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**SURVEY OF THE REPTILES OF THE GOLAN PLATEAU
AND MT. HERMON, ISRAEL**

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ABSTRACT

Examination of 637 reptile specimens from the Golan Plateau and Mt. Hermon yielded 37 species. Of six species virtually restricted to high Mt. Hermon, one is endemic to that mountain, another to the Hermon and Lebanon ranges and four have Anatolian affinities. The other 31 species occur also in northern Cisjordan, and most are known also in Transjordan and Syria-Lebanon. *Typhlops simoni* is a new marginal record for the physical-geographical area of Syria. The nearby occurrence of *Agama rudrata* reflects the proximity of the Syrian desert. Within the Golan, the number of species observed declines from north to south, presumably for both ecological and methodological reasons. A few additional species of northern Cisjordan and Transjordan may yet be discovered on the Golan in the future.

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INTRODUCTION

The Golan Plateau is a natural physical-geographical land unit at the junction of four countries, centred on 33°N, 35°45'E, 70 km long (N-S) and up to 30 km wide (W-E)

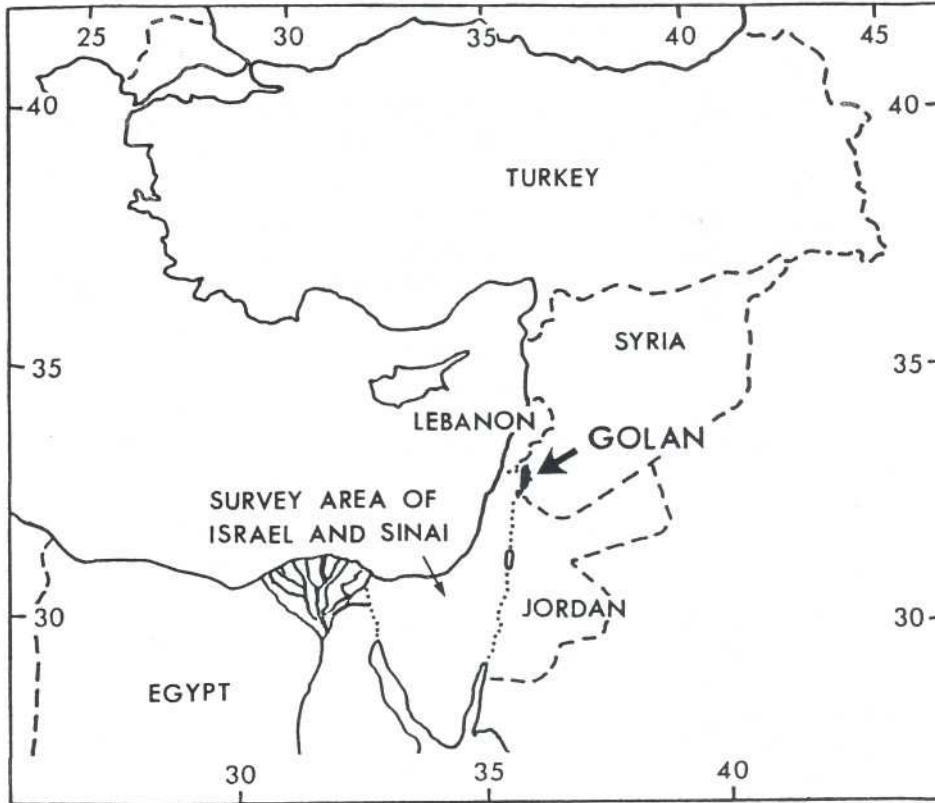


Fig. 1. Location of the Golan within the Levant.

(Fig. 1). Our survey area comprises the Golan in its broader sense. It is bound on the west by the Jordan River and Lake Kinneret, on the north by Mt. Hermon, east by the Raqqad River (Wadi Ar Ruqqad) and on the south by the Yarmouk River. In the west and south its scarps rise over the river beds from -200 to $+200$ m; thence it slopes up to 900 m in the NE, with peaks surpassing 2000 m. It is almost completely basaltic, the latest basalt dating from the Middle Pleistocene (Orni and Efrat, 1980). We may recognise three subdivisions, schematically indicated on all maps (Figs. 3–40): Mt. Hermon in the north (Area 1 on Fig. 2), the lowlands of the Jordan Valley (all or most of the areas 5, 6 and 7 in Fig. 2) and the Golan Plateau proper in between (areas 2 and 3 in Fig. 2).

Thanks to its west-facing slope the Golan receives relatively abundant rainfall, depending on elevation, and has been cultivated since antiquity. Much of the area is grassland, and localised forests (Fig. 2) are believed to reveal the typical climax vegetation of different parts. In Fig. 2, the *Quercus calliprinos* area approximately coincides with the Upper Golan, with elevations above 450 m and average annual precipitation over 650 mm, up to 1200 mm on Mt. Hermon. The Lower Golan with *Q. ithaburensis* and the Jordan Valley with *Ziziphus* spp., lie at lower elevations with lower rainfall

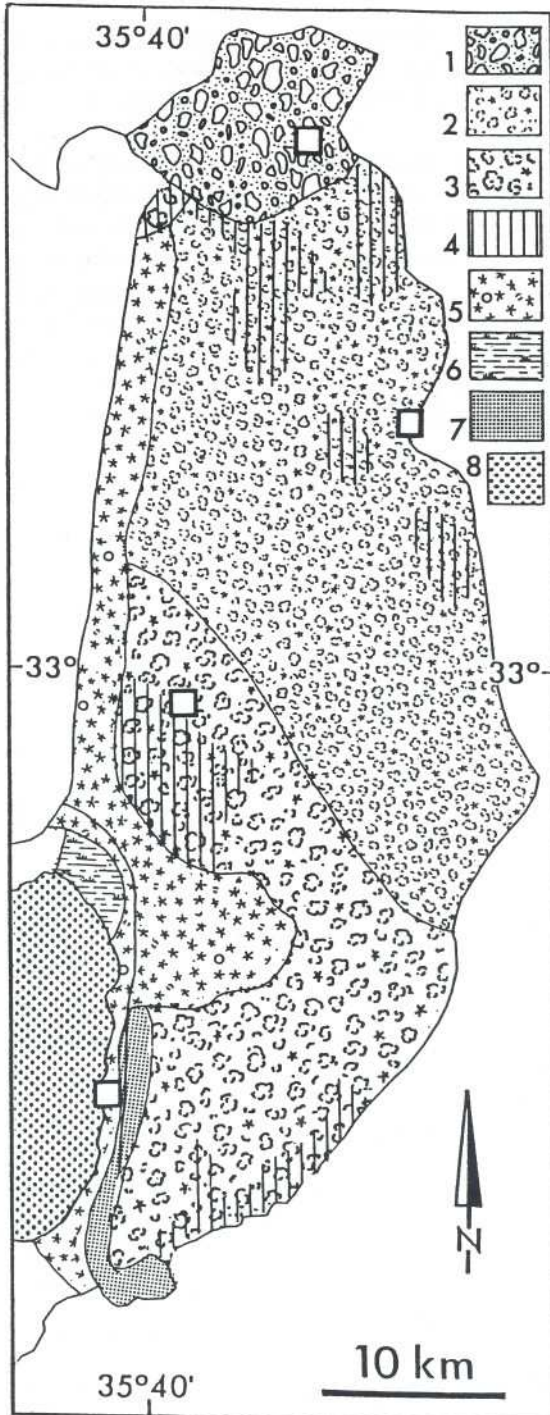


Fig. 2. Vegetation map of the Golan, simplified from Danin (1968). Hollow squares, localities for orientation (see Fig. 3).

1. Mt. Hermon.
2. Area with presumed climax of *Quercus calliprinos*.
3. Area with presumed climax of *Quercus ithaburensis*.
4. Actual forest stands.
5. Areas dominated by *Zizyphus* spp.
6. Marshes (Buteiha).
7. Area with infiltration of *Retama roetam*.
8. Lake (Kinneret).

(down to 400 mm near Lake Kinneret) (1950–1980 rainfall map, Ministry of Agriculture). Temperature roughly parallels elevation and the August (warmest month) mean ranges are 24–28°C on the Upper Golan and 28–32°C on the Lower Golan (Karmon and Brawer, 1967).

Biogeographically the Golan lies within the Mediterranean zone (*sensu stricto*), but the Irano Turanian steppe of the Syrian desert lies only 20 km away to the east (Zohary, 1973). Zoogeographical interest in the Golan arises from this fact, together with its situation, already described, as a well defined unit between other units. We know of no previous survey or review of the reptiles of the Golan, although scattered data occur in the literature concerning surrounding areas, listed by Haas (1951) and Werner (1988). However, the reptiles of the eastern margin of the Golan recently received intensive reporting from Esterbauer (1983–1990) as part of his activity in southwestern Syria. The reptiles of Mt. Hermon were preliminarily summarised by Hurvitz (1980) and Werner and Avital (1980).

We report here on the reptiles of the Golan, with comparative notes on adjacent areas, and include data from Mt. Hermon (in Israel up to 2200 m). A thorough examination of zonation on the mountain remains a task for the future.

MATERIALS AND METHODS

The material comprises 637 specimens deposited in the National Collections of Natural History at the Hebrew University of Jerusalem (HUJ) and Tel Aviv University (TAU)¹. Included are also a few personal observations by J. H. Hoofien and Y. L. Werner. Species were identified and named according to current convention as explained previously (Werner, 1987, 1988). Locality data were originally formulated in Grid of Israel coordinates accurate to the nearest 100 m, or later translated to these, using a topographical map (1:50,000 Survey of Israel, Ministry of Labour). For each species locality records were entered (preserved specimens, solid circles; personal observations, open circles) on a pre-printed base map of the Golan and Mt. Hermon, with an overprinted pale blue topographical Grid of Israel network (Werner, 1977). The map of the Golan with Mt. Hermon, i.e., the delimitation of areas, was adopted from the map of the Fauna and Flora Palaestina Committee (The Israel Academy of Sciences and Humanities), as modified by Ortal (1990). Fig. 3 explains some localities which recur (as hollow squares without legend) for orientation on all the specific maps of locality records.

RESULTS AND COMMENTS

The material comprises 37 species. Six of these and one subspecies are limited, or almost limited (within Israel), to Mt. Hermon. All the others occur in the Mediterranean part of Cisjordan as well (Werner, 1988) and, except as noted, are known also from northern Transjordan (Werner, 1971; Disi, 1985). Literature data for the adjacent parts of Lebanon and Syria, when available, are quoted below by species.

¹Included was the whole reptile material from the Golan in these collections: in HUJ up to no. 16064 for Testudinata, 16989 for Ophidia and 18303 for Lacertilia; in TAU up to no. 13771.

TESTUDINES

Two species of turtles occur on the Golan. *Mauremys caspica rivulata* (Valenciennes, 1833) is found in streams, ponds and swamps on most of the Golan, and is most common in the swampy Buteiha (Biq'at Bet Zayda) area (Fig. 4). From Syria it was reported by Boulenger (1923) from the region of Ataibé, east of Damascus. According to Hraoui Bloquet (1982), it is found in Lebanon only in the Bekaa Valley. *Testudo graeca terrestris* (Forskål, 1775) is common north of Quneitra, including all of Mt. Hermon, but has been observed also in the southern part of the Golan (Fig. 5), where more information is needed. It is found in all the western part of Syria as far south as the Jordanian border (Esterbauer, 1985b). In Lebanon it is widely distributed in the mountain regions and Bekaa Valley (Hraoui Bloquet, 1982). We must comment that we employ the name *T. g. terrestris* following Wermuth and Mertens (1961) despite our conviction that an open taxonomic problem lurks here. These authors quote the terra typica restricta of this subspecies as "Libanon-Gebirge, Israel". In fact the animals from the Golan are often conspicuously different from those from Israel, being darker, with much more corrugated carapace, and growing to a much larger size.



Fig. 3. Localities for orientation; these reappear unexplained as hollow squares on the subsequent maps of specific locality records (Figs. 4-40).

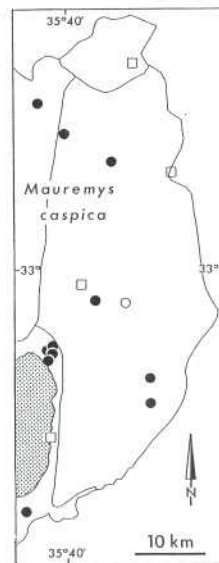


Fig. 4.

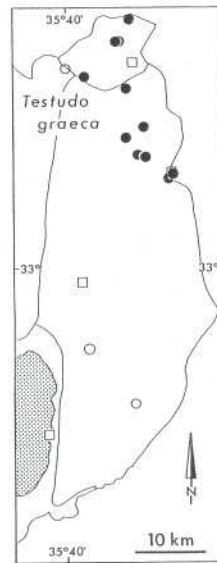


Fig. 5.

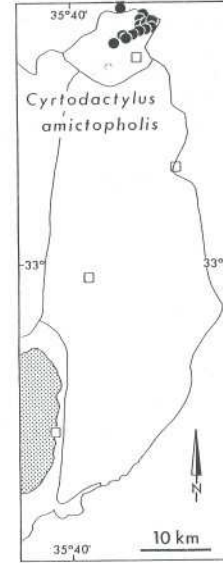


Fig. 6.

Figs. 4-40. Maps of locality records, each for one species as indicated. Solid circles, localities from which one or more specimens are in HUJ and or TAU; hollow circles, localities where the species has been observed and recorded (YLW or J.H. Hoofien).

SAURIA

Gekkoniidae. Among the four species, one, *Cyrtodactylus amictopholis* Hoofien, 1967, is so far only known from Mt. Hermon, and is probably endemic to this area (Fig. 6). The first specimen was collected by Hoofien and companions in August 1967 (Hoofien, 1967), and since then the species has been found to be quite common on the upper reaches of Mt. Hermon, at altitudes above 1300 m (Hoofien, 1980). *Cyrtodactylus kotschy orientalis* (Štěpánek, 1937) was collected once, on the western slope of Mt. Hermon (Fig. 7). It has not been found in other parts of the Golan, although it has been searched for. In Syria and Lebanon other subspecies are reported. *Hemidactylus turcicus turcicus* (Linnaeus, 1758) is quite common on the lower slopes of the Golan and along Lake Kinneret (Fig. 8). It occurs also on the slopes of Mt. Hermon. In Syria it was reported from Berzé near Damascus (Boulenger, 1923) and from Hama (Angel, 1936). In Lebanon it is common up to an altitude of 1000 m (Hraoui Bloquet, 1982), similar to the situation in Israel (Hurvitz, 1980). The only species of *Ptyodactylus* on the Golan and Mt. Hermon is *P. puiseuxi* Boutan, 1893, which is quite common all over the area (Fig. 9). On Mt. Hermon it has been found only up to an altitude of 1500 m in Israel (Werner and Avital, 1980), but up to 1990 m in Syria (Esterbauer, 1990). Boutan (1893) described from the Palmyra ruins, Syria, three species (*P. barroisi*, *bischoffsheimi* and *montmahoui*) which appear to be synonyms of *P. puiseuxi*. Its occurrence in Lebanon is now documented by specimens from near Lake Qar'un and from the Bekaa Valley (HUJ).

Agamidae. The only agamid lizard in the northern part of Israel, *Agama stellio* ssp., is common on the Golan, and even more so on Mt. Hermon (Fig. 10). It is common in the western part of Syria (Esterbauer, 1985a), and all over Lebanon up to an altitude of

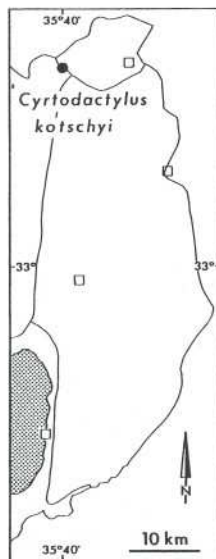


Fig. 7.

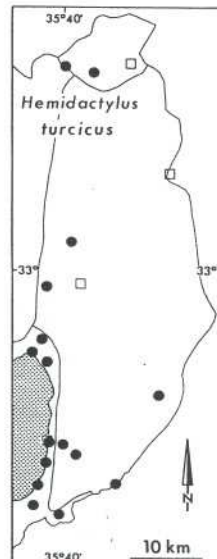


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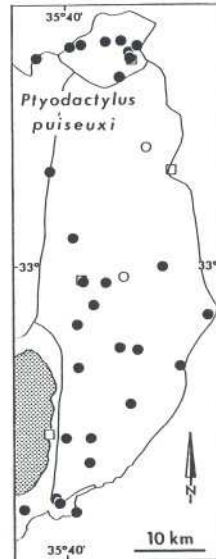


Fig. 9.

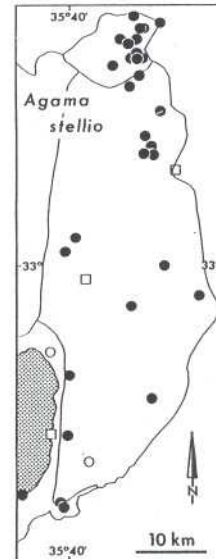


Fig. 10.

2000 m (Zinner, 1967; Hraoui Bloquet, 1982). Peracca (1894) reported it from Mt. Hermon at 3000 m, but this must be inaccurate (Mt. Hermon reaches an altitude of 2814 m). The collections of HUI and TAU do not have a single specimen of *Agama rudrata* from the Israeli part of the Golan or Mt. Hermon, although it could be expected to be present in these areas. Specimen TAU-R 10535 is from Mazra'at Bayt Jinn on the eastern slope of Mt. Hermon (33°19'N, 35°55'E, approx. 13 km ENE of Majdal Shams)². Esterbauer (1987b) found it east of Majdal Shams and at other sites on the Syrian part of the Golan. Berger-Dell'mour (1986) also reported it from the Majdal Shams area and from Camp Fauver near Quneitra.

Chamaeleonidae. *Chamaeleo chamaeleon recticrista* Boettger, 1880 probably occurs all over the Golan and on the lower parts of Mt. Hermon, but has not been collected often (Fig. 11). It is found in all the western part of Syria up to an altitude of 1850 m (Esterbauer, 1986a). In Lebanon it is widely distributed up to an altitude of 1600 m (Hraoui Bloquet, 1982).

Scincidae: *Scincinae*³. *Chalcides guentheri* Boulenger, 1887 is not common but probably occurs on most parts of the Golan and Mt. Hermon, up to an altitude of

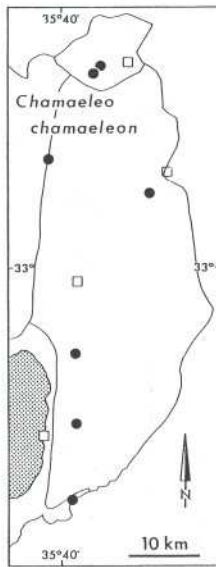


Fig. 11.

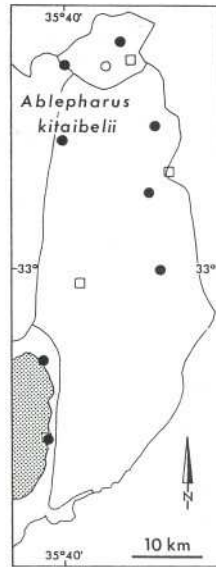


Fig. 12.

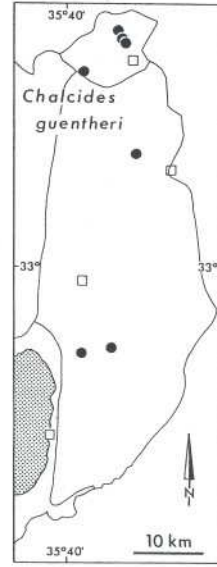


Fig. 13.

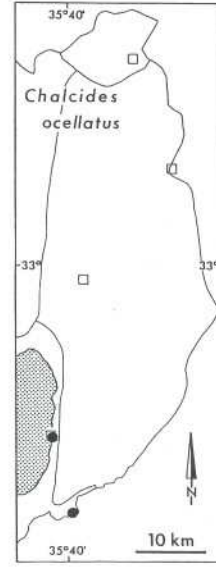


Fig. 14.

²The recorded data say only "Mazraat Beit Jan" but on the base of one of us (YLV) remembering the enthusiasm aroused by the specimen's arrival at TAU, and in view of Esterbauer's (1987b) quoted observation, we see no reason to interpret the locality other than at face value.

³We adopt a subfamilial classification of the Scincidae because, despite other differences of opinion, both Greer (1970) and Fuhr (1975) agree on the subfamilial assignment of the Israeli genera.

about 1500 m (Fig. 13). Berger-Dell'mour (1986) reported it from Camp Fauer, east of Quneitra, and from Majdal Shams, and Zinner (1967) from the western slopes of High Lebanon. We have records of *Chalcides ocellatus* (Forskål, 1775) only from En Gev and El Hama (Hammat Gader) (Fig. 14), but Hurvitz (1980) reported it also from Mt. Hermon. Angel (1936) reported it from Hama in Syria, but there are no records from south-west Syria. In Lebanon it occurs in the area of Beirut (Boettger, 1880; Hraoui Bloquet, 1982). *Eumeces schneideri pavimentatus* (Geoffrey-St. Hilaire, 1827) was found in a few localities, mostly in the northern part of the Golan (Fig. 15). The eastern limit of distribution of this subspecies lies about 50 km east of the Syrian-Israeli border (Esterbauer, 1986d). In south west Syria it has been found up to an altitude of 1028 m, a little higher than that reported for Israel (920 m, Werner and Avital, 1980). Our only record of *Ophiomorus latastii* Boulenger, 1887 is from the south-western border of the Golan (Fig. 17), but it has been found also on Mt. Hermon (Günther, 1864). No records exist of this species from Syria or Lebanon.

Lygosominae. *Ablepharus kitaibelii kitaibelii* (Bibron & Bory, 1833) was collected infrequently but is probably found on most parts of the Golan and Mt. Hermon, up to about 1500 m (Fig. 12). It was reported by Berger-Dell'mour (1986) from Camp Fauer near Quneitra, and repeatedly by others from Lebanon (Wettstein, 1928; Zinner, 1967; Hraoui Bloquet, 1982). Of the six skinks of the Golan, only *Mabuya vittata* (Olivier, 1804) is common; it occurs all over the Golan and Mt. Hermon (Fig. 16). It is common also in western Syria (Esterbauer, 1985e) and all over Lebanon (Hraoui Bloquet, 1982).

Lacertidae. Three Mediterranean lacertids of Israel are found on the Golan and Mt. Hermon, but, curiously, mostly in the northern part of the area. *Lacerta laevis* abounds

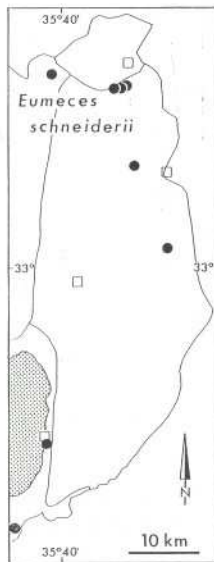


Fig. 15.

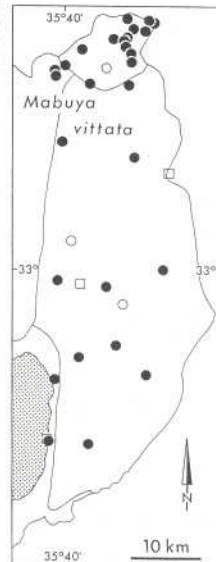


Fig. 16.

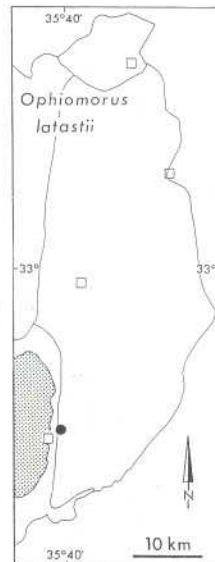


Fig. 17.

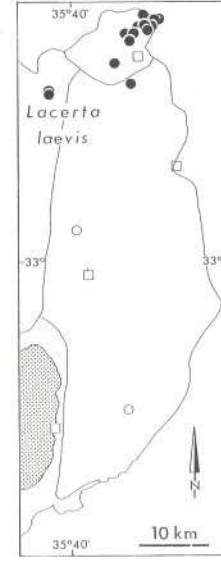


Fig. 18.

on Mt. Hermon, but despite specific searching has hardly been observed on the Golan (Fig. 18). Two subspecies are found in this area: *L. l.* cf. *kulzeri* (Müller & Wettstein, 1933), on the higher parts of Mt. Hermon (it was previously mistaken for *Lacerta danfordi* — Hoofien, Sivan and Werner, 1990); and *L. l. laevis* Gray, 1838, mainly at lower elevations. From Syria it is known from the vicinity of Damascus (Boulenger, 1923) and also from Al Kab in the Syrian part of the Golan (HUJ collection). It is common all over Lebanon (Zinner, 1967; Hraoui Bloquet, 1982). Of *L. trilineata israelica* Peters, 1964 we have only three specimens from Mt. Hermon and observations from Mas'ada forest (Fig. 19). The only records of the species from Syria are from Ataibé (E of Damascus), Homs (Boulenger, 1923) and Hadar east of Majdal Shams (HUJ collection). It is quite common in Lebanon at altitudes above 900 m (Hraoui Bloquet, 1982). *Ophisops elegans ehrenbergii* (Wiegmann, 1835) is common on the Golan and Mt. Hermon (Fig. 20) and is also the commonest reptile on the Syrian part of the Golan (Esterbauer, 1986b, who uses the name *O. e. schlueteri* contrary to Wettstein's, 1928, opinion). It is found all over Lebanon up to an altitude of 2600 m (Hraoui Bloquet, 1982).

OPHIDIA

Typhlopidae. We have only one specimen of *Typhlops simoni* (Boettger, 1879) from the survey area, and this is from the Jordan valley (Fig. 21). There are no data from Syria and Lebanon, and it may be endemic to Israel and Jordan (Haas, 1951). *T. Vermicularis* Merrem, 1820 is commoner, and occurs on both the Golan and Mt. Hermon (Fig. 22). It has been reported from the Damascus area in Syria (Boulenger, 1923), and from various sites in Lebanon (Barbour, 1914; Angel, 1936; Hraoui Bloquet, 1982).

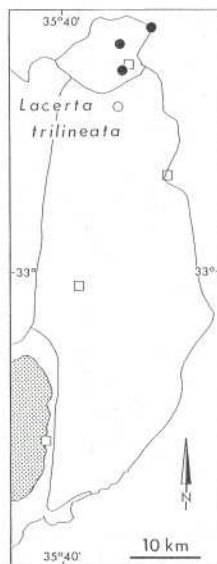


Fig. 19.

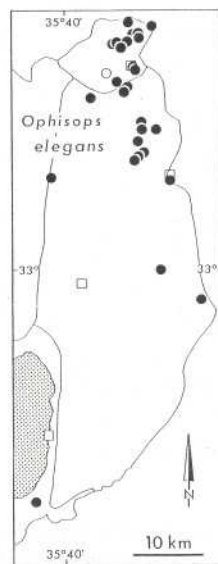


Fig. 20.

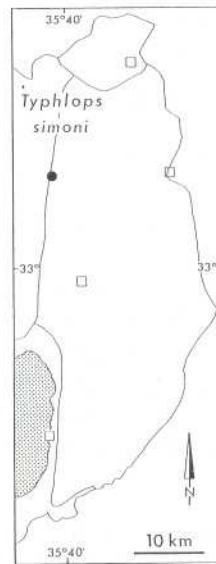


Fig. 21.

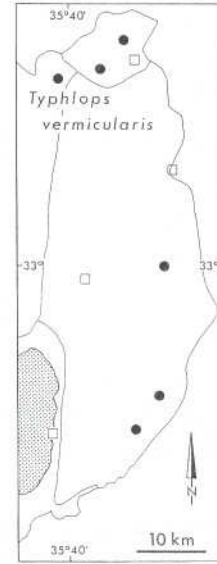


Fig. 22.

Boidae. *Eryx jaculus turcicus* (Olivier, 1801) is rare, and only two specimens have been collected from the area (Fig. 23). Esterbauer (1986e) reported it from the Syrian part of the Golan between Quneitra and Majdal Shams. The only reports from Lebanon are from the Bekaa Valley (Boulenger, 1923; Zinner, 1967; Hraoui Bloquet, 1982).

Colubridae ("Aglypha")⁴. Of the 12 species present in our area, one, *Coluber ravergeri* Ménériés, 1832, is restricted to Mt. Hermon (Fig. 26). We shall return to this taxon further on. Three others: *Eirenis modestus* (Martin, 1838) (Fig. 30), *Elaphe hohackeri taurica* (Werner, 1898)⁵ (Fig. 32) and *Elaphe quatuorlineata sauromates* (Pallas, 1814) (Fig. 33) were most often encountered on Mt. Hermon (Zinner, 1972) but also, occasionally, in its vicinity. All four are well known from Anatolia. *Eirenis modestus* occurs also in northern Israel (one or perhaps two specimens), in Syria and in Lebanon (Hoofien, 1968). The others are recorded neither in Syria and Lebanon nor in Cis- and Transjordan, except for one *E. h. taurica* from Lebanon (Hoofien, 1973) and one *E. q. sauromates* from the Golan (Tiedemann and Haupl, 1978).

Coluber ravergeri is limited to the highest peaks of Mt. Hermon (Peracca, 1894; Hoofien, 1968). *C. nummifer* Reuss, 1834 is found on the Golan and Mt. Hermon, but not above 1500 m (Fig. 25). This is similar to the situation on the Syrian part of the Golan (Esterbauer, 1989). The distinct specific status of these two taxa was discussed by Werner and Avital (1980) and Schätti and Agasian (1985). Esterbauer's comment that *C. nummifer* occurs up to 2800 m, is apparently not based on his own observations, and might refer to *C. ravergeri*. Among the different records from Lebanon it is difficult to know which refer to *C. ravergeri*, and which to *C. nummifer*.

All our records of *C. jugularis asianus* (Boettger, 1880) are from a limited area of the Golan (Fig. 24). Our only record from Mt. Hermon has no precise locality data, and is therefore not on the map. The species is common on the Syrian part of the Golan (Esterbauer, 1985c), and widely distributed in Lebanon (Hraoui Bloquet, 1982). *C. rubriceps* (Venzmer, 1919) occurs mainly in the eastern part of the Golan and on Mt. Hermon, including the high peaks (Fig. 27). It had been reported up to an altitude of 1600 m in Syria (Esterbauer, 1986c) and Lebanon (Hraoui Bloquet, 1982), and our record from 2200 m extends its local altitudinal range.

We have records of *Eirenis decemlineatus* (Duméril & Bibron, 1854) only from the Golan (Fig. 28), although Günther (1864) reported it from Mt. Hermon. There are only a few records of this species from Syria and Lebanon (Boulenger, 1923; Berger-Dell'mour, 1986). *E. lineomaculatus* Schmidt, 1939 (= *E. coronella* (Schlegel, 1837)) is found in the northern part of the Golan and the lower part of Mt. Hermon (Fig. 29). Records from neighbouring countries are recent: Kafr Kuk in southeast Lebanon (Ilani, 1983) and Harfa in the Syrian part of the Golan (HUJ collection, two specimens). *E. rothi* Jan, 1865 is also restricted in our collections to the eastern part of the Golan and to Mt. Hermon (Fig. 31). The only record from Syria is from Camp Fauer, near Quneitra

⁴Following Werner (1988) the terms "Aglypha" and "Opisthoglypha" are used here for the convenience of local readers, as this is not the place for taking sides in the discussion on the subfamilial taxonomy of the Colubridae.

⁵We now have identified the specimens in HUJ, and one in Izmir, down to the subspecific level.

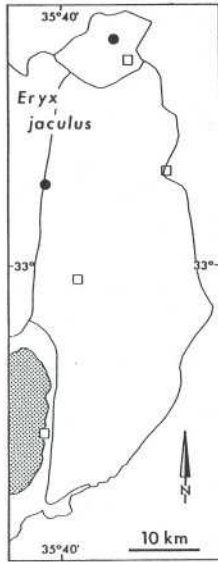


Fig. 23.

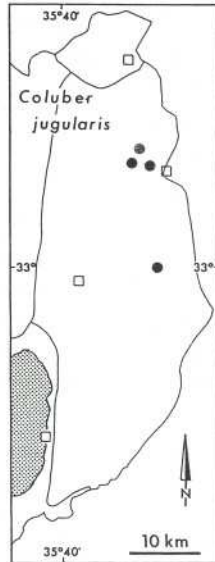


Fig. 24.

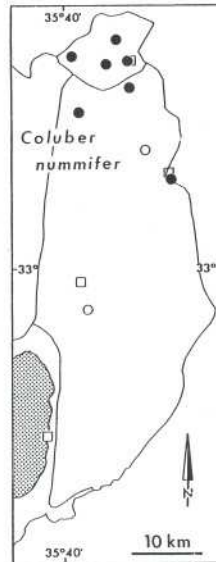


Fig. 25.

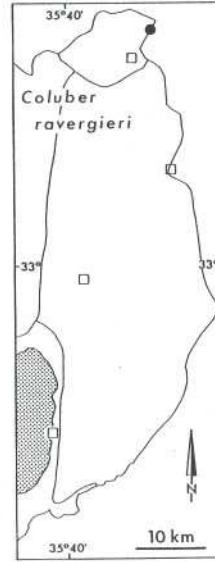


Fig. 26.

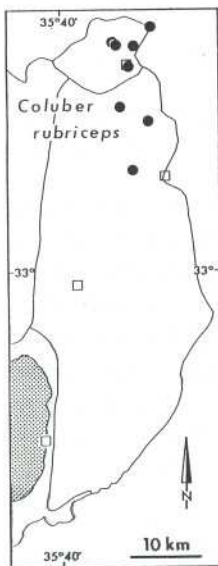


Fig. 27.

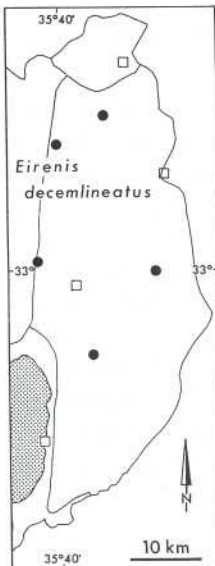


Fig. 28.

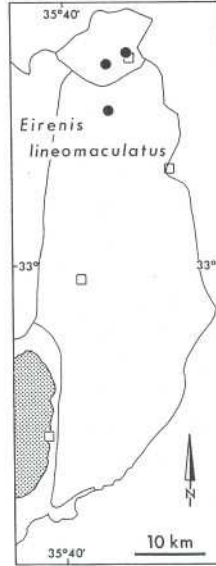


Fig. 29.

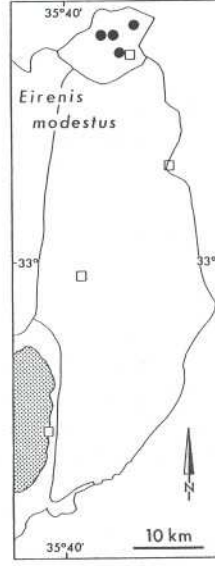


Fig. 30.

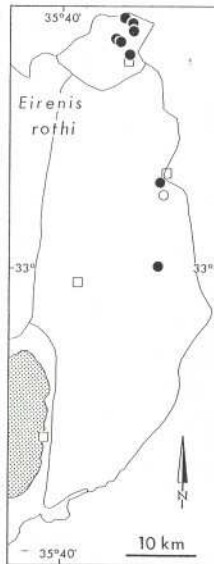


Fig. 31.

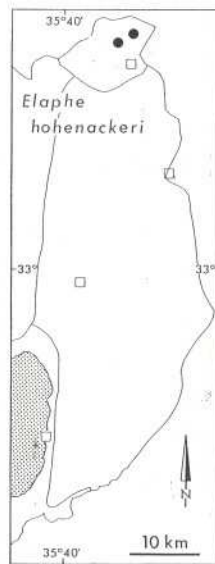


Fig. 32.

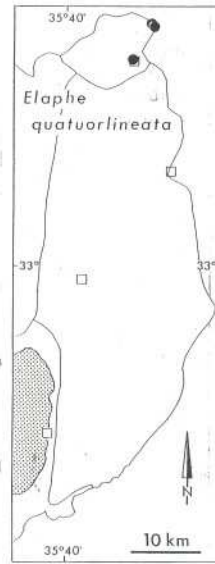


Fig. 33.

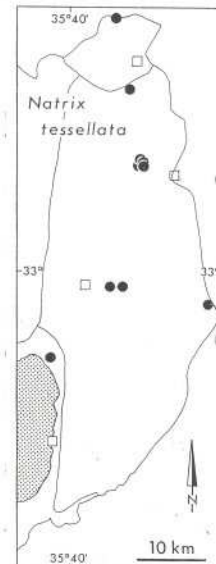


Fig. 34.

(Berger-Dell'mour, 1986). In Lebanon it was collected at Kafr Kuk, in the southeastern part of the country (Ilani, 1983). *Natrix tessellata tessellata* (Laurenti, 1768) occurs on the Golan and Mt. Hermon (Fig. 34), in western Syria (Angel, 1936; Berger-Dell'mour, 1986), and all over Lebanon up to 1750 m (Hraoui Bloquet, 1982). *Rhynchocalamus melanocephalus* (Jan, 1862) was infrequently found on the Golan (Fig. 35), and in Syria near Damascus (Boulenger, 1923) and east of Quneitra (Berger-Dell'mour, 1986). It was reported from Lebanon (Müller and Wettstein, 1933; Hraoui Bloquet, 1982).

Colubridae ("Ophistoglypha"). *Malpolon monspessulanus insignitus* (Geoffroy-St. Hilaire, 1827) is quite common in the northern part of the Golan and on Mt. Hermon (Fig. 36). According to Esterbauer (1985f) it is the most common snake in southwest Syria. It is found all over Lebanon up to an altitude of 1700 m (Hraoui Bloquet, 1982). We have only one specimen and one record of *Psammophis schokari* (Forskål, 1775), both from the southwestern part of the survey area, within the Jordan Valley (Fig. 37). Peracca (1894), too, reported it from east of Lake Kinneret. There are no reports from western Syria, and only a few from Lebanon (Angel, 1936; Hraoui Bloquet, 1982). *Telescopus fallax syriacus* (Boettger, 1880) occurs mostly in the eastern part of the Golan, and was found on Mt. Hermon up to 1700 m in Israel (Fig. 38), and up to 2000 m in Syria (Esterbauer, 1985g). There are several records of this species from Lebanon (Müller and Wettstein, 1933; Schmidt, 1939; Hraoui Bloquet, 1982; Ilani, 1983).

Viperidae. *Vipera bornmuelleri* Werner, 1898 is restricted to the upper parts of Mt. Hermon (Fig. 39), and is endemic to the mountains of Hermon and Lebanon. It has not been reported below 1500 m (Werner, 1898; Müller and Wettstein, 1933; Zinner, 1967; Hoofien, 1980; Hurvitz, 1980; Werner and Avital, 1980; Esterbauer, 1983). Our record

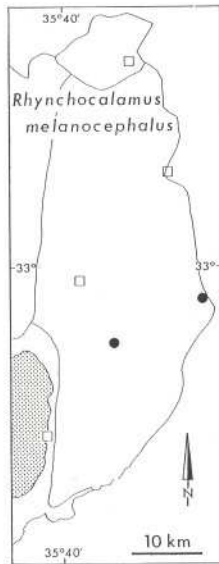


Fig. 35.

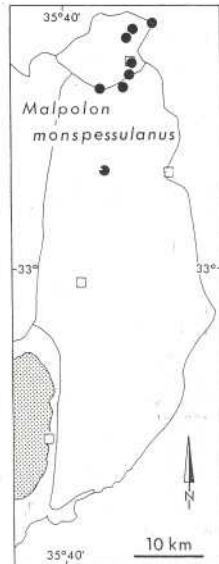


Fig. 36.

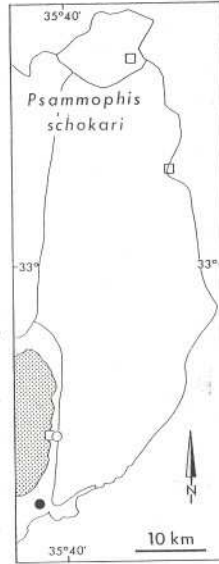


Fig. 37.

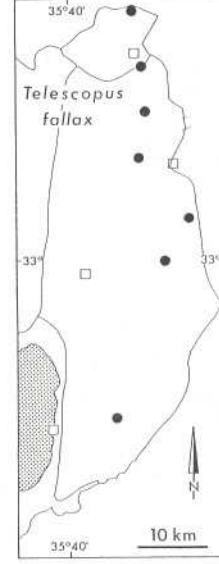


Fig. 38.

from Neve Ativ (altitude 1010 m) is therefore a downward extension of its range. *Vipera palaestinae* Werner, 1938 is common all over the Golan. On Mt. Hermon it is found up to an altitude of 1600 m (Fig. 40), but it is more common up to about 1200 m, as has been reported also for southwest Syria (Esterbauer, 1987a) and for Lebanon (Hraoui Bloquet, 1982). Specimens of this viper from the upper reaches of Mt. Hermon tend to be conspicuously dark, verging on melanistic (J. H. Hoofien, pers. comm.).

SPECIES NOT FOUND

Whereas all Golan reptiles, except those restricted to Mt. Hermon, also occur in northern Cisjordan, the reverse is not true. Taxa⁶ that are inhabitants of the light soils of the coastal plain cannot be expected on the Golan and are irrelevant in this context. Nor can one expect *Ptyodactylus guttatus* von Heyden, 1827, in Israel parapatric with *P. puiseuxi* Boutan, 1893, which occupies all of the Golan. On the other hand, three additional taxa may yet be found on the Golan. *Ophisaurus apodus* (Pallas, 1772) occurs in northern Cisjordan and Transjordan (Werner, 1971) and would therefore be expected with high probability also on the Golan. The Mediterranean form of the *Coluber rhodorachis* complex (Perry, pers. comm.) and *Micrelaps muelleri* (Boettger, 1880) are not known from Transjordan, but this is not indicative because in Cisjordan they are encountered only infrequently. Hence both may or may not exist also on the Golan.

⁶*Testudo graeca floweri* Bodenheimer, 1935, and *Acanthodactylus schreiberi syriacus* Boettger, 1879.

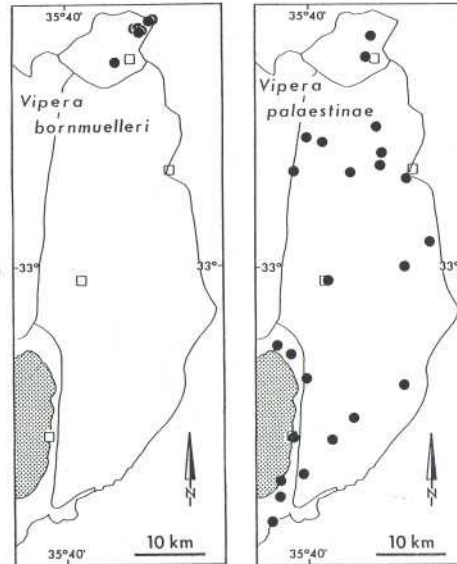


Fig. 39.

Fig. 40.

CONCLUDING REMARKS

1. Reptile specimens from the Golan and Mt. Hermon (n=637) represent 36 species: 2 turtles, 15 lizards and 19 snakes.
2. Six species and one subspecies are limited in Israel to Mt. Hermon. Of the species, one is endemic to Mt. Hermon and one to the mountains of Hermon and Lebanon. Four are Anatolian and two of these are unknown from intervening Syria and Lebanon. This zoogeographical pattern is exemplified by *Elaphe hohenackeri* in Fig. 41.
3. The remaining 31 species occur also in northern, Mediterranean Cisjordan. Two of these, *Typhlops simoni* and *Psammophis schokari*, have so far been found within the survey area only in the Jordan Valley.
4. Most of these species have been reported also from northern Transjordan. Exceptions, expected but unreported from there, are *Cyrtodactylus kotschyi*, *Chalcides guentheri* and *Lacerta trilineata*. Presumably, in Jordan snakes have been collected and studied more intensively than lizards.
5. Almost all of the 31 species shared by the Golan with northern Cisjordan, have also been reported from Syria, Lebanon or both.
6. *Typhlops simoni* is a new record (and very marginal at that) for Syria in its physical-geographical sense.
7. Three relevant taxa of Mediterranean Cisjordan have not yet been found on the Golan: *Ophisaurus apodus*, *Micrelaps muelleri* and the Mediterranean form of the *Coluber rhodorachis* complex may still be discovered there, especially the first, which is also known from Transjordan.

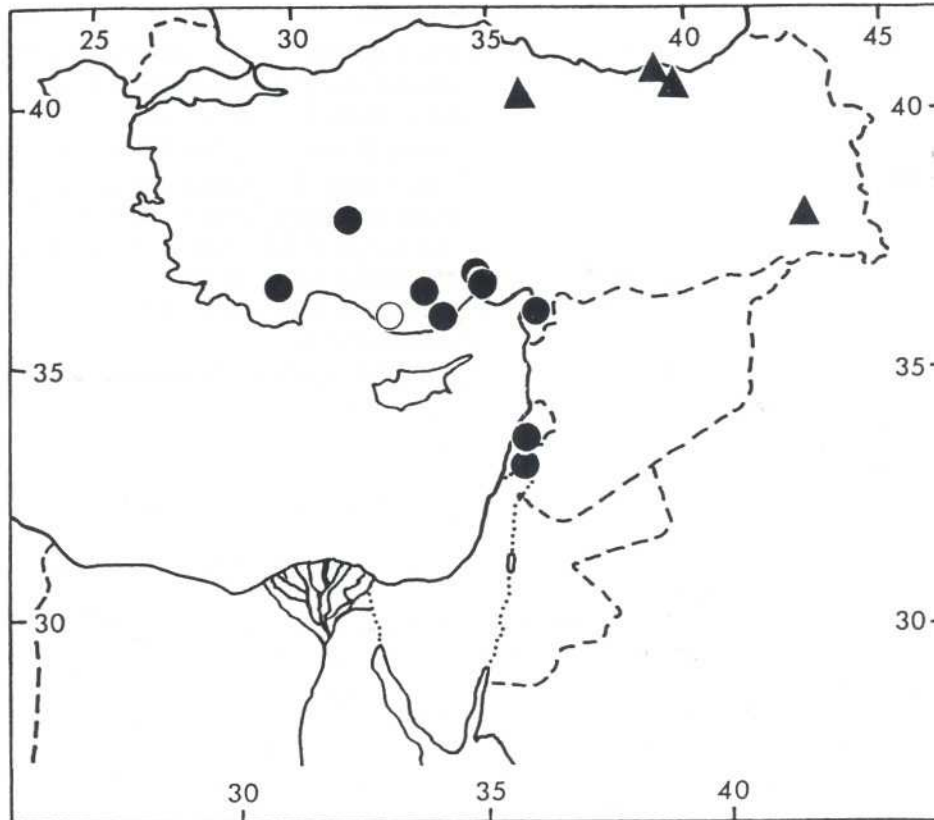


Fig 41. Western locality records of *Elaphe hohenerkeri*: ▲, *E. h. hohenerkeri* (from Başoğlu & Baran, 1980); ●, *E. h. taurica* (in Turkey from Başoğlu & Baran, 1980; Schätti & Baran, 1988; in Lebanon and Mt. Hermon from HUI); ○, subspecies not verified (from Schätti & Baran, 1988). Dashed lines, political boundaries. Dotted line, herpetological survey area of Israel and Sinai (Werner, 1988).

8. The only herpetological manifestation of the proximity of the Irano-Turanian Syrian Desert, is the occurrence of *Agama rudrata* (Olivier, 1804) on the southeastern slopes of Mt. Hermon.

9. The restriction of *Chalcides ocellatus* to the extreme southwest is perplexing, considering the ubiquity of the species in Cisjordan.

10. Within the Golan, the number of species observed declines from north to south, from 27 on Mt. Hermon through 24 in the northeastern third to 15 in the southwestern third of the Golan. Some species may perhaps truly be restricted to the northeastern part because of its different environment (Fig. 2). In other cases we may be faced with an artifact of unequal search effort, because, as detailed above, certain species for which we have data only from the north, have been found by Esterbauer in the Syrian Golan also in the south.

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APPENDIX: LIST OF THE REPTILE SPECIES OF THE GOLAN AND MT. HERMON
(n=specimens recorded)

Name	n	Page	
		Text	Map
TESTUDINES (2 spp.)	32	197	
<i>Mauremys caspica rivulata</i>	14	197	197(4)
<i>Testudo graeca terrestris</i>	18	197	197(5)
SAURIA (16 spp. & sspp.)	437	198	
<i>Ablepharus kitaibelii kitaibelii</i>	17	200	199(12)
<i>Agama stellio</i> ssp.	56	198	198(10)
<i>Chalcides guentheri</i>	14	199	199(13)
<i>Chalcides ocellatus</i>	5	200	199(14)
<i>Chamaeleo chamaeleon recticrista</i>	8	199	199(11)
<i>Cyrtodactylus amictopholis</i>	30	198	197(6)
<i>Cyrtodactylus kotschyi orientalis</i>	1	198	198(7)
<i>Eumeces schneideri pavimentatus</i>	8	200	200(15)
<i>Hemidactylus turcicus turcicus</i>	27	198	198(8)
<i>Lacerta laevis</i> cf. <i>kulzeri</i>	14	201	200(18)
<i>Lacerta laevis laevis</i>	26	201	200(18)
<i>Lacerta trilineata israelica</i>	3	201	201(19)
<i>Mabuya vittata</i>	81	200	200(16)
<i>Ophiomorus latastii</i>	1	200	200(17)
<i>Ophisops elegans ehrenbergii</i>	94	201	201(20)
<i>Ptyodactylus puiseuxi</i>	52	198	198(9)
OPHIDIA (20 spp.)	168	201	
<i>Coluber jugularis asianus</i>	5	202	203(24)
<i>Coluber nummifer</i>	10	202	203(25)
<i>Coluber ravergieri ravergieri</i>	1	202	202(26)
<i>Coluber rubriceps</i>	11	202	203(27)
<i>Eirenis decemlineatus</i>	5	202	203(28)
<i>Eirenis lineomaculatus</i>	3	202	203(29)
<i>Eirenis modestus</i>	10	202	203(30)
<i>Eirenis rothi</i>	14	202	204(31)
<i>Elaphe hohenackeri taurica</i>	4	202	204(32)
<i>Elaphe quatuorlineata sauromates</i>	3	202	204(33)
<i>Eryx jaculus turcicus</i>	2	202	203(23)
<i>Natrix tessellata tessellata</i>	13	204	204(34)
<i>Malpolon monspessulanus</i>	9	204	205(36)
<i>Psammophis schokari</i>	1	204	205(37)
<i>Rhyncocalamus melanocephalus</i>	2	204	205(35)
<i>Telescopus fallax syriacus</i>	8	204	205(38)
<i>Typhlops simoni</i>	1	201	201(21)
<i>Typhlops vermicularis</i>	11	201	201(22)
<i>Vipera bornmuelleri</i>	14	204	206(39)
<i>Vipera palaestinae</i>	41	205	206(40)