

# **Annotated Checklist of Amphibians and Reptiles of Iran**

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An updated checklist of the herpetofauna of Iran is presented based on records of amphibian and reptile species whose presence has been confirmed in Iran as a result of extensive field expeditions, examination of herpetological collections, literature review, and personal communications from researchers. The herpetofauna of Iran consists of 13 species and five subspecies of frogs and toads belonging to five genera and four families, eight species of salamanders belonging to four genera and two families, nine species and six subspecies of turtles, terrapins and tortoises belonging to nine genera and six families, one species of crocodile, one species of amphisbaenian, more than 125 species of lizards belonging to 36 genera and eight families as well as 79 species of snakes belonging to 37 genera and six families.

**Key words:** Amphibians, Checklist, Iran, Reptiles.

## **INTRODUCTION**

Although taxonomic and faunistic studies on the herpetofauna of Iran began during the late 18th century (Anderson, 1999), the study of amphibians and reptiles of Iran has undergone rapid progress during the last decades as a result of several factors.

Here just a few pioneering works are mentioned. Among the most comprehensive works done by foreign herpetologists are Anderson's long-term studies on the herpetofauna of Iran starting in 1957 and resulting in publication of *The Lizards of Iran* (Anderson, 1999). In this monographic work, Anderson focused on the Iranian lizards and explained distribution, systematics, and gave a brief history of all of the then-known lizard taxa. Also, during recent years, some Iranian herpetologists have started more or less comprehensive studies of the Iranian Plateau herpetofauna by publishing books and papers. For instance, Balouch and Kami in 1995 published *Amphibians of Iran* as the only available reference on amphibians prepared by Iranian herpetologists; Rastegar-Pouyani et al.(2007) published the first Field Guide of the Lizards of Iran; in addition, the late Mahmoud Latifi (1991, 2000) published the most comprehensive work on distribution and toxicology of the Snakes of Iran. Also, the works done by the present first and second authors and their MSc students plus field expeditions and joint researches carried out with European and American herpetologists partnered with these authors resulted in the description of new taxa and reports of new records as

well as taxonomic changes in the amphibians and reptiles of Iran. In the preparation of the checklist of turtles, our major reference has been Chelonians of the World (Fritz and Havas, 2007) and personal communication with Fritz. A complete and up-to-date checklist of the herpetofauna of Iran should ideally include voucher specimens of all the reported taxa.

Because *Spalerosophis diadema* subspecies as well as subspecies of *Platyceps rhodorachis* have been reported from the same localities in Iran, serious questions about their validity remain. Concerning *Spalerosophis diadema*, Khan (pers comun, 2006) has raised the subspecies extending into Pakistan (*Spalerosophis diadema schirazi*) to a full species. *P. r. rhodorachis* and *P. r. ladaensis* are mostly regarded today as two color morphs. Taxonomic studies of *Spalerosophis diadema* subspecies and subspecies of *Platyceps rhodorachis* in Iran are in first stages and traditional classification of these taxa is adopted here.

In the present paper, only species whose presence has been confirmed in Iranian territory via extensive field expeditions, examination of collections, literature review, as well as through personal communications with regional herpetologists are listed.

The classification adopted here is mostly conservative, though in some cases new, and to some extent, controversial names have been used. We call attention to nomenclatural controversies through footnotes and by including supporting papers in the bibliography.

## CHECKLIST

### FROGS AND TOADS<sup>1</sup>

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<sup>1</sup> Frost, et al. (2006) have completely revised the phylogenetic nomenclature of amphibians based on molecular studies. Common usage of their generic names has not been established and there is much ongoing controversy over their usage, as application of their names separates many common and widely researched species from the literature. As an aid to introducing the reader to this new taxonomy, we retain the conventional generic names, but utilize the generic names of Frost, et al. as subgeneric names in parentheses.

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#### I. Family Pelobatidae

##### Genus *Pelobates* Wagler, 1830

*Pelobates syriacus* Boettger, 1889

#### II. Family Bufonidae Gray, 1825

##### Genus *Bufo* Laurenti, 1768

*Bufo (Bufo) eichwaldi* Litvinchuk, Borkin, Skorinov, and Rosanov, 2008

*Bufo kavirensis* Andren & Nilson, 1979

*Bufo* s. l. ("stomaticus Group")

*Bufo olivaceus* Blanford, 1874

*Bufo stomaticus* Lutkin, 1862

*Bufo (Pseudopidalea) surda surda* (Boulenger, 1891)

*Bufo (Pseudopidalea) surda annulata* (J. J. Schmidtler and J. F. Schmidtler, 1969)

*Bufo (Pseudopidalea) luristanica* (K. Schmidt, 1952)<sup>2</sup>

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<sup>2</sup> Considered a subspecies of *B. surdus* by some authors.

*Bufo (Pseudopidalea) oblonga* (Nikolsky, 1896)

*Bufo (Pseudopidalea) viridis viridis* (Laurenti, 1768)

*Bufo (Pseudopidalea) viridis kermanensis* (Eislt and J. F. Schmidtler, 1971)

*Bufo (Pseudopidalea) viridis turanensis* Hemmer, Schmidtler & Bohme, 1978

*Bufo (Pseudopidalea) viridis* ssp.

**III. Family Hylidae****Genus *Hyla* Laurenti, 1768***Hyla savignyi* Audouin, 1812**IV. Family Ranidae****Genus *Euphlyctis* Fitzinger, 1843<sup>3</sup>**<sup>3</sup>Frost, et al. (2006) place the genus *Euphlyctis* in the family Dicoglossidae Anderson, 1871.*Euphlyctis cyanophlyctis* (Schneider, 1799)**Genus *Rana* Linnaeus, 1758***Rana camerani* Boulenger, 1886*Rana macrocnemis pseudodalmatina* Eiselt & Schmidtler, 1971*Rana (Pelophylax) ridibunda ridibunda* Pallas 1771**SALAMANDERS AND NEWTS****I. Family Hynobiidae****Genus *Paradactylodon* Risch, 1984***Paradactylodon gorganensis* (Clergue-Gazeau&Thorn, 1978)*Paradactylodon persicus* (Eiselt& Steiner, 1970)**II. Family Salamandridae Gray, 1825****Genus *Triturus* Rafinesque, 1815***Triturus karelini* (Strauch, 1870)**Genus *Neurergus* Cope, 1862***Neurergus crocatus* Cope, 1862*Neurergus kaiseri* K.Schmidt, 1952*Neurergus microspilotus* (Nesterov, 1916)**Genus *Salamandra* Laurenti, 1768***Salamandra infraimmaculata semenovi* Nesterov, 1916**TURTLES AND TORTOISES****I. Family Cheloniidae****Genus *Caretta* Rafinesque, 1814***Caretta caretta* (Linnaeus, 1758)**Genus *Chelonia* Brongniart, 1800***Chelonia mydas agassizii* (Bocourt, 1868)**Genus *Eretmochelys* Fitzinger, 1843***Eretmochelys imbricata bissa* (Ruppell, 1835)**Genus *Lepidochelys* Fitzinger, 1843***Lepidochelys olivacea* (Eschscholtz, 1829)**II. Family Dermochelyidae**

**Genus *Dermochelys* Blainville, 1816***Dermochelys coriacea* (Vandellius, 1761)**III. Family Emydidae****Genus *Emys* Dumeril, 1806***Emys orbicularis persica* Eichwald, 1831**IV. Family Geoemydidae****Genus *Mauremys* Gray, 1869***Mauremys caspica caspica* (Gmelin, 1774)*Mauremys caspica siebenrocki* Wischuf & Fritz, 1997*Mauremys caspica ventrimaculata* Wischuf & Fritz, 1996**V. Family Testudinidae****Genus *Testudo* Linnaeus, 1758***Testudo graeca armeniaca* Chkhikvadze & Bakradze, 1991<sup>4</sup><sup>4</sup> But see Parham et al. (2006), Fritz et al. (2007) and Sindaco and Jeremčenko (2008).*Testudo graeca buxtoni* Boulenger, 1921*Testudo graeca zarudnyi* Nikolsky, 1896*Testudo horsfieldii horsfieldii* Gray, 1844<sup>5</sup><sup>5</sup> *Agrionemys horsfieldii* of many authors. Le et al. (2006) do not recognize *Agrionemys* in their molecular phylogeny of turtles. Fritz and Havaš (2006) follow its usage, and consider this species basal to *Testudo*. But see Parham et al. (2006).*Testudo horsfieldii rustamovi* (Chkhikvadze, Amiranashvili & Ataev, 1990)<sup>6</sup><sup>6</sup> Occurs in southwestern Kopet Dag, Turkmenistan and may occur in Iran.**VI. Family Trionychidae****Genus *Rafetus* Gray, 1864***Rafetus euphraticus* (Daudin, 1801)**CROCODILES****I. Family Crocodylidae****Genus *Crocodylus* Laurenti, 1768***Crocodylus palustris* Lesson, 1831**Amphisbaenians****I. Family Tropidophoridae****Genus *Diplometopon* Nikolsky, 1907***Diplometopon zarudnyi* Nikolsky, 1907**LIZARDS****I. Family Agamidae****Genus *Calotes* Cuvier, 1816***Calotes versicolor* (Daudin, 1802)

**Genus *Laudakia* Gray, 1845<sup>7</sup>**

<sup>7</sup> Sindaco and Jeremčenko (2008) discuss the taxonomic uncertainties regarding this possibly paraphyletic genus.

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- Laudakia caucasia caucasia* (Eichwald, 1831)  
*Laudakia erythrogaster* (Nikolsky, 1896)  
*Laudakia melanura lirata* (Blanford, 1874)  
*Laudakia microlepis* (Blanford, 1874)  
*Laudakia nupta* (De Filippi, 1843)  
*Laudakia fusca* (Blanford, 1876)

**Genus *Phrynocephalus* Kaup, 1825**

- Phrynocephalus arabicus* J. Anderson, 1894  
*Phrynocephalus helioscopus helioscopus* (Pallas, 1771)  
*Phrynocephalus helioscopus horvathi* Méhely, 1894  
*Phrynocephalus maculatus maculatus* J. Anderson, 1872  
*Phrynocephalus mystaceus galli* Krassowsky, 1932<sup>8</sup>

<sup>8</sup> Golubev and Sattorov (1992) regard *P. mystaceus* (Pallas, 1776) as monotypic. Sindaco and Jeremčenko (2008) recognize the subspecies *aurantiacocaudatus* Semenov and Šenbrot, 1990, but regard *galli* as a synonym of *P. m. mystaceus*.

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- Phrynocephalus ornatus vindumi* Golubev, 1998  
*Phrynocephalus persicus* De Filippi, 1863  
*Phrynocephalus scutellatus* (Olivier, 1807)

**Genus *Trapelus* Cuvier, 1816**

- Trapelus agilis agilis* (Olivier, 1804)  
*Trapelus agilis khuzistanensis* Rastegar-Pouyani, 1999  
*Trapelus agilis sanguinolentus* (Pallas, 1814)  
*Trapelus lessonae* (De Filippi, 1865)  
*Trapelus megalonyx* Günther, 1864  
*Trapelus ruderatus ruderatus* (Olivier, 1804)

**II. Family Anguidae****Genus *Anguis* Linnaeus**

- Anguis fragilis colchicus* (Nordmann, 1840)

**Genus *Pseudopus* Merrem, 1820<sup>9</sup>**

<sup>9</sup> On the basis of molecular studies, Macey, et al. (1999) discovered that the genus *Ophisaurus* is paraphyletic. To resolve this paraphyly, all anguienes could be placed in *Anguis*, or *apodus* could be transferred to the genus *Pseudopus* and *O. koelkeri* to *Hyalosaurus* (Sindaco and Jeremčenko, 2008).

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- Pseudopus apodus apodus* (Pallas, 1775)

**III. Family Eublepharidae****Genus *Eublepharis* Gray, 1827**

- Eublepharis angramainyu* S. Anderson and Leviton, 1966  
*Eublepharis turcmenicus* Darevsky, 1977  
*Eublepharis* sp.<sup>10</sup>

<sup>10</sup> Zarudny (1903) reported collecting specimens of *Eublepharis macularius* (Blyth, 1854) in Khorasan near the Afghan border, but the specimens were lost before they could be deposited in St.

Petersburg. Neither the identification nor the locality has since been confirmed. See Anderson (1999).

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#### **IV. Family Gekkonidae**

##### **Genus IV *Agamura* Blanford, 1874**

*Agamura persica* (Duméril, 1856)

##### **Genus *Asaccus* Dixon and S. Anderson**

*Asaccus elisae* (Werner, 1895)

*Asaccus griseonotus* Dixon and S. Anderson, 1973

*Asaccus kermanshabensis* Rastegar-Pouyani, 1996

*Asaccus kurdistanensis* Rastegar-Pouyani, Nilson and Faizi, 2006

*Asaccus nasrullahi* Werner, 2006

##### **Genus *Bunopus* Blanford, 1874**

*Bunopus crassicaudus* Nikolsky, 1907

*Bunopus tuberculatus* Blanford, 1874

##### **Genus *Carinatogecko* Golubev and Sczcerbak, 1981**

*Carinatogecko aspratilis* (S. Anderson, 1973)

*Carinatogecko heteropholis* (Minton, S. Anderson and J. A. Anderson, 1970)

##### **Genus *Crossobamon* Boettger, 1888**

*Crossobamon eversmanni* (Wiegmann, 1834)

##### **Genus *Cyrtopodion* Fitzinger, 1843<sup>11</sup>**

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<sup>11</sup> Kluge (1985) demonstrated that *Tenuidactylus* is a junior subjective synonym of *Cyrtopodion*, type species *Stenodactylus scabrum*. See also Anderson (1999). Krysko, Rehman, and Auffenberg (2007) review the history of the confusion surrounding the names of bent-toed geckos. See also Sindaco and Jeremčenko (2008).

*Cyrtopodion agamiroides* (Nikolsky, 1900)

*Cyrtopodion brevipes* (Blanford, 1874)

*Cyrtopodion caspium caspium* (Eichwald, 1831)

*Cyrtopodion gastrophole* (Werner, 1917)

*Cyrtopodion heterocercum heterocercum* (Blanford, 1874)

*Cyrtopodion kachhense* (Stoliczka, 1872)<sup>12</sup>

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<sup>12</sup> Sczcerbak and Golubev (1986, 1996) do not include Iran in the range of this species, and Anderson (1999) expressed skepticism about its occurrence. There is a single record for Bushehr dating to 1913, which has never been confirmed, although bent-toed geckos of several species have been introduced in port cities in many areas.

*Cyrtopodion kirmanense* (Nikolsky, 1900)

*Cyrtopodion longipes longipes* (Nikolsky, 1896)

*Cyrtopodion longipes microlepis* (Lantz, 1918)

*Cyrtopodion russowii zarudnyi* (Nikolsky, 1900)

*Cyrtopodion sagittifer* (Nikolsky, 1900)

*Cyrtopodion scabrum* (Heyden, 1827)

*Cyrtopodion spinicauda* (Strauch, 1887)

*Cyrtopodion sistanensis* Nazarov and Rajabizadeh, 2007  
*Cyrtopodion turcmenicum* (Szczerbak, 1978)

#### Genus *Hemidactylus* Oken

*Hemidactylus flaviviridis* Rüppell, 1840  
*Hemidactylus persicus* J. Anderson, 1872  
*Hemidactylus turcicus turcicus* (Linnaeus, 1758) (*sensu lato*)<sup>13</sup>

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<sup>13</sup> It is likely that all records of this species in Iran actually are referred to *H. robustus* (Bauer, et al., 2006; Sindaco and Jeremčenko, 2008).

*Hemidactylus robustus* Heyden, 1827

#### Genus *Pristurus* Rüppell

*Pristurus rupestris* Blanford, 1874

#### Genus *Rhinogecko* de Witte, 1973

*Rhinogecko misonnei* de Witte, 1973

#### Genus *Stenodactylus* Fitzinger, 1826

*Stenodactylus affinis* (Murray, 1884)  
*Stenodactylus doriae* (Blanford, 1874)  
*Stenodactylus khobarensis* (Haas, 1957)

#### Genus *Teratoscincus* Strauch, 1863

*Teratoscincus bedriagai* Nikolsky, 1899  
*Teratoscincus microlepis* Nikolsky, 1899  
*Teratoscincus keyserlingii* Strauch, 1863  
*Teratoscincus scincus* (Schlegel, 1858)

#### Genus *Tropiocolotes* Peters, 1880<sup>14</sup>

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<sup>14</sup> Sindaco and Jeremčenko (2008) follow Kluge (1991, 1993) in assigning *heleneae*, *latifi*, and *persicus* to the genus *Microgecko* Nikolsky, 1907. The taxonomy of this genus remains unsettled.

*Tropiocolotes heleneae* (Nikolsky, 1907)  
*Tropiocolotes heleneae fasciatus* (Schmidtler and Schmidtler, 1972)  
*Tropiocolotes latifi* Leviton and S. Anderson, 1972  
*Tropiocolotes persicus persicus* (Nikolsky, 1903)  
*Tropiocolotes persicus bakhtiari* Minton, S. Anderson and J. A. Anderson, 1970  
*Tropiocolotes cf. steudneri* (Peters, 1869)

#### V. Family Lacertidae<sup>15</sup>

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<sup>15</sup> The nomenclature and phylogeny of the Lacertidae, especially of the large encompassing genus *Lacerta*, has long been in flux. Here we follow the division of the Lacertini proposed by Arnold, et al., 2007, although others (e.g. Sindaco and Jeremčenko, 2008) recognize these taxa only at the subgeneric level.

#### Genus *Acanthodactylus* Fitzinger, 1834<sup>16</sup>

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<sup>16</sup> Harris and Arnold (2000) have authored the most recent analysis of the phylogeny of this genus. Sindaco and Jeremčenko (2008) state that *A. cantoris* likely occurs in SE Iran, but we have no records

to support this assertion.

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- Acanthodactylus blanfordi* Boulenger, 1918
- Acanthodactylus boskianus euphraticus* Boulenger, 1919
- Acanthodactylus grandis* Boulenger, 1909
- Acanthodactylus micropholis* Blanford, 1874
- Acanthodactylus nilsoni* Rastegar-Pouyani, 1998
- Acanthodactylus schmidti* Haas, 1957

#### **Genus *Apathya* Méhely, 1907**

- Apathya cappadocia urmiana* (Lantz and Suchow, 1934)
- Apathya yasujica* (Nilson, Rastegar-Pouyani, Rastegar-Pouyani and Andrén, 2003)

#### **Genus *Darevskia* Arribas, 1997**

- Darevskia chlorogaster* (Boulenger, 1909)
  - Darevskia defilippii* (Camerano, 1877)
  - Darevskia mostoufi* (Baloutch, 1976)<sup>17</sup>
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<sup>17</sup> The identity and locality for this species has been called into question by Bosch (1999) and others. The type locality in eastern Sistan-Baluchistan is far east of other members of the genus. This record requires verification.

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- Darevskia praticola praticola* (Eversmann, 1834)
- Darevskia raddei raddei* (Boettger, 1892)
- Darevskia raddei vanensis* (Eiselt, Schmidtler and Darevsky, 1993)
- Darevskia steineri* (Eiselt, 1995)
- Darevskia valentini valentini* (Boettger, 1892)

#### **Genus *Eremias* Fitzinger, 1834<sup>18</sup>**

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<sup>18</sup> See Sindaco and Jeremčenko (2008) for currently recognized subgenera.

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- Eremias acutirostris* (Boulenger, 1887)
- Eremias andersoni* Darevsky and Szczerbak, 1978
- Eremias arguta* (Pallas, 1773)
- Eremias fasciata* Blanford, 1874
- Eremias grammica* (Lichtenstein, 1823)
- Eremias intermedia* (Strauch, 1876)
- Eremias kavirensis* Mozaffari and Parham, 2007
- Eremias lalezharica* Moravec, 1994
- Eremias lineolata* (Nikolsky, 1896)
- Eremias montana* Rastegar-Pouyani and Rastegar-Pouyani, 2001
- Eremias nigrocellata* Nikolsky, 1896
- Eremias nigrolateralis* Rastegar-Pouyani and Nilson, 1997
- Eremias persica* Blanford, 1875
- Eremias pleskei* Bedriaga, 1907
- Eremias strauchi strauchi* Kessler, 1878
- Eremias strauchi kopetdagica* Szczerbak, 1972
- Eremias velox velox* (Pallas, 1771)

#### **Genus *Iranolacerta* Arnold, Arribas and Carranza, 2007**

- Iranolacerta brandtii brandtii* (De Filippi 1863)

*Iranolacerta brandtii esfahanica* (Nilson, Rastegar-Pouyani, Rastegar-Pouyani and Andrén, 2003)  
*Iranolacerta zagrosica* (Rastegar-Pouyani and Nilson, 1998)

### Genus *Lacerta* Linnaeus, 1758

*Lacerta media media* Lantz and Cyrén, 1920  
*Lacerta strigata* Eichwald, 1831

### Genus *Mesalina* Gray, 1838

*Mesalina brevirostris brevirostris* Blanford, 1874  
*Mesalina brevirostris fieldi* (Haas and Werner, 1969)  
*Mesalina watsonana* (Stoliczka, 1872)  
*Mesalina guttulata* (Lichtenstein, 1823) (most likely occurring in Iran)

### Genus *Ophisops* Ménétriés, 1832

*Ophisops elegans* Ménétriés, 1832<sup>19</sup>

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<sup>19</sup> Many subspecies of this widely distributed taxon have been described and Sindaco and Jeremčenko (2008) list *persicus* Boulenger, 1918 from Iran and *blanfordi* Schmidt, 1939 from the Mesopotamian plain. Until a comprehensive study of specimens from the entire range has been made, we prefer not to use subspecific designations.

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### Genus *Timon* Tschudi, 1836

*Timon princeps princeps* (Blanford, 1874)  
*Timon princeps kurdistanica* (Suchow, 1936)

## VI. Family Scincidae

### Genus *Ablepharus* Fitzinger, 1823

*Ablepharus bivittatus* (Ménétriés, 1832)  
*Ablepharus pannonicus* Fitzinger, 1823

### Genus *Chalcides* Laurenti, 1768

*Chalcides ocellatus ocellatus* (Forsskål, 1775)

### Genus *Eumeces* Wiegmann, 1834

*Eumeces schneiderii princeps* (Eichwald, 1839)  
*Eumeces schneiderii zarudnyi* Nikolsky, 1900

### *Eurylepis* Blyth, 1854<sup>20</sup>

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<sup>20</sup> For separation of the genus *Eurylepis* from *Eumeces* based on molecular grounds see Griffith, et al. (2000) and Schmitz, et al. (2004).

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*Eurylepis taeniolatus pathianicus* (Szczerbak, 1990)

### Genus *Ophiomorus* Duméril and Bibron, 1839

*Ophiomorus blanfordi* Boulenger, 1887  
*Ophiomorus brevipes* (Blanford, 1874)  
*Ophiomorus nuchalis* Nilson and Andrén, 1978  
*Ophiomorus persicus* (Steindachner, 1867)  
*Ophiomorus streeti* S. Anderson and Leviton, 1966

*Ophiomorus tridactylus* (Blyth, 1853)

**Genus *Scincus* Laurenti, 1768**

*Scincus sincus conirostris* Blanford, 1881

*Scincus mitranus*<sup>21</sup>

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<sup>21</sup> Record for Iran is in press: Fahimi, Papenfuss, and Anderson.

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**Genus *Trachylepis* Fitzinger, 1843<sup>22</sup>**

<sup>22</sup> Change in generic name from *Mabuya* based on Mausfeld et al., 2002, Mausfeld and Schmitz, 2003, and Bauer 2003.

*Trachylepis aurata transcaucasica* Chernov, 1926

*Trachylepis septemtaeniata* (Reuss, 1834)<sup>23</sup>

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<sup>23</sup> See Moravec, et al.(2005) for change to species level. Mausfeld and Schmitz (2003) regard *transcaucasica* as a subspecies of *septemtaeniata*.

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*Trachylepis vittata* (Olivier, 1804)

**VII. Family Uromastycidae**

**Genus *Uromastyx* Merrem, 1820**

*Uromastyx aegyptius* (Forsskål, 1775)<sup>24</sup>

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<sup>24</sup> Sindaco and Jeremčenko (2008) say that the subspecies *microlepis* Blanford, 1874 occurs in the part of the species range east of Wadi Araba.

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*Uromastyx asmussi* (Strauch, 1863)

*Uromastyx loricatus* (Blanford, 1875)

**VIII. Family Varanidae**

**Genus *Varanus* Merrem**

*Varanus bengalensis* (Daudin, 1802)

*Varanus griseus griseus* (Daudin, 1803)

*Varanus griseus caspius* Eichwald, 1831

**SNAKES**

**I. Family Leptotyphlopidae**

**Genus *Leptotyphlops* Fitzinger, 1843**

*Leptotyphlops macrorhynchus* (Jan, 1861)

*Leptotyphlops blanfordii* (Boulenger, 1890)

*Leptotyphlops hamulirostris* (Nikolsky, 1916)

**II. Family Typhlopidae**

**Genus *Ramphotyphlops* Fitzinger, 1843**

*Ramphotyphlops braminus* (Daudin, 1803)

**Genus *Typhlops* Schneider, 1811**

*Typhlops vermicularis* Merrem, 1820

*Typhlops wilsoni* Wall, 1908

**III. Family Boidae****Subfamily Erycinae****Genus *Eryx* Daudin, 1803***Eryx (Eryx) elegans* (Gray, 1849)*Eryx (Eryx) jaculus turcicus* (Olivier, 1801)<sup>25</sup>

<sup>25</sup> Based on the examination of an extensive series of specimens throughout its range, Tokar and Obst (1993) have shown that the Caucasus population of *E. jaculus*, described by Eichwald (1831) as *E. familiaris* and recognized by Czarevsky (1916) as a subspecies of *E. jaculus*, is not distinguishable from southeast European-Turkish populations, heretofore referred to as *E. j. turcicus*. Thus, they recognize only two subspecies, the nominate form and *E. j. turcicus*.

*Eryx (Pseudogongylophis) jayakari* Boulenger, 1888 *Eryx (Eryx) johnii* (Russell, 1801)<sup>26</sup>

<sup>26</sup> Latifi (1991) reported seeing *E. johnii* from Zabol, in Sistan. The name *persicus* Nikolsky, 1907 is not available for a western subspecies of *Eryx johni*, because it applies to a different species of *Eryx* (paper in preparation). If a western taxon related to *E. johni* exists, whether or not it occurs in Iran, it requires a new name.

*Eryx (Eryx) miliaris* (Pallas, 1773)<sup>27</sup>

<sup>27</sup> According to Tokar (1990, in McDiarmid *et al.* 1999), *E. miliaris* is part of a complex, together with *E. tataricus*, probably a junior synonym and with *E. speciosus*, which should deserve specific rank.

*Eryx (Eryx) tataricus* (Lichtenstein, 1823)<sup>28</sup>

<sup>28</sup> The populations within Iran need to be clarified as to subspecies. Latifi (1991) provided the following distribution in Iran for the species as a whole: Central Province; Zanjan Province; East Azarbaijan Province; West Azarbaijan Province; Khuzistan Province.

**IV. Family Colubridae****Subfamily Colubrinae****Genus *Boiga* Fitzinger, 1826***Boiga trigonatum melanocephala* (Annandale, 1904)**Genus *Coronella* Laurenti, 1768***Coronella austriaca* (Laurenti, 1768)<sup>29</sup>

<sup>29</sup> Venchi and Sindaco (2006) state that the species is monotypic.

**Genus *Dolichophis* Gistel, 1868***Dolichophis caspius* (Gmelin, 1779)*Dolichophis jugularis* (Linnaeus, 1758)*Dolichophis schmidti* (Nikolsky, 1909)**Genus *Eirenis* Jan, 1863<sup>30</sup>**

<sup>30</sup> Nagy *et al.* (2003) propose a phylogeny based on molecular data, allocating the species to four subgenera: *Eirenis* Jan, 1863 (including *modestus* and *aurolineatus*), the new subgenus *Eoseirenis* (for *decemlineatus*), *Pseudocyclophis* Boettger, 1888 (for *persicus*) and *Pediophis* Fitzinger, 1843 (for all remaining taxa).

*Eirenis collaris* (Ménétriés, 1832)*Eirenis coronella coronella* (Schlegel, 1837)<sup>31</sup>

<sup>31</sup> Populations from SW Iran, S Iraq and NE Saudi Arabia cannot be assigned with certainty to any subspecies, although so far considered as belonging to *E. c. coronella*. (Venchi and Sindaco, 2006)

*Eirenis decemlineatus* (Duméril, Bibron, and Duméril, 1854)

*Eirenis iranicus* Schmidt, 1939

*Eirenis medus* (Chernov, 1940)

*Eirenis modestus modestus* (Martin, 1838)

*Eirenis punctatolineatus punctatolineatus* (Boettger, 1892)

*Eirenis rechingeri* Eiselt, 1971

### Genus *Elaphe* Fitzinger, 1833<sup>32</sup>

<sup>32</sup> Utiger et al. (2002) split the western palaearctic species of *Elaphe* into three genera, reviving *Zamenis* Wagler for four species.

*Elaphe dione dione* (Pallas, 1773)

*Elaphe sauromates* (Pallas, 1814)

### Genus *Hemorrhois* Boie, 1826

*Hemorrhois nummifer* (Reuss, 1834)

*Hemorrhois raverdieri* (Ménétriés, 1832)

### Genus *Lycodon* Boie, 1826

*Lycodon striatus bicolor* (Nikolsky, 1903)

### Genus *Lytorhynchus* Peters, 1862

*Lytorhynchus diadema gaddi* Nikolsky, 1907

*Lytorhynchus ridgewayi* Boulenger, 1887

*Lytorhynchus maynardi* Alcock and Finn, 1896

### Genus *Malpolon* Fitzinger, 1826

*Malpolon insignitus insignitus* (Geoffroy Saint-Hilaire, 1827)<sup>33</sup>

<sup>33</sup> Carranza et al. (2006) proposed, on the basis of molecular data, to raise to species level the eastern populations of *monspessulanus* assigned to the ssp. *insignitus*, as well as to recognize the validity of the ssp. *fuscus*.

*Malpolon moilensis* (Reuss, 1834)<sup>34</sup>

<sup>34</sup> Brandstätter (1995) proposed to include this species in the monospecific genus *Scutophis*, on the basis of the microornamentation of the scales.

### Genus *Oligodon* Boie, 1826

*Oligodon taeniatus taeniatus* (Jerdon, 1853)

### Genus *Platyceps* Blyth, 1860

*Platyceps karelini karelini* (Brandt, 1838)

*Platyceps karelini mintonorum* (Mertens, 1969)<sup>35</sup>

<sup>35</sup> Khan (2006) regards *mintonorum* as a color variation of *P. karelini* and not meriting subspecific status.

*Platyceps najadum najadum* (Eichwald, 1831)<sup>36</sup>

<sup>36</sup> *P. n. atayevi* (Tuniyev & S hammakov, 1993) occurs in the Kopet Dag, Turkmenistan and probably adjoining Iran.

*Platyceps najadum schmidtleri* (Schärtti & McCarthy, 2001)

*Platyceps rhodorachis rhodorachis* (Jan, 1865)

*Platyceps rhodorachis ladacensis* (J. Anderson, 1871)<sup>37</sup>

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<sup>37</sup> *ladacensis* has been considered a color pattern variation of *rhodorachis* ever since J. Anderson (1895) recognized that this species had already been described by Jan in 1865.

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*Platyceps ventromaculatus ventromaculatus* (Gray, 1834)

#### Genus *Pseudocyclophis* Boettger, 1888

*Pseudocyclophis persicus* (J. Anderson, 1872)

#### Genus *Psammophis* Fitzinger, 1826

*Psammophis lineolatus* (Brandt, 1838)

*Psammophis schokari* (Forsskål, 1775)

#### Genus *Rhynchocalamus* Günther, 1864

*Rhynchocalamus melanocephalus satunini* (Nikolsky, 1899)

#### Genus *Spalerosophis* Jan, 1843

*Spalerosophis diadema cliffordii* (Schlegel, 1837)

*Spalerosophis diadema schiraziana* (Jan, 1865)

*Spalerosophis microlepis* Jan, 1865

#### Genus *Telescopus* Wagler, 1830

*Telescopus fallax ibericus* (Eichwald, 1831)

*Telescopus rhinopoma* (Blanford, 1874)

*Telescopus tessellatus martini* (K. Schmidt, 1939)

*Telescopus tessellatus tessellatus* (Wall, 1908)

#### Genus *Zamenis* Wagler, 1830

*Zamenis andreae* (Werner, 1917)

*Zamenis hohenackeri* (Strauch, 1873)<sup>38</sup>

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<sup>38</sup> In the past, two subspecies were recognized, the nominate one and *taurica* (Werner, 1898); these were synonymized by Nilson & Andrén (1984).

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*Zamenis longissima* (Laurenti, 1768)

*Zamenis persica* (Werner, 1913)

#### Subfamily Natricinae

##### Genus *Natrix* Laurenti, 1768

*Natrix natrix natrix* (Linnaeus, 1758)<sup>39</sup>

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<sup>39</sup> Following the subspecific concept proposed by Thorpe (1975), only four subspecies are valid: *natrix*, *cetti*, *corsa* and *helvetica*. The populations of the Eurasian mainland, North Africa and islands of the eastern Mediterranean Sea are divided into eastern, *N. n. natrix*, and western, *N. n. helvetica*, subspecies (Guiking, et al., 2006). However, subspecies have been described since, and Thorpe needs to be reevaluated.

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*Natrix tessellata tessellata* (Laurenti, 1768)

#### V. Family Elapidae

**Subfamily Elapinae****Genus *Naja* Laurenti, 1768**

*Naja oxiana* (Eichwald, 1831)

**Genus *Walterinnesia* Lataste, 1887**

*Walterinnesia morgani* (Mocquard, 1905)

**Subfamily Hydrophiinae<sup>40</sup>**

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<sup>40</sup> *Astrotia stokesii* (Gray, 1846) has been recorded for the Makran coast of Pakistan and probably also occurs in Iran.

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**Genus *Enhydrina* Gray, 1849**

*Enhydrina schistosa* (Daudin, 1803)

**Genus *Hydrophis* Latrielle, 1802**

*Hydrophis cyanocinctus* Daudin, 1803

*Hydrophis gracilis* (Shaw, 1802)

*Hydrophis lapemoides* (Gray, 1849)

*Hydrophis ornatus* (Gray, 1842)

*Hydrophis spiralis* (Shaw, 1802)

**Genus *Lapemis* Gray, 1835**

*Lapemis curtus* (Shaw, 1802)

**Genus *Pelamis* Daudin, 1803**

*Pelamis platurus* (Linnaeus, 1766)

**Genus *Praescutata* Wall, 1921**

*Praescutata viperina* (P. Schmidt, 1852)

**VI. Family Viperidae****Subfamily Crotalinae****Genus *Gloydius* Hoge et Romano-Hoge, 1981**

*Gloydius halys caucasicus* (Nikolsky, 1916)

**Subfamily Viperinae****Genus *Cerastes* Laurenti, 1768**

*Cerastes gasperettii gasperettii* Leviton and S. Anderson, 1967

**Genus *Echis* Merrem, 1820**

*Echis carinatus sochureki* Stemmler, 1969

*Echis multisquamatus* Cherlin, 1981

**Genus *Eristicophis* Alcock and Finn, 1896**

*Eristicophis macmahonii* Alcock and Finn, 1897

**Genus *Macrovipera* Reuss, 1927**

*Macrovipera lebetina cernovi* (Chikin et Szczerbak, 1992)

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*Macrovipera lebetina obtusa* (Dwigubsky, 1832)<sup>41</sup>

<sup>41</sup> According to Venchi and Sindaco (2006), the ssp. *obtusa* Dwigubskij, 1832 includes *euphratica* Martin, 1838, *turanica* Černov in Terent'ev & Černov, 1940 and *cernovi* Chikin & Ščerbak, 1992.

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**Genus *Montivipera* Nilson, Tuniyev, Andrén, Orlov, Joger and Herrmann, 1999**

*Montivipera albicornuta* (Nilson and Andrén, 1985)

*Montivipera latifii* (Mertens, Darevsky and Klemmer, 1967)

*Montivipera raddei raddei* (Boettger, 1890)

*Montivipera raddei kurdistanica* (Nilson and Andrén, 1986)<sup>42</sup>

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<sup>42</sup> Quoted later as a full species by Nilson *et al.* (1999).

*Montivipera wagneri* (Nilson and Andrén, 1984)<sup>43</sup>

<sup>43</sup> The specific distinctness of *V. wagneri* Nilson & Andrén, 1984 is based only on electrophoretic studies (Joger & Meder 1997).

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**Genus *Pseudocerastes* Boulenger, 1896**

*Pseudocerastes persicus* (Duméril, Bibron, and Duméril, 1854)

*Pseudocerastes fieldi* K. Schmidt, 1930

*Pseudocerastes urarachnoides* Bostanchi, S. Anderson, Kami, and Papenfuss, 2006

**Genus *Vipera* Laurenti, 1768<sup>44</sup>**

<sup>44</sup> Joger *et al.* (2003) identify five “evolutionary groups (species)” within the *V. kaznakovi-ursinii* complex: 1) *ursinii* including all European subspecies, 2) *renardi* including *eriwanensis* and Central Asian “*ursinii*”, 3) *anatolica*, 4) *darevskii*, 5) *kaznakovi* with *dinniki* and *orlovi*.

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*Vipera (Acridophaga) ebneri* Knoepfler and Sochurek, 1955

*Vipera (Acridophaga) eriwanensis* (Reuss, 1933)

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