah and outskirts of Mecca in March and April of 1977 and April and May of 1978. This lizard is endemic in Arabia and was regarded as a subspecies of *A. Cantoris*, but is now turned out to be a distinct species (Arnold, per. com.)

*Mesalina* (= *Eremias*) *brevirostris* (Blanford)

(Map 4)

*Mesalina brevirostris* Blanford, 1874, Ann. Mag. Nat. Mus., (4), 14 : p. 32.

*Eremias brevirostris* Boulenger, 1887, Cat. Liz. Brit. Mus., 3 : p. 89.

The genus *Eremias* Wiegmann, 1834 has been changed to *Mesalina* Scherbak, 1977 according to Arnold and Gasperetti (per. com.).

A single specimen was collected from under rocks near the airport at Al Wajh in May 1977. This species extends from Sinai eastward to north western India (Marx, 1968).

*Mesalina* (= *Eremias*) *guttulata* (Lichtenstein)

(Map 4)

*Lacerta guttulata* Lichtenstein, 1823, Verz. Doubl. Mus. Berlin, p. 101-Egypt and Nubia.

*Eremias guttulata*, A. Smith, 1845, 111. Zool. S. Afr., Rept., pl. 48, Fig. 8.

Three specimens of this small spotted lizard were collected from Wadi Baysh, and two from sand hummocks in a district near Jizan in March 1978.

#### Family SCINCIDAE

*Chalcides ocellatus ocellatus* (Forskal) (Map 4)

*Lacerta ocellata* Forskal, 1775, Descr. Anim., p. 13-Egypt.

*Chalcides ocellatus* Boulenger, 1887 Cat. Liz. Brit. Mus., 3 : 400.

*Chalcides ocellatus ocellatus* Wettstein, 1928. Sitzber. Akad. Wiss. Wien (math-natur), 137. Abt. 1, p. 784.

Nine specimens were collected from Jiddah from March 1976 to May 1978, four from Yanbu al Bahr in May 1977, five from Rabigh in April 1978 and three from Abha in March 1978. The length ranges from 15 to 18.5 cm. This species is a widespread skink around the western coast of Arabia, and has related populations right across North Africa (Arnold, per. com.).

*Eumeces schneideri* (Daudin) (Map 4)

*Scincus schneideri* Daudin, 1802, Hist. Nat. Rept., 4 : p. 291 - West Asia.

*Eumeces schneideri* Boulenger, 1887. Cat. Liz. Brit. Mus., 3 : 383.

Five specimens were collected among heaps of rocks at the margin of a date garden near al Nakhl on the way from Yanbu al Bahr to Suq Suwayq in May and June 1977. The largest specimen was about 32 cm. in length. This orange tailed skink has a range of distribution extending from North Africa to West Asia (Marx, 1968).

*Mabuya quinquetaeniata* (Lichtenstein) (Map 5)

*Scincus quinquetaeniata* Lichtenstein, 1823, Verz. Doubl. Mus. Berlin, p. 103-Egypt and Nubia.

*Mabuya quinquetaeniata* Boulenger, 1887, Cat. Liz. Brit. Mus., 3 : p. 198.

Six specimens were collected from date gardens in a district north of Umm Luj in May 1977. The adult specimen was about 23.5 cm. in length. This five-lined skink is an African species, widely distributed from North of Uganda to Egypt, and might have entered the West region of Arabia across Sinai (Marx, 1968).

*Mabuya vittata* (Olivier) (Map 5)

*Scincus vittatus* Olivier, 1804. Voy. Emp. Ottoman, 3 : p. 103 - sands West of Rossetta.

*Mabuya vittata* Boulenger, 1887, Cat. Liz. Brit. Mus., 3 : p. 176.

A single specimen was caught in a date garden in Sabya in March 1977 and its length was about 19.5 cm. This bridled skink has a range of distribution extending from North Africa to Southwest Asia (Marx, 1968).

*Scincus hemprichi* Wiegmann (Map 5)

*Scincus hemprichi* Wiegmann, 1837, Arch. Natung., 3 : 128 - Abyssinia.

Three specimens were caught among sand hummocks on the way to the airport of Jizan in March 1977. The average length of the specimens was about 18 cm. This species is a common form of sand skink in the South of the Peninsula (Arnold, per. com.).

*Scincus scincus meccensis* Wiegmann 1837 (Map 5)

Five specimens of this skink, as identified by Arnold in 1976 (per. com.), were collected from the outskirts of Jiddah in April 1976 and May and June 1978. The length of the adult one was about 18.5 cm. According to Arnold, this is the common form of *Scincus* in Western and Northwestern Arabia, and is replaced by *S. hemprichii* in the south and by *S. s. coninostris* and *S. mitranus* in the east.

#### Family AGAMIDAE

*Agama adramitana* Anderson (Map 5)

*Agama adramitana* Anderson, 1896, Contr. Herpet. Arabia, p. 31 - between Makalla and the Hadaramut Valley.

Thirty five specimens were collected from Al Taif, Baljarshi, and Abha during the spring and summer months of 1976, 1977 and 1978. The average length was about 26.5 cm. This species is confined to the Southwestern mountains of Arabia and appears to be closely related to the Northeast African form of the *A. cyanogaster* group (Schmidt and Inger, 1961).

*Agama mutabilis* Merrem (Map 6)

*Agama mutabilis* Merrem, 1820, Jent. Syst. Amphib., p. 50-Egypt.

*Agama pallida* Reuss, 1834, Mus. Senckenb., 1 : 38-Sinai (by designation of Anderson, 1896).

Pasteur and Bons (1960) synonymized *A. pallida* Reuss with *Agama mutabilis* Merrem (Marx, 1968).

Six specimens were collected from nearby date gardens at Umm Luj and Al Wajh in March 1977. The largest specimen was about 18.5 cm. in length. This pale *Agama* is abundant in the desert areas marked by scattered bushes, and is rarely observed in bare sand.

*Agama isolepis* Boulenger (Map 6)

*Agama isolepis* Boulenger, 1885, Cat. Lizards Brit. Mus. 1 : 342-from Egypt to Sind.

A single specimen was collected from a rocky place in a district near Jizan in March 1977 and its length was about 16 cm.

*Agama savigayi* Dumeril and Bihron (Map 6)

*Agama savigayi* Dumeril and Bibron, 1837, Exp. Gen., 4 : p. 508.

*Agama flavimaculata* Ruppell, Anderson, 1898, Zool. Egypt, 1 : p. 110, pl. 11.

Three specimens were collected near a date garden on the way from Umm Luj to Iianak in May 1977, one from Yanbu and one from Al Biar in June 1977.

*Agama sinaita* Heyden (Map 6)

*Agama sinaita* Heyden, 1821 in Ruppell, Atlas Reise nord. Afr. Rept., p. 10-Sinai.

Two specimens were from At Taif in April 1976, four from Baljarshi in June 1977 and three from Yanbu in April 1978. The largest specimen was about 17.5 cm. in length. This Sinai *Agama* is a rock dwelling species which occurs in the coastal moun-

tains of Arabia and in Oman. Its distribution extends from Sinai southwest into Egypt to Eritrea (Marx, 1968).

*Uromastix aegyptius* (Forsk.)

(Map 7)

*Lacerta aegyptia* Forskal, 1775, Descr. Anim., p. 13-Egypt

*Uromastix spinipes* Gray, Boulenger, 1885, Cat. Liz. Brit. Mus., 1 : p. 407.

*Uromastix aegyptius* Anderson, 1896, Herp. Arabia and Egypt. p. 129, pl. 14.

Twenty three specimens were collected from Jeddah in April 1977, Wadi Fatimah in April 1977, Madinah and Yanbu al Bahr in May 1978. Adult specimen was about 56 cm. in length. This species is widely distributed in Saudi Arabia, especially in the northern region. Its distribution extends westward across Sinai to Egypt.

*Uromastix oronatus* Hyden

(Map 7)

*Uromastix oronatus* Hyden, 1827, in Ruppell, Atlas Reise nord. Afr., Rept., p. 1. Mohila or Moila, Arabia.

Seven specimens were collected from different localities in Wadi Fatimah in March 1976 and April 1977, five from Al Taif in May and June 1978, three from Baljarshi in August 1978 and two from a district near Zalim on At Taif - Riyadh road in March 1976. The collected specimens were adult, and the average length was about 26.5 cm. This species is the common *Uromastix* in Western Arabia.

#### Family VARANIDAE

*Varanus griseus griseus* (Daudin)

(Map 7)

*Tubinambis griseus* Daudin, 1803, Hist. Nat. Rept., 8 : p. 352

*Varanus griseus* Boulenger, 1885, Cat. Liz. Brit. Mus., 2 : p. 306.

*Varanus griseus griseus* Mertens, 1954, Senckenb. Biol. 35 : p. 354.

Two specimens from Wadi Fatimah in April 1978 and one specimen on the road near kilo 7 on Jiddah - Mecca Road in May 1978. The largest specimen was about 67 cm. in length. This desert monitor is the common *Varanus* in Arabia. It ranges all the way from the arid Northwest Pakistan to the Western Sahara Provinces of Africa (Schmidt and Igner, 1961).

#### Family CHAMAELEONTIDAE

*Chamaeleo chamaeleon chamaeleon* (Linnaeus)

(Map 7)

*Lacerta chamaeleon* Linnaeus, 1758, Syst. Nat., ed. 10. p. 204 Africa and Asia.

*Chamaeleon chamaeleon chamaeleon* Werner, 1911, Das Tierreich 17 : 10.

*Chamaeleo chamaeleon chamaeleon* Mertens and Muller, 1929, Zool. Anz., 84 g; 296.

Two specimens from Al Shafa near Al Taif, three from Baljarshi, five from Abha and two from Jeddah. This form is one of two species of the genus *Chamaeleo* which occur in the west and southwest corner of the Arabian Peninsula (Schmidt, 1953).



## Suborder SERPENTES

Collected specimens were 15 species and one subspecies belonging to 5 families: Typhlopidae, Leptotyphlopidae, Colubridae, Elapidae and Viperidae.

### Family TYPHLOPIDAE

#### *Typhilops braminus* (Daudin)

One specimen was found in April 1978 under a heap of rotten leaves in a house garden at Madain Al Fahd in Jiddah. This wormy snake is blind and measures about 14 cm. in length. As far as we are aware this is the first record of Blinding typhlop snake in Saudi Arabia, but it was previously recorded from Muscat and Bahrain in the Arabian Gulf (see, Gasperetti, 1974).

### Family LEPTOTYPHLOPIDAE

#### *Leptotyphlops macrorhynchus* (Jan) (Map 8)

*Stenostoma macrorhynchus* Jan, 1926, Arch. Zool. Anat. Phys., 1 : p. 190 Snnar.

*Glauconia macrorhynchus*, Boulenger, 1893, Cat. Sn. Brit. Mus. 1 : p. 61.

*Letotyphlops macrorhynchus* Corkill, 1932, Snakes and Snake Bite, Iraq. p. 8.

A Single specimen was obtained from rubbish on the road to the Royal Saudi Naval Reservation, South of Jiddah in April 1977. The length of the specimen is approximately 175 mm., and the length diameter ratio is about 85 : 1. Gasperetti (1974) noted that a single specimen of this species has been reported from Aden in 1966.

#### *Leptotyphlops nursi* (Anderson) Boulenger (Map 8)

*Glauconia nursii* Anderson, 1896, in Boulenger, Cat. Snakes Brit. Mus., 3 : 951-Aden.

*Leptotyphlops nursi* Parker, 1938, Ann. Mag. Nat. Hist., (11), 1 : 488.

Two specimens were found in a house garden at Madain Al Fahd in Jiddah in May and June 1978. The length of the first specimen is about 185 mm. and that of the second is 170 mm. The length diameter ratio is 79 : 1 & 76 : 1, respectively. This species was previously reported from Najran and Mecca (Gasperetti, 1974).

### Family COLUBRIDAE

#### *Coluber elegantissimus* (Gunther) (Map 8)

*Zamenis elegantissimus* Gunther, 1878, Proc. Zool. Soc. London, 1878: p. 977, pl. 57-mountains east of Ek-Muwaylih, Midian, Arabia.

*Coluber elegantissimus* Flower, 1933, Proc. Zool. Soc. London, 1933. p. 811.

One specimen, of about 43 cm long, was found dead on the road to Al-Hawiyah airport in June 1976, and a second, of about 47 cm. long, was handed to us in May 1977 by a geologist from Yanbu. This species was first reported by Sir Richard Burton in 1878 at El Muwaylih, another one was found by Mr. George Popove in 1972 near Nabhaniyah, and Mr. John Gasperetti found three killed specimens in the fall of 1974,

on the road near kilo 45 on Al Taif - Abha Road.

*Coluber rhodorhachis rhodorhachis* (Jan)

(Map 9)

*Zamenis rhodornachis* Jan, 1865, in De Fillipi, Viagg. Peas., p. 356-Schiras, Central Iran.

*Coluber rhodorhachis* Parker, 1931, Ann. Mag. Nat. Hist., (10), 8 : 516.

*Coluber rhodorachis rhodorachis* Parker, 1949, Snakes Somalit. Sokotra Ids., p. 37.

Four specimens were collected from mountains areas in outskirts of Jiddah in September 1976 and May 1977. The largest specimen was about 119.5 cm. long. This Cliff Racer is one of commonest snakes in the Middle East ranging from Libya to Northwest India (Marx, 1968).

*Lytrohynchus diadema* (Dumeril and Bibron)

(Map 9)

*Heterodon diadema* Dumeril and Bibron, 1854, Exp. Gen., 7 : p.779-Algeria.

*Lutrohynchus diadema*, Peters, 1862, Monatsber. Akad. Wiss. Berlin, 1862 : p. 272.

One specimen, of about 42 cm. long, was collected from Zaymah in the vicinity of Mecca in May 1976 and two, each of about 40 cm long, from Hadda on Jeddah - Mecca Road in March and May 1977. This sand snake ranges from North Africa eastward to South Western Asia. Another species of this genus, *L. gasperetti*, has been reported from the vicinity of Jizan. A specimen of this species was collected by one of our students from Baysh in March 1978 and it was about 39 cm. in length.

*Malpolon moilensis* (Reuss)

(Map 9)

*Coluber moilensis* Reuss, 1834, Mus. Senck., 1 : p. 142-Moljah, Arabia.

*Coelopeltis moilensis* Boulenger, 1896, Cat. Sn. Brit. Mus., 30 : p. 143.

*Malpolon moilensis* Parker, 1931, Ann. Mag. Nat. Hist., (10), 8 : p. 522.

Two specimens were collected from Tuwal on Jiddah - Madinah road in March 1976, two near a date garden in Al Biar in May 1977 and one specimen from Al Jumum in Wadi Fatimah in March 1978. The largest specimen was about 128 cm. long. This Moila snake is widespread in Arabia except in the highest mountain areas. It is one of the rearfanged snakes (group Opisthoglypha) of Arabia (Gasperetti, 1977).

*Spalerosophis diadema cliffordi* (Schlegel)

(Map 10)

*Coluber cliffordi* Schlegel, 1837, Phys. Serp., 2 : p. 163-Tripoli, Libya.

*Zamenis diadema* Boulenger, 1933, Cat. Sn. Brit. Mus., 1 : p. 410.

*Spalerosophis diadema cliffordi* Mertens, 1956, Senck. biol., 37 : p. 225.

One specimen, about 112 cm. long, was collected on June 1976 from Duba and one, about 97 cm. long, from Abha in May 1978. This species is usually found throughout the mountainous verdant areas of Arabia. It is distributed throughout North Africa, Sinai and Southwest Asia to Iran (Marx, 1968).

*Psammophis schokari schokari* (Forsk.)

(Map 10)

*Coluber schokari* Forskal, 1715, Descr. Anim., p. 14-Yemen.

*Psammophis schokari* Boulenger, 1896, Cat. Sn. Brit. Mus., 3 : p. 157.

*Psammophis schokari schokari* Kramer and Schnurrenberger, 1963, Rev. Suisse. Zool., 70 : p. 517.

Thirteen specimens were collected from vegetated areas on both sides of Jiddah - Mecca Road extending in Wadi Fatimah during March, April and May 1976 and May and June 1978. Three specimens were found on the trees in the University campus at Jiddah in September 1977 and April 1978. The largest specimen was about 127 cm. in length. This species is the commonest of the group *Opisthophis* of Arabia and its range extends from North Africa eastward through Iran, into arid west Pakistan and India (Marx, 1968).

#### Family ELAPIDAE

*Naja haje* (Linnaeus) (Map 10)

*Coluber haje* Linnaeus, 1758, Syst. Nat., ed. 10, 1 : 225-Lower Egypt.

*Naja haje* Boulenger, 1896, Cat. Sn. Brit. Mus., 3 : 374.

Two specimens were collected, in May 1976 and June 1977, from Al Wajh. This Egyptian Cobra is a serious poisonous snake as it represents the *proteroglypha* group. Two specimens, found in the outskirts of Baljarshi in April and June 1978, were identified as *Naja haje arabica*, a subspecies of Egyptian Cobra. One of the two specimens was about 139 cm. in length. This Arabian Cobra has been reported from Madinah, Najran, Abha, Yemen, the Qara mountains, Dhufar and Jabal Jihaf (Gasperetti, 1974).

#### Family VIPERIDAE

*Bitis arietans* Merrem (Map 10)

*Bitis (Echidna) arietans* Merrem, 1820, Tent. Syst. Amphib., p.152-Cap of God hope.

*Bitis arietans* Boulenger, 1896, Cat. Snakes Brit. Mus., 3 : 493.

Two specimens were collected from Baljarshi, in April 1976 and one from Abha in July 1978 and was of about 56.5 cm. in length. This puff adder snake is common in Arabia, so far in the mountainous areas of the south and Yemen (Gasperetti, 1974).

*Cerastes cerastes* (Linnaeus) (Map 11)

*Coluber cerastes* Linnaeus, 1758, Syst. Nat., ed. 10 : p. 217-Orients.

*Cerastes coronatus* Boulenger, 1896, Cat. Sn. Brit. Mus., 3 : p.502.

*Cerastes cerastes* Anderson, 1899, Bihang. Svenska Vet. — Akad. Handl., Stockholm (4), 24 : p. 29.

One specimen, of about 78 cm. long, was caught from under a rock in a district near Duba in May 1977. Although the range of this species extends from North Africa to Southwestern Asia, it is very rare in Saudi Arabia where it may be replaced by the subspecies *C. c. gasperetti*. Five specimens of this subspecies were collected from Al Ula in May 1977, Umm Luj in June 1977, Dirs in April 1978 and Jizan in July 1978; four of these specimens have horns. The largest one was about 61 cm. in length.

*Echis carinatus* (Schneider) (Map 11)

*Pseudoboa carinata* Schneider, 1801, Hist. Amph., p. 285 - Arni (bei Madras

Indian field Klemmer, 1936 : p. 376.

*Echis carinata* Wagler, 1830, Syst. Amph., p. 177.

Four specimens were collected from different localities in Wadi Fatimah in March and April, 1977 and May 1978, one from Al Lith in June 1978 and one from near the airport of Jizan April 1978. The largest one was about 61 cm. in length. This dangerous viper is widely distributed in the Arabian Peninsula. It ranges throughout Africa from North of the Equator, continuing throughout Southern Asia to India and Ceylon (Marx, 1968).

*Echis coloratus* Gunther

(Map 11)

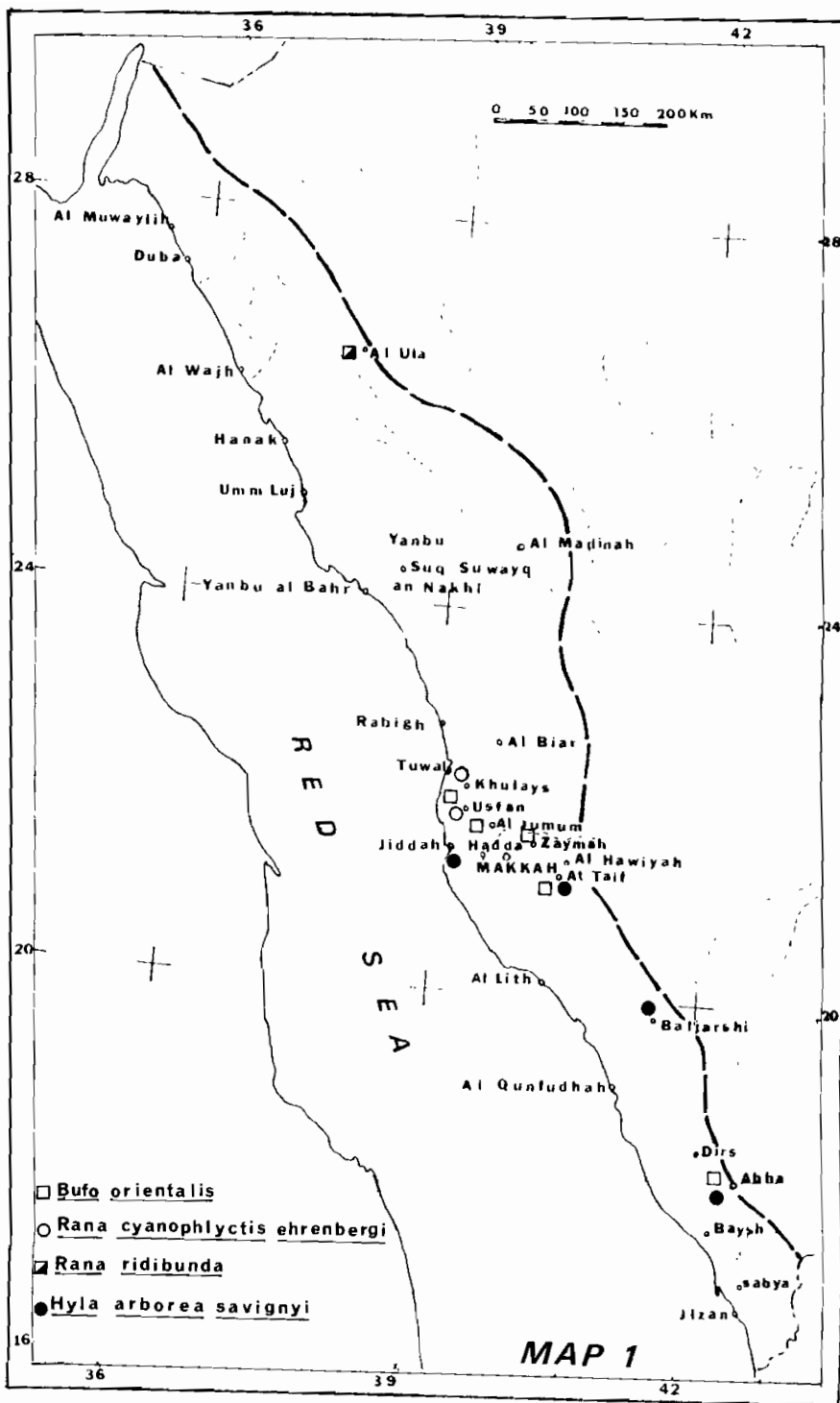
*Echis colorata* Gunther, 1878, Proc. Zool. Soc. London, 1878 : p. 978-Jebel Sharr, Midian, Arabia.

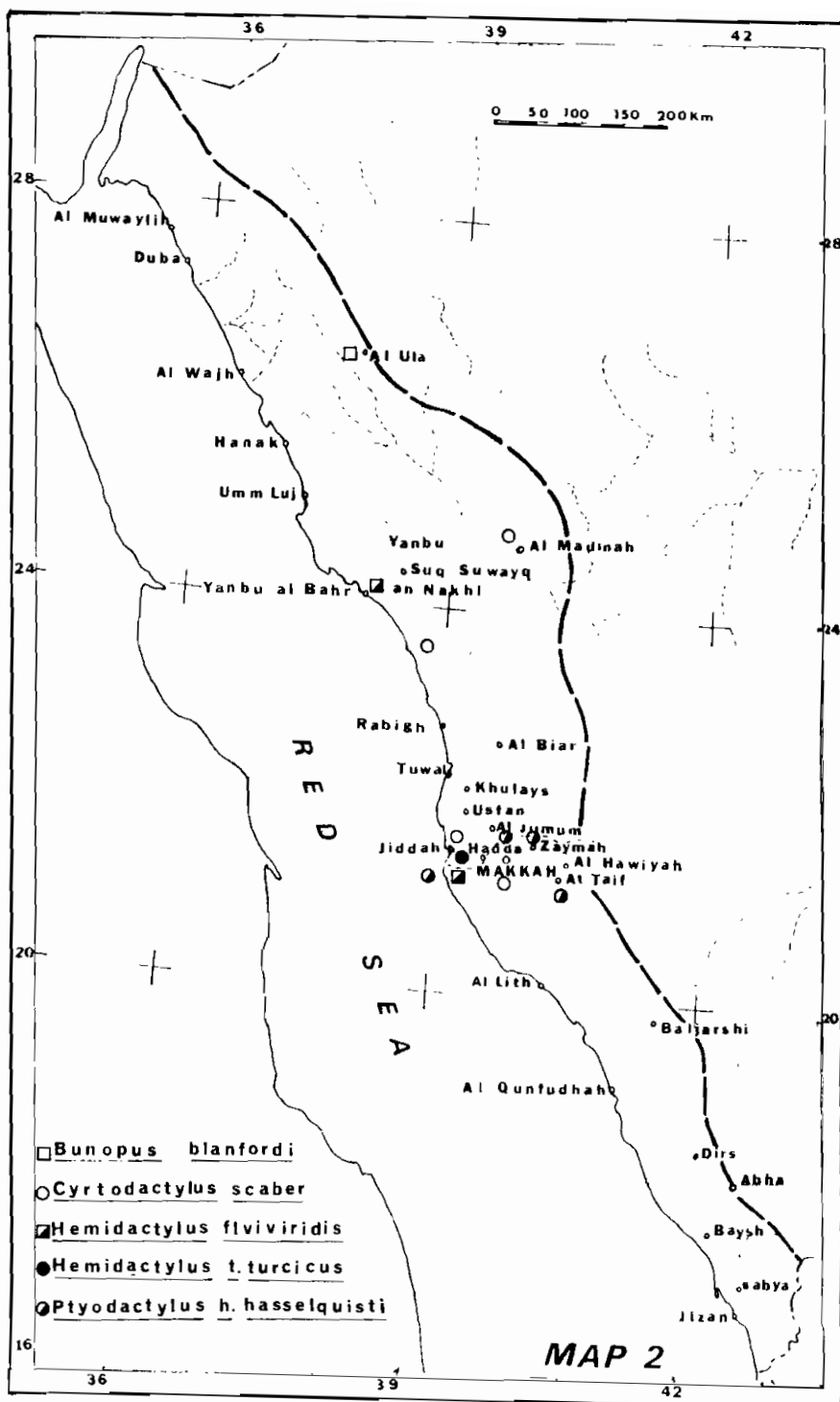
Two specimens were collected from near a date garden at Umm Luj in May and September 1976 and one was found under the bag of one of the geologists in a district at the North of Yanbu in April 1977. It was the largest one and was of length about 63 cm. This dangerous carpet snake looks very much like *E. carinata*. This species is found in Egypt, Palestine, Jordan and Arabia (Marx, 1968).

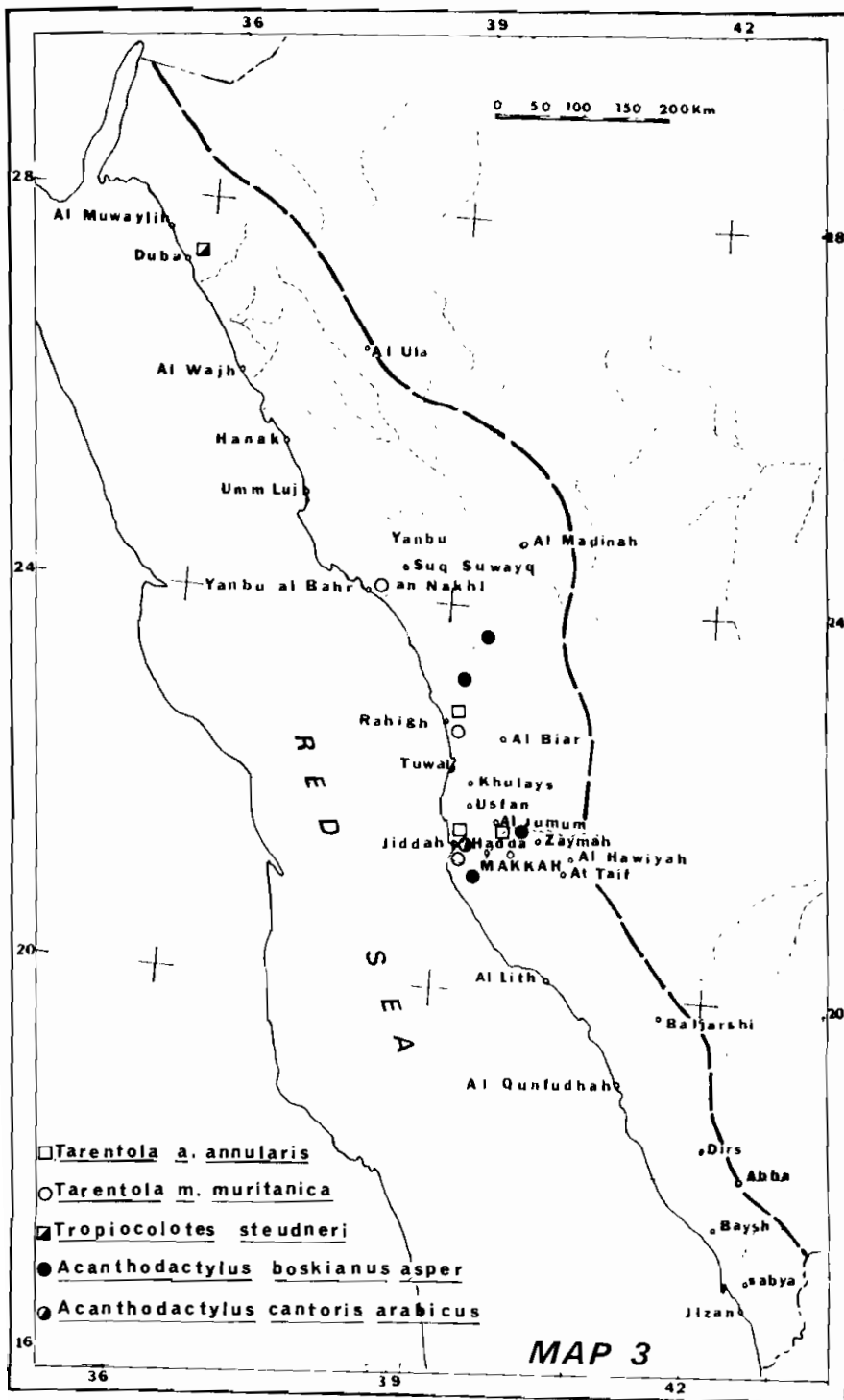
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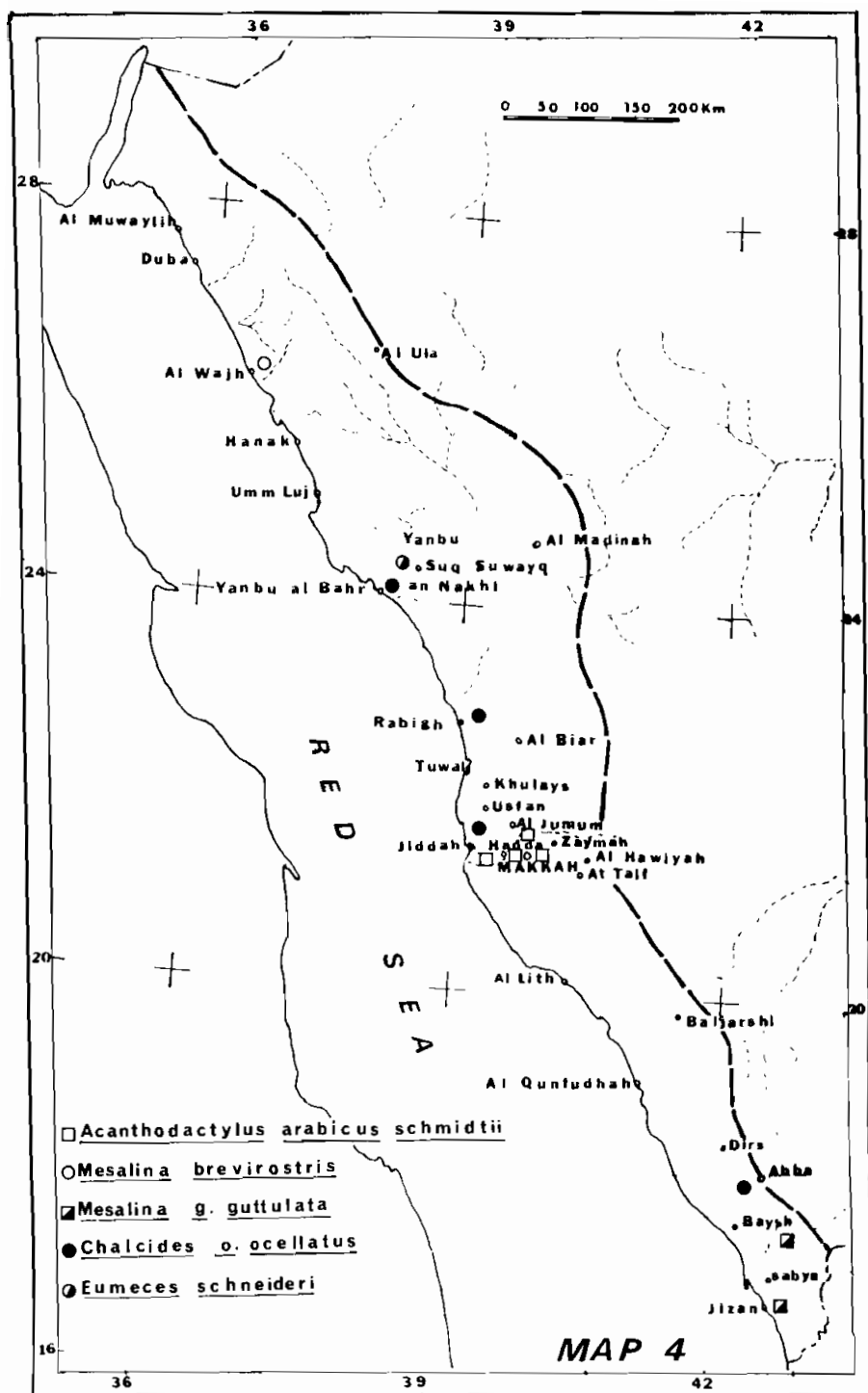
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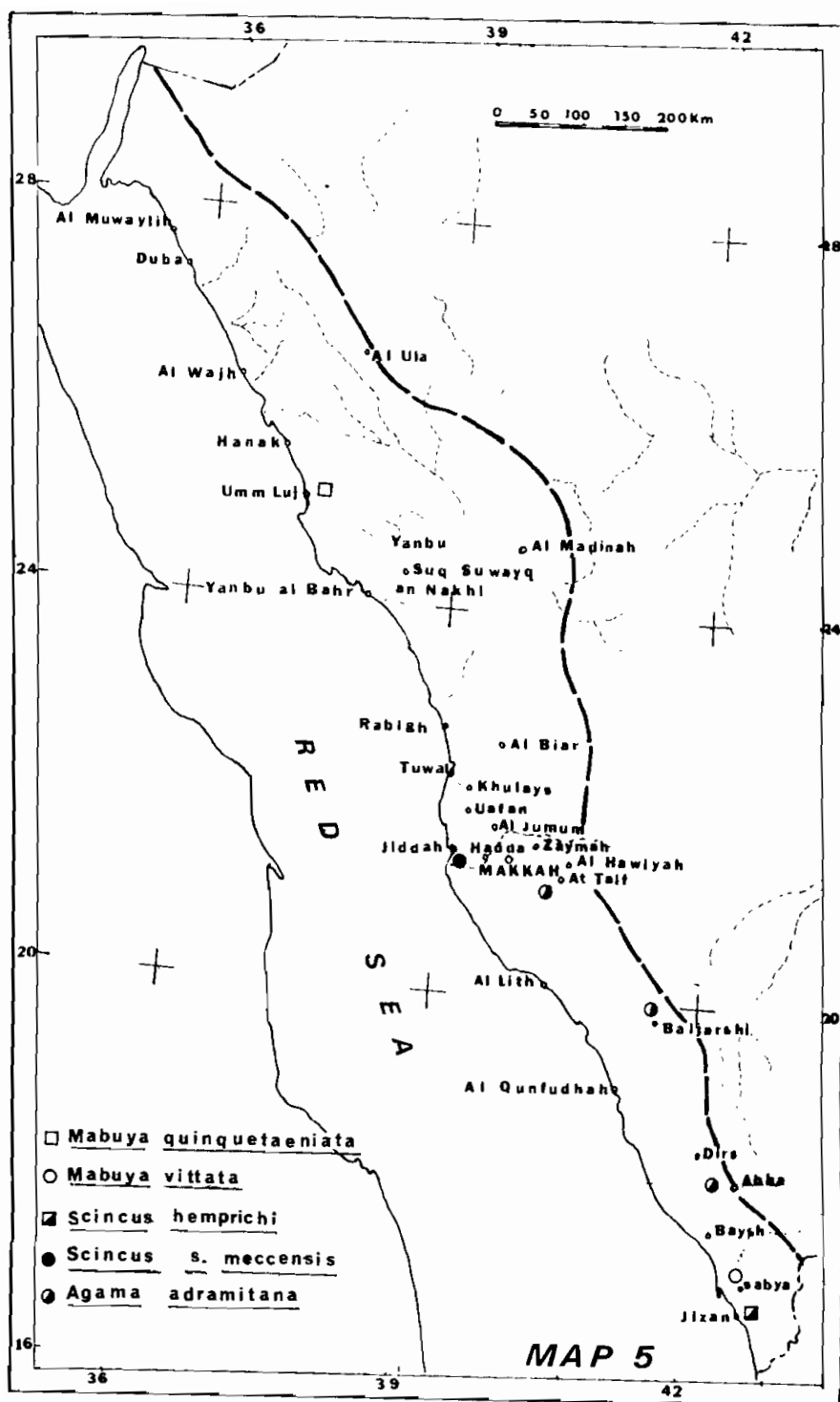


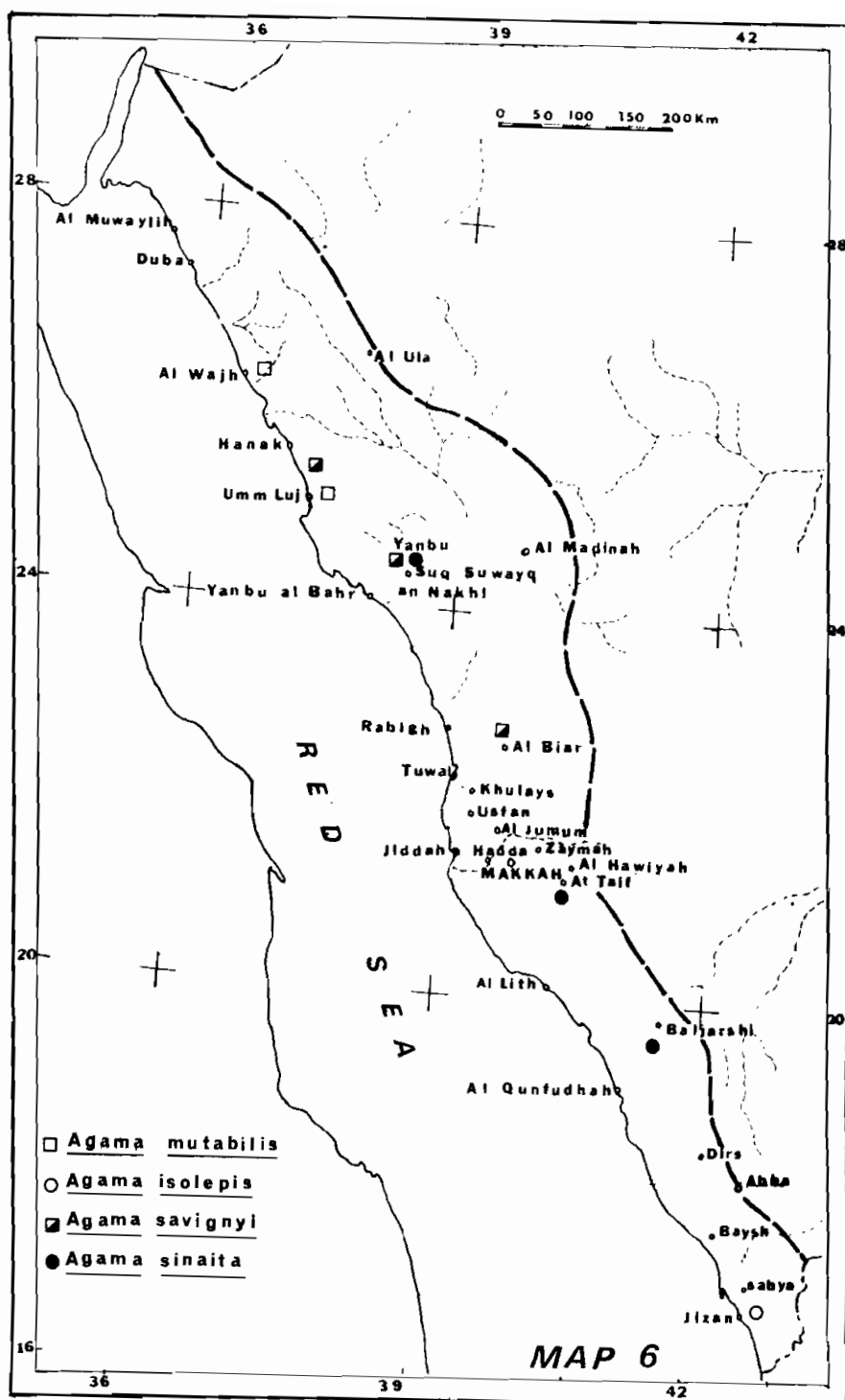


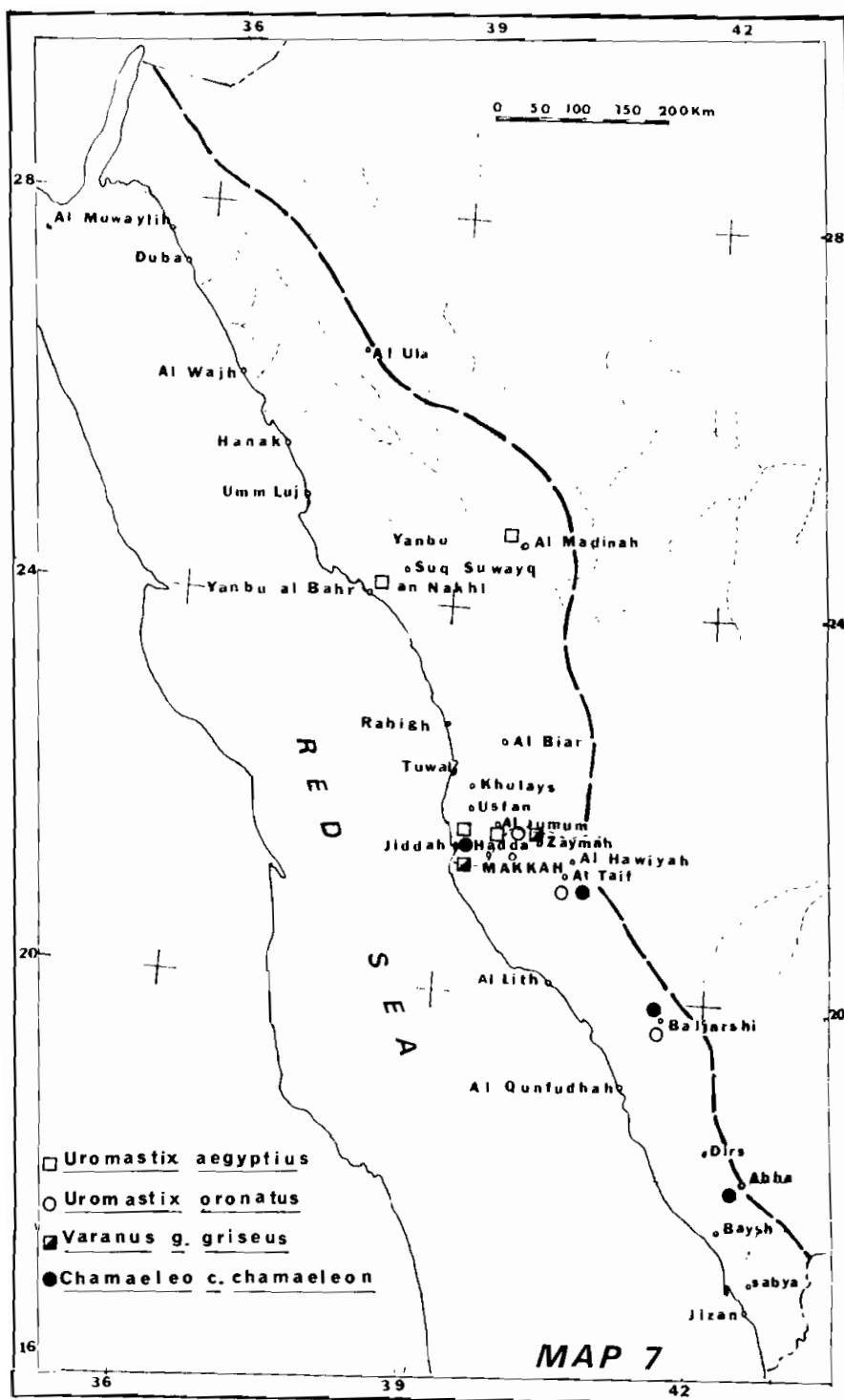


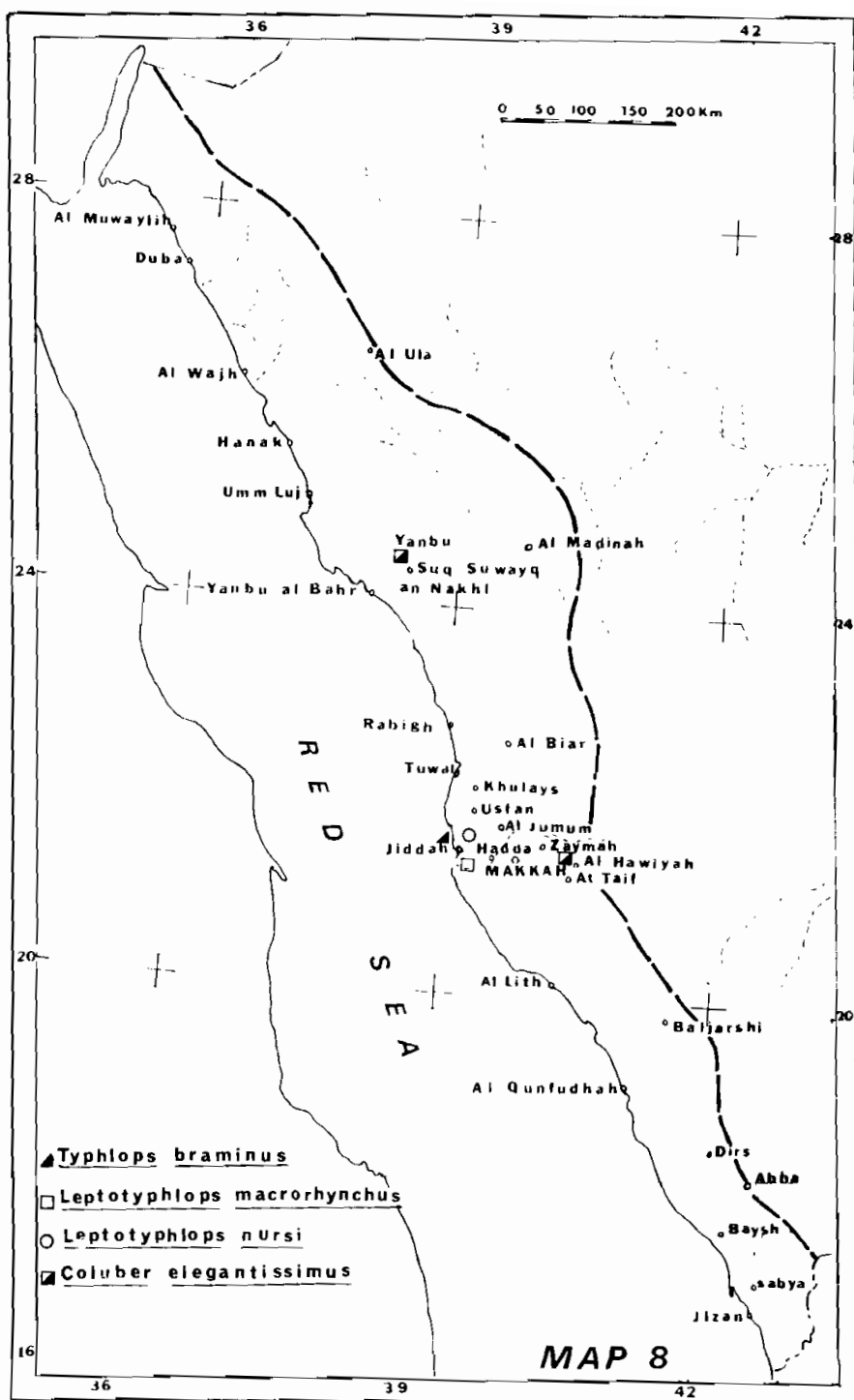


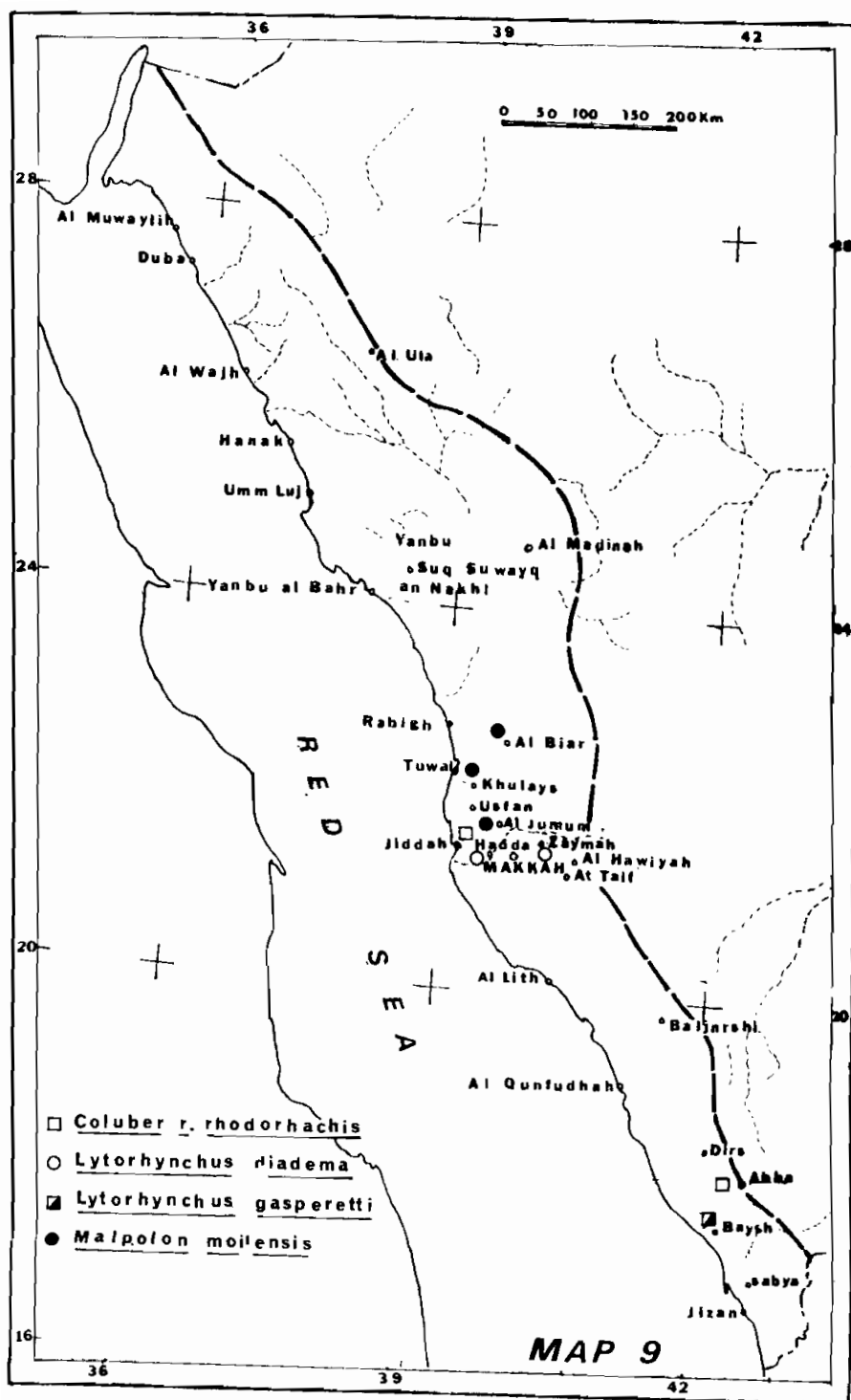


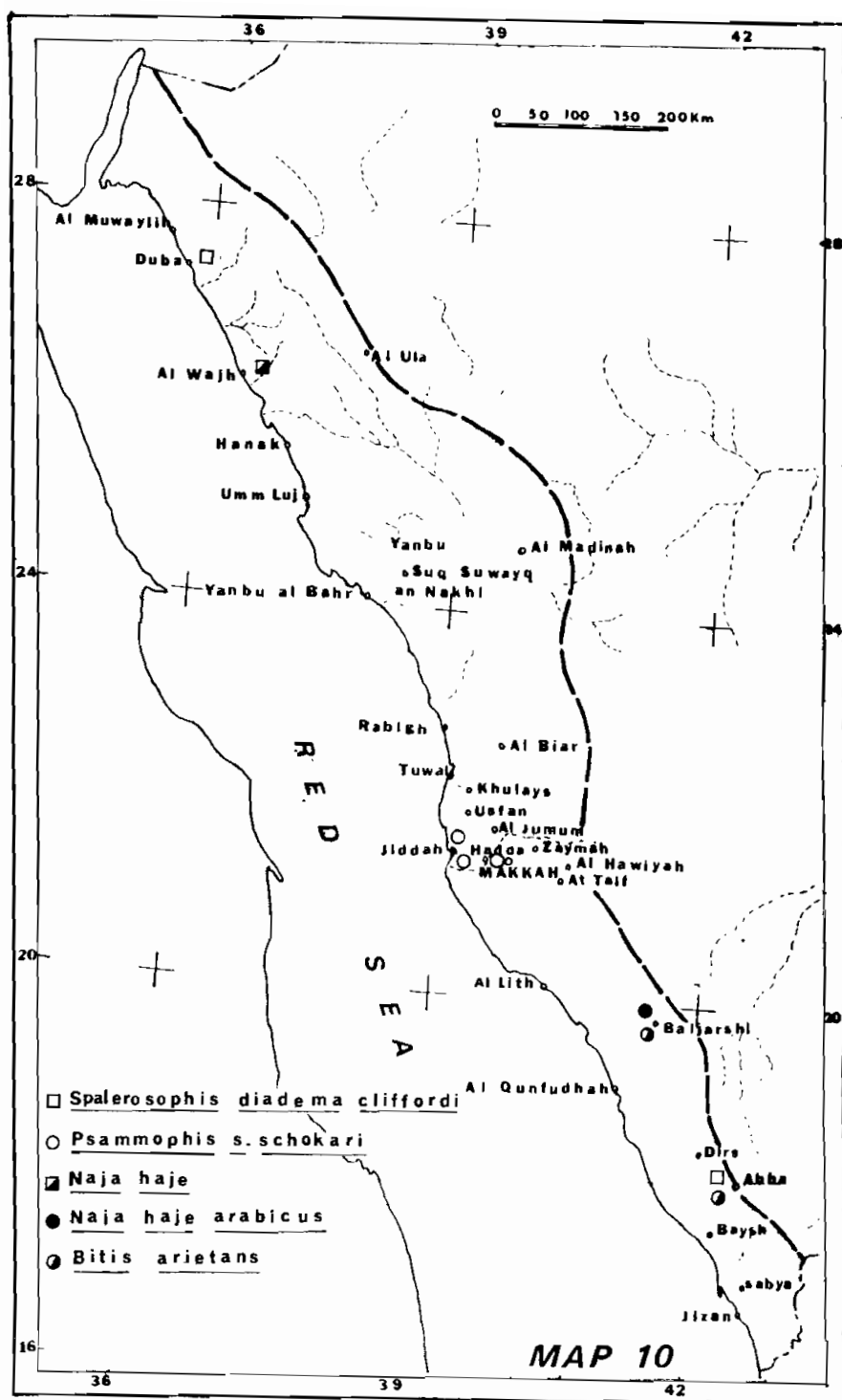


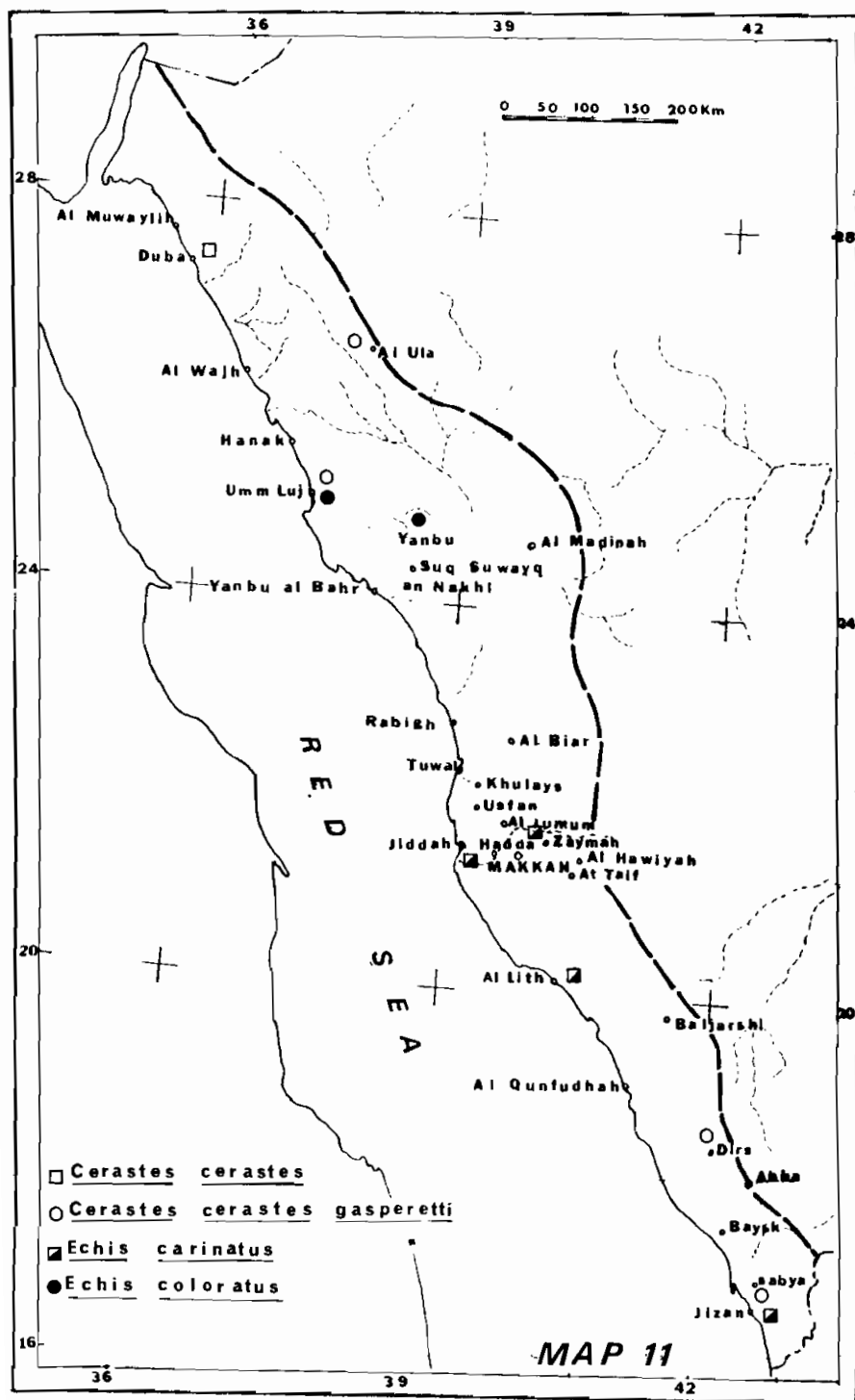














## دراسة لبرمائيات وزواحف من المنطقة الغربية بالمملكة العربية السعودية

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### ملخص

جمع من برمائيات وزواحف المنطقة الغربية بالمملكة في السنوات الاربع الأخيرة ٦٠٨ عينة من البرمائيات الذيلية بالاضافة الى ٢٧٣ عينة من الزواحف وذلك من مناطق مختلفة مثل دبا - الوجه - امالج - ينبع - ينبع النخيل - المدينة المنورة - جدة - الطائف - بلجرشي - جيزان - ولقد قام الباحثان بمساعدة قسم التاريخ الطبيعي بالمتحف البريطانى بلندن وكذلك مستر جاسبرتى من اكاديمية العلوم بكاليفورنيا بعمل الدراسة التصنيفيه لهذه العينات . وقد وجد الآتى :

- إن عينات البرمائيات عباره عن أربعة أنواع تتبع ثلاث فصائل .
- إن عينات الزواحف تنقسم الى :

( أ ) ٢٨ نوعا من السحالي تتبع ست فصائل

( ب ) ١٦ نوعا من الثعابين تتبع سبع فصائل منها نوع من الثعابين الدودية يسجل لأول مره بالمملكة .

وقد قام الباحثان اثناء عملية الجمع بدراسة مبسطه عن طبيعة البيئه لهذه الانواع وكذلك بعض نواحيها السلوكية .