

## Notes on the taxonomy, nomenclature and distribution of the *Trachylepis* (formerly *Mabuia*) *aurata* (Linnaeus, 1758) complex

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**Abstract.** *Lacerta aurata* Linnaeus, 1758 is a composed taxon based on at least seven different species and the current usage of the name *aurata* is not stable. In order to stabilize the taxonomy we reconsider all the Linnaean types of *L. aurata*, designate and redescribe a lectotype of *L. aurata* and correct the type locality of *L. aurata* as Asia Minor. We present morphological and distributional evidence for the specific status of the nominal subspecies *Trachylepis* [*Mabuia* auct.] *aurata aurata* and *T. a. septemtaeniata* and report *T. septemtaeniata* from Afghanistan for the first time.

### Introduction

The skink *Lacerta aurata* was described by Linnaeus (1758) on the basis of five earlier descriptions (Aldrovandi 1637, Seba 1734, Linnaeus 1749, Gronovius 1754, Linnaeus 1754). In all, four extant museum syntypes of *Lacerta aurata* Linnaeus, 1758 housed in the collections of the Swedish Museum of Natural History, Stockholm and the Museum of Evolution, Uppsala University, Uppsala are available. Andersson (1900) revised three of these syntypes and placed *L. aurata* into the genus *Mabuia* [= *Mabuia*]. Until recent time the name *Mabuia aurata* (Linnaeus, 1758) was commonly applied for one supposedly polytypic species distributed widely in the Middle East.

Generally, three subspecies of *Mabuia aurata* were recognized on the basis of colour pattern and number of gular and ventral scales: (i) *M. a. aurata* - having two longitudinal rows of large more or less rectangular dark spots on the dorsum (reported usually from Turkey and some adjacent Greek islands); (ii) *M. a. septemtaeniata* (Reuss, 1834) - with the dorsal pattern consisting of four more or less complete longitudinal rows of small dark spots (commonly assigned to populations from Eritrea, Syria, Iraq, southern Iran, Saudi Arabia, Bahrain, Qatar, United Arab Emirates and Oman); (iii) *M. a. transcaucasica* Černov, 1926 (formerly *M. a. affinis* [De Filippi, 1863]) characterised by the *septemtaeniata* pattern and higher number of gular and ventral scales (associated often with the individuals from Armenia, Azerbaijan [Nakhičevan], central and northern Iran and Turkmenistan) (for details and distribution see e.g.

Mertens 1924, Černov 1926, Schmidt 1939, Mertens 1952, Banikov et al. 1977, Yilmaz 1977, Achmedov and Ščerbak 1987, Leviton et al. 1992, Moravec 1998, Anderson 1999, Lymberakis and Kalionzopoulou 2003, Paysant 2005, Soorae and Al Hameiri 2005). Nevertheless, until recently, the definition of the individual subspecies remained unclear and different authors used different names for the same populations. Occasionally, also the trinomen *M. a. fellowsii* (Gray, 1845) was used for the western Turkish and adjacent Greek populations (e.g. Chondropoulos 1986).

Mausfeld et al. (2002) partitioned the genus *Mabuia* into four genera and restricted the application of the name *Mabuia* to the South American clade of these skinks. Therefore, we tentatively associate the skinks known formerly as *M. aurata* with the generic name *Trachylepis*, which was resurrected by Bauer (2003) for the Afro-Malagasy evolutionary lineage.

Our recent finding of sympatric occurrence of *T. a. septemtaeniata* with *T. a. aurata* in southern Turkey (surroundings of Birecik, voucher specimen ZFMK 13939) indicates specific status for both these taxa. However, serious questions concerning the validity of the name *Lacerta aurata* arose out from the study of the original description of this species and published revisions of its type specimens. The description itself is brief, general and largely uninformative. Type localities of *L. aurata* are given as "Jersea Anglorum, Cypro" [English island of Jersey and Cyprus] and lie outside the known ranges of today's *T. aurata* and *T. septemtaeniata*. The only species of *Trachylepis* living on Cyprus is *T. vittata* (Olivier, 1804) (see e.g. Schätti and Sigg 1989). Boulenger (1887) listed the populations from the Middle East under the name *Mabuia septemtaeniata* and used the specific epithet *aurata* for South American species. Lönnberg (1896, ex Andersson 1900) examined the Uppsala syntype of *L. aurata* and determined it as *Mabuia septemtaeniata*. Later, Andersson (1900) studied the remaining three Stockholm syntypes and associated them with names

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of three quite different skink species: *Mabuia bistriata* (Spix, 1825), *Mabuia homalocephala* (Wiegmann, 1828) and *Mabuia multifasciata* (Kuhl, 1820). This author also accepted Lönnberg's finding and concluded: "Lönnberg says that the type for Linnaeus description in Amoen. Acad. is a *Mabuia septemtaeniata* (Reuss), which thus first of all ought to bear the Linnean name." The above described situation apparently sheds doubt on the correctness of the existing usage of the name *aurata*.



**Figure 1.** Syntype of *Lacerta aurata* Linnaeus, 1758 (Uppsala Univ. Zool. Mus. Nr. 38). Designated as a lectotype of *Lacerta aurata* Linnaeus, 1758.



**Figure 2.** Syntype of *Lacerta aurata* Linnaeus, 1758 (NRM 136). Determined as *Trachylepis homalocephala* (Wiegmann, 1828).



**Figure 3.** Syntype of *Lacerta aurata* Linnaeus, 1758 (NRM 137). Determined as *Eutropis cf. multifasciata* (Kuhl, 1820).

In case that Lönnberg's determination is right, the name *Lacerta aurata* Linnaeus, 1758 would have priority over *Euprepis septemtaeniata* Reuss, 1834. In this case the Turkish and Greek populations currently known as *Trachylepis aurata* or *T. a. aurata* should receive a new name. *Euprepis fellowsii* Gray, 1845 would be available in this case.

To solve this problem, a thorough re-examination of the Linnaean types of *Lacerta aurata* appeared to be necessary.

## Results

### 1. Type specimens of *Lacerta aurata*

#### *Specimen described by Linnaeus (1749)*

The first syntype of *Lacerta aurata* (Fig. 1) was originally described as *Lacerta aurata* by Linnaeus (1749). It originated from Linnaeus' own collection. Today it is deposited in the collections of the Museum of Evolution, Uppsala University, Uppsala (Catalogue number: Uppsala Univ. Zool. Mus. Nr. 38). This specimen is relatively well preserved; nevertheless, it is completely faded. Its general habitus and scalation correspond to both *Trachylepis aurata* and *T. septemtaeniata* (see e.g. Achmedov and Ščerbak 1987). However, the absence of the colour pattern does not allow to verify today if Lönnberg's identification (*T. septemtaeniata*) was correct.

#### *Specimens described by Linnaeus (1754)*

Three other syntypes of *Lacerta aurata* belonged to the collection of King Adolf Friderick of Sweden. They were described by Linnaeus (1754) as *Lacerta barbara* and they are housed in the collections of the Swedish Museum of Natural History, Stockholm (NRM 136-138). The re-examination of these specimens has generally confirmed the original Andersson's (1900) determination. The syntype NRM 136 (Fig. 2) represents *Trachylepis homalocephala* (Wiegmann, 1828) sensu Bauer (2003) and is conspecific with the two Linnean types of *Lacerta punctata* Linnaeus, 1758 catalogued as NRM 135. The specimen NRM 137 (Fig. 3) corresponds fairly well to Asian *Eutropis multifasciata* (Kuhl, 1820) or to some closely related species. The last Stockholm syntype (NRM 138) (Fig. 4) determined by Andersson (1900) as *Mabuia bistriata* can be better identified with today's *Mabuia nigropunctata* (Spix, 1825), which was until recently confused with the former species. This determination is supported by the following characteristics found in the syntype: five supraciliaries, tricarinate dorsal scales, wider snout and absence of light lateral stripe above the lateral dark band (see Avila-

Pires 1995). On the other hand, the palms of the syntype are covered by more or less subequal tubercles, which characteristic is more typical for *M. bistriata*.

#### *Specimens described by Gronovius (1754)*

The third source quoted by Linnaeus (1758) was Gronovius (1754: p. 75) who provided a description of a species named “*Scincus*” (Linnaeus added a question mark at this name). This relatively detailed description (pp. 75-76) is based on five earlier publications and apparently gathers several different reptile species under one name. The presented characteristics are mostly general and do not make possible a closer determination of the given taxon. In addition, it is reported to inhabit “Surinamam” [= Surinam].

#### *Specimen described by Seba (1734)*

This specimen was described and figured by Seba (1734: p. 141, pl. 89, fig. 3) as “*Lacerta, Americana*”. Both the text and the figure concern a representative of the family Teiidae - most probably *Ameiva ameiva* (Linnaeus, 1758).

#### *Specimen described by Aldrovandi (1637)*

The last source cited by Linnaeus (1758) was a figure of “*Lacertus Cyprius scincoides*” published by Aldrovandi (1637: p. 660). The given figure resembles Schneider’s skink *Eumeces schneideri* (Daudin, 1802) living also on Cyprus. Thus the fact that Aldrovandi mentioned Cyprus as a locality of this skink (p. 659) explains probably why Linnaeus (1758) erroneously believed that his *L. aurata* lives on this island.

## 2. Identity of *Lacerta aurata*

The above account shows that the description of *Lacerta aurata* is a composition based on at least seven different species and that the Uppsala syntype plays the key role in decision, which taxon should really bear the Linnean name. Regarding the fact that the faded colour pattern cannot be taken into consideration we examined the external morphology of 58 museum specimens and available photographs of *Trachylepis aurata* and *T. septemtaeniata* from Greece, Turkey, Syria, Iraq, Iran, Turkmenistan and Afghanistan (see Appendix) to find some more suitable discriminative character. It turned out that the position of frontal and third supraocular shield provides the needed key. These shields are separated from each other in *aurata*, whereas they are in contact in *septemtaeniata* (as well as the related *T. vittata*) (see Fig. 5).

In the Uppsala syntype the position of the frontal and third supraocular shield is the same as in *aurata*. Therefore, we believe that this syntype represents the taxon, which is presently called *Trachylepis aurata*. In

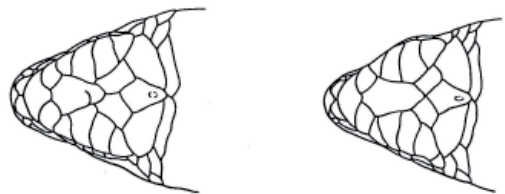
order to stabilize the taxonomy we take this opportunity to designate the Uppsala syntype (Uppsala Univ. Zool. Mus. Nr. 38) as the lectotype of *Lacerta aurata* Linnaeus, 1758. As a consequence of this, the remaining extant type specimens (NRM 136-138) as well as the specimens figured by Aldrovandi (1637) and Seba (1734) and described by Gronovius (1754) become paralectotypes. The Linnean type locality of *Lacerta aurata* (Jersey and Cyprus) is apparently incorrect. Thus, according to provisions of Article 76A.1.4. of the International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature 1999) we correct the type locality of *L. aurata* as Asia Minor.

### 3. Description of the lectotype of *Lacerta aurata*

Adult specimen (sex undetermined) with moderate robust and slightly depressed body; snout-vent length 86mm; tail original, partly broken, round in cross section; tail length 126 mm; head length from rostrum



**Figure 4.** Syntype of *Lacerta aurata* Linnaeus, 1758 (NRM 138). Determined as *Mabuya nigropunctata* (Spix, 1825).



**Figure 5.** Difference in head scalation between *Trachylepis aurata* and *T. septemtaeniata*. Third supraocular shield separated from the frontal shield in *aurata* (left) and in contact with the frontal shield in *septemtaeniata* (right).

to the end of interparietal shield 15.4 mm; head length from rostrum to anterior margin of eye opening 18.1 mm; maximal head width 13.2 mm; four upper labials anterior and two upper labials posterior to subocular shield, three smaller scales between last upper labial and ear opening (same for left and right side); lower eyelid with a distinct transparent oval window; ear opening not covered by enlarged scales; area of the left mouth corner damaged; rostral, supranasal and frontonasal shields damaged; five supraciliary shields (left and right side); first and second supraocular shields in contact with frontale, third and fourth supraoculars in contact with frontoparietal shield (both on left and right side); postfrontal shields in a wide contact; parietal shields completely separated by interparietal shield; one pair of smooth nuchal shields; 33 scales around mid-body; dorsal scales with three slight keels; 61 gular plus ventral scales (from mental shield to vent), gular and ventral scales smooth; hind leg length (left/right) 30/30 mm; fourth finger length (from insertion of 3rd finger, claw included) 9.7/9.8 mm; fourth toe length (from insertion of 5th toe, claw included) 12.9/12.8 mm; lamellae under the fourth toe 18/18, flat and smooth; colouration (in alcohol) light brown, pattern completely faded.

### Discussion and conclusions

The re-examination of the type material of *Lacerta aurata* Linnaeus, 1758 confirmed that the name *Lacerta aurata* can be fixed as a valid name. Thus, the name *Trachylepis aurata* (Linnaeus, 1758) can be correctly applied to populations having third supraocular shield separated from the frontal shield and dorsal pattern consisting of two longitudinal rows of large more or less rectangular dark spots. In consequence the name *Euprepis fellowisii* Gray, 1845 remains in the synonymy of *T. aurata*. According to our current knowledge this species is distributed in Turkey (including one locality in the European part; Bodenheimer 1944) and adjacent Greek islands: Kastellorizo, Kos, Rhodos, Samos, Simi (Chondropoulos 1986). Its occurrence in northern Syria and northern Iraq is expected (see e.g. Schmidt 1939).

*Trachylepis septemtaeniata* (Reuss, 1834) remains the valid name for the populations, which are characterised by third supraocular shield being in contact with the frontal shield and by pattern of four longitudinal rows of small dark spots on the dorsum (the spots can fuse anteriorly and disappear posteriorly). This species is known from Eritrea, Oman, United Arab Emirates, Qatar, Bahrain, Saudi Arabia, Syria, Iraq, Armenia, Azerbaijan, Iran and Turkmenistan. Populations coming from Armenia, Azerbaijan (Nakhičevan), central and northern Iran and Turkmenistan differ from the remaining ones by higher number of gular and ventral scales (e.g. Achmedov et Ščerbak 1987, Anderson 1999). They are traditionally recognized as a

distinct subspecies currently known under the name *T. s. transcaucasiaca* (Černov, 1926) (see Anderson 1999). Nevertheless, more detailed study is necessary to clarify the exact distribution and taxonomic status of this form. Our specimen (ZFMK 9064) collected in the vicinity of Sheva (Dar-e-Nur, Nangahar, Afghanistan) represents the first record of *T. septemtaeniata* for Afghanistan (occurrence expected by Leviton and Anderson 1970) and extends the known range from the easternmost Iranian locality (see Anderson 1999) for ca. 1200 km air distance to the east!

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### References

- Achmedov, S.B., Ščerbak, N.N. (1987): Geografičeskaja izmenčivost' i vnutrividovaja sistematika zolotistoj mabuji (Sauria, Scincidae). *Vestn. Zool.* **1987**: 20-24.
- Aldrovandi, U. (1637): De quadvrpedib' digitatis viviparis libri tres, et De quadvrpedib' digitatis oviparis libri duo. Bartholomaeus Ambrosinus. Bonon. N. Tebaldinum.
- Anderson, S.C. (1999): The lizards of Iran. *Contributions to Herpetology (SSAR)* **15**. Ithaca, New York.
- Andersson, L.G. (1900): Catalogue of Linnean type-specimens of Linnaeus's Reptilia in the Royal Museum in Stockholm. *Bih. Kongl. Svenska Vetenskaps-Akad. Handl.* **26**: 1-29.
- Avila -Pires, T.C.S. (1995): Lizards of Brazilian Amazonia (Reptilia: Squamata). *Zool. Verh.* **299**: 1-706.
- Banikov, A.G., Darevskij, I.S., Iščenko, V.G., Rustamov, A.K., Ščerbak N.N. (1977): Opređelitel' zemnovodnyh i presmykajuščichsja fauny SSSR. Moskva, Prosvěšćenie.
- Bauer, A. (2003): On the identity of *Lacerta punctata* Linnaeus 1758, the type species of the genus *Euprepis* Wagler 1830, and the generic assignment of Afro-Malagasy skinks. *Afr. J. Herpetol.* **52**: 1-7.
- Bodenheimer, F.S. (1944): Introduction to the knowledge of the Amphibia and Reptilia of Turkey. *Rev. Fac. Sci. Istanbul, Ser. B*, **9**: 1-78.
- Boulenger, G.A. (1887): Catalogue of the lizards in the British Museum (Natural History). Vol. 3, Lacertidae, Gerrosauridae, Scincidae, Anelytropidae, Dibamidae, Chamaleontidae. London, British Museum (Nat. Hist.).
- Černov, S.A. (1926): Sur la connaissance de la faune herpétologique d'Arménie et de la contree du Nakhiezevan. *Bull. Sci. Inst. Explor. Reg. Caucase Nord. Vladicaucase* **1**: 63-72.
- Chondropoulos, B.P. (1986): A checklist of the Greek reptiles. I. The Lizards. *Amphibia-Reptilia* **7**: 217-235.

- Daudin, F.M. (1802): Histoire naturelle, générale et particulière des Reptiles. 4, 397 pp., Paris.
- De Filippi, F. (1863): Nuove o poco note specie di animali vertebrati raccolte in un viaggio in Persia nell'estate dell'anno 1862. Arch. Zool. Anat. Fisiol. Modena 2: 15.
- Gray, J.E. (1845): Catalogue of the specimens of lizards in the collection of the British Museum. London, Trustees of the British Museum.
- Gronovius, L.T. (1754): Museum Ichthyologicum, sistens piscium indigenorum & quarumdam exoticorum, qui in museo Laurentii Theodori Gronovii adservantur, descriptiones systematico. Leiden, Haak.
- International Commission on Zoological Nomenclature (1999): International code of zoological nomenclature, fourth edition. London, International Trust for Zoological Nomenclature.
- Kuhl, H. (1820): Beiträge zur Zoologie und vergleichenden Anatomie. 152 pp. Frankfurt a.M., Hermannsche Buchhandlung.
- Leviton, A.E., Anderson, S.C. (1970): The amphibians and reptiles of Afghanistan, a checklist and key to the herpetofauna. Proc. Californ. Acad. Sci. 4th ser. 38: 163-206.
- Leviton, A.E., Anderson, S.C., Adler, K., Minton, S.A. (1992): Handbook to Middle East amphibians and reptiles. SSAR, Oxford, Ohio.
- Linnaeus, C. (1749): Amoenitates Academicæ, seu Dissertationes varie physicae, medicae, botanicae antehac seorsim editae nunc collectae et auctae, cum tabulis aeneis. Holmiae et Lipsiae.
- Linnaeus, C. (1754): Museum S:ae R:ae M:tis. Adolphi Friderici Regis Svecorum, Gothorum, Vandalorumque. Haer. Norv. Duc. Slesv. Hols. Storm. Ditm. Com. Oldenb. Delmenhorstiae. In quo animalia rariora imprimis et exotica: Quadrupedia, Aves, Amphibia, Pisces, Insecta, Vermes describuntur et determinatur, Latine et Suetice cum iconibus. Holmiae, Typ. Regia, Stockholm.
- Linnaeus, C. (1758): Systema Naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Editio decima, reformata. Tomus I. Holmiae, Laurentii Salvi, Stockholm.
- Lönnberg, E. (1896): Linnean type-specimens of birds, reptiles, batrachians and fishes in the zoological museum of the R. University in Upsala. Bih. K. Svensk Vet. Akad. Handl. 22: 1-45.
- Lymberakis, P., Kalionzopoulou, A. (2003): Additions to the herpetofauna of Syria. Zool. Middle East 29: 33-39.
- Mausfeld, P., Schmitz, A., Böhme, W., Misof, B., Vrcibradic, D., Rocha, C.F.D. (2002): Phylogenetic affinities of *Mabuya atlantica* Schmidt, 1945, endemic to the Atlantic Ocean archipelago of Fernando de Noronha (Brazil): necessity of partitioning the genus *Mabuya* Fitzinger, 1826 (Scincidae: Lygosominae). Zool. Anz. 241: 281-293.
- Mertens, R. (1924): Amphibien und Reptilien aus dem nördlichen Mesopotamien. Abh. Ber. Mus. Naturk. Heimatk., Magdeburg, 3: 349-390.
- Mertens, R. (1952): Amphibien und Reptilien aus der Türkei. Rev. Fac. Sci. Univ. Istanbul, ser. B, 17: 41-75.
- Moravec, J. (1998): Taxonomic and faunistic notes on the herpetofauna of Syria (Reptilia). - Faun. Abh. Staat. Mus. Tierk. Dresden, 21, Suppl.: 99-106.
- Olivier, G.A. (1804): Voyage dans l'Empire Othoman, L'Égypte et la Perse. Agasse, Paris. Vol. 4.
- Paysant, F. (2005): Herpetological notes on the island Kastellorizo (South-east Aegean, Greece). Herpetozoa 18: 80-83.
- Reuss, A. (1834): Zoologische Miscellen, Reptilien, Ophidien. Abhandlungen aus dem Gebiete der beschreibenden Naturgeschichte. Mus. Senckenberg., Frankfurt a.M. 1: 127-162.
- Schätti, B., Sigg, H. (1989) Die Herpetofauna des Insel Zypern. Teil 1: Die herpetologische Erforschung/Amphibien. Herpetofauna 11: 9-16.
- Schmidt, K.P. (1939): Reptiles and amphibians from southwestern Asia. Field Museum of Natural History, Zool. Ser. 24: 49-92.
- Seba, A. (1734): Locuoletissimi rerum naturalium thesauri accurate descriptio, et iconibus artificiosissimis expressio, per universam physices historiam. Opus, cui, in hoc rerum genere, nullum par extitit. Ex toto terrarum orbe collegit, digessit, descripsit, et depingendum curavit Albertus Seba, Etzela Oostfrisius, Academiae Caesareae Leopoldinae Carolinae Naturae Curiosorum Collega Xenocrates dictus; Societatis Regiae Anglicanae, et Instituti Bononiensis, sodalis. Tomus I. J. Wetstenium, & Gul. Smith, & Janssonio-Waesbergios, Amstelaedami.
- Soorae, P.S., Al Hameiri, A. (2005): *Mabuya aurata septemtaeniata* (Family, Scincidae): first record for the United Arab Emirates. Herp. Bull. 92: 19-20.
- Spix, J.B. von (1825): Animalia Nova sive species novae Lacertarum, quas in itinere per Brasiliam annis MDCCCXVII-MDCCCXX jussu et auspiciis Maximiliani Josephi I. Bavariae regis. Monachii: 1-26.
- Wiegmann, A.F.A. (1828): Beiträge zur Amphibienkunde. Isis (Oken) 21: 364-383.
- Yilmaz, I. (1977): *Mabuya aurata* (Scincidae, Lacertilia) 'nin Anadolu'da subspezifk durumu. The subspecific status of *Mabuya aurata* (Scincidae, Lacertilia) in Turkey. E.Ü. Fen Fakültesi Dergisi, Seri B, C.I, S.2: 111-137.

## Appendix

**Abbreviations:** NMP = National Museum Prague; ZFMK = Zoologisches Forschungsmuseum Alexander Koenig, Bonn

### *Trachylepis aurata*

Greece: NMP 70284: Rhodos, Lindos.

Turkey: NMP 70285: 15 km E of Kas; NMP 70286: "Turkey"; ZFMK 7241: Izmir, Efes (Ephesus); ZFMK 59965: Gaziantep, Polateli; ZFMK 57086: Icel, Kizkalezi; ZFMK 57995: Püren Pass (Püren gecidi); ZFMK 68537: Mersin; 75863: Mardin, Derik; ZFMK 75873: Urfa, Halfeti; ZFMK 75880: Maras, Pazarcik.

### *Trachylepis septemtaeniata* ssp.

Afghanistan: ZFMK 9064: Nangahar, Dar-e-Nur, vic. of Sheva.

Iran: NMP 34564: Qanar Marwan; NMP 35555: Markan, 8 km N of Ev Ogli; ZFMK 26842-44: Fars, Busheer; ZFMK 71601: Shiraz, Yasug.

Iraq: NMP 33089: Garraf at Baghdad; NMP 70613/1-19: Baghdad.

Syria: NMP 34788/1-3: Abu Kamal; NMP 34894: Abu Kamal; NMP 72492: Abu Kamal, wadi ar-Ratgah; ZFMK 71726: Abu Kamal.

Turkey: ZFMK 13939: Birecik.

Turkmenistan: NMP 70614: Kaakha; NMP 70615/1-3: "Turkmenistan"; NMP 70717/1-8: Kopet Dagh, Fijuza-Çubi; ZFMK 53810: Aşchabad.