

## AMPHIBIANS AND REPTILES FROM IRAN IN THE UNITED STATES NATIONAL MUSEUM COLLECTION

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Iran (Map 1) encompasses an area of about 1,650,000 sq. km. and is the most geographically complex nation in Southwest Asia (Anderson, 1968: 366). Thirteen major physiographic features are present (Map 3). Although much of Iran consists of a plateau some 1200 m. above sea level, altitude ranges from -28.6 m. at the Caspian Sea to 6200 m. at the summit of Mt. Demavand in the Alborz Range. Iranian plant communities vary from mesic to xeric, and most are characteristic of arid to semi-arid conditions (Map 4). The Iranian fauna includes approximately 180 described species of amphibians and reptiles of 66 genera and is composed of representatives of five zoogeographic elements: Aralo-Caspian, Iranian, Mediterranean, Saharo-Sindian, and Oriental (Anderson, 1963, 1966b, 1968). All but the last are considered regions within the Palearctic realm.

The United States National Museum of Natural History collection of amphibians and reptiles contains 951 specimens from Iran, of which 924 were obtained from August 1962 through August 1965 during field work directed by H. W. Setzer under U. S. Army Medical Research and Development Command, Office of the Surgeon General Grant Number DA-MD-49-193-63-G74(645-M). The first year's collection was assembled by G. L. Ranck and L. H. Hermann, and the specimens secured the following two years were taken by J. W. Neal, Jr., and myself.

This paper is a preliminary listing of the specimens included in the collection. Simple maps are used to indicate the general area from which each was obtained. The figures were made from color transparencies taken by myself. Certain specimens from this assemblage have been previously reported upon by Anderson and Leviton (1966b), Minton, Anderson, and Anderson (1970), and Tuck (1971).

Other recent papers based on herpetological collections made in Iran and adjacent areas have been published by Anderson (1963, 1968), Anderson and Leviton (1966a), CLARK, Clark, and Anderson (1966), Guibé (1966), Haas and Werner (1969), Latifi, Hoge, and Eliazan (1966), Mertens (1969), Minton (1966), and Schmidtler and Schmidtler (1969).

Initial identifications of the USNM Iranian specimens were made by reference to Khalaf (1959), Marx (1968), Nikolsky (1962, 1963, 1964), and Terent'ev and Chernov (1965). Many of these tentative assignments to taxa were confirmed or corrected by S. C. Anderson, M. Latifi, A. R. Hoge, and Y. L. Werner. Nonetheless, I am solely responsible for any misidentifications and errors that may appear herein.

This collection lacks Iranian salamanders but is notable for its inclusion of the only known examples of the dwarf gecko *Tropiocolotes helena* (Nikolsky) (see Minton, Anderson, and Anderson, 1970, and Tuck, 1970) and the eighth reported specimen of the colubrid snake *Spalerosophis microlepis* Jan, in De Filippi (see Marx, 1959).

Nomenclature used in this report is in accordance with the most recently published works (see above), but, in the instance of disagreements, I have arbitrarily made a choice. Recent Russian workers (e.g., Terent'ev and Chernov, 1965, and Shcherbak, 1966) assign the short-legged form of the frog *Rana ridibunda* in Iran to the taxon *R. r. saharica* Boulenger in Hartert, 1913, but, if this subspecies is valid, it should be known as *R. r. susana* Boulenger, 1905. The use of a trinomial for *Agama blanfordi* Anderson (1966a) is justified by the recent description of *A. persica fieldi* (=*A. blanfordi fieldi*) Haas and Werner (1969). *Agama agilis* (*sensu lato*), as used in this paper, includes the nominal forms *A. isolepis* Boulenger and *A. sanguinolenta* (Pallas), since the confused systematics of this difficult group is currently under study by S. C. Anderson (pers. comm.).

I wish to acknowledge my great debt to S. C. Anderson for his constant and considerable aid and encouragement, and I wish to pay special tribute to the late D. M. Cochran for her consideration and many kindnesses. I am also much in debt to W. C. A. Bokermann, J. Buskirk, S. M. Campden-Main, R. I. Crombie, R. Donoso-Barros, J. Eiselt, T. J. Feuerbach, A. R. Hoge, M. Latifi, J. W. Neal, Jr., G. A. Niehaus, B. R. Orejas-Miranda, J. A. Peters, M. H. Pettibone, D. A. Schlitter, J. F. Schmidtler, H. W. Setzer, J. Vasserot, Y. L. Werner, G. R. Zug, and the Iran National Tourist Organization.

In the section that follows, collecting stations are numbered approximately chronologically in Table 1 and keyed to Map 5. In many instances a single dot on the map indicates a number of collecting stations, since on the scale used it would not be possible clearly to differentiate very close localities. Place names are given as spelled by the United States Board on Geographic Names (1956). Latitude and longitude are also taken from this work and refer only to the town or city from which the distance is measured. Taxa are arranged alphabetically, except that orders and suborders are placed phylogenetically. Each trivial name is provided with its author's name and date of publication to facilitate comparison with the usage of other workers. Familial allocations of the snakes are according to the suggestions of Underwood (1967). Abbreviations used: CAS -- California Academy of Sciences; USNM -- United States National Museum of Natural History.

## CLASS AMPHIBIA

## Order Salientia

## Family Bufonidae

*Bufo olivaceus* Blanford, 1874

Faunal Element: Oriental

Collecting Stations (Map 6): 26 (USNM 148637-40); 27 (USNM 148641-43).

Total - 7 specimens.

*Bufo surdus luristanicus* Schmidt, 1952

Faunal Element: Iranian

Collecting Station (Map 6): 68 (USNM 153444). Total - 1 specimen.

*Bufo viridis arabicus* Heyden, 1827 (Fig. 1)

Faunal Element: Saharo-Sindian

Collecting Stations (Map 6): 10 (USNM 148572-76); 12 (USNM 153822);  
24 (USNM 148612); 45 (USNM 149408); 54 (USNM 149423); 62 (USNM  
153436-42); 66 (USNM 153443); 68 (USNM 153445); 69 (USNM 153446-47);  
70 (USNM 153469-83); 71 (USNM 153528-35); 74 (USNM 153544-45); 75  
(USNM 153546-50); 83 (USNM 154420-21); 84 (USNM 158427-29); 89  
(USNM 154244-309, 158430); 91 (USNM 154343-44); 93 (USNM 154412-13);  
94 (USNM 154345-411); 103 (USNM 158463-64); 106 (USNM 158433); 107  
(USNM 158434). Total - 197 specimens.

## Family Hylidae

*Hyla arborea savignyi* Audouin, 1827

Faunal Element: Mediterranean

Collecting Stations (Map 7): 69 (USNM 153448); 70 (USNM 153484-85); 71 (USNM 153536-40); 83 (USNM 154422); 95 (USNM 158432); 102 (USNM 158449); 103 (USNM 158465); 112 (USNM 158944). Total - 13 specimens.

Family Pelobatidae

*Pelobates syriacus boettgeri* Mertens, 1923

Faunal Element: Mediterranean

Collecting Stations (Map 7): 88 (USNM 154414-19); 89 (USNM 154310).  
Total - 7 specimens.

Family Ranidae

*Rana camerani* Boulenger, 1886

Faunal Element: Mediterranean

Collecting Station (Map 8): 83 (USNM 154423, 154425). Total - 2 specimens.

*Rana cyanophlyctis* Schneider, 1799

Faunal Element: Oriental

Collecting Stations (Map 8): 27 (USNM 148644-45); 28 (USNM 148665-67).  
Total - 5 specimens.

*Rana ridibunda ridibunda* Pallas, 1771

Faunal Element: Mediterranean

Collecting Stations (Map 8): 13 (USNM 153821); 14 (USNM 153820); 40

(USNM 149395-98); 47 (USNM 149409); 55 (USNM 149432-34); 80 (USNM 154445); 89 (USNM 154311-41, 158431, 158933-34); 92 (USNM 154342). Total - 46 specimens.

*Rana ridibunda susana* Boulenger, 1905

Faunal Element: Saharo-Sindian

Collecting Stations (Map 8): 3 (USNM 26192-93); 69 (USNM 153449-68, 153510-27); 70 (USNM 153486-509); 71 (USNM 153541-43); 75 (USNM 153551-61); 83 (USNM 154424, 154426); 84 (USNM 154430-44); 105 (USNM 158458); 112 (USNM 158935-43). Total - 105 specimens.

CLASS REPTILIA

Order Chelonia

Family Emydidae

*Emys orbicularis* (Linnaeus, 1758)

Faunal Element: Mediterranean

Collecting Stations (Map 9): 87 (USNM 154513); 89 (USNM 154506-10); 90 (USNM 154411-12). Total - 8 specimens.

*Mauremys caspica caspica* (Gmelin, 1774)

Faunal Element: Mediterranean

Collecting Stations (Map 9): 71 (USNM 153752); 89 (USNM 154504-05); 103 (USNM 158530-34); 104 (USNM 158529); 112 (USNM 158945). Total - 10 specimens.

## Family Testudinidae

*Testudo graeca ibera* Pallas, 1814

Faunal Element: Mediterranean

Collecting Stations (Map 9): 72 (USNM 153753); 73 (USNM 153754); 88 (USNM 154514); 102 (USNM 158457); 103 (USNM 158528). Total - 5 specimens.

*Testudo zarudnyi* Nikolsky, 1896 (Fig. 2)

Faunal Element: Iranian

Collecting Stations (Map 9): 85 (USNM 154515). Total - 1 specimen.

Order Squamata

Suborder Sauria

## Family Agamidae

*Agama agilis* Olivier, 1807 [*sensu lato*]

Faunal Element: Saharo-Sindian

Collecting Stations (Map 10): 7 (USNM 148571); 11 (USNM 148578); 12 (USNM 148586); 21 (USNM 148615); 44 (USNM 149399, 149403-05); 49 (USNM 149416-17); 54 (USNM 149418-22); 78 (USNM 153563-65); 80 (USNM 154485). Total - 19 specimens.

*Agama blanfordi blanfordi* Anderson, 1966

Faunal Element: Saharo-Sindian

Collecting Stations (Map 10): 34 (USNM 149145-48); 35 (USNM 149149-51); 69 (USNM 153685); 70 (USNM 153601-03); 76 (USNM 153579-81). Total - 14

specimens.

*Agama caucasica* (Eichwald, 1831)

Faunal Element: Iranian

Collecting Stations (Map 11): 12 (USNM 148587); 14 (USNM 153818-19);  
15 (USNM 153817); 40 (USNM 149391-92); 57 (USNM 149442-43); 82  
(USNM 154491-94). Total - 12 specimens.

*Agama nupta* De Filippi, 1843 (Figs. 3 & 4)

Faunal Element: Iranian

Collecting Stations (Map 11): 66 (USNM 153675-82, 153711-24); 68 (USNM  
153739); 71 (USNM 153598); 74 (USNM 153732); 85 (USNM 154481); 110  
(USNM 158438). Total - 27 specimens.

*Agama ruderata ruderata* Olivier, 1807

Faunal Element: Saharo-Sindian

Collecting Stations (Map 10): 71 (USNM 153600); 84 (USNM 154479); 102  
(USNM 159342, 164185); 109 (USNM 164822-23). Total - 6 specimens.

*Phrynocephalus helioscopus* (Pallas, 1771)

Faunal Element: Aralo-Caspian

Collecting Stations (Map 12): 53 (USNM 149415); 101 (USNM 164821).  
Total - 2 specimens.

*Phrynocephalus scutellatus* (Olivier, 1807) (Fig. 5)

Faunal Element: Iranian

Collecting Stations (Map 12): 1 (USNM 69902); 8 (USNM 148579-80); 12  
(USNM 148588); 16 (USNM 148593); 18 (USNM 148596-98, 148603-04);

19 (USNM 148599-602); 20 (USNM 148616-19, 148621-22); 22 (USNM 148620); 23 (USNM 148609-11); 25 (USNM 148632-36); 29 (USNM 148669-71); 31 (USNM 148672); 32 (USNM 149142); 33 (USNM 149141); 36 (USNM 149153); 64 (USNM 153586-87); 65 (USNM 153596-97); 76 (USNM 153582-85); 97 (USNM 158512-26); 98 (USNM 159343-57); 99 (USNM 158439-44); 100 (USNM 158435); 101 (USNM 153426). Total - 82 specimens.

*Uromastyx loricatus* (Blanford, 1874)

Faunal Element: Saharo-Sindian

Collecting Station (Map 12): 71 (USNM 153599). Total - 1 specimen.

Family Anguidae

*Anguis fragilis colchicus* (Nordmann, 1840)

Faunal Element: Aralo-Caspian

Collecting Stations (Map 17): 48 (USNM 149400); 56 (USNM 149441). Total - 2 specimens.

*Ophisaurus apodus* (Pallas, 1775) (Fig. 6)

Faunal Element: Mediterranean

Collecting Stations (Map 17): 40 (USNM 149393); 41 (USNM 149410); 81 (USNM 154487-88); 82 (USNM 154489-90). Total - 6 specimens.

Family Gekkonidae

*Agamura persica* (Duméril, 1856)

Faunal Element: Iranian

Collecting Station (Map 18): 12 (USNM 148585); 16 (USNM 148590-92).

Total - 4 specimens.

*Bunopus tuberculatus* Blanford, 1874

Faunal Element: Saharo-Sindian

Collecting Stations (Map 18): 8 (USNM 148577); 26 (USNM 148647-51, 153823-32); 30 (USNM 148668); 38 (USNM 149156-57). Total - 19 specimens.

*Cyrtodactylus caspius* (Eichwald, 1831)

Faunal Element: Iranian

Collecting Stations (Map 18): 4 (USNM 58979); 79 (USNM 154484). Total - 2 specimens.

*Cyrtodactylus scaber* (Heyden, 1827)

Faunal Element: Saharo-Sindian

Collecting Station (Map 18): 26 (USNM 148647). Total - 1 specimen.

*Eublepharis angramainyu* Anderson & Leviton, 1966

Faunal Element: Iranian

Collecting Station (Map 18): 59 (USNM 157373). Total - 1 specimen.

*Hemidactylus turcicus* (Linnaeus, 1758)

Faunal Element: Saharo-Sindian

Collecting Station (Map 18): 26 (USNM 148452-55). Total - 4 specimens.

*Pristurus rupestris iranicus* Schmidt, 1952

Faunal Element: Saharo-Sindian

Collecting Station (Map 18): 26 (USNM 148646). Total - 1 specimen.

*Teratoscincus bedriagai* Nikolsky, 1899

Faunal Element: Iranian

Collecting Station (Map 18): 6 (USNM 148569-70). Total - 2 specimens.

*Tropiocolotes heleneae* (Nikolsky, 1907)

Faunal Element: Iranian

Collecting Stations (Map 18): 66 (CAS 120795 [formerly USNM 153692],

USNM 153693-703, CAS 120796 [formerly USNM 153704], USNM 153705-10);

68 (USNM 153731). Total - 20 specimens.

## Family Lacertidae

*Acanthodactylus cantoris blanfordi* Boulenger, 1918

Faunal Element: Saharo-Sindian

Collecting Stations (Map 13): 26 (USNM 148656-58); 30 (USNM 148673-75).

Total - 6 specimens.

*Eremias guttulata watsonana* Stoliczka, 1872 (Fig. 7)

Faunal Element: Iranian

Collecting Stations (Map 13): 9 (USNM 148582-83); 16 (USNM 148594); 17

(USNM 148589); 20 (USNM 148623); 23 (USNM 148613); 36 (USNM 149152);

62 (USNM 153593); 67 (USNM 153683); 68 (USNM 153740); 69 (USNM

153686); 99 (USNM 158445-46); 109 (USNM 164824-27). Total - 17

specimens.

*Eremias lineolata* (Nikolsky, 1896)

Faunal Element: Aralo-Caspian

Collecting Station (Map 13): 8 (USNM 148581). Total - 1 specimen.

*Eremias nigrocellata* Nikolsky, 1896

Faunal Element: Aralo-Caspian

Collecting Stations (Map 13): 19 (USNM 148605-08); 21 (USNM 148624, 148627-30); 22 (USNM 148625-26); 99 (USNM 158447-48). Total - 13 specimens.

*Eremias velox persica* Blanford, 1874

Fauanl Element: Iranian

Collecting Stations (Map 14): 15 (USNM 153816); 23 (USNM 148614); 32 (USNM 149143-44); 37 (USNM 149154-55); 77 (USNM 153562); 78 (USNM 153566-78). Total - 20 specimens.

*Eremias velox velox* (Pallas, 1771)

Faunal Element: Aralo-Caspian

Collecting Stations (Map 14): 46 (USNM 149401-02); 80 (USNM 154486); 96 (USNM 158527). Total - 4 specimens.

*Lacerta chlorogaster* Boulenger, 1908.

Faunal Element: Aralo-Caspian

Collecting Stations (Map 15): 50 (USNM 149435-37); 51 (USNM 149439-40). Total - 5 specimens.

*Lacerta strigata* Eichwald, 1831

Faunal Element: Mediterranean

Collecting Stations (Map 15): 51 (USNM 149438); 55 (USNM 149424-26); 89 (USNM 154446-78). Total - 37 specimens.

*Lacerta trilineata media* Lantz & Cyren, 1920

Faunal Element: Iranian

Collecting Station (Map 15): 85 (USNM 154482-83). Total - 2 specimens.

*Ophisops elegans blanfordi* Schmidt, 1939

Faunal Element: Saharo-Sindian

Collecting Stations (Map 16): 60 (USNM 157374); 69 (USNM 153687-90); 70 (USNM 153604-74). Total - 76 specimens.

*Ophisops elegans elegans* Ménétries, 1832 (Fig. 7)

Faunal Element: Iranian

Collecting Stations (Map 16): 0 (USNM 37277); 62 (USNM 153594); 63 (USNM 153588-92); 66 (USNM 153684, 153725-26); 74 (USNM 153733-37); 75 (USNM 153738); 86 (USNM 154480); 101 (USNM 164816-20); 102 (USNM 158450-51, 164814); 103 (USNM 158466-511). Total - 70 specimens.

## Family Scincidae

*Ablepharus pannonicus* Lichtenstein in Eversmann, 1823

Faunal Element: Iranian

Collecting Station (Map 19): 69 (USNM 153691). Total - 1 specimen.

*Chalcides ocellatus ocellatus* (Forskål, 1775)

Faunal Element: Saharo-Sindian

Collecting Station (Map 19): 26 (USNM 148659). Total - 1 specimen.

*Eumeces schneideri* (Daudin, 1802) (Fig. 8)

Faunal Element: Saharo-Sindian

Collecting Stations (Map 19): 53 (USNM 149414); 61 (USNM 153595); 66 (USNM 153729-30). Total - 4 specimens.

*Mabuya aurata affinis* (De Filippi, 1865)

Faunal Element: Iranian

Collecting Station (Map 19): 66 (USNM 153727-28). Total - 2 specimens.

*Ophiomorus blanfordi* Boulenger, 1887

Faunal Element: Saharo-Sindian

Collecting Station (Map 19): 26 (USNM 148660). Total - 1 specimen.

#### Family Varanidae

*Varanus griseus* (Daudin, 1803) (Fig. 9)

Faunal Element: Saharo-Sindian

Collecting Stations (Map 17): 28 (USNM 149140); 66 (USNM 160302).

Total - 2 specimens.

#### Suborder Amphisbaenia

#### Family Trogonophidae

*Diplometopon zarudnyi* Nikolsky, 1907

Faunal Element: Saharo-Sindian

Collecting Station (Map 9): 2 (USNM 121594). Total - 1 specimen.

## Suborder Serpentes

## Family Boidae

*Eryx jaculus familiaris* Eichwald, 1831

Faunal Element: Saharo-Sindian

Collecting Station (Map 20): 2 (USNM 121593). Total - 1 specimen.

## Family Colubridae

*Coluber karelini* Brandt, 1838

Faunal Element: Aralo-Caspian

Collecting Station (Map 21): 20 (USNM 148631). Total - 1 specimen.

*Coluber naja* Schinz, 1833

Faunal Element: Mediterranean

Collecting Station (Map 21): 105 (USNM 158462). Total - 1 specimen.

*Coluber ravergeri* Ménétries, 1832

Faunal Element: Mediterranean

Collecting Station (Map 21): 105 (USNM 158461). Total - 1 specimen.

*Coluber rhodorhachis* (Jan in De Filippi, 1865)

Faunal Element: Mediterranean

Collecting Station (Map 21): 70 (USNM 153743). Total - 1 specimen.

*Elaphe longissima* Laurenti, 1768

Faunal Element: Mediterranean

Collecting Station (Map 21): 52 (USNM 149412-13). Total - 2 specimens.

*Malpolon monspessulanus insignitus* (Geoffroy Saint-Hilaire in Savigny, 1827)

Faunal Element: Mediterranean

Collecting Station (Map 22): 70 (USNM 153745). Total - 1 specimen.

*Psammophis schokari* (Forskål, 1775)

Faunal Element: Saharo-Sindian

Collecting Station (Map 22): 39 (USNM 149159). Total - 1 specimen.

*Spalerosophis diadema schiraziana* Jan in De Filippi, 1865

Faunal Element: Iranian

Collecting Station (Map 22): 11 (USNM 148584). Total - 1 specimen.

*Spalerosophis diadema cliffordi* (Schlegel, 1837)

Faunal Element: Saharo-Sindian

Collecting Stations (Map 22): 2 (USNM 121592); 59 (USNM 157376-77).

Total - 3 specimens.

*Spalerosophis microlepis* Jan in De Filippi, 1865

Faunal Element: Iranian

Collecting Station (Map 22): 68 (USNM 153749). Total - 1 specimen.

#### Family Elapidae

*Microcephalophis gracilis gracilis* (Shaw, 1802)

Faunal Element: Oriental

Collecting Station (Map 23): 113 (USNM 159786). Total - 1 specimen.

*Pelamydrus platurus* (Linnaeus, 1766) = Pelamis PLATURUS (L.)

Faunal Element: Oriental

Collecting Station (Map 23): 26 (USNM 148661-63). Total - 3 specimens.

*Praescutata viperina* (Schmidt, 1852)

Faunal Element: Oriental

Collecting Station (Map 23): 26 (USNM 148664). Total - 1 specimen.

Family Homalopsidae

*Telescopus tessellatus tessellatus* (Wall, 1908)

Faunal Element: Iranian

Collecting Station (Map 22): 102 (USNM 158453-54). Total - 2 specimens.

Family Leptotyphlopidae

*Leptotyphlops hamulirostris* (Nikolsky, 1907)

Faunal Element: Saharo-Sindian

Collecting Station (Map 20): 71 (USNM 157342). Total - 1 specimen.

*Leptotyphlops macrorhynchus* (Jan, 1861)

Faunal Element: Saharo-Sindian

Collecting Station (Map 20): 102 (USNM 158456). Total - 1 specimen.

Family Natricidae

*Eirenis collaris* (Ménétries, 1832)

Faunal Element: Iranian

Collecting Station (Map 22): 102 (USNM 158452). Total - 1 specimen.

*Eirenis persica* (Anderson, 1872)

Faunal Element: Saharo-Sindian

Collecting Stations (Map 22): 59 (USNM 157375); 66 (USNM 153747); 72 (USNM 153741). Total - 3 specimens.

*Eirenis punctatolineata* (Boettger, 1892)

Faunal Element: Mediterranean

Collecting Station (Map 22): 66 (USNM 153748). Total - 1 specimen.

*Natrix natrix persa* (Pallas, 1814)

Faunal Element: Mediterranean

Collecting Stations (Map 21): 43 (USNM 149411); 55 (USNM 149430); 89 (USNM 154495, 154498, 154501-03); 105 (USNM 158459). Total - 8 specimens.

*Natrix tessellata* (Laurenti, 1768)

Faunal Element: Mediterranean

Collecting Stations (Map 21): 55 (USNM 149428-29, 149431); 75 (USNM 153750-51); 89 (USNM 154496-97, 154499-500); 105 (USNM 158460); 108 (USNM 164828). Total - 11 specimens.

#### Family Typhlopidae

*Typhlops vermicularis* Merrem, 1820

Faunal Element: Mediterranean

Collecting Stations (Map 20): 41 (USNM 149406); 42 (USNM 149407); 55 (USNM 149427); 58 (USNM 157372); 102 (USNM 158455). Total 5- specimens.

Family Viperidae

*Echis carinatus pyramidum* (Geoffroy Saint-Hilaire, 1827)

Faunal Element: Saharo-Sindian

Collecting Stations (Map 23): 16 (USNM 148595); 38 (USNM 149158); 66  
(USNM 153746); 70 (USNM 153744); 111 (USNM 158437). Total - 5  
specimens.

*Vipera lebetina obtusa* Dvigubsky, 1832

Faunal Element: Mediterranean

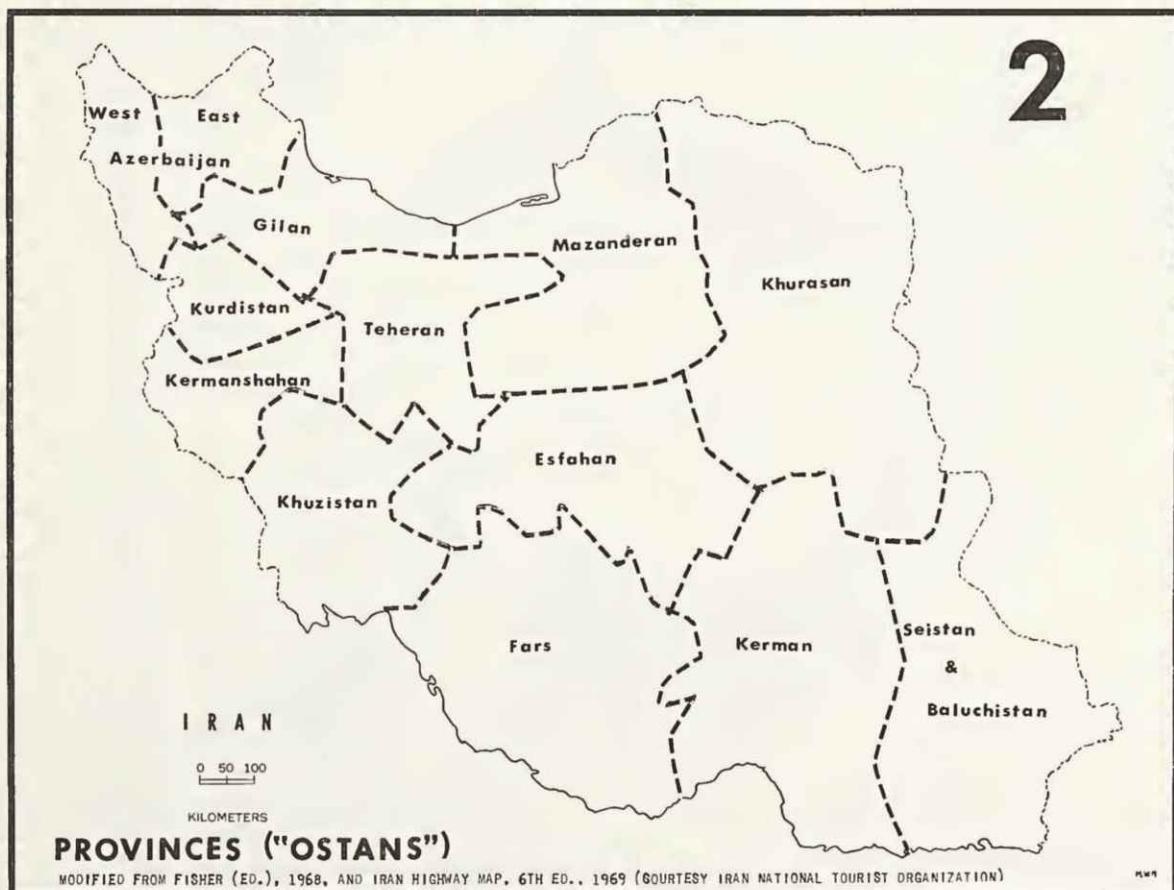
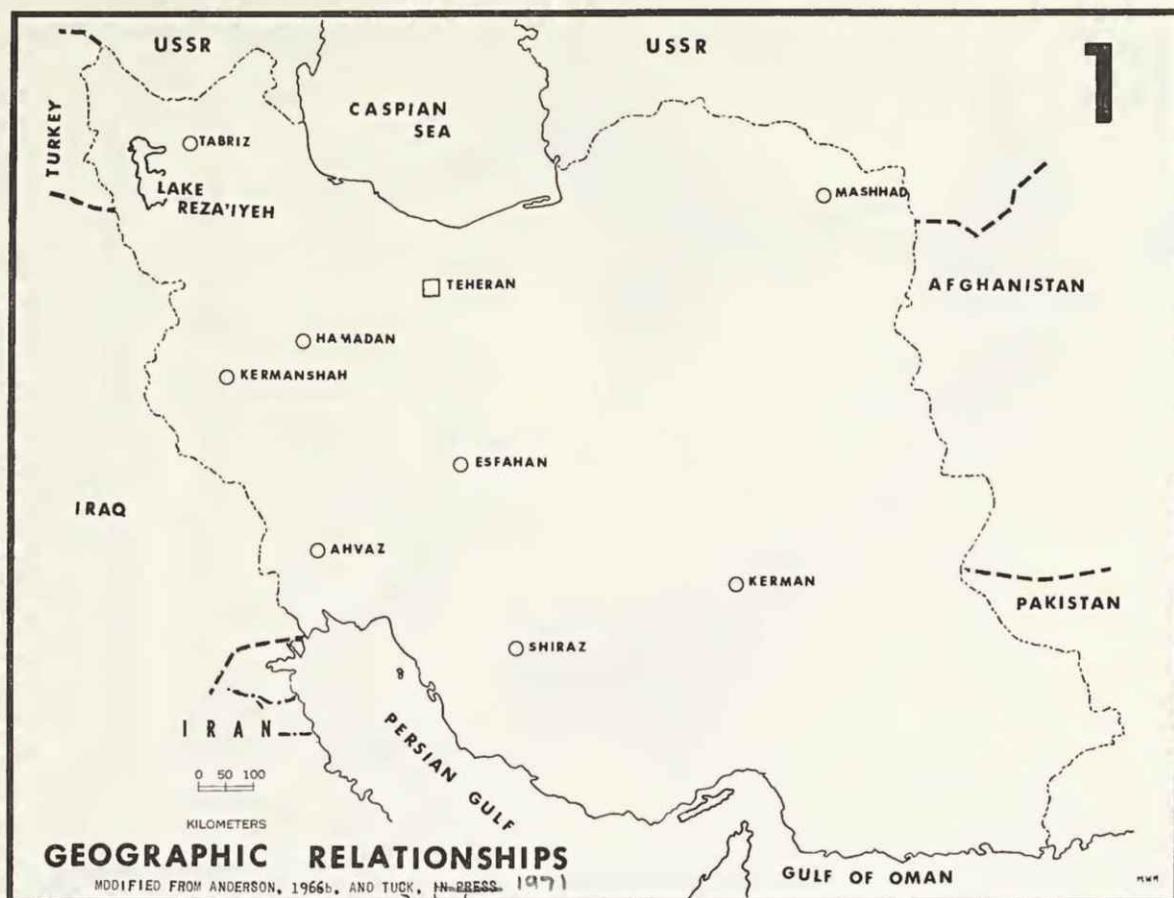
Collecting Station (Map 23): 40 (USNM 149394). Total - 1 specimen.

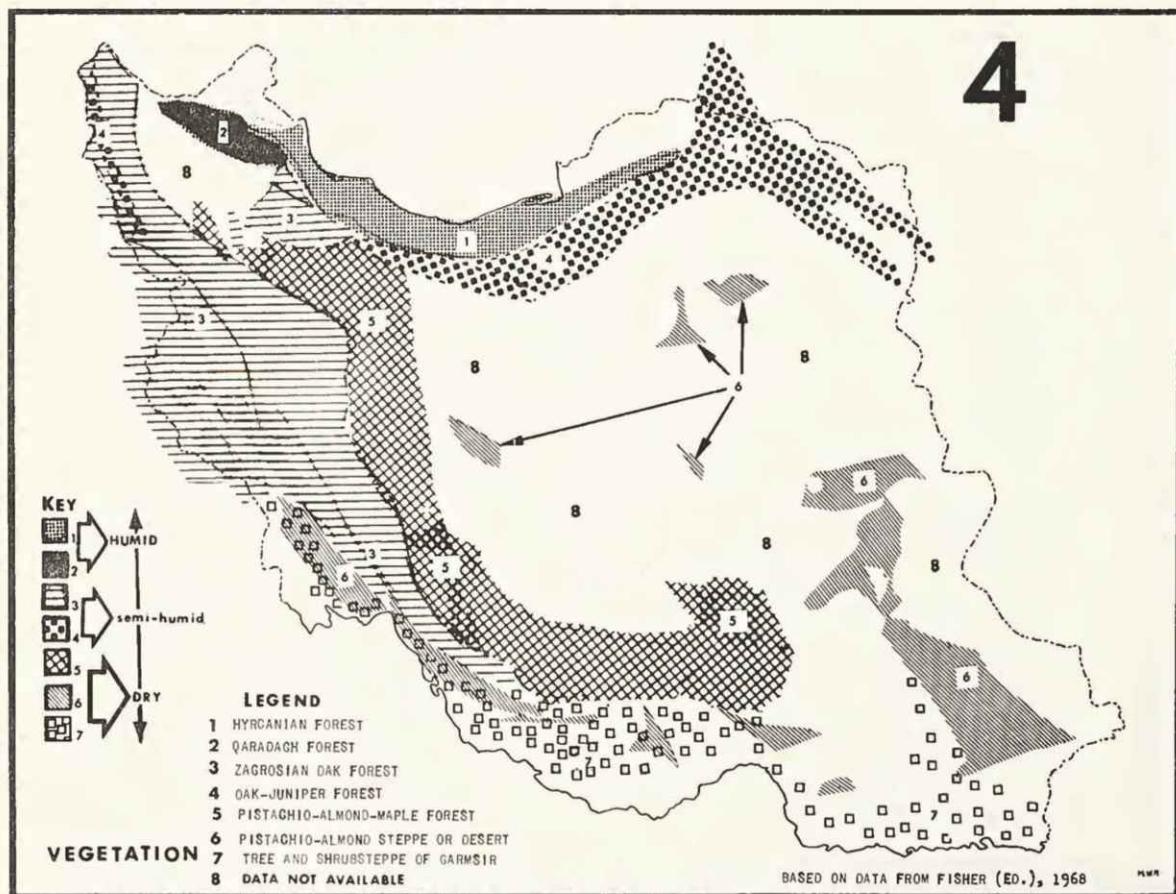
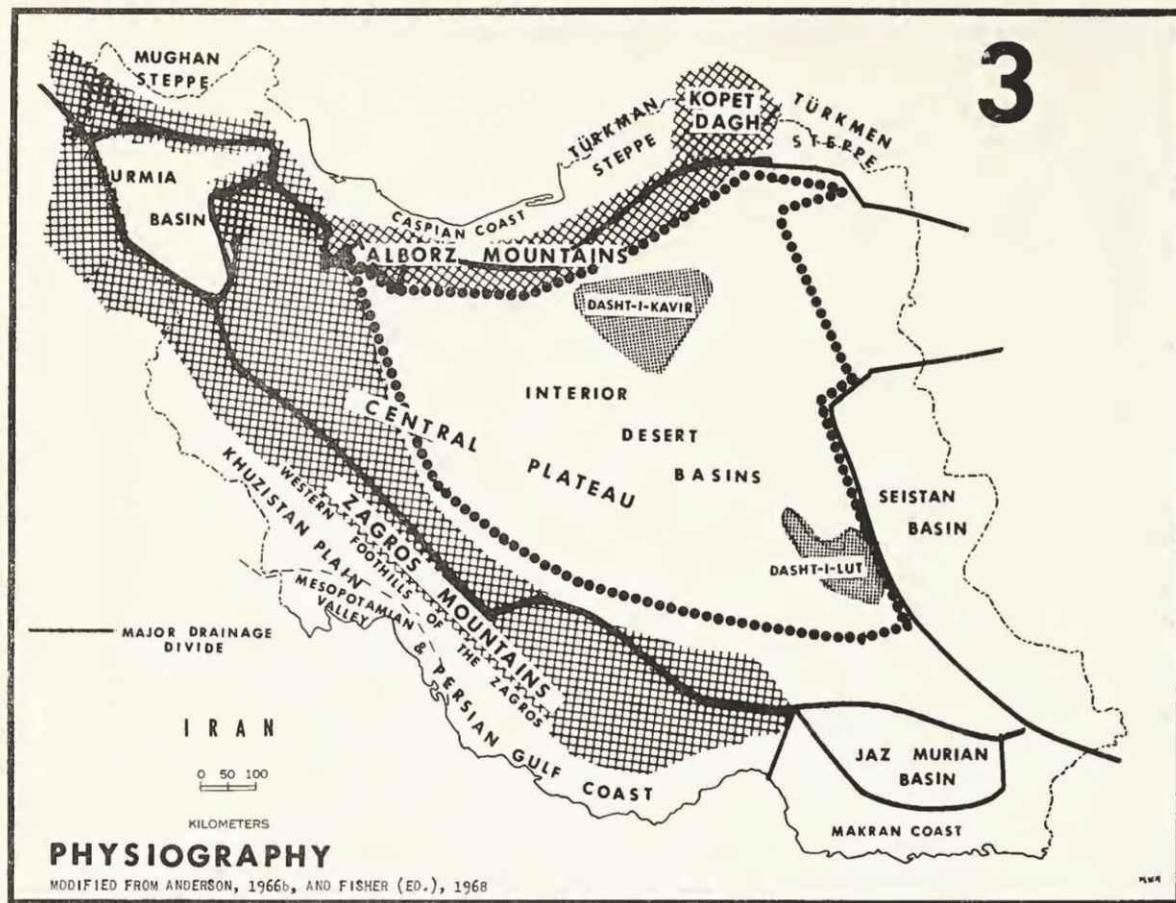
TABLE 1

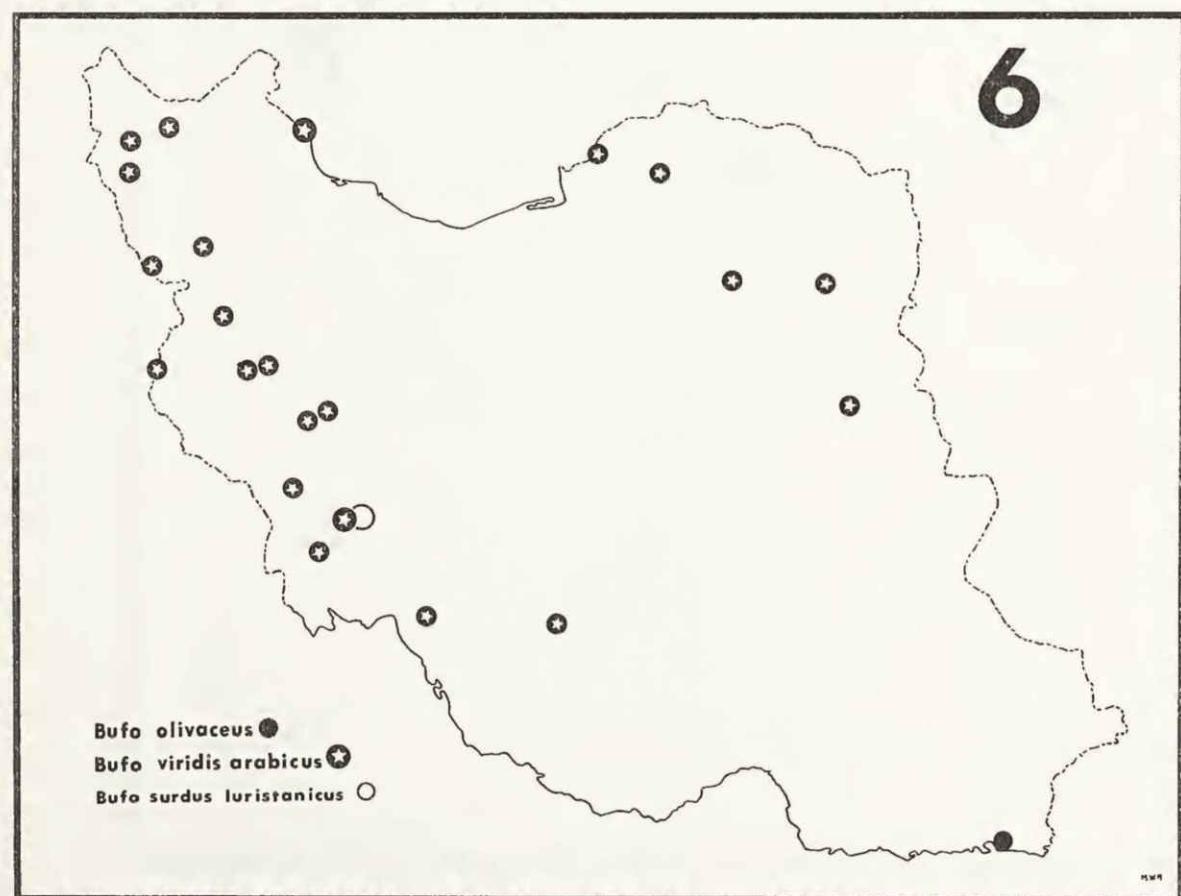
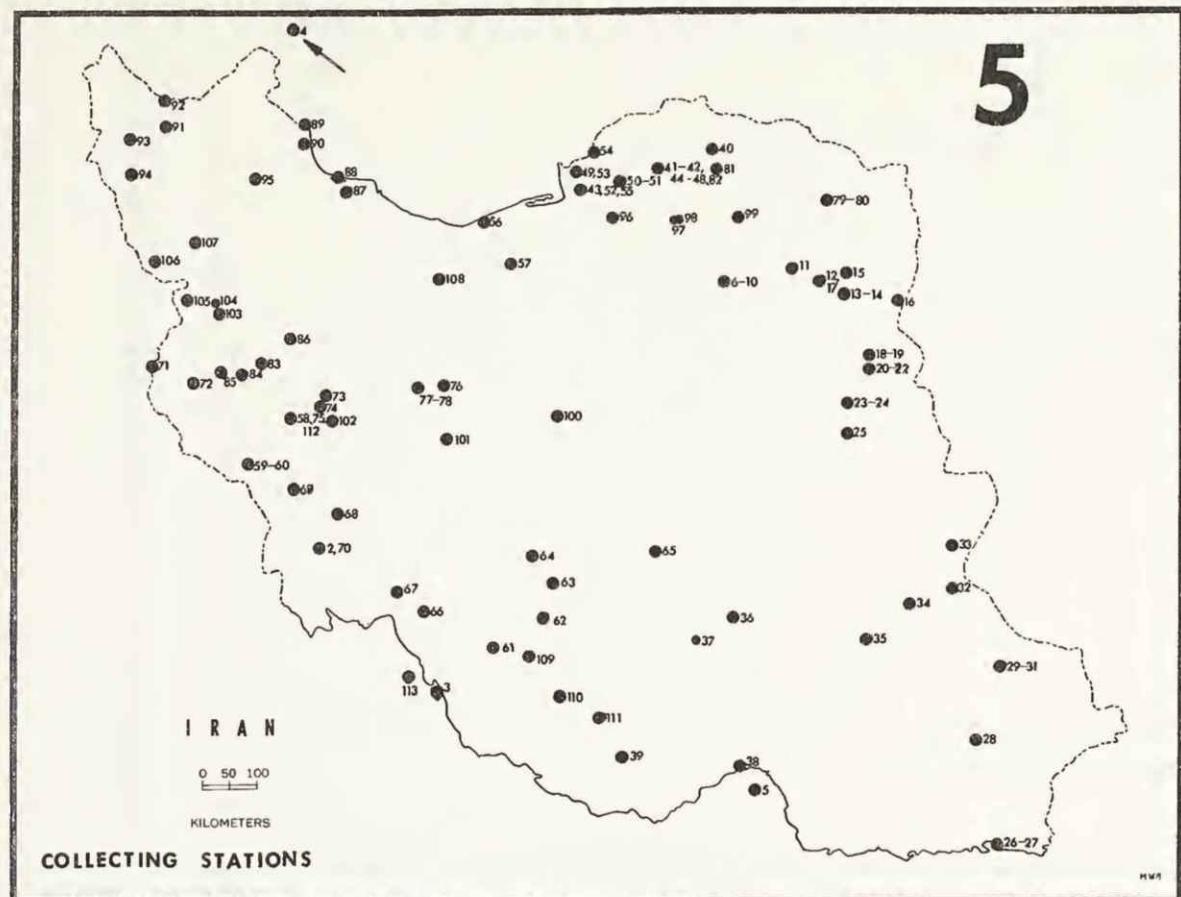
<i>Collecting Station &amp; Locality (Maps 2 &amp; 5)</i>	<i>Physiography (Map 3)</i>
0. "Northern Persia" (?) NOT MAPPED . . . . .	?
1. East Persia: Tara Sirkuh (?) NOT MAPPED . . . . .	?
2. Khuzistan: Ahvaz (31°19'N, 48°42'E) . . . . .	Khuzistan Plain
3. Fars: Bushehr (28°59'N, 50°50'E) . . . . .	Gulf Coast Plain
4. "Daghestan" . . . . .	Caspian Coast
5. Strait of Hormuz (26°34'N, 56°15'E) . . . . .	—
6. Khurasan: 10 km. E. Doruneh (35°10'N, 57°18'E) . . . . .	Central Plateau
7. Khurasan: 15 km. E. Doruneh . . . . .	Central Plateau
8. Khurasan: 15 km. N.W. Doruneh . . . . .	Central Plateau
9. Khurasan: Doruneh . . . . .	Central Plateau
10. Khurasan: 2 km. N.E. Doruneh . . . . .	Central Plateau
11. Khurasan: 5 km. N. Kashmar (35°12'N, 58°27'E) . . . . .	Central Plateau
12. Khurasan: Torbat-e Heydariyeh (35°16'N, 59°13'E) . . . . .	Central Plateau
13. Khurasan: 6 km. E.N.E. Roshkhvar (34°58'N, 59°37'E) . . . . .	Central Plateau
14. Khurasan: 25 km. N. Roshkhvar . . . . .	Central Plateau
15. Khurasan: 1.5 km. E. Khajar (35°06'N, 59°42'E) . . . . .	Central Plateau
16. Khurasan: 6 km. W. Ayubi (34°18'N, 60°35'E) . . . . .	Central Plateau
17. Khurasan: 18 km. N. Torbat-e Heydariyeh . . . . .	Central Plateau
18. Khurasan: 4 km. N.N.E. Jangal (34°43'N, 59°15'E) . . . . .	Central Plateau
19. Khurasan: 15 km. N.E. Jangal . . . . .	Central Plateau
20. Khurasan: 1 km. S. Esfideh (33°39'N, 59°46'E) . . . . .	Central Plateau
21. Khurasan: Esfideh . . . . .	Central Plateau
22. Khurasan: 5 km. N.E. Esfideh . . . . .	Central Plateau
23. Khurasan: 55 km. E.N.E. Birjand (32°53'N, 59°13'E) . . . . .	Seistan Basin
24. Khurasan: 61 km. E.N.E. Birjand . . . . .	Seistan Basin
25. Khurasan: Mazhan (32°35'N, 59°01'E) . . . . .	Seistan Basin
26. Seistan & Baluchistan: Chah-Bahar (25°18'N, 60°37'E) . . . . .	Makran Coast
27. Seistan & Baluchistan: 21 km. E. Chah-Bahar . . . . .	Makran Coast
28. Seistan & Baluchistan: 30 km. N. Iranshahr (27°13'N, 60°41'E) . . . . .	Central Plateau
29. Seistan & Baluchistan: 6 km. N. Khash (28°14'N, 64°14'E) . . . . .	Seistan Basin
30. Seistan & Baluchistan: Khash . . . . .	Seistan Basin
31. Seistan & Baluchistan: 15 km. N. Khash . . . . .	Seistan Basin
32. Seistan & Baluchistan: Zahedan (29°30'N, 60°52'E) . . . . .	Seistan Basin
33. Seistan & Baluchistan: 85 km. N. Zahedan . . . . .	Seistan Basin
34. Seistan & Baluchistan: 5 km. N.N.E. Kahoorak (29°26'N, 59°52'E) . . . . .	Central Plateau
35. Kerman: Fahraj (28°58'N, 58°52'E) . . . . .	Central Plateau
36. Kerman: 28 km. S.W. Mashiz (29°56'N, 56°37'E) . . . . .	Central Plateau
37. Kerman: 40 km. S.E. Sa'idabad (29°28'N, 55°42'E) . . . . .	Central Plateau
38. Kerman: 5 km. E. Bandar 'Abbas (27°11'N, 56°17'E) . . . . .	Gulf Coast Plain
39. Fars: 50 km. N. Lar (27°41'N, 54°17'E) . . . . .	Zagros Mountains
40. Khurasan: 6 km. E. Bojnurd (37°28'N, 57°19'E) . . . . .	Kopet Dagh
41. Mazanderan: 5 km. E.N.E. Dasht (37°17'N, 56°07'E) . . . . .	Kopet Dagh
42. Mazanderan: 11 km. W. Dasht . . . . .	Kopet Dagh
43. Mazanderan: 25 km. E. Gorgan (36°50'N, 54°29'E) . . . . .	Türkmen Steppe
44. Mazanderan: 13 km. E. Dasht . . . . .	Kopet Dagh
45. Mazanderan: 1 km. N.E. Dasht . . . . .	Kopet Dagh
46. Mazanderan: 3 km. S.W. Dasht . . . . .	Alborz Mountains
47. Mazanderan: 8 km. W. Dasht . . . . .	Kopet Dagh
48. Mazanderan: 15 km. W. Dasht . . . . .	Kopet Dagh
49. Mazanderan: 35 km. N. Gorgan . . . . .	Türkmen Steppe
50. Mazanderan: 18 km. S.W. Shah-Pasand (37°07'N, 55°16'E) . . . . .	Türkmen Steppe
51. Mazanderan: 22 km. S.W. Shah-Pasand . . . . .	Türkmen Steppe
52. Mazanderan: 20 km. E. Gorgan . . . . .	Türkmen Steppe
53. Mazanderan: 42 km. N. Gorgan . . . . .	Türkmen Steppe
54. Mazanderan: 75 km. N. Gorgan . . . . .	Türkmen Steppe
55. Mazanderan: 28 km. W. Gorgan; Garareh-su River . . . . .	Türkmen Steppe
56. Mazanderan: 24 km. W. Mahmudabad (36°38'N, 52°15'E) . . . . .	Caspian Coast
57. Teheran: 36-38 km. W. Firuzkuh (35°45'N, 52°47'E) . . . . .	Alborz Mountains

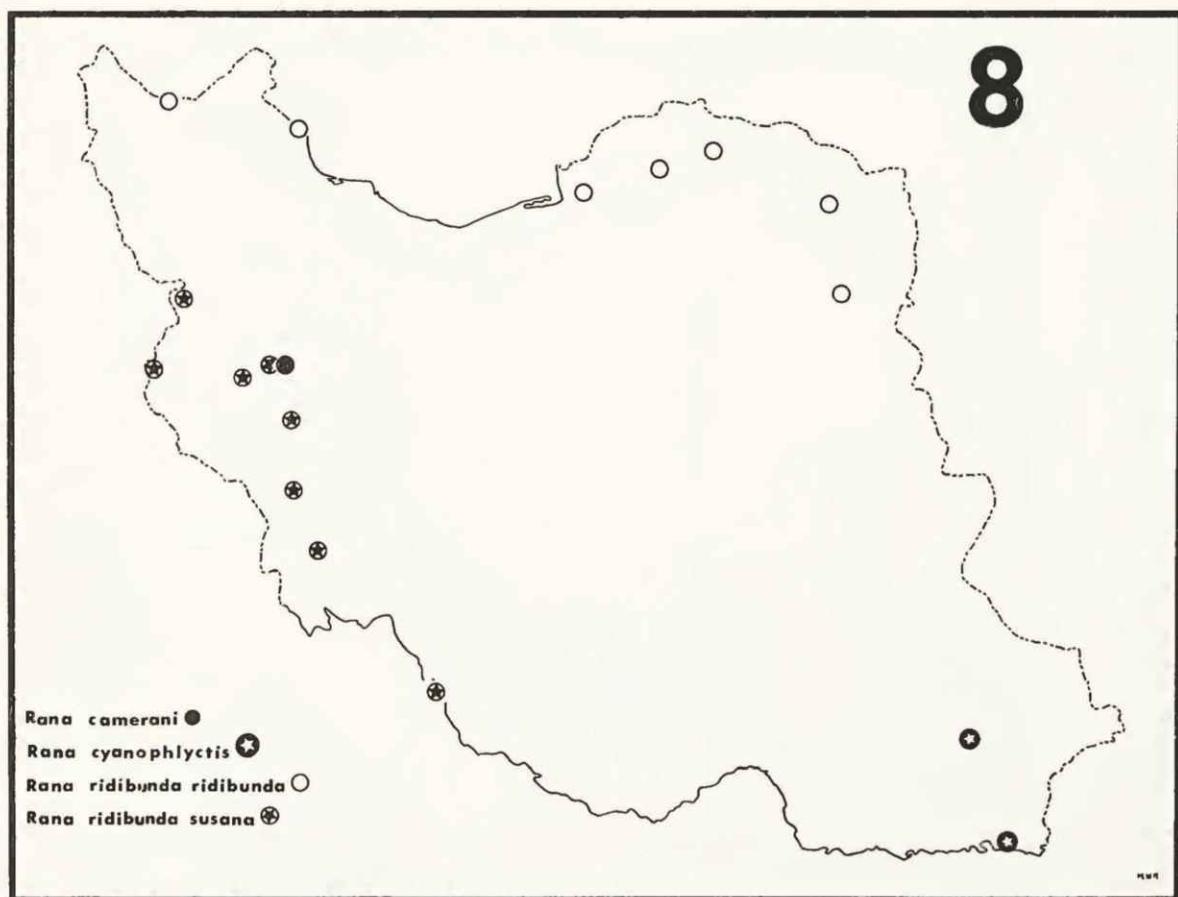
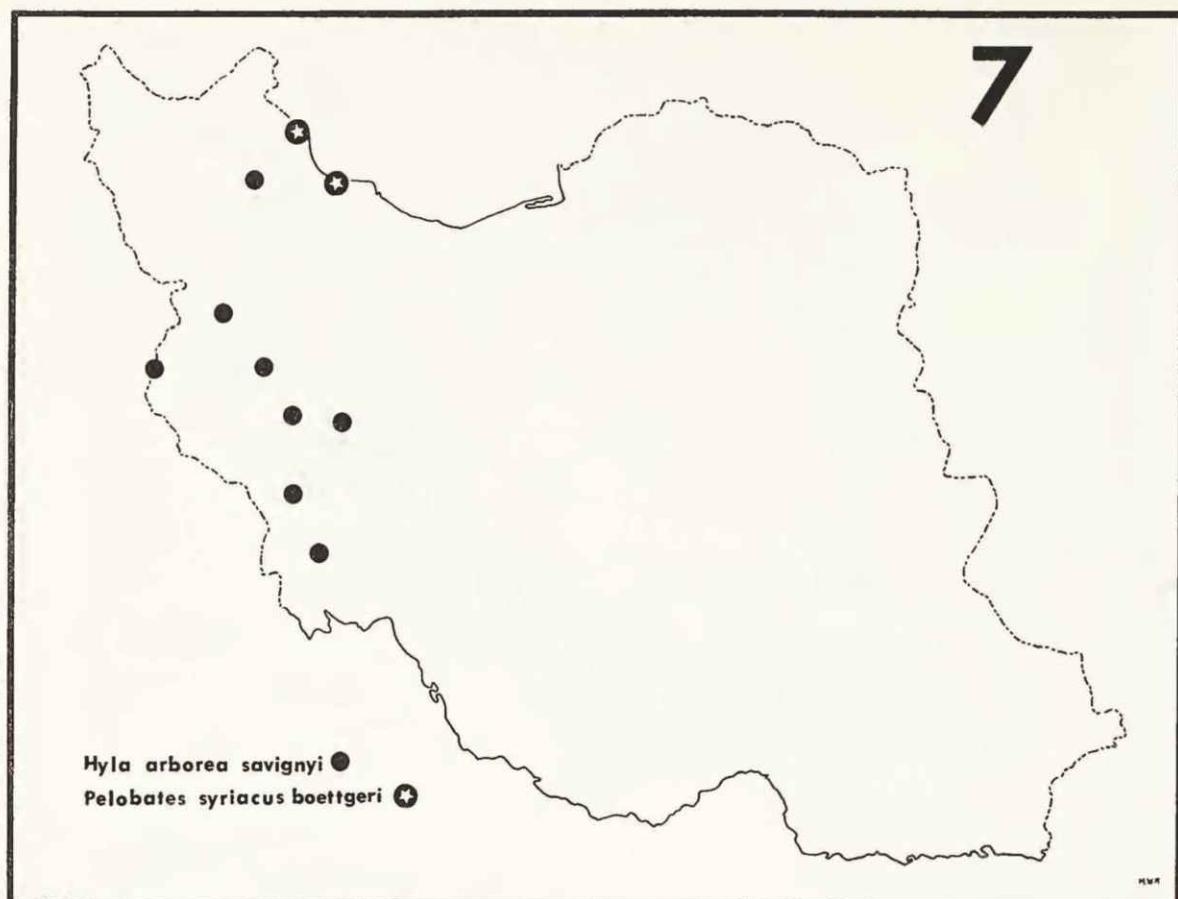
TABLE 1 (continued)

<i>Collecting Station &amp; Locality (Maps 2 &amp; 5)</i>	<i>Physiography (Map 3)</i>
58. Khuzistan: 6 km. S. Khorramabad (33°30'N, 48°20'E) . . . . .	Zagros Mountains
59. Khuzistan: Dehloran; Ali Khosh (32°41'N, 47°16'E) . . . . .	Khuzistan Plain
60. Khuzistan: Dehloran . . . . .	Khuzistan Plain
61. Fars: 38 km. W. Shiraz (29°36'N, 52°32'E) . . . . .	Zagros Mountains
62. Fars: 1 km. N. Takht-e Jamshid (Persepolis) and 7 km. N. Takht-e Jamshid; Naqsh-e Rustam (29°57'N, 52°52'E) . . . . .	Zagros Mountains
63. Fars: 10 km. S. Deh Bid (30°38'N, 53°13'E) . . . . .	Zagros Mountains
64. Fars: 27 km. N. Abadeh (31°10'N, 52°37'E) . . . . .	Central Plateau
65. Esfahan: 20 km. S.E. Anar (30°53'N, 55°18'E) . . . . .	Central Plateau
66. Khuzistan: 35 km. E. Gachsaran (30°12'N, 50°47'E) . . . . .	W. Foothills Zagros
67. Khuzistan: 10 km. W.N.W. Behbehan (30°35'N, 50°14'E) . . . . .	W. Foothills Zagros
68. Khuzistan: 18 km. S. Masjed Soleiman (31°50'N, 49°18'E) . . . . .	W. Foothills Zagros
69. Khuzistan: 30 km. S. Andimeshk (32°27'N, 48°21'E) . . . . .	Khuzistan Plain
70. Khuzistan: 45 km. N. Ahvaz . . . . .	Khuzistan Plain
71. Kermanshahan: 8 km. E. Qasr-e Shirin (34°31'N, 45°35'E) . . . . .	Khuzistan Plain
72. Kermanshahan: 24 km. W. Karand (34°16'N, 46°15'E) . . . . .	W. Foothills Zagros
73. Khuzistan: 17.5 km. S.W. Borujerd (33°54'N, 48°46'E) . . . . .	Zagros Mountains
74. Khuzistan: 50 km. S.W. Borujerd . . . . .	Zagros Mountains
75. Khuzistan: 10 km. W. Khorramabad . . . . .	Zagros Mountains
76. Teheran/Mazanderan: 10 km. N.W. Kashan (33°59'N, 51°28'E) . . . . .	Central Plateau
77. Teheran: 35 km. S. Delijan (33°59'N, 50°40'E) . . . . .	Central Plateau
78. Esfahan/Teheran: 150 km. N. Esfahan (32°40'N, 51°38'E) . . . . .	Central Plateau
79. Khurasan: Mashhad (36°18'N, 59°36'E) . . . . .	Central Plateau
80. Khurasan: 20 km. E. Mashhad . . . . .	Turkmen Steppe
81. Khurasan: 90 km. W. Quchan (37°06'N, 58°30'E) . . . . .	Kopet Dagh
82. Mazanderan: 150 km. W. Bojnurd (37°28'N, 57°19'E) . . . . .	Kopet Dagh
83. Kermanshahan: vicinity of Kangavar (34°30'N, 47°58'E) . . . . .	Zagros Mountains
84. Kermanshahan: Bisotun (34°23'N, 47°26'E) . . . . .	Zagros Mountains
85. Kermanshahan: 42 km. W. Kermanshah (34°19'N, 47°04'E) . . . . .	W. Foothills Zagros
86. Kurdistan: 20 km. N. Hamadan (34°48'N, 48°30'E) . . . . .	Zagros Mountains
87. Gilan: 20 km. E. Rasht (37°16'N, 49°36'E) . . . . .	Caspian Coast
88. Gilan: Bandar-e Pahlavi (37°28'N, 49°47'E) . . . . .	Caspian Coast
89. East Azerbaijan: Astara (38°26'N, 48°52'E) . . . . .	Caspian Coast
90. Gilan: 45 km. S. Astara . . . . .	Caspian Coast
91. East Azerbaijan: 8 km. S. Marand (38°26'N, 45°46'E) . . . . .	Urmia Basin
92. East/West Azerbaijan: Jolfa (38°57'N, 45°38'E) . . . . .	Mughan Steppe
93. West Azerbaijan: 25 km. S.E. Shahpur (38°11'N, 44°47'E) . . . . .	Urmia Basin
94. West Azerbaijan: 22 km. N. Reza'iyyeh (37°33'N, 45°04'E) . . . . .	Urmia Basin
95. East Azerbaijan: 5 km. S.E. Mianeh (37°26'N, 47°42'E) . . . . .	Alborz Mountains
96. Mazanderan: 34 km. N.N.E. Shahrud (36°25'N, 55°01'E) . . . . .	Alborz Mountains
97. Mazanderan: 39.5 km. W. 'Abbasabad (36°22'N, 56°25'E) . . . . .	Central Plateau
98. Mazanderan: 5 km. W. 'Abbasabad . . . . .	Central Plateau
99. Khurasan: 30 km. E. Sabzevar (36°13'N, 57°42'E) . . . . .	Central Plateau
100. Esfahan: 4 km. S.S.W. Anarak (33°20'N, 53°42'E) . . . . .	Central Plateau
101. Esfahan: 45 km. S.W. Natanz (33°31'N, 51°54'E) . . . . .	Central Plateau
102. Khuzistan: 5 km. N.W. Dowrud (33°28'N, 49°04'E) . . . . .	Zagros Mountains
103. Kurdistan: 32 km. W.N.W. Sanandaj (35°19'N, 47°00'E) . . . . .	W. Foothills Zagros
104. Kurdistan: 66 km. N.W. Sanandaj . . . . .	W. Foothills Zagros
105. Kurdistan: 4 km. E. Marivan (35°31'N, 46°10'E) . . . . .	W. Foothills Zagros
106. West Azerbaijan: 32 km. N.N.W. Sardasht (36°09'N, 45°28'E) . . . . .	W. Foothills Zagros
107. West Azerbaijan: 5 km. S.E. Shahin Dezh (36°40'N, 46°33'E) . . . . .	Zagros Mountains
108. Teheran: 22 km. N. Teheran (35°40'N, 51°26'E) . . . . .	Alborz Mountains
109. Fars: 13 km. S.E. Shiraz (29°36'N, 52°32'E) . . . . .	Zagros Mountains
110. Fars: 110 km. S.E. Shiraz . . . . .	Zagros Mountains
111. Fars: 5 km. N. Juyom (28°10'N, 53°52'E) . . . . .	Zagros Mountains
112. Khuzistan: Khorramabad . . . . .	Zagros Mountains
113. Persian Gulf: nr. Khark Island (29°15'N, 50°20'E) . . . . .	Zagros Mountains

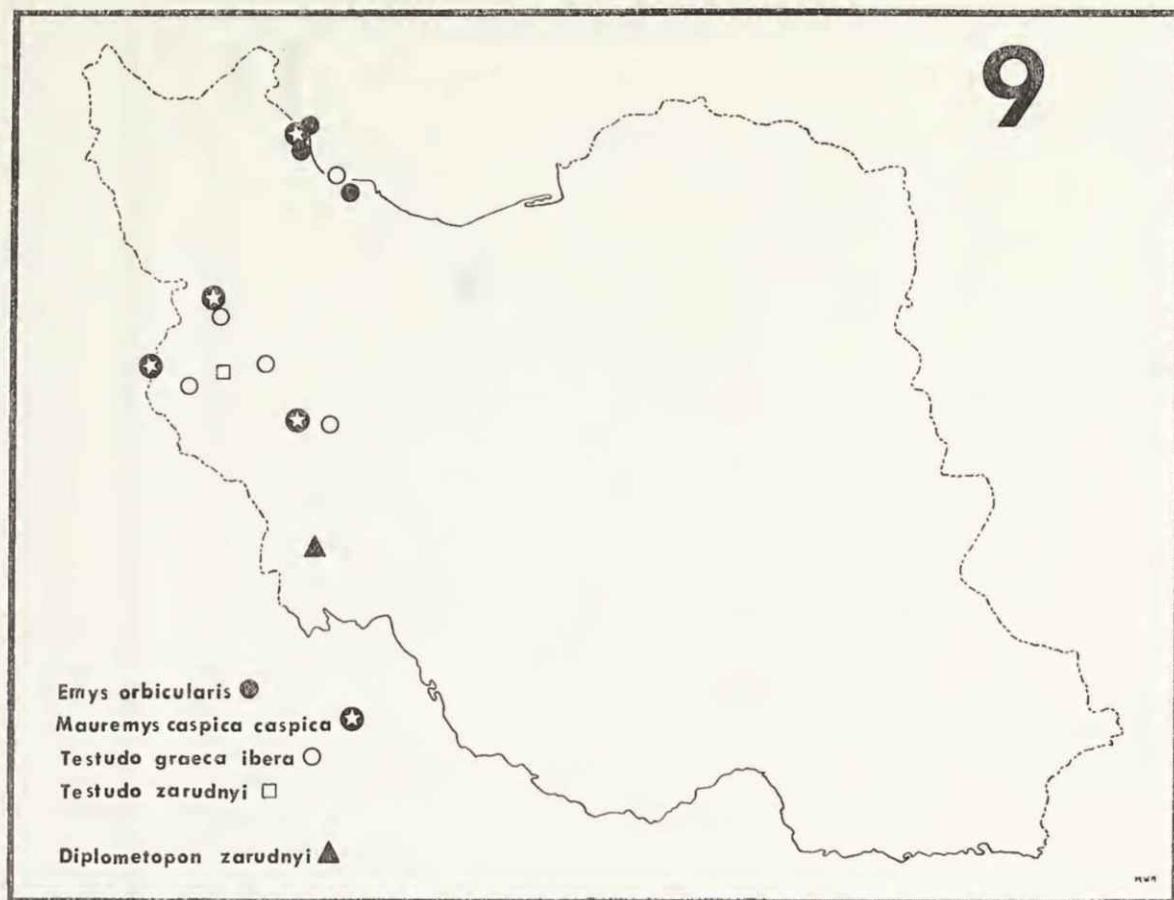




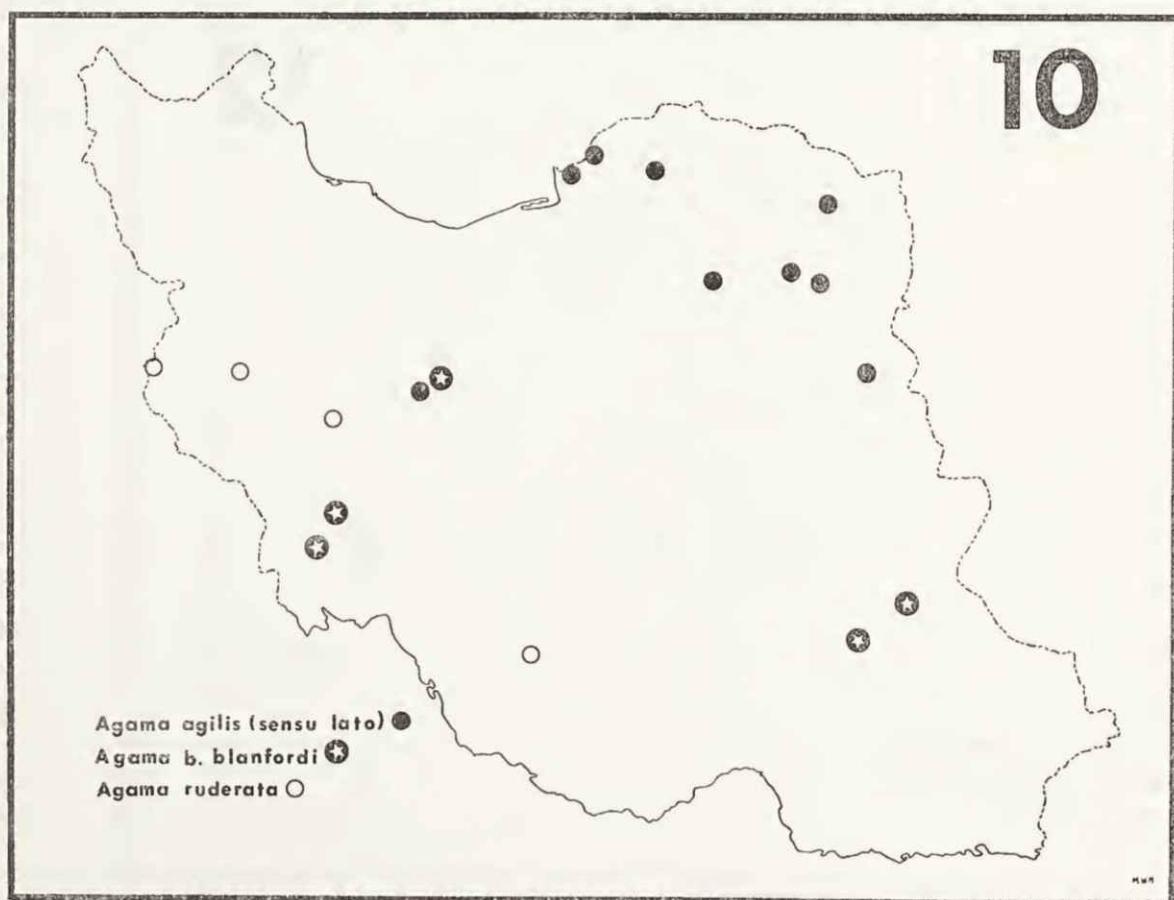


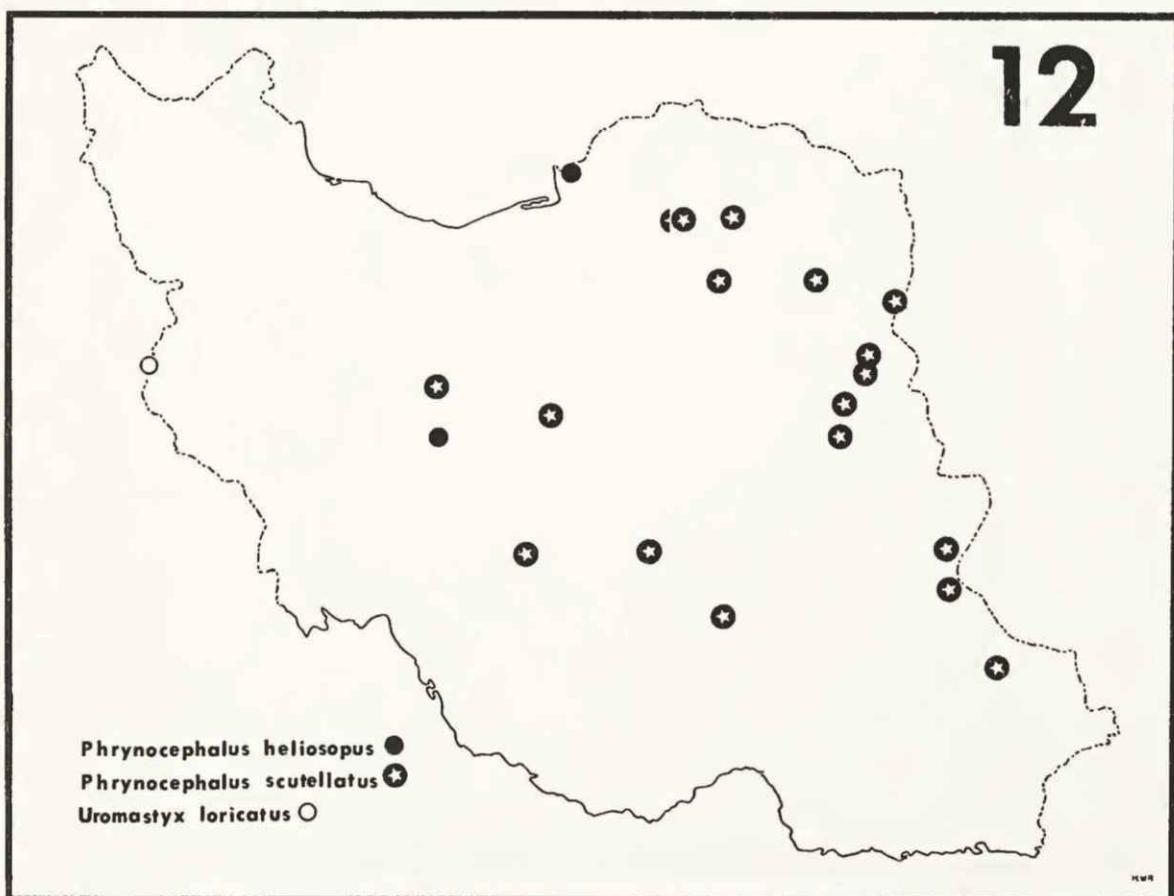
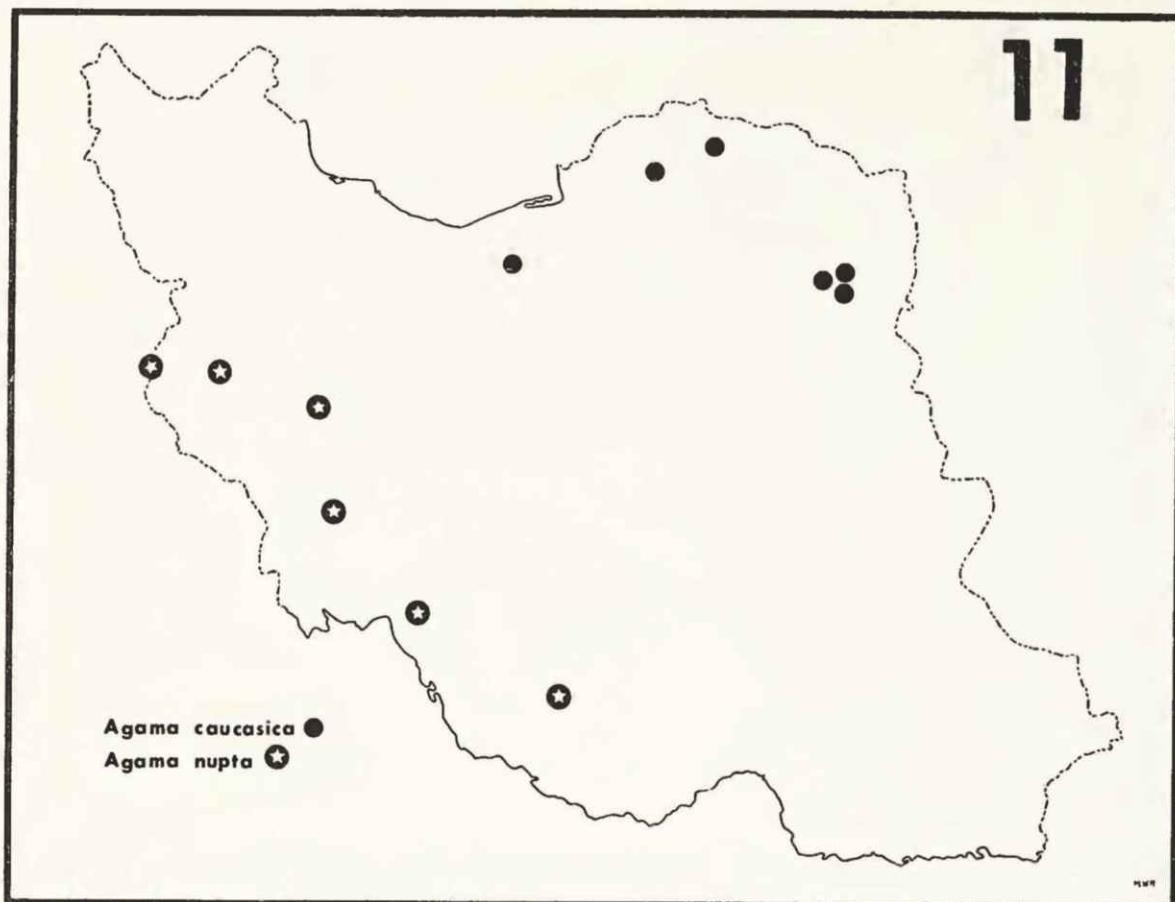


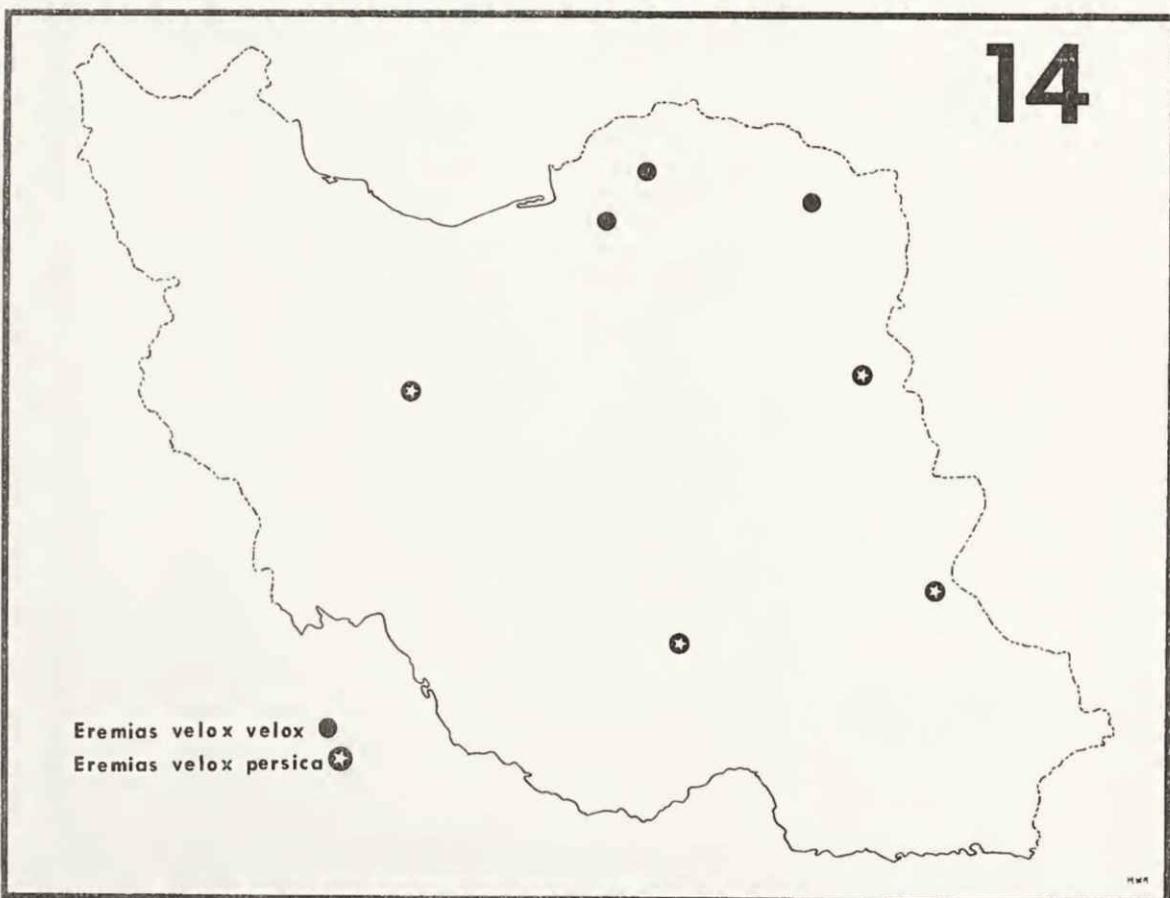
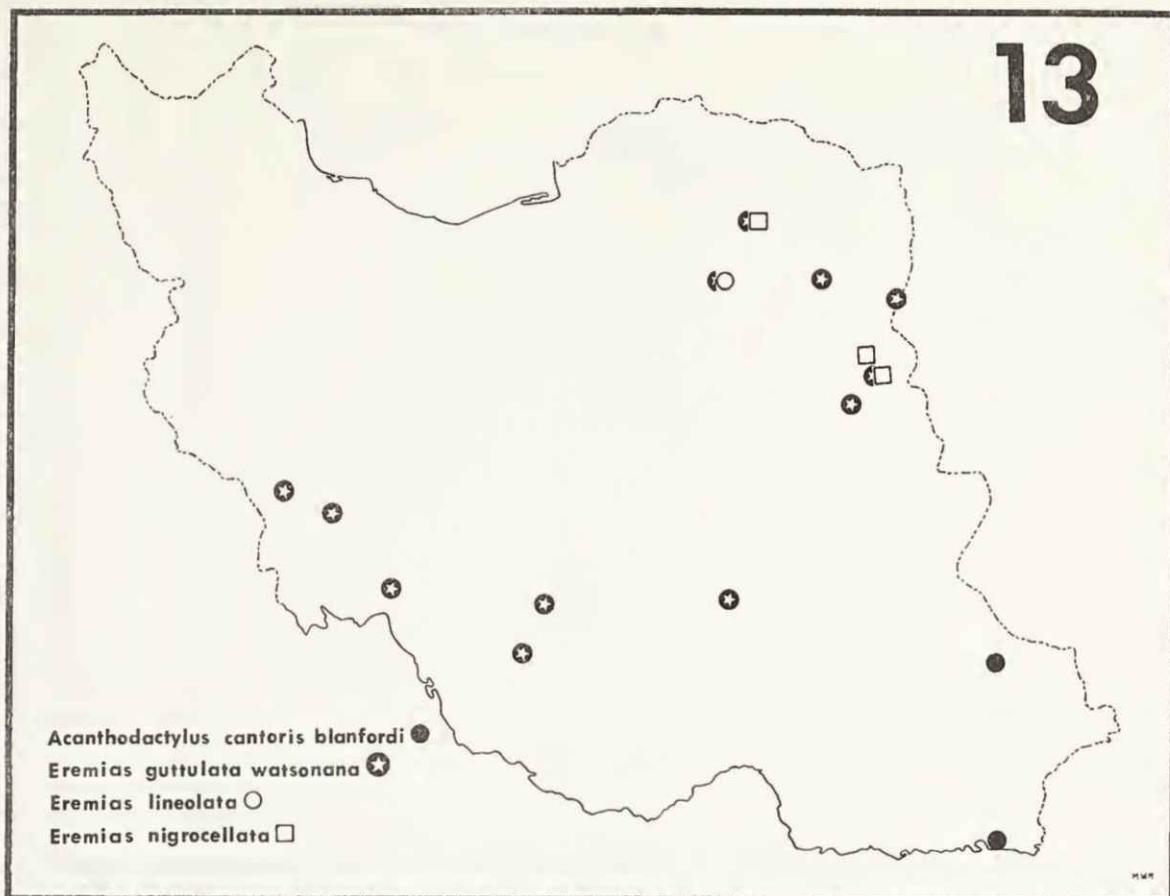
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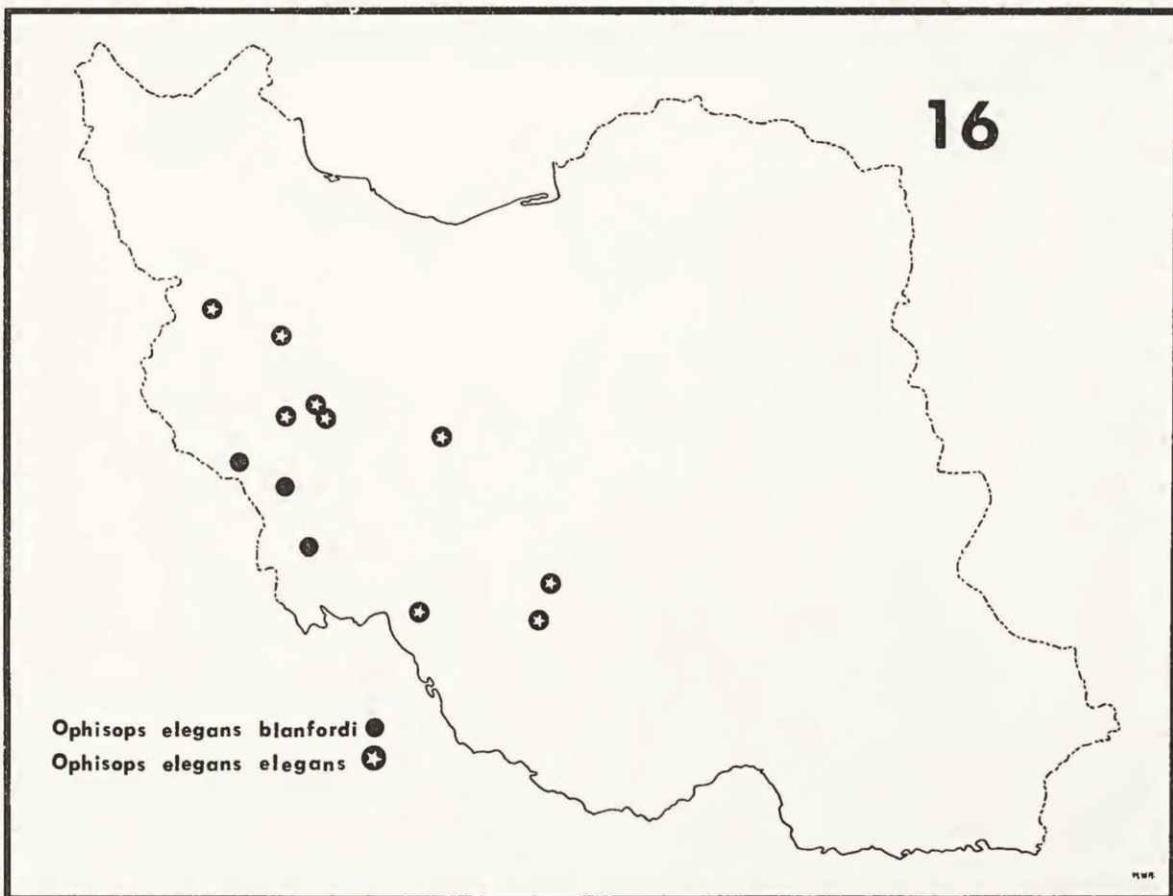
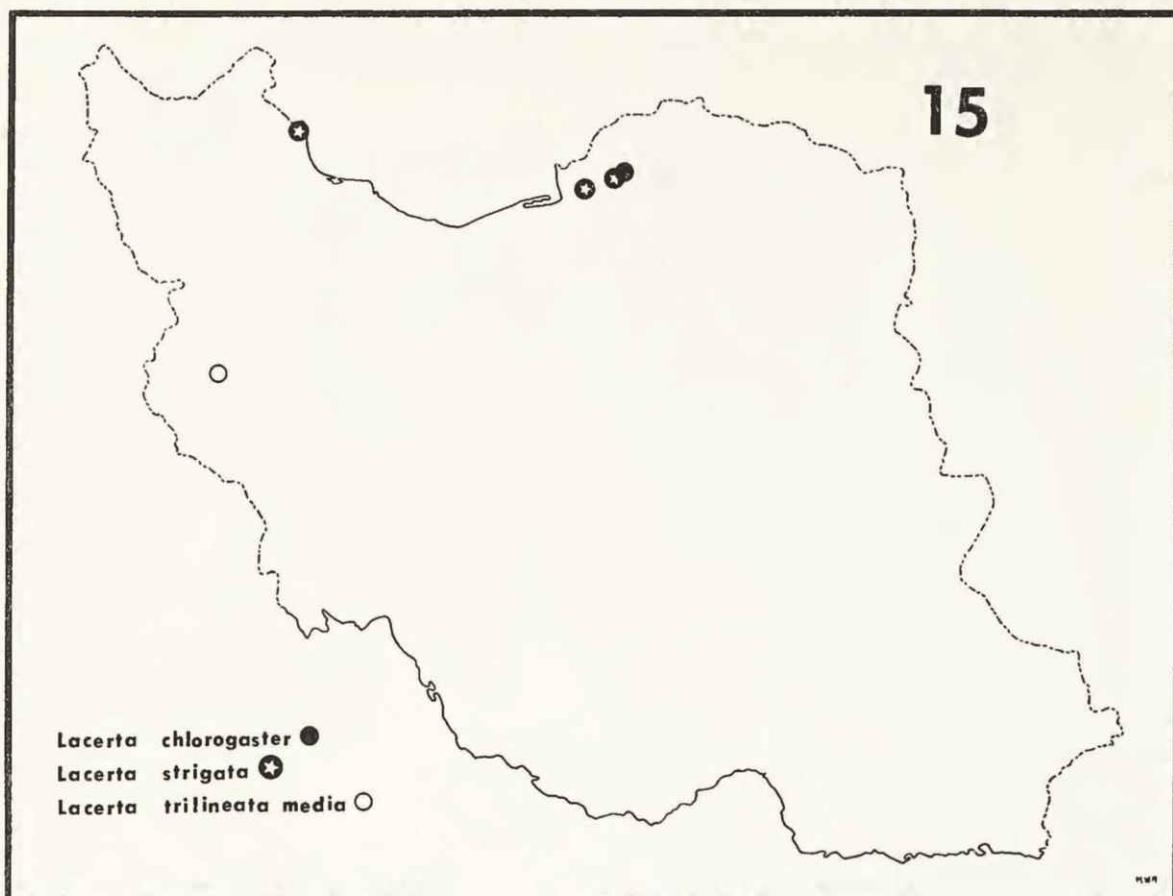


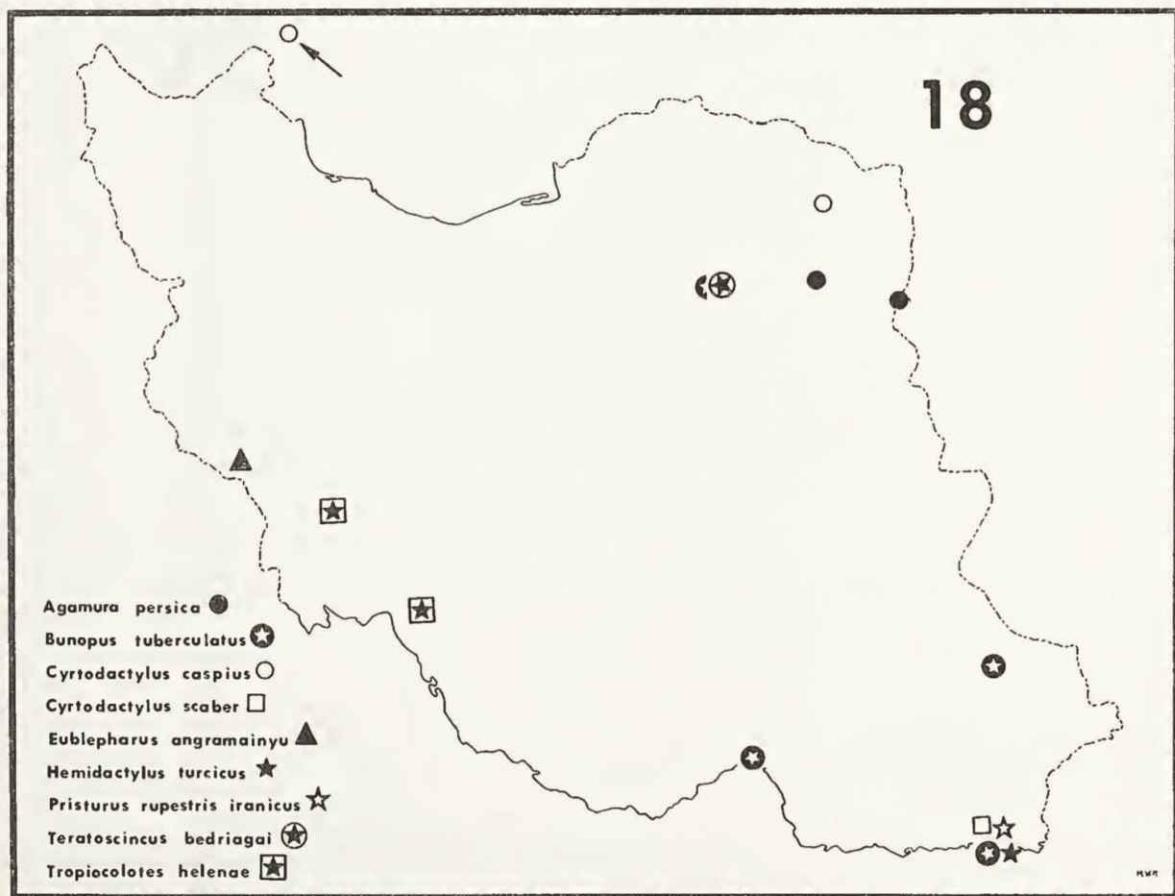
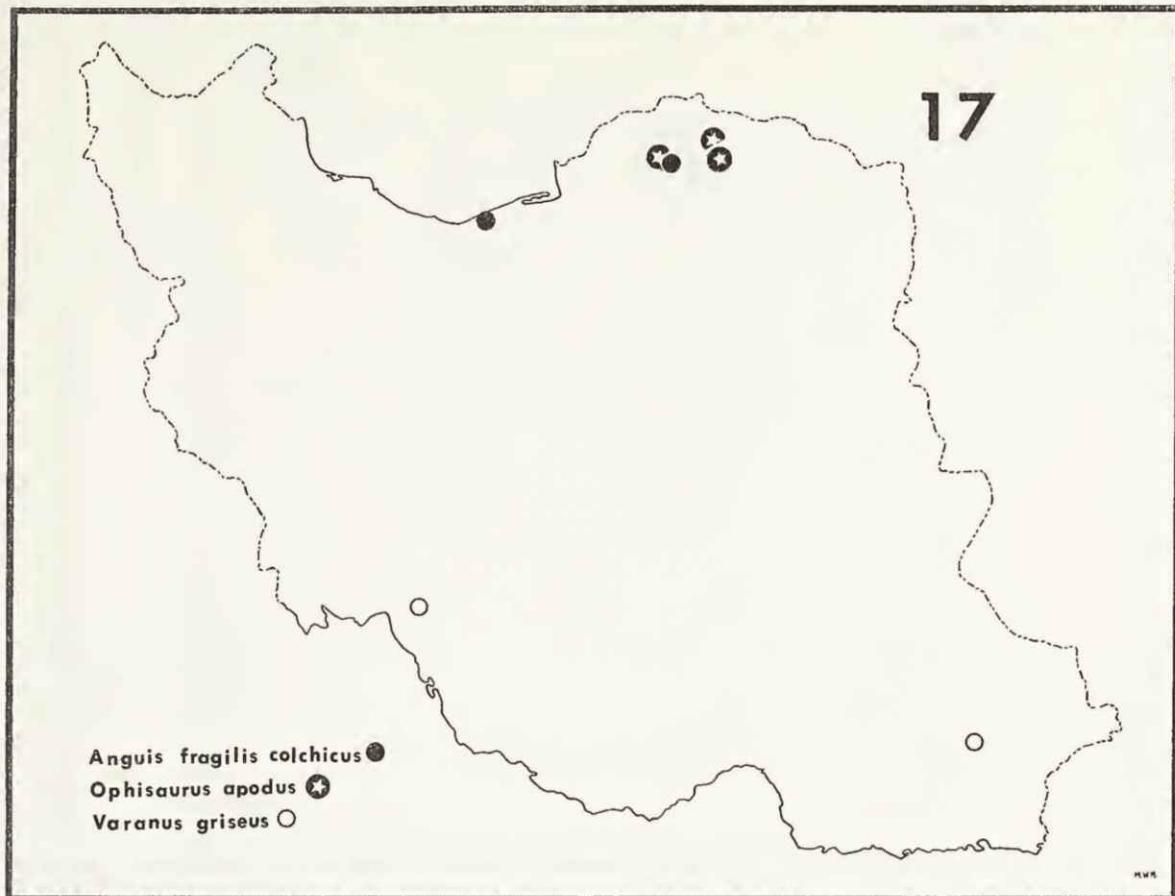
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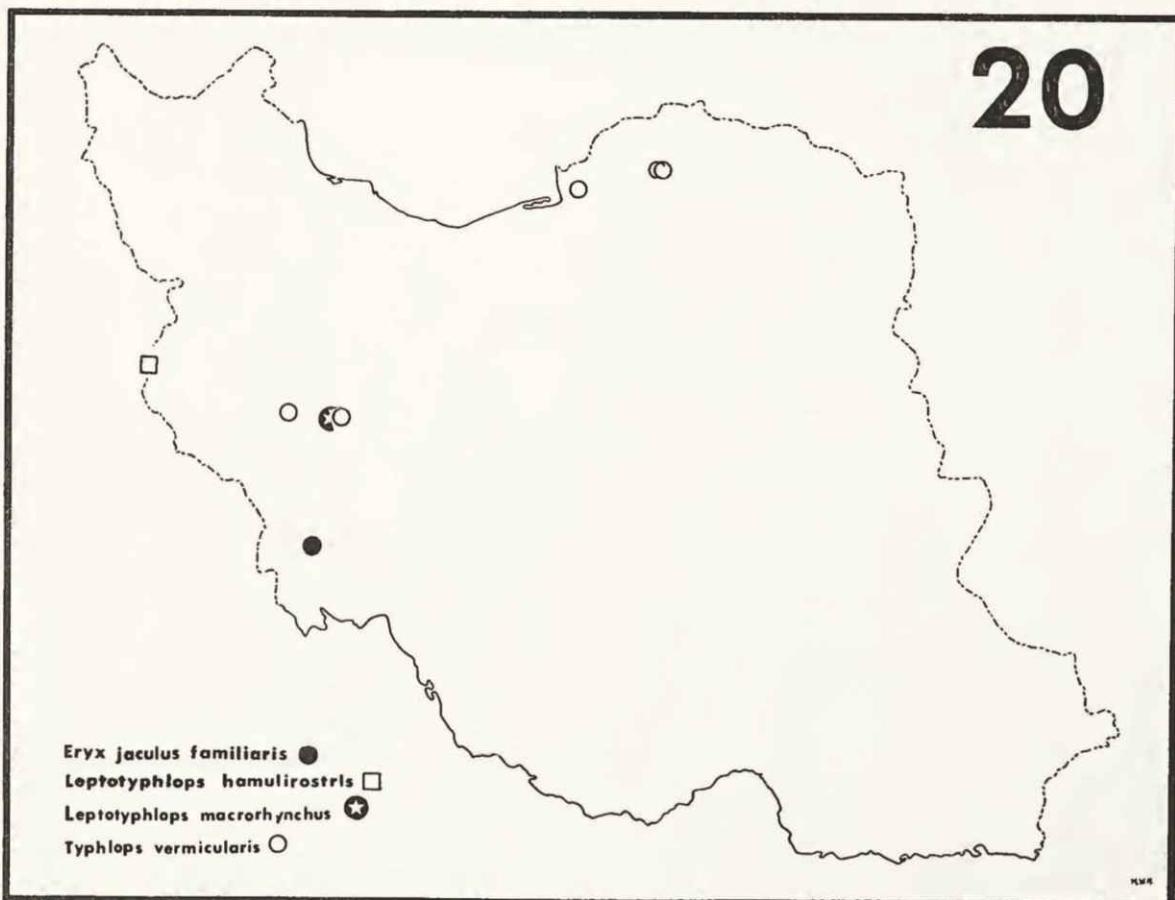
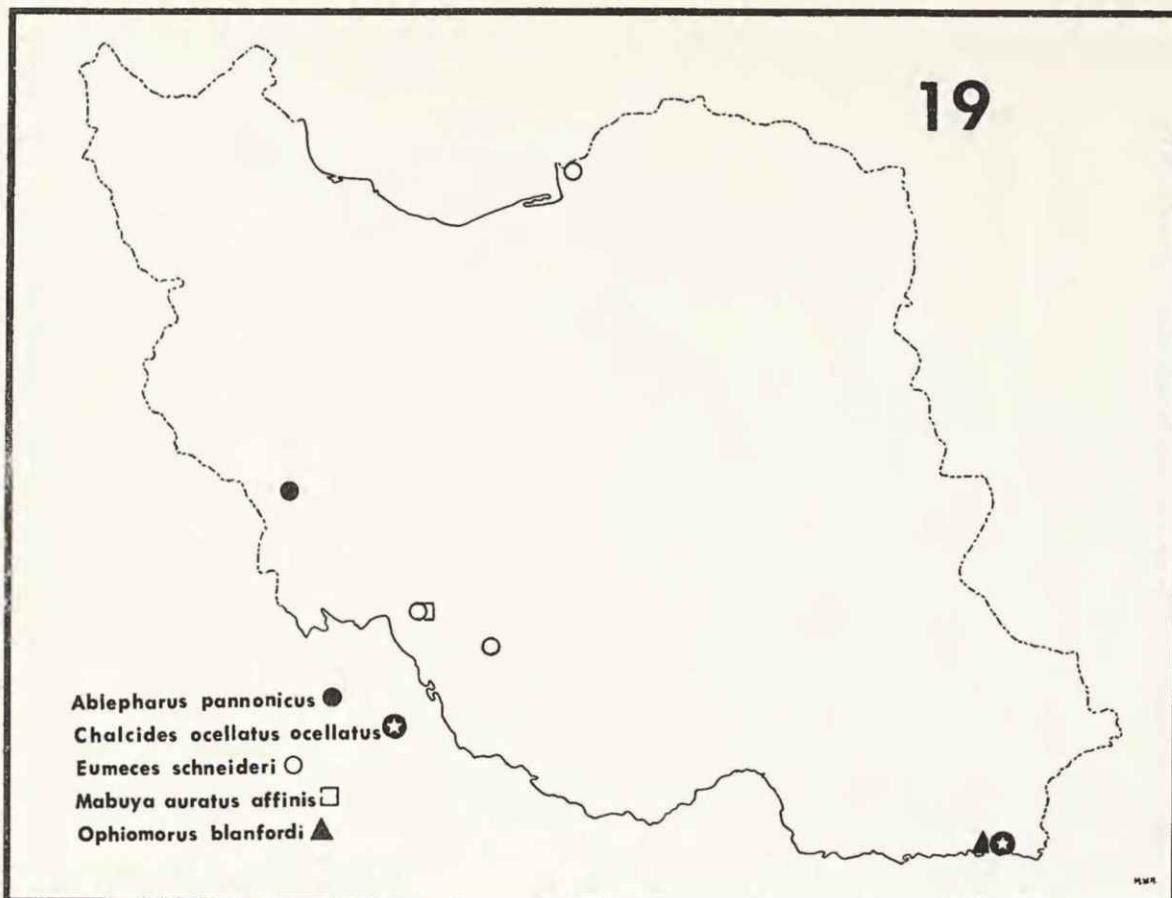




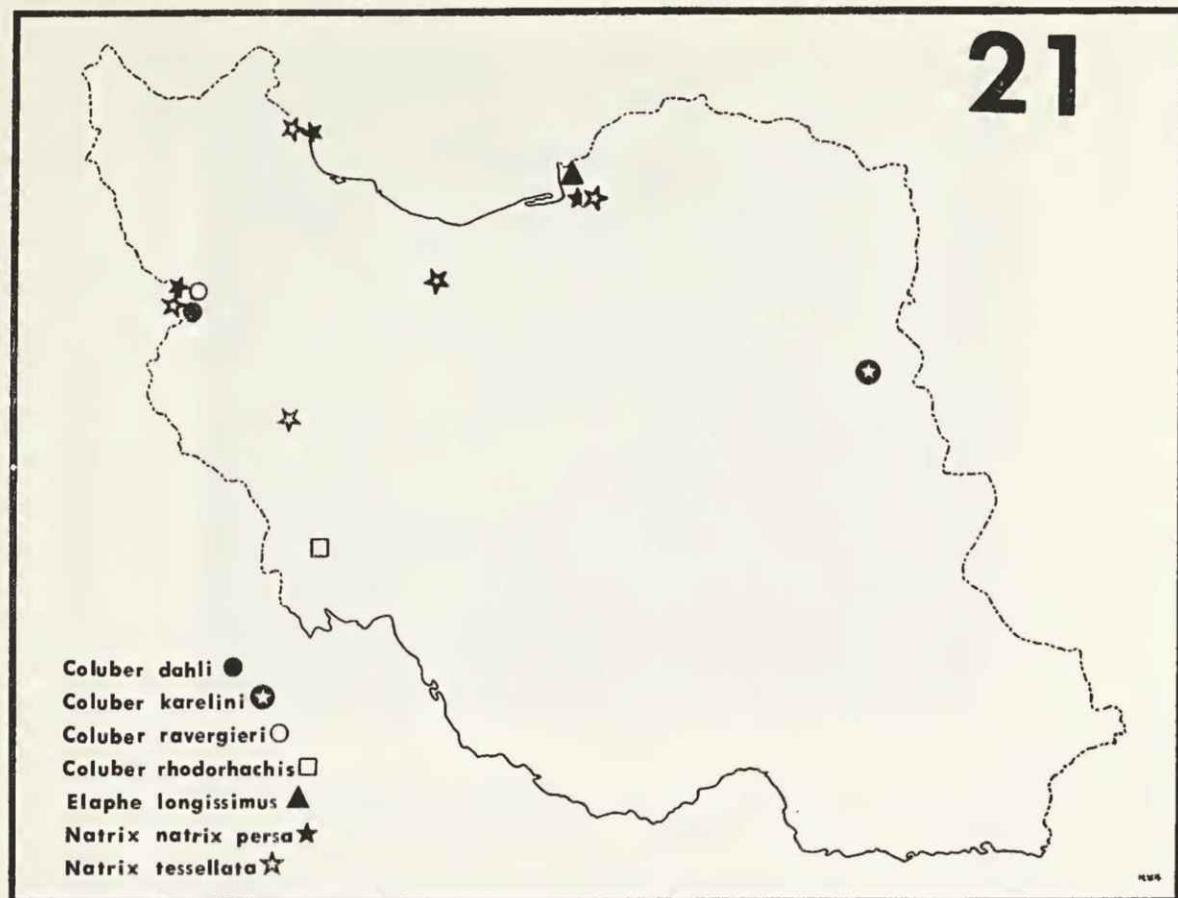




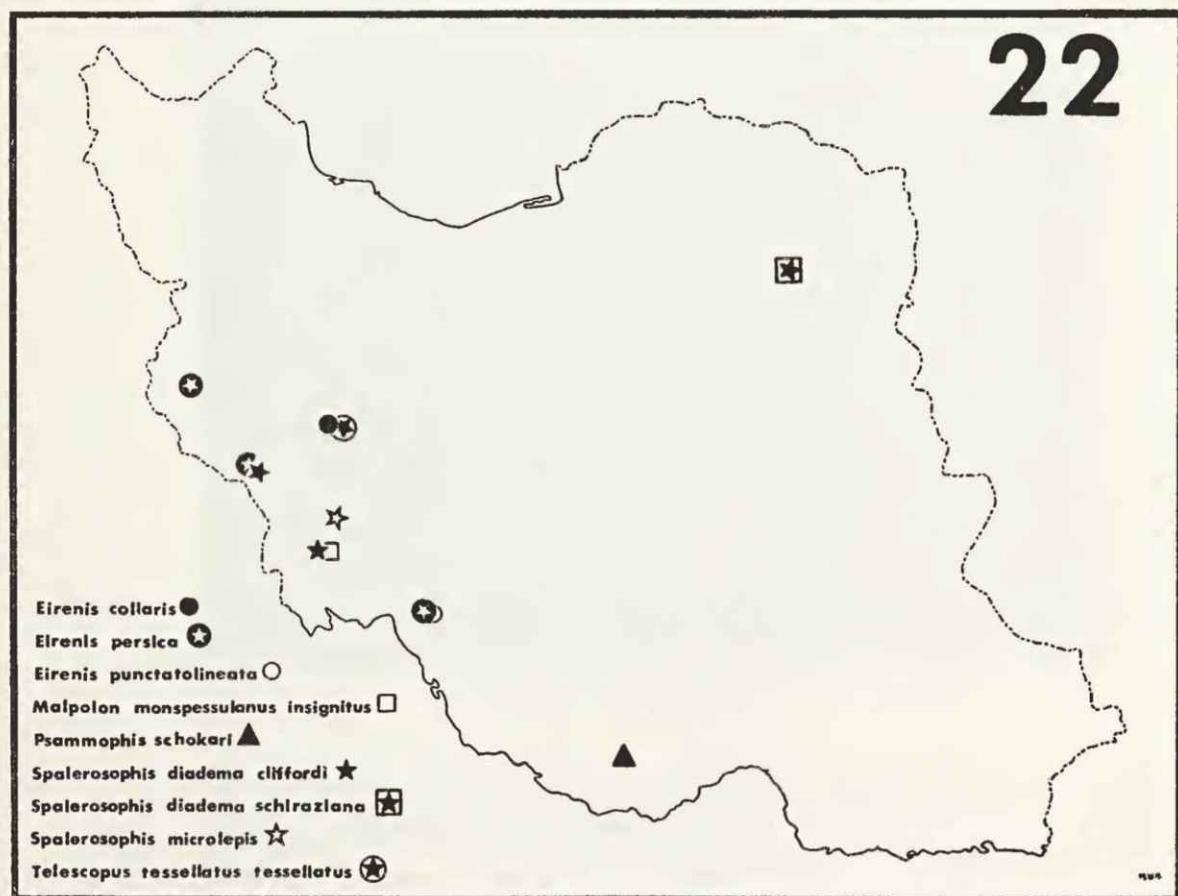




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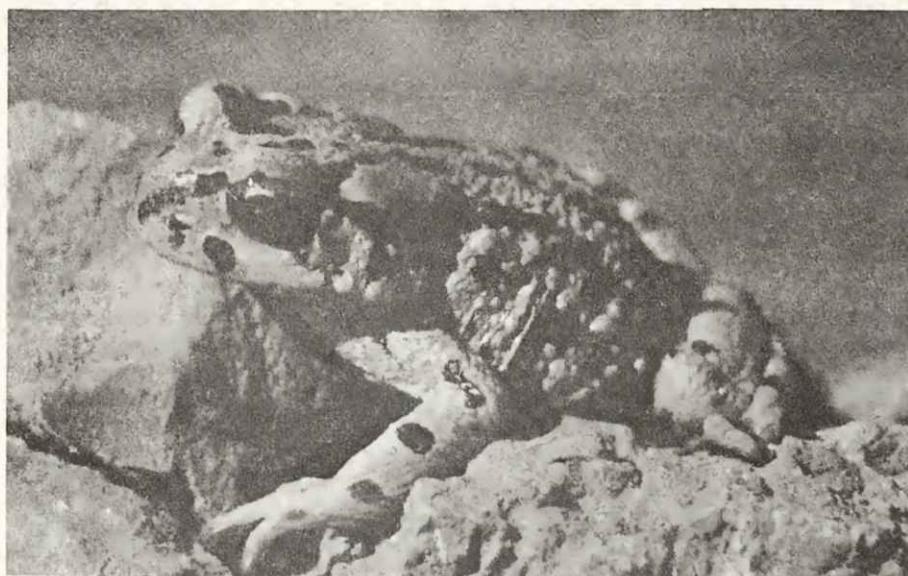
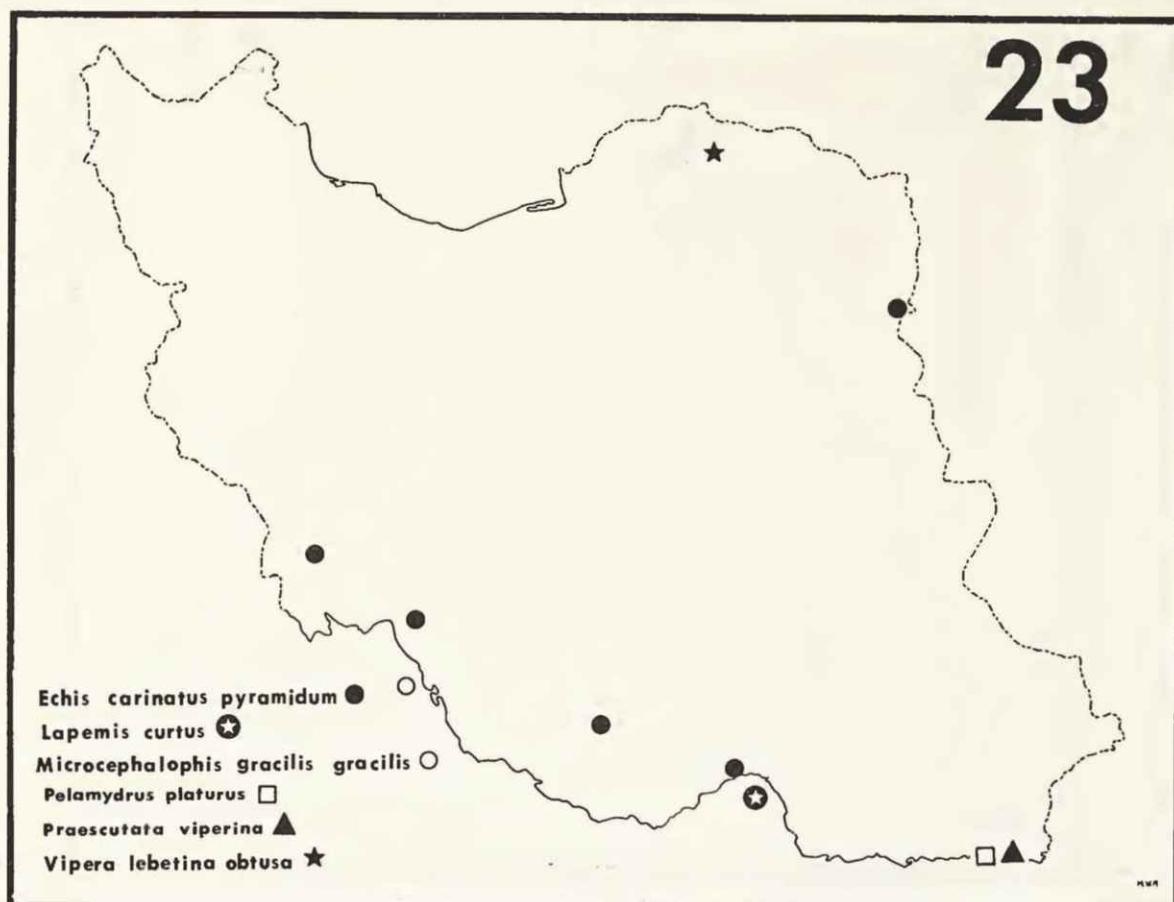


Fig. 1. *Bufo viridis arabicus*, one of series USNM 153436-40, 1 km. N. Takht-e Jamshid (Persepolis), Fars Province, Iran, 27 Nov. 1963.

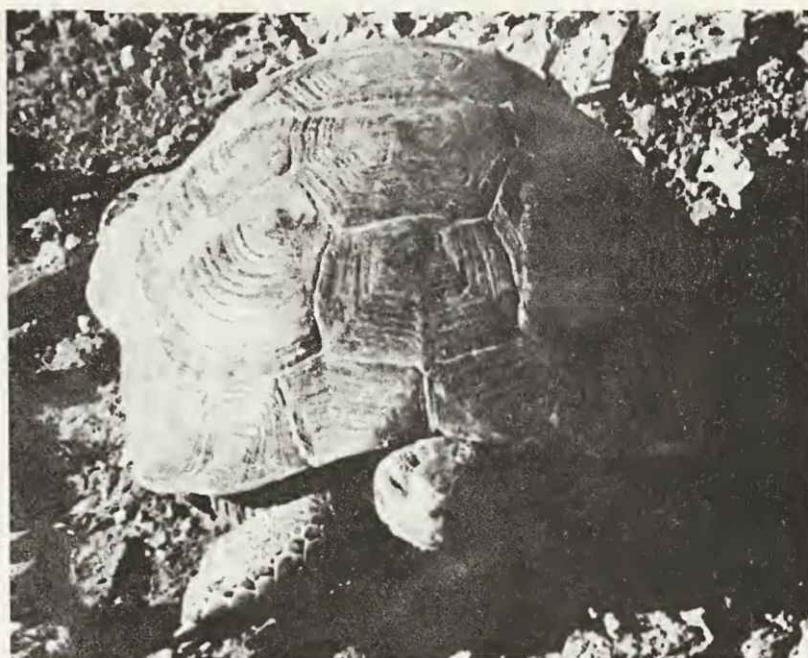


Fig. 2. *Testudo zarudnyi*, not collected, 74 km. NW  
Najafabad, Esfahan Province, Iran, 14 May 1964.

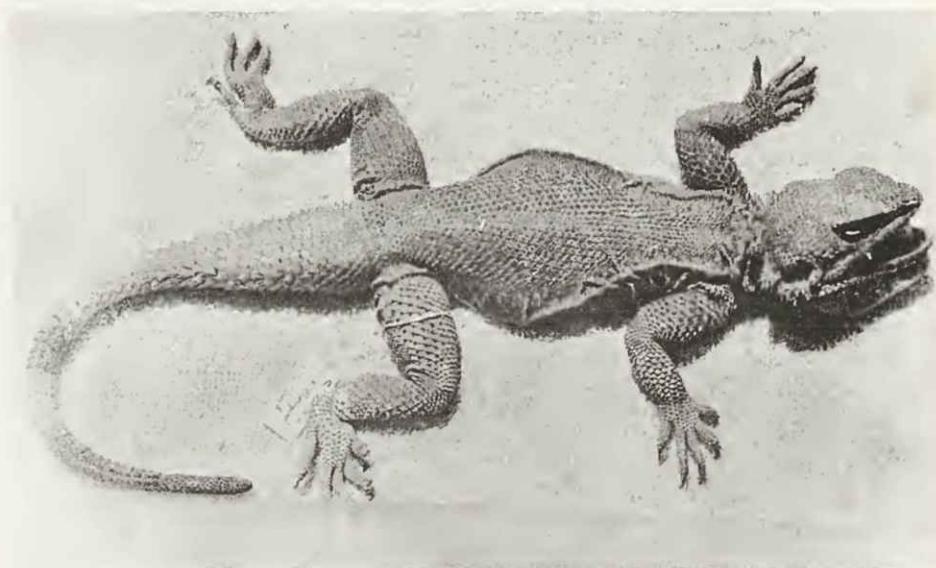


Fig. 3. [dorsum]: *Agama nupta*, USNM 153732, 50 km. SW  
Borujerd, Khuzistan Province, Iran, 27 Apr. 1964.

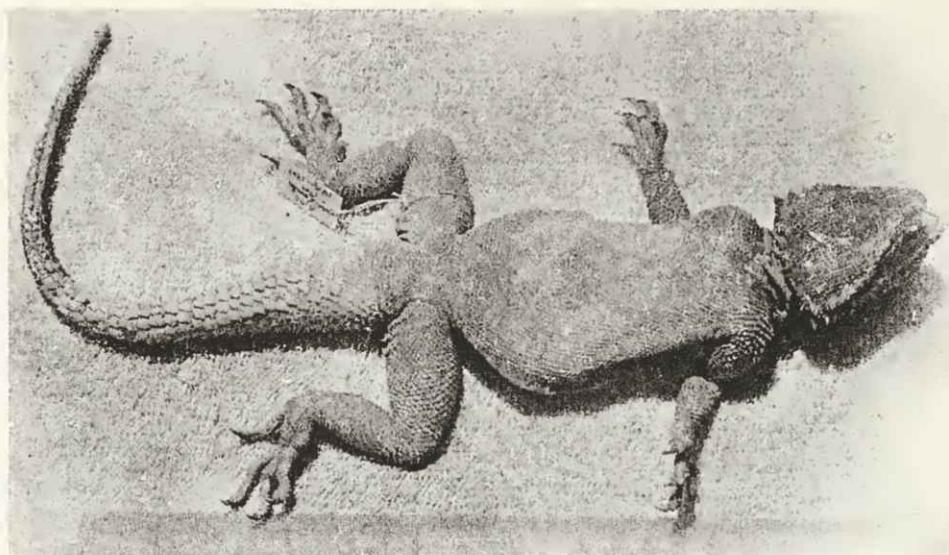


Fig. 4. [venter]: *Agama nupta*, USNM 153732, 50 km. SW Borujerd, Khuzistan Province, Iran, 27 Apr 1964.

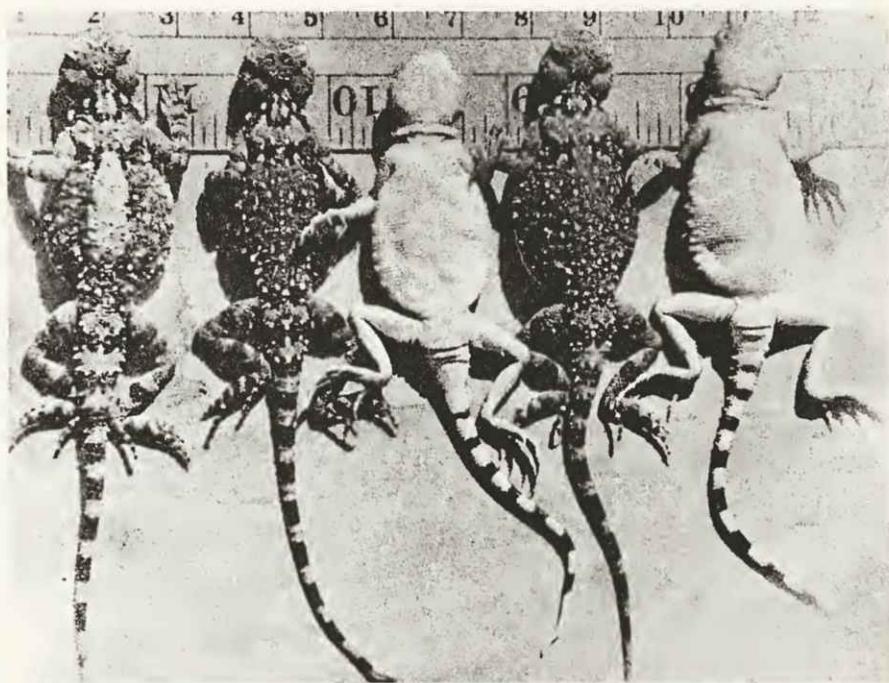


Fig. 5. *Phrynocephalus scutellatus*, part of series USNM 159343-57, 5 km. W. 'Abbasabad, Mazanderan Province, Iran, 9 Nov. 1964.

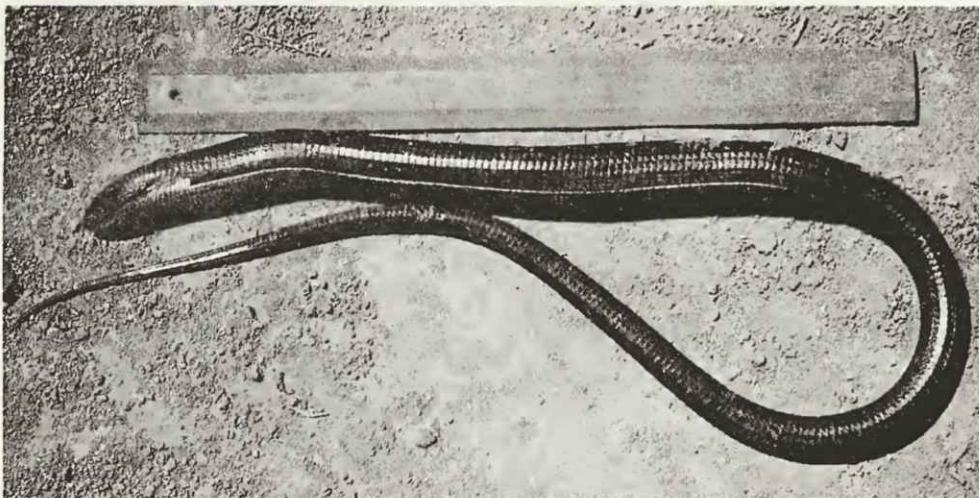


Fig. 6. *Ophisaurus apodus*, USNM 154489, 159 km. W. Bojnurd, Mazanderan Province, Iran, 12 June 1964.

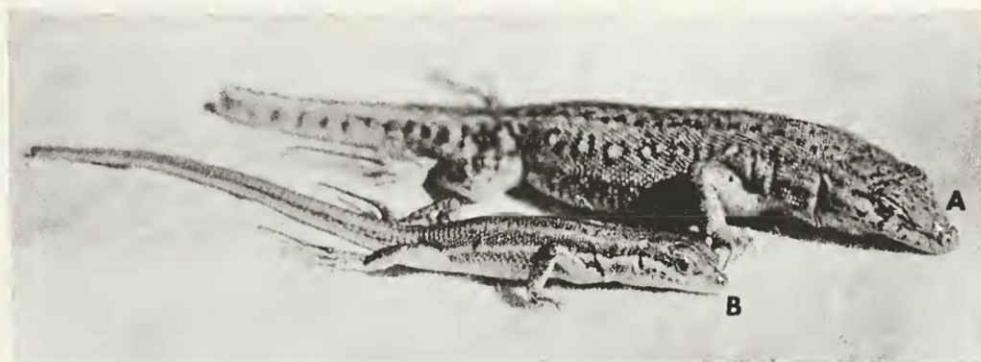


Fig. 7. A (top), *Eremias guttulata watsonana*, USNM 153593, and B (bottom), *Ophisops elegans elegans*, USNM 153594, 1 km. N. Takht-e Jamshid (Persepolis), Fars Province, Iran, 27 Nov. 1963.

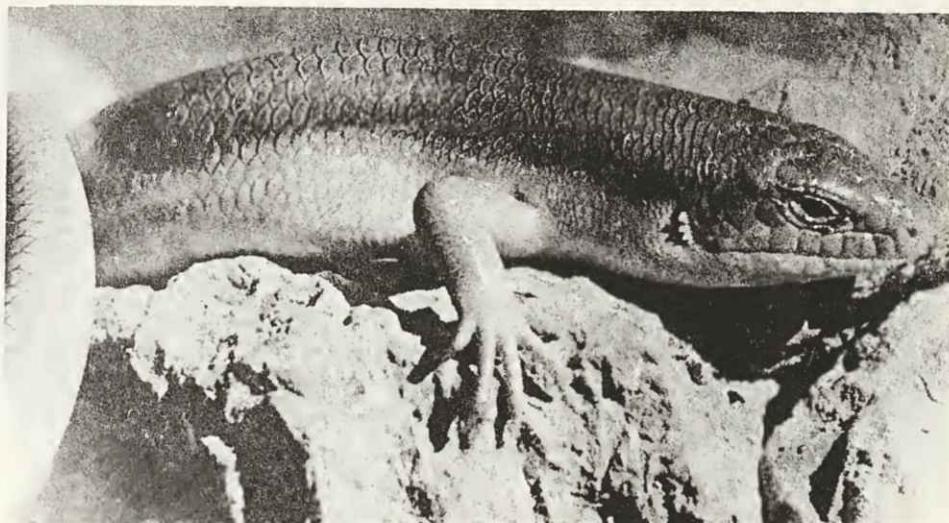


Fig. 8. *Eumeces schneideri*, USNM 153595, 38 km. W. Shiraz, Fars Province, Iran, 23 Nov. 1963.



Fig. 9. *Varanus griseus*, USNM 160302, 35 km. E. Gachsaran, Khuzistan Province, Iran, 11 Feb. 1964.

## Literature Cited

Anderson, S. C.

1963. Amphibians and reptiles from Iran. *Proc. Calif. Acad. Sci.*, ser. 4, Vol. 31, pp. 417-498.

1966a. A substitute name for *Agama persica* Blanford. *Herpetologica*, Vol. 22, No. 3, p. 230.

1966b. The turtles, lizards, and amphisbaenians of Iran. Unpublished doctoral dissertation, Stanford University. xvii + 643 pp. [L. C. card no. 67-77042] Available from University Microfilms, Inc., Ann Arbor, Michigan. [Dissertation Abstr., 27B(7): 2538-B].

1968. Zoogeographic analysis of the lizard fauna of Iran. Chapter 10 in: Fisher, W. B. (ed.), *The Cambridge History of Iran*, Vol. 1, *The Land of Iran*. Cambridge, Cambridge University Press. PP. 305-371, 749-752.

Anderson, S. C. and A. E. Leviton

1966a. A new species of *Eublepharis* from southwestern Iran (Reptilia: Gekkonidae). *Occ. Pap. Calif. Acad. Sci.*, No. 53, 5 pp., 2 figs.

1966b. A review of the genus *Ophiomorus* (Sauria: Scincidae), with descriptions of three new forms. *Proc. Calif. Acad. Sci.*, ser. 4, Vol. 33, pp. 499-534.

Clark, R. J., E. Clark, and S. C. Anderson

1966. Report on two small collections of reptiles from Iran. *Occ. Pap. Calif. Acad. Sci.*, No. 55, 9 pp.

Fisher, W. B. (ed.)

1968. *The Cambridge History of Iran*. Vol. 1, *The Land of Iran*. Cambridge, Cambridge University Press. xix + 784 pp.

Guibé, J.

1966. Reptiles et amphibiens récoltés par la mission Franco-Iranienne. *Bull. Mus. nat. d'Hist. Nat.*, Paris, ser. 2, Vol. 38, No. 2, pp. 97-98.

Haas, G. and Y. L. Werner

1969. Lizards and snakes from southwestern Asia collected by Henry Field. *Bull. Mus. Comp. Zool.*, Vol. 38, No. 6, pp. 327-406.

Khalaf, K. T.

1959. Reptiles of Iraq, with some notes on the amphibians. Baghdad, Ar-Rabitta. v + 96 pp.

- Latifi, M., A. R. Hoge, and M. Eliazan  
1966. The poisonous snakes of Iran. *Mem. Inst. Butantan, Simp. Internac.*, Vol. 33, No. 3, pp. 735-744.
- Marx, H.  
1959. Review of the colubrid snake genus *Spalerosophis*. *Fieldiana, Zool.*, Vol. 39, pp. 347-361.  
1968. Checklist of the reptiles and amphibians of Egypt. Cairo, *Spec. Publ. U. S. Naval Res. Unit No. 3*. iv + 91 pp.
- Mortens, R.  
1969. Die Amphibien und Reptilien West-Pakistans. Stuttg. *Beitr. Naturk.*, No. 197, 96 pp.
- Minton, S. A.  
1966. A contribution to the herpetology of West Pakistan. *Bull. Am. Mus. Nat. Hist.*, Vol. 134, Art. 2, pp. 27-184.
- Minton, S. A., S. C. Anderson, and J. A. Anderson  
1970. Remarks on some geckos from southwest Asia, with descriptions of three new forms and a key to the genus *Tropiocolotes*. *Proc. Calif. Acad. Sci.*, ser. 4, Vol. 37, No. 9, pp. 333-362.
- Nikolsky, A. M.  
1962 [1918]. Fauna of Russia and adjacent countries. Amphibians. *Jerusalem, Israel Program for Scientific Translations*. 225 pp.  
1963 [1915]. Fauna of Russia and adjacent countries. Vol. 1, Chelonia and Sauria. *Jerusalem, Israel Program for Scientific Translations*. 352 pp.  
1964 [1916]. Fauna of Russia and adjacent countries. Vol. 2, Ophidia. *Jerusalem, Israel Program for Scientific Translations*. vi + 247 pp.
- Schmidtler, J. J. and J. F. Schmidtler  
1969. Über *Bufo surdus*, mit einem Schlüssel und Anmerkungen zu den übrigen Kröten Irans und West-Pakistans. *Salamandra*, Vol. 5, Nos. 3/4, pp 113-123.
- Shcherbak, N. N.  
1966. *Herpetologija Taurica: reptiles and amphibians of Crimea*. Kiev, Ukraine Academy of Science. 240 pp. [in Russian].
- Terent'ev, P. V. and S. A. Chernov  
1965 [1949]. Key to amphibians and reptiles. 3rd, enlarged edition. *Jerusalem, Israel Program for Scientific Translations*. 315 pp.

