

Report on Hungarian entomological expeditions to Iran

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ABSTRACT: Data related to the fieldwork of 12 entomological expeditions to Iran, carried out by Hungarian researchers during the period of 1995–2004, and notes on the environments are given.

Introduction

During the period of 1995–2004 Hungarian researchers staged several entomological expeditions to the Near and Middle East. This paper reports on the Iranian segments of 12 of these expeditions. Collecting activities were mainly focused on Lepidoptera and Coleoptera, however, insects belonging to other orders were also collected opportunistically. The expeditions reached various parts of Iran and carried out fieldwork in diverse habitats in order to obtain a representative collection of specimens of the Iranian insect fauna and thus gain an insight into its biodiversity.

Localities, where fieldwork was carried out, are far too numerous to be described individually and in details here. Instead, a brief and general description of the physical features of Iran and its environments are given below.

Structurally, Iran is an extremely complex area. Despite the efforts of local scientists as well as many expeditions of various nations, partly due to political terrain and partly to the difficult nature of the country itself, complete exploration and investigation of its fauna have not been achieved so far. The work of the Hungarian researchers represent a modest contribution to this research.

The bulk of the collected material, including all holotypes, is deposited in the Hungarian Natural History Museum. Private collections of the participants of the trips also house specimens. Various parts of the collected material is studied by individual workers and a collaborative database is being created of certain insect groups (e.g. Scarabaeoidea). It is suggested that this introductory paper is the first of a series. It is envisaged that following papers will present the results of studies of particular insect groups collected during these trips.

Collecting localities are sorted in chronological order and numbered continuously. Geographic/cartographic names are spelled according to ANONYMUS (1994).

The authors of this paper are listed in alphabetical order.

Geography and environments

The Islamic Republic of Iran is bordered on the north by the Caspian Sea, Armenia, Azerbaijan and Turkmenistan, on the east by Afghanistan and Pakistan, on the south by the Persian Gulf and the Gulf of Oman, and on the west by Iraq and Turkey. Its area is 1,648,000 square kilometres, of which 14% is arable land, 8% is forest, 47% is natural (i.e. non-arable) pastures and the remaining 31% is varied arid environments (YALE *et al.* 2001: 24), including salt swamps, sand and gravel deserts and bare-rock high mountains. In general, Iran consists of a central plateau, 1000

to 1500 m above sea level. Two great deserts, Dasht-é Kavir and Dasht-é Lut frame most of the north-east and east of this area. The central plateau is surrounded by mountain ranges of varying heights. Most rivers drain into the Persian Gulf, the Caspian Sea and into some of the salty lakes of the interior. The Persian Gulf is 965 km long. Its easternmost section, east of the Strait of Hormoz is the Gulf of Oman.

The Central Plateau

Only the western and larger half of the great Plateau of Iran belongs to the Islamic Republic of Iran today. This distinctively arid central region covers more than half of the country's land area and it forms a link with the steppes of Central Asia to the plateau of Asia Minor. It is considered as a part of a larger topographical unit that extends east into Afghanistan and Pakistan (ROGERS 1989). It is divided into many basins of varying altitudes, parts of the Dasht-é Lut being the lowest (less than 500 m above sea level). Watercourses of the Plateau drain into these basins, often forming salty swamps. The 200,000 square kilometres of Dasht-é Kavir and Dasht-é Lut (166,000 sq km) (YALE *et al.* 2001: 24) are true deserts, but great parts of the Central Plateau have steppes and desert-steppes. HOBBERLANDT (1981: 7) distinguishes two main plant cover types of this arid region: (1) the Tragacanthic type association, or Astragaleta, usually occupying the more elevated areas, with spiny bushes or brushwood of Tragacanthic or other *Astragalus* and *Acantholimon* species, together with other smaller bushes and grassy and herbaceous plants, including *Artemisia* and (2) the Artemisia type associations of the lower regions, which are composed of dwarf bushes, grasses and herbs with *Herba alba* as the dominant species.

Zagros Mountains

This massif lies in the west, stretching from Kordestan province to Bandar-é Abbas. Streams cut deep, narrow gorges through this range, creating a very rugged terrain, alternating high tablelands and lowland basins, some containing lakes, often saline. The highest point is Mt. Haft Tanun (4548 m). The southern and eastern parts of the ranges are somewhat lower, only a few peaks exceed 3000 m. Vegetation cover is sparse, especially on the hotter, southern slopes, but on the higher elevations (1500- 2500 m) of the central and north-west Zagros Mountains patches of open forests dominated by oaks (*Quercus* spp.) and junipers (*Juniperus* spp.) can be found. The southern parts are the most arid regions of the ranges. Semidesert oak forests of the Irano-Turanian complex with a few Mediterranean elements, called "Zagrosian forests", cover the outer slopes of the southern and south-western margins of the lowlands (HOBBERLANDT 1981: 10).

Sabalan and Talesh Mountains

These volcanic ranges are in the Azerbaijan province, in the northernmost section of Iran. Their highest elevation is Mt. Sabalan (4811 m).

Elborz Mountains

These mountains stretch from the borders of the Republic of Azerbaijan towards Turkmenistan. It's highest peak is Damavand (5671 m). The northern slopes, up to 2500 m above sea level, are densely vegetated, mainly by broad-leaved deciduous forests, dominated by oaks (*Quercus* spp.) maple (*Acer* spp.), pines (*Pinus* spp.) and elms (*Ulmus* spp.). Deforestation, erosion and overgrazing are evident on the southern slopes and in the lowland areas.

Southern and eastern Iran

The lowlands of these regions fall well into the arid zone and in many parts are completely void of vegetation. Scattered juniper trees and scrubland, featuring prickly thrift (*Acantholimon* sp.) and camel's thorn (*Alhagi camelorum*) can be found in the wetter parts while the rolling *dasht* (sand and gravel plains or plateaus) is populated by *Artemisia* spp. and *Herba alba*.

Altered environments

Like most other parts of the World, Iran's natural environments are also being altered, mainly by human activities. 94,000 square kilometres of land is irrigated (1993 est.) causing economically necessary, albeit detrimental changes to the naturally arid environments. Although Iran signed a number of international agreements regarding Biodiversity, Climate Change, Desertification, Endangered Species, Hazardous Wastes, Ozone Layer Protection and

Wetlands Preservation, the country is plagued by air pollution, especially in urban areas, from vehicle emissions, refinery operations and industrial effluents, by deforestation, overgrazing, desertification and oil pollution in the Persian Gulf (YAHOO! 2001).

Climate

The climate of Iran is one of great extremes. Owing to its southerly position, adjacent to Arabia and near the Thar Desert, the summer is extremely hot, with temperatures in the interior exceeding 55°C. Winters are often very cold, mainly due to the relatively high altitude of the country and its continental positioning. The lowest winter temperature at -30 °C was measured in the north-west Zagros and -20 °C is common in many places (FISHER 2001: 492). Most of Iran is arid, however, parts of the Caspian provinces and the area north of the Elborz Mountains receive more rain (1300–2000 mm or more per annum) resulting in a hot and humid climate there in the summer, resembling that of the lower Himalayas. Rainfall and winter snow in the mountainous regions amount to 500–1000 mm on average. Annual precipitation in the central plateau is 100–400 mm. The innermost territory and the extreme east and south of Iran are the driest, receiving less than 100 mm rain in a year.

Dates and participants of the expeditions

Dates ¹	Participants ²
22 August –1 September 1995	Nádai László
30 April –14 May 1998	Fábián György, Székely Kálmán
4–30 April 1999	Fábián György, Nádai László, Rahmé Nikola, Székely Kálmán
15 May–11 June 1999	Gaskó Kálmán, Hác Tamás, Kőszegi Gábor
6 April–2 May 1999	Benedek Balázs, Hác Tamás, Kőszegi Gábor
11 April–3 May 2000	Darnai László, Gaskó Kálmán, Juhász István
26 April–11 May 2000	Hentschel Péter, Szabó Attila
9 June–4 July 2000	Fábián György, Szécsényi Lajos, Székely Kálmán
14 June–4 July 2000	Gaskó Kálmán, Kókai Tamás, Rozner György
30 June–21 July 2000.	Benedek Balázs, Hác Tamás, Kőszegi Gábor
26 April–17 May 2001	Fábián György, Dr. Vig Károly
6–21 April 2004	Hác Tamás, Benedek Balázs

List of collecting localities

Dates are denoted here according to Hungarian grammar (year, month, day) as they appear on the specimen labels.

001. Prov. Tehran, Elborz Mts., Tehran, 1995. VIII. 22., leg. L. Nádai.
002. Prov. Tehran, Elborz Mts., Damavand, Rineh, 2200 m, 1995. VIII. 24., leg. L. Nádai.
003. Prov. Tehran, Elborz Mts., Damavand, S-side, 2800 m, 1995. VIII. 25., at light, leg. L. Nádai.
004. Prov. Tehran, Elborz Mts., Damavand, S-side, 3000 m, 1995. VIII. 26., leg. L. Nádai.
005. Prov. Tehran, Elborz Mts., Damavand, S-side, 3500 m, 1995. VIII. 26., leg. L. Nádai.
006. Prov. Tehran, Elborz Mts., Damavand, S-side, 2400 m, 1995. VIII. 28., leg. L. Nádai.
007. Prov. Fars, Shiraz, 1995. VIII. 31., leg. L. Nádai.

¹ Dates only relate to the Iranian segments of these expeditions, which may have reached a number of other locations also outside Iran.

² The names of the participants of the expeditions are written according to Hungarian grammar: surnames followed by given names.

008. Prov. Fars, Persepolis, 1995. IX. 01., leg. L. Nádai.
009. Prov. Tehran, Elborz Mts., Darban valley, 2500 m, 51°29'02" E, 35°46'39" N, 1998. IV. 30, leg. Gy. Fábíán & K. Székely.
010. Prov. Tehran, Elborz Mts., Damavand, 3 km W from Reine, 2400 m, 52°09'02" E, 35°53'22" N, 1998. V. 01., leg. Gy. Fábíán & K. Székely.
011. Prov. Tehran, Elborz Mts., Damavand, 3 km W from Reine, 2400 m, 52°09'02" E, 35°53'22" N, 1998. V. 02., leg. Gy. Fábíán & K. Székely.
012. 15 km S from Amol, 300 m, 52°17'21" E, 36°29'18" N, 1998. V. 03., leg. Gy. Fábíán & K. Székely.
013. Prov. Mazandaran, Elborz Mts., 35 km S from Amol, 500 m, 52°20'02" E, 36°22'01" N, 1998. V. 03., leg. Gy. Fábíán & K. Székely.
014. Prov. Tehran, Elborz Mts., Damavand, 5 km W from Reine, 2200–2650 m, 52°02'24" E, 35°53'22" N, 1998. V. 05., leg. Gy. Fábíán & K. Székely.
015. Prov. Tehran, Elborz Mts., Damavand, 7 km NW from Reine, 3500 m, 52°02'20" E, 35°55'20" N, 1998. V. 05., leg. Gy. Fábíán & K. Székely.
016. Prov. Tehran, Elborz Mts., Damavand, 10 km W from Reine, above Lar-e Polur, 2200–2650 m, 52°01'02" E, 35°52'11" N, 1998. V. 06., leg. Gy. Fábíán & K. Székely.
017. Prov. Isfahan, Isfahan city, 1400 m, 51°37' E, 32°50' N, 1998. V. 07., leg. Gy. Fábíán & K. Székely.
018. Prov. Fars, Shiraz city middle, 1300 m, 52°32' E, 29°25' N, 1998. V. 07–08., leg. Gy. Fábíán & K. Székely.
019. Prov. Fars, Zagros Mts., Takht-e Gamsid, Persepolis, 1100 m, 52°54'44" E, 29°54'20" N, 1998. V. 09., leg. Gy. Fábíán & K. Székely.
020. Prov. Büyer Ahmad, Zagros Mts., 3 km N from Sisaht, 2700 m, 51°23'21" E, 31°09'22" N, 1998. V. 10–12., leg. Gy. Fábíán & K. Székely.
021. Prov. Büyer Ahmad, Zagros Mts., Sisaht village, 2400 m, 51°23'02" E, 31°09'12" N, 1998. V. 10–12., leg. Gy. Fábíán & K. Székely.
022. Prov. Tehran, Elborz Mts., Damavand, 10 km W from Reine, 2200–2650 m, 52°02'24" E, 35°53'22" N, 1998. V. 14., leg. Gy. Fábíán & K. Székely.
023. Prov. Mazandaran, Elborz Mts., 35 km S from Amol, 500 m, 52°20'02" E, 36°22'01" N, 1998. V. 14., leg. Gy. Fábíán & K. Székely.
024. Prov. Azarbaygan-e Garbi, 3 km S from Margan, 1200 m, 44°54'02" E, 39°12'01" N, 1998. V. 29., leg. Gy. Fábíán & K. Székely.
025. Prov. Fars, 7 km from Persepolis, 1100 m, 52°54'44" E, 29°54'20" N, 1998. V. 08., leg. Gy. Fábíán & K. Székely.
026. Prov. Büyer Ahmad, Zagros Mts., Yasugh city, 1100 m, 51°31'54" E, 31°00'20" N, 1998. V. 10., leg. Gy. Fábíán & K. Székely.
027. Prov. Azarbaygan-e Garbi, Margan, 1100 m, 44°55'49" E, 39°09'38" N, 1999. IV. 13., leg. Gy. Fábíán, L. Nádai, N. Rahmé & K. Székely.
028. Prov. Azarbaygan-e Garbi, Shiramin, 1500 m, 45°50'14" E, 37°37'30" N, 1999. IV. 13., leg. Gy. Fábíán, L. Nádai, N. Rahmé & K. Székely.
029. Prov. Azarbaygan-e Garbi, Zagros Mts., Ajabshir, 1600 m, at light, 45°51'38" E, 37°32'09" N, 1999. IV. 13., leg. Gy. Fábíán, L. Nádai, N. Rahmé & K. Székely.
030. Prov. Azarbaygan-e Garbi, Zagros Mts., Qarinje, 1400 m, 46°09'26" E, 36°48'39" N, 1999. IV. 14., leg. Gy. Fábíán, L. Nádai, N. Rahmé & K. Székely.
031. Prov. Kordestan, Zagros Mts., 10 km S from Hoseinabad, 1600 m, 47°02'40" E, 35°40'43" N, at light, 1999. IV. 14., leg. Gy. Fábíán, L. Nádai, N. Rahmé & K. Székely.
032. Prov. Lorestan, Zagros Mts., 5 km S from Borujerd, 1500 m, 48°44'35" E, 33°51'26" N, 1999. IV. 15., leg. Gy. Fábíán, L. Nádai, N. Rahmé & K. Székely.
033. Prov. Lorestan, Zagros Mts., Bongale, 1600 m, 48°52'17" E, 33°36'26" N, 1999. IV. 15., at light, leg. Gy. Fábíán, L. Nádai, N. Rahmé & K. Székely.
034. Prov. Lorestan, Zagros Mts., Aznavelet, 2500 m, 49°27'19" E, 33°27'51" N, 1999. IV. 16., leg. Gy. Fábíán, L. Nádai, N. Rahmé & K. Székely.
035. Prov. Fars, Zagros Mts., Naks-e Rustam, 1600 m, 52°34'09" E, 30°01'44" N, 1999. IV. 17., leg. Gy. Fábíán, L. Nádai, N. Rahmé & K. Székely.
036. Prov. Fars, Zagros Mts., Takht-e Jamshid, 1600 m, 52°51'38" E, 29°55'43" N, 1999. IV. 17., leg. Gy. Fábíán, L. Nádai, N. Rahmé & K. Székely.
037. Prov. Fars, Zagros Mts., 5 km S from Komehr, 2900 m, 51°51'10" E, 30°27'15" N, at light, 1999. IV. 17., leg. Gy. Fábíán, L. Nádai, N. Rahmé & K. Székely.

038. Prov. Fars, Zagros Mts., 3 km W from Sangar, 2000 m, 52°01'08" E, 30°11'41" N, at light, 1999. IV. 18., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
039. Prov. Fars, Zagros Mts., 5 km S from Komehr, 2900 m, 51°51'10" E, 30°27'15" N, at light, 1999. IV. 19., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
040. Prov. Fars, Zagros Mts., Marv Dasht, 1600 m, 52°45'20" E, 29°51'26" N, 1999. IV. 20., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
041. Prov. Fars, Zagros Mts., Saadat-Shah, 1900 m, 53°12'38" E, 30°05'21" N, 1999. IV. 20., at light, leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
042. Prov. Fars, Zagros Mts., 10 km N from Dehbid, 2400 m, 53°11'45" E, 30°43'55" N, 1999. IV. 21., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
043. Prov. Yazd, Kohrud Mts., Dumb Qaftar, Haris Mt., 1100 m, 54°05'10" E, 32°33'13" N, at light, 1999. IV. 21., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
044. Prov. Mazandaran, Elborz Mts., 3 km S from Kelerd, 200 m, 52°17'21" E, 36°29'08" N, at light, 1999. IV. 22., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
045. Prov. Mazandaran, Elborz Mts., 4 km E from Levane Sharghi, 200 m, 55°02'36" E, 37°03'25" N, 1999. IV. 23., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
046. Prov. Mazandaran, Elborz Mts., Ghorogh National Park, 200 m, 55°08'18" E, 37°09'29" N, 1999. IV. 23., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
047. Prov. Mazandaran, Elborz Mts., Ghare Ghach, 200 m, 1999. IV. 24., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
048. Prov. Mazandaran, Elborz Mts., Razi, 1900 m, 1999. IV. 24., 55°25'10" E, 36°48'40" N, at light, leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
049. Prov. Semnan, Byarjamand, 1000 m, 55°49'20" E, 36°15'11" N, 1999. IV. 25., at light, leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
050. Prov. Khorasan, Aladag Mts., 1200 m, 57°16'18" E, 37°16'18" N, 1999. IV. 26., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
051. Prov. Khorasan, Aladag Mts., Dasht, 600 m, 1999. IV. 27., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
052. Prov. Mazandaran, Elborz Mts., Dara Abad, 400 m, 1999. IV. 27., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
053. Prov. Mazandaran, Elborz Mts., 3 km S from Kelerd, 200 m, 52°17'21" E, 36°29'08" N, at light, 1999. IV. 27., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
054. Prov. Mazandaran, Elborz Mts., 6 km W from Reine, 2600 m, 52°02'24" E, 35°53'22" N, at light, 1999. IV. 28., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
055. Prov. Mazandaran, Elborz Mts., Damavand, SE-side, 3100 m, 1999. IV. 28., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
056. Prov. Zanjan, Nikpei, 1500 m, 48°12'10" E, 36°45'02" N, at light, 1999. IV. 28., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
057. Prov. Azarbaygan-e Garbi, 15 km E from Miyane, 1100 m, 47°45'12" E, 37°22'12" N, 1999. IV. 30., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
058. Prov. Azarbaygan-e Garbi, 20 km W from Miyane, 1200 m, 47°22'18" E, 37°29'10" N, 1999. IV. 30., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
059. 25 km E from Bostanabad, 1700 m, 47°02'10" E, 37°32'20" N, 1999. IV. 30., leg. Gy. Fábián, L. Nádai, N. Rahmé & K. Székely.
060. Prov. Azarbaygan-e Sarqi, Marand, 1999. V. 15., leg. K. Gaskó, T. Hác & G. Kőszegi.
061. Prov. Azarbaygan-e Sarqi, 25 km N of Marand, 1800 m, 1999. V. 16., leg. K. Gaskó, T. Hác & G. Kőszegi.
062. Prov. Azarbaygan-e Sarqi, Sahand Mt., 2000 m, 1999. V. 17., leg. K. Gaskó, T. Hác & G. Kőszegi.
063. Prov. Kordestan, Zagros Mts, Sanandag, 1900 m, 1999. V. 18–19., leg. K. Gaskó, T. Hác & G. Kőszegi.
064. Prov. Hamadan, Zagros Mts, Nehavand, 2500 m, 1999. V. 20–21., leg. K. Gaskó, T. Hác & G. Kőszegi.
065. Prov. Lorestan, Zagros Mts, Bongale, 1800 m, 1999. V. 22., leg. K. Gaskó, T. Hác & G. Kőszegi.
066. Prov. Cahar Mahal-o-Bahtiyari, Zagros Mts, Nagan, 2700 m, 1999. V. 23., leg. K. Gaskó, T. Hác & G. Kőszegi.
067. Prov. Buyer Ahmad-o-Kuhgiluye, Zagros Mts, Yasug, 1999. V. 24., leg. K. Gaskó, T. Hác & G. Kőszegi.
068. Prov. Fars, Zagros Mts, Persepolis, Kum Mt., 1200 m, 1999. V. 25–26., leg. K. Gaskó, T. Hác & G. Kőszegi.
069. Prov. Yazd, Qohrud Mts., Ali Abad, 2400 m, 1999. V. 27., leg. K. Gaskó, T. Hác & G. Kőszegi.
070. Prov. Yazd, on the road, 1200 m, 1999. V. 28–29., leg. K. Gaskó, T. Hác & G. Kőszegi.
071. Prov. Khorasan, Kopet Dag Mts., Qucan, 1999. V. 30., leg. K. Gaskó, T. Hác & G. Kőszegi.
072. Prov. Khorasan, Aladag Mts., Bognurd, 2000 m, 1999. V. 31., leg. K. Gaskó, T. Hác & G. Kőszegi.

073. Prov. Khorasan, W-Kopet Dag Mts., Garmab, 800 m, 1999. VI. 1., leg. K. Gaskó, T. Hác & G. Kőszegi.
074. Prov. Mazandaran, Elborz Mts., Azadsahr, Sah Mt., 1000 m, 1999. VI. 2., leg. K. Gaskó, T. Hác & G. Kőszegi.
075. Prov. Mazandaran, Elborz Mts., Razan, 1800 m, 1999. VI. 3., leg. K. Gaskó, T. Hác & G. Kőszegi.
076. Prov. Mazandaran, Elborz Mts., Damavand Mt., 3000 m, 1999. VI. 4., leg. K. Gaskó, T. Hác & G. Kőszegi.
077. Prov. Zangan, Elborz Mts., Zangan, Talesh Mt., 1800–2000 m, 1999. VI. 6–7., leg. K. Gaskó, T. Hác & G. Kőszegi.
078. Prov. Azarbaygan-e Sarqi, Elborz Mts., Ardabil, Sabalan Mt., 1500 m, 1999. VI. 8., leg. K. Gaskó, T. Hác & G. Kőszegi.
079. Prov. Azarbaygan-e Sarqi, Elborz Mts., Ahar, Sabalan Mt., 1500 m, 1999. VI. 9., leg. K. Gaskó, T. Hác & G. Kőszegi.
080. Prov. Zangan, Elborz Mts., Zangan, Talesh Mt., 1800–2000 m, 1999. VI. 10–11., leg. K. Gaskó, T. Hác & G. Kőszegi.
081. Prov. Azarbaygan-e Sarqi, Sahand Mt., Jeghir, 1800 m, 2000. IV. 6. leg. B. Benedek, T. Hác & G. Kőszegi.
082. Prov. Zangan, , Elborz Mts., Zangan, 20 km E from Zangan, Sendan Dag Mt., 2200–2300 m, 2000. IV. 7. leg. B. Benedek, T. Hác & G. Kőszegi.
083. Prov. Markazi, Qohrud Mts., Qom, 900 m, 2000. IV. 8–9. leg. B. Benedek, T. Hác & G. Kőszegi.
084. Prov. Esfahan, Zagros Mts., 10 km SE from Kasan, 1000 m, 2000. IV. 8–9. leg. B. Benedek, T. Hác & G. Kőszegi.
085. Prov. Yazd, Qohrud Mts., 5 km S from Ali Abad, 2500 m, 2000. IV. 10. leg. B. Benedek, T. Hác & G. Kőszegi.
086. Prov. Fars, 10 km E from Persepolis, Saidatshar, 1200–1400 m, 2000. IV. 11–12. leg. B. Benedek, T. Hác & G. Kőszegi.
087. Prov. Fars, Zagros Mts., 5 km S from Komehr, Barm Firuz Mt., 2800–3000 m, 2000. IV. 12–13. leg. B. Benedek, T. Hác & G. Kőszegi.
088. Prov. Büyer Ahmad-o-Kuhgiluye, Zagros Mts., 10 km S from Yasug, 1500–2000 m, 2000. IV. 14–15. leg. B. Benedek, T. Hác & G. Kőszegi.
089. Prov. Khuzestan, Zagros Mts., Behbahan, 100 m, 2000. IV. 15. leg. B. Benedek, T. Hác & G. Kőszegi.
090. Prov. Busehr, Zagros Mts., 10 km N from Ameri, 2000. IV. 15., leg. B. Benedek, T. Hác & G. Kőszegi.
091. Prov. Busehr, Zagros Mts., Deylam, 50 m, 2000. IV. 15–16. leg. B. Benedek, T. Hác & G. Kőszegi.
092. Prov. Fars, Zagros Mts., Kazerun, 1200 m, 2000. IV. 17. leg. B. Benedek, T. Hác & G. Kőszegi.
093. Prov. Yazd, Qohrud Mts., 5 km S from Ali Abad, 2000–2500 m, 2000. IV. 17. leg. B. Benedek, T. Hác & G. Kőszegi.
094. Prov. Esfahan, Qohrud Mts., 10 km SE from Kasan, 1000 m, 2000. IV. 18. leg. B. Benedek, T. Hác & G. Kőszegi.
095. Prov. Markazi, Qom, 900 m, 2000. IV. 18., leg. B. Benedek, T. Hác & G. Kőszegi.
096. Prov. Markazi, Qohrud Mts., 20 km S from Qom, 1300. 1500 m, 2000. IV. 19., leg. B. Benedek, T. Hác & G. Kőszegi.
097. Prov. Kerman, Qohrud Mts., Anar, Madvar Mt., 2000–2300 m, 2000. IV. 20–21., leg. B. Benedek, T. Hác & G. Kőszegi.
098. Prov. Kerman, Qohrud Mts., 10 km N from Deh Bakri, Gebal Barez Mt., 2000 m, 2000. IV. 21., leg. B. Benedek, T. Hác & G. Kőszegi.
099. Prov. Kerman, Kuhpaye Mts., Bam, 2000 m, 2000. IV. 21–22., leg. B. Benedek, T. Hác & G. Kőszegi.
100. Prov. Kerman, Qohrud Mts., 10 km S from Deh Bakri, Gebal Barez Mt., 2000 m, 2000. IV. 22., leg. B. Benedek, T. Hác & G. Kőszegi.
101. Prov. Kerman, Qohrud Mts., Anar, Madvar Mt., 2000 m, 2000. IV. 23., leg. B. Benedek, T. Hác & G. Kőszegi.
102. Prov. Kerman, Qohrud Mts., Anar, Madvar Mt., 2000 m, 2000. IV. 23., leg. B. Benedek, T. Hác & G. Kőszegi.
103. Prov. Esfahan, Zagros Mts., Daran, Fereidun Sahr, 2500–3000 m, 2000. IV. 24–25., leg. B. Benedek, T. Hác & G. Kőszegi.
104. Prov. Lorestan, Zagros Mts., Aligudarz, 1800–2000 m, 2000. IV. 25., leg. B. Benedek, T. Hác & G. Kőszegi.
105. Prov. Hamadan, Zagros Mts., 25 km SE from Nehavand, 2300–2500 m, 2000. IV. 25–27., leg. B. Benedek, T. Hác & G. Kőszegi.
106. Prov. Kordestan, Zagros Mts., 30 km SE from Sanandag, Bolbanabad, 1800 m, 2000. IV. 27., leg. B. Benedek, T. Hác & G. Kőszegi.
107. Prov. Zangan, Elborz Mts., Zangan, 20 km E from Zangan, Sendan Dag Mt., 1600 m, 2000. IV. 28. leg. B. Benedek, T. Hác & G. Kőszegi.
108. Prov. Zangan, Elborz Mts., Gilvan, Talesh Mt., 1500 m, 2000. IV. 29. leg. B. Benedek, T. Hác & G. Kőszegi.
109. Prov. Gilan, Elborz Mts., 10 km S from Rast, Disku, 1500 m, 2000. IV. 29. leg. B. Benedek, T. Hác & G. Kőszegi.
110. Prov. Zangan, Elborz Mts., Gilvan, Talesh Mt., 1500 m, 2000. IV. 30. leg. B. Benedek, T. Hác & G. Kőszegi.
111. Prov. Zangan, Elborz Mts., Gilvan, Talesh Mt., 5 km W from Sorkhed Dizaj, 2000 m, 2000. IV. 30. leg. B. Benedek, T. Hác & G. Kőszegi.
112. Prov. Kordestan, Zagros Mts., 30 km SE from Sanandag, Bolbanabad, 1500 m, 2000. V. 1. leg. B. Benedek, T. Hác & G. Kőszegi.

113. Prov. Azarbaygan-e Sarqi, 10 km NE from Yengeje, Sahand Mt., 2000 m, 2000. V. 1. leg. B. Benedek, T. Hác & G. Kőszegi.
114. Prov. Azarbaygan-e Sarqi, Marand, 2000. V. 5. leg. B. Benedek, T. Hác & G. Kőszegi.
115. 5 km E from Hoy, 1020 m, 2000. IV. 26., leg. A. Szabó & P. Hentschel.
116. Prov. Kordestan, Elborz Mts., 6 km SE from Saqqez, 1620 m, 2000. IV. 27., leg. A. Szabó & P. Hentschel.
116. Prov. Lorestan, Elborz Mts., 3 km W from Bongale, 1800 m, 2000. IV. 28., leg. A. Szabó & P. Hentschel.
117. Prov. Lorestan, Elborz Mts., 15 km SW from Miyandast, 2620 m, 2000. IV. 29., leg. A. Szabó & P. Hentschel.
118. Prov. Fars, Zagros Mts., 5 km S from Vazag, 1970 m, 2000. IV. 30., leg. A. Szabó & P. Hentschel.
119. Prov. Fars, Zagros Mts., 12 km S from Kashan, 2545 m, 2000. V. 1., leg. A. Szabó & P. Hentschel.
120. Prov. Fars, Zagros Mts., 5 km S from Dehbid, 2040 m, 2000. V. 2., leg. A. Szabó & P. Hentschel.
121. Prov. Esfahan, 3 km N from Gouseganqali, 2300 m, 2000. V. 3., leg. A. Szabó & P. Hentschel.
122. Prov. Mazandaran, Elborz Mts., 8 km S from Neka, 200 m, 2000. V. 5., leg. A. Szabó & P. Hentschel.
123. Prov. Mazandaran, Elborz Mts., 3 km N from Razi, 2040 m, 2000. V. 6., leg. A. Szabó & P. Hentschel.
124. Prov. Semnan, 28 km S from Meyamei, Sah Mt., 1550 m, 2000. V. 7., leg. A. Szabó & P. Hentschel.
125. Prov. Mazandaran, Elborz Mts., 3 km N from Razi, 2040 m, 2000. V. 8., leg. A. Szabó & P. Hentschel.
126. Prov. Mazandaran, Elborz Mts., 1 km E from Razan, 1190 m, 2000. V. 9., leg. A. Szabó & P. Hentschel.
127. Prov. Azarbaygan-e Sarqi, Elborz Mts., 5 km W from Halhal, Talesh Mt., 1400 m, 2000. V. 10., leg. A. Szabó & P. Hentschel.
128. Prov. Azarbaygan-e Garbi, 3 km S from Margan, 1380 m, 2000. V. 11., leg. A. Szabó & P. Hentschel.
129. Prov. Kordestan, Zagros Mts., Hosein Abad, 2000. IV. 11., leg. L. Darnai, K. Gaskó & I. Juhász.
130. Prov. Kordestan, Zagros Mts., Mahmud Abad, 2000. IV. 12., leg. L. Darnai, K. Gaskó & I. Juhász.
131. Prov. Bahtaran, Zagros Mts., Harsin, 2000. IV. 13., leg. L. Darnai, K. Gaskó & I. Juhász.
132. Prov. Lorestan, Zagros Mts., Bongale, 2000. IV. 13., leg. L. Darnai, K. Gaskó & I. Juhász.
133. Prov. Lorestan, Zagros Mts., Vazag, 2000. IV. 15., leg. L. Darnai, K. Gaskó & I. Juhász.
134. Prov. Fars, Zagros Mts., Shiraz, 2000. IV. 15., leg. L. Darnai, K. Gaskó & I. Juhász.
135. Prov. Fars, Zagros Mts., Nurabad, 2000. IV. 16., leg. L. Darnai, K. Gaskó & I. Juhász.
136. Prov. Fars, Zagros Mts., Masiri, 2000. IV. 16., leg. L. Darnai, K. Gaskó & I. Juhász.
137. Prov. Fars, Zagros Mts., Lar, 2000. IV. 17., leg. L. Darnai, K. Gaskó & I. Juhász.
138. Prov. Fars, Zagros Mts., Nougín, 2000. IV. 17., leg. L. Darnai, K. Gaskó & I. Juhász.
139. Prov. Fars, Qir, 2000. IV. 17., leg. L. Darnai, K. Gaskó & I. Juhász.
140. Prov. Hormozgan, Zagros Mts., Herang, Puhál-e Hamir Mt., 2000. IV. 18., leg. L. Darnai, K. Gaskó & I. Juhász.
141. Prov. Hormozgan, Zagros Mts., Bastak, Puhál-e Hamir Mt., 2000. IV. 18., leg. L. Darnai, K. Gaskó & I. Juhász.
142. Prov. Hormozgan, Zagros Mts., Dar Gur, Puhál-e Hamir Mt., 2000. IV. 19., leg. L. Darnai, K. Gaskó & I. Juhász.
143. Prov. Hormozgan, Zagros Mts., Bandar-e Abbas, Pahel, 2000. IV. 20–21., leg. L. Darnai, K. Gaskó & I. Juhász.
144. Prov. Hormozgan, Zagros Mts., Dehag, 2000. IV. 21., leg. L. Darnai, K. Gaskó & I. Juhász.
145. Prov. Hormozgan, Zagros Mts., Gouzam, 2000. IV. 21., leg. L. Darnai, K. Gaskó & I. Juhász.
146. Prov. Yazd, Qohrud Mts., Yazd, 2000. IV. 22., leg. L. Darnai, K. Gaskó & I. Juhász.
147. Prov. Mazandaran, Elborz Mts., Abrachi, 2000. IV. 24–25., leg. L. Darnai, K. Gaskó & I. Juhász.
148. Prov. Khorasan, Sabzevar, Gogatay Mt., 2000. IV. 26., leg. L. Darnai, K. Gaskó & I. Juhász.
149. Prov. Khorasan, Aladag Mts., Esfárayen, 2000. IV. 26., leg. L. Darnai, K. Gaskó & I. Juhász.
150. Prov. Khorasan, Aladag Mts., Bognurd, 2000. IV. 26., leg. L. Darnai, K. Gaskó & I. Juhász.
151. Prov. Khorasan, Aladag Mts., Badranlu, 2000. IV. 26., leg. L. Darnai, K. Gaskó & I. Juhász.
152. Prov. Khorasan, Bozgan, Binalud Mt., 2000. IV. 27., leg. L. Darnai, K. Gaskó & I. Juhász.
153. Prov. Khorasan, Aladag Mts., Dogai, Bargovein Mt., 2000. IV. 27., leg. L. Darnai, K. Gaskó & I. Juhász.
154. Prov. Khorasan, Soqlabad, Binalud Mt., 2000. IV. 27., leg. L. Darnai, K. Gaskó & I. Juhász.
155. Prov. Khorasan, Kopet Dag Mts., Emamqoli, 2000. IV. 28., leg. L. Darnai, K. Gaskó & I. Juhász.
156. Prov. Khorasan, Kopet Dag Mts., Garmab, 2000. IV. 29., leg. L. Darnai, K. Gaskó & I. Juhász.
157. Prov. Khorasan, Kopet Dag Mts., Pisqal'e, 2000. IV. 29–30., leg. L. Darnai, K. Gaskó & I. Juhász.
158. Prov. Mazandaran, Elborz Mts., Abrachi, 2000. V. 1., leg. L. Darnai, K. Gaskó & I. Juhász.
159. Prov. Mazandaran, Elborz Mts., Razan, 2000. V. 2., leg. L. Darnai, K. Gaskó & I. Juhász.
160. Prov. Mazandaran, Elborz Mts., Damavand Mt., 2000. V. 3., leg. L. Darnai, K. Gaskó & I. Juhász.
161. Prov. Azarbaygan-e Sarqi, Hastrud, Sahand Mt., 2150 m, 47°06'15" E, 37°34'30" N, 2000. VI. 9. . leg. Gy. Fábián, L. Szécsényi & K. Székely.
162. Prov. Azarbaygan-e Sarqi, 25 km E from Bostanabad, Sahand Mt., 1700 m, 47°41'49" E, 37°27'19" N, 2000. VI. 10. leg. Gy. Fábián, L. Szécsényi & K. Székely.

163. Prov. Zangan, 55 km SW from Gilvan, Sendan Mt., 2010 m, 48°44'13" E, 36°41'01" N, 2000. VI. 10., leg. Gy. Fábán, L. Szécsényi & K. Székely.
164. Prov. Zangan, 50 km SW from Gilvan, Sendan Mt., 2400 m, 48°43'55" E, 36°41'37" N, at light, 2000. VI. 10., leg. Gy. Fábán, L. Szécsényi & K. Székely.
165. Prov. Gilan, Talesh Mts., 20 kmSW from Talem, 260 m, 49°26'15" E, 36°50'22" N, at light, 2000. VI. 11., leg. Gy. Fábán, L. Szécsényi & K. Székely.
166. Prov. Gilan, Talesh Mts., 17 km E from Gilvan, 360 m, 49°16'12" E, 36°44'23" N, 2000. VI.12. leg. Gy. Fábán, L. Szécsényi & K. Székely.
167. Prov. Zangan, 40 km W from Gilvan, Sendan Mt., 2060 m, 48°48'03" E, 36°44'27" N, 2000. VI. 12., leg. Gy. Fábán, L. Szécsényi & K. Székely.
168. Prov. Zangan, 45 km W from Gilvan, Sendan Mt., 2030 m, 48°46'20" E, 36°43'16" N, 2000. VI. 12., leg. Gy. Fábán, L. Szécsényi & K. Székely.
169. Prov. Zangan, 5 km S from Aveg, Sah-e Gulak Mt., 2250 m, 49°10'44" E, 35°31'54" N, at light, 2000. VI. 12., leg. Gy. Fábán, L. Szécsényi & K. Székely.
170. Prov. Tehran, Elborz Mts., 10 km NE from Lar-e Polur, Damavand, 2300 m, 52°04'43" E, 35°52'18" N, 2000. VI. 13., leg. Gy. Fábán, L. Szécsényi & K. Székely.
171. Prov. Mazandaran, Elborz Mts., 15 km S from Amol, 380 m, 52°21'46" E, 36°19'42" N, at light, 2000. VI. 13., leg. Gy. Fábán, L. Szécsényi & K. Székely.
172. Prov. Mazandaran, Sah Mts., Ghorogh National Park, 140 m, 54°40'52" E, 36°52'55" N, at light, 2000. VI. 14., leg. Gy. Fábán, L. Szécsényi & K. Székely.
173. Prov. Mazandaran, Sah Mts., 15 km S from Azad Sar, 600 m, 55°18'58" E, 36°58'22" N, 2000. VI. 15., leg. Gy. Fábán, L. Szécsényi & K. Székely.
174. Prov. Mazandaran, Sah Mts., 2 km N from Razi, 1720 m, 55°21'31" E, 36°50'09" N, at light, 2000. VI. 15., leg. Gy. Fábán, L. Szécsényi & K. Székely.
175. Prov. Mazandaran, Sah Mts., 12 km S from Azad Sar, 500 m, 55°16'46" E, 37°01'48" N, 2000. VI. 16., leg. Gy. Fábán, L. Szécsényi & K. Székely.
176. Prov. Khorasan, Aladag Mts., 10 km E from Sadagh Abad, 600 m, 55°41'36" E, 37°22'05" N, at light, 2000. VI. 16., leg. Gy. Fábán, L. Szécsényi & K. Székely.
177. Prov. Mazandaran, Ghorogh National Park, 140 m, 2000. VI. 17., leg. Gy. Fábán, L. Szécsényi & K. Székely.
178. Prov. Mazandaran, Elborz Mts., 5 km E from Behsahr, 130 m, 52°46'22" E, 36°42'28" N, 2000. VI. 17., leg. Gy. Fábán, L. Szécsényi & K. Székely.
179. Prov. Mazandaran, Elborz Mts., 15 km S from Amol, 380 m, 52°21'46" E, 36°19'42" N, 2000. VI. 17., leg. Gy. Fábán, L. Szécsényi & K. Székely.
180. Prov. Tehran, Elborz Mts., 15 km NE from Lar-e Polur, Damavand, 2580 m, 52°06'10" E, 35°52'28" N, at light, 2000. VI. 17–19., leg. Gy. Fábán, L. Szécsényi & K. Székely.
181. Prov. Mazandaran, Elborz Mts., 5 km E from Razan, 1300 m, 52°06'12" E, 36°10'13" N, 2000. VI. 19., leg. Gy. Fábán, L. Szécsényi & K. Székely.
182. Prov. Mazandaran, Elborz Mts., 5 km N from Kalavanga, 2500 m, 51°12'06" E, 36°12'03" N, 2000. VI. 19., leg. Gy. Fábán, L. Szécsényi & K. Székely.
183. Prov. Zangan, 50 km SW from Gilvan, Sendan Mt., 2400 m, 48°43'55" E, 36°41'37" N, at light, 2000. VI. 19–20., leg. Gy. Fábán, L. Szécsényi & K. Székely.
184. Prov. Hamadan, Zagros Mts., 25 km W from Khakadan, 2200 m, 48°20'30" E, 34°02'53" N, at light, 2000. VI. 21., leg. Gy. Fábán, L. Szécsényi & K. Székely.
185. Prov. Lorestan, 17 km E from Dorud, Ostoran Mt., 2300–2700 m, , 49°11'11" E, 33°22'41" N, at light, 2000. VI. 22., leg. Gy. Fábán, L. Szécsényi & K. Székely.
186. Prov. Esfahan, Zagros Mts., Dare Hoz, 1800 m, 49°55'09" E, 33°16'21" N, 2000. VI. 23., leg. Gy. Fábán, L. Szécsényi & K. Székely.
187. Prov. Esfahan, Zagros Mts., 10 km S from Shibak, 2700 m, 50°01'22" E, 32°50'16" N, at light, 2000. VI. 23., leg. Gy. Fábán, L. Szécsényi & K. Székely.
188. Prov. Esfahan, Zagros Mts., Shibak village, 2580 m, 50°03'40" E, 32°53'30" N, 2000. VI. 24., leg. Gy. Fábán, L. Szécsényi & K. Székely.
189. Prov. Esfahan, Zagros Mts., 5 km N from Afous, 2700 m, 50°02'09" E, 33°02'41" N, 2000. VI. 24., 1 leg. Gy. Fábán, L. Szécsényi & K. Székely.
190. Prov. Fars, Zagros Mts., 15 km S from Khomer, Barm Firuz Mt., 3000 m, 51°57'20" E, 30°20'30" N, at light, 2000. VI. 26., leg. Gy. Fábán, L. Szécsényi & K. Székely.

191. Prov. Fars, Zagros Mts., 4 km E from Khomer, Barm Firuz Mt., 2400 m, 51°51'43" E, 30°28'23" N, 2000. VI. 27., leg. Gy. Fábián, L. Szécsényi & K. Székely.
192. Prov. Fars, Zagros Mts., 2 km N from Margun, valley of Kor, 2500 m, 51°54'04" E, 30°29'39" N, 2000. VI. 27., leg. Gy. Fábián, L. Szécsényi & K. Székely.
193. Prov. Buyer Ahmad-o-Khugiluye, Zagros Mts., Kurtyanzu, Dinar Mt., 2400 m, 51°18'49" E, 30°54'29" N, 2000. VI. 27., leg. Gy. Fábián, L. Szécsényi & K. Székely.
194. Prov. Markazi, Kavir-Desert, 3 km S from Kusk-e Nosrat, Houz-e Soltan, 830 m, 50°55'26" E, 35°05'14" N, at light, 2000. VI. 28., leg. Gy. Fábián, L. Szécsényi & K. Székely.
195. Prov. Mazandaran, Elborz Mts., 15 km S from Amol, 380 m, 52°21'46" E, 36°19'42" N, 2000. VI. 29., leg. Gy. Fábián, L. Szécsényi & K. Székely.
196. Prov. Tehran, Elborz Mts., 8 km N from Lar-e Polur, Damavand, 3000 m, 52°02'56" E, 35°54'14" N, at light, 2000. VI. 29–30., leg. Gy. Fábián, L. Szécsényi & K. Székely.
197. Prov. Tehran, Elborz Mts., Lar-e Polur, 2220 m, 52°02'56" E, 35°54'14" N, 2000. VI. 30., leg. Gy. Fábián, L. Szécsényi & K. Székely.
198. Prov. Tehran, Elborz Mts., 15 km NE from Lar-e Polur, Damavand, 3580 m, 52°06'10" E, 35°52'28" N, at light, 2000. VII. 1–2., leg. Gy. Fábián, L. Szécsényi & K. Székely.
199. Prov. Azarbaygan-e Sarqui, 5 km E from Acachi, Kiyamaki Mt., 1150 m, 45°36'12" E, 38°28'14" N, 2000. VII. 04., leg. Gy. Fábián, L. Szécsényi & K. Székely.
200. Prov. Azarbaygan-e Garbi, 6 km SE from Makou, 1100 m, 44°29'14" E, 39°15'21" N, 2000. VII. 04., leg. Gy. Fábián, L. Szécsényi & K. Székely.
201. Prov. Azarbaygan-e Sarqi, Qara Dag Mt., Taze Kandi, 15 km E from Ahar, 2000. VI. 14. leg. K. Gaskó, T. Kókay, Gy. Rozner.
202. Prov. Azarbaygan-e Sarqi, Sabalan Mts., Mesginsahr, 2000. VI. 14., leg. K. Gaskó, T. Kókay & Gy. Rozner.
203. Prov. Azarbaygan-e Sarqi, Halhal, Tales Mts., 32 km W from Asalem, 2000. VI. 15., leg. K. Gaskó, T. Kókay & Gy. Rozner.
204. Prov. Gilan, Elborz Mts., Pol-e Lousan, 2000. VI. 15., leg. K. Gaskó, T. Kókay & Gy. Rozner.
205. Prov. Zangan, Tales Mts., Sorkhed Dizaj, 2000. VI. 15–16., leg. K. Gaskó, T. Kókay & Gy. Rozner.
206. Prov. Zangan, Tales Mts., Gilvan, 2000. VI. 16., leg. K. Gaskó, T. Kókay & Gy. Rozner.
207. Prov. Kordestan, Zagros Mts., Zage-ye Bala, 2000. VI. 16–17., leg. K. Gaskó, T. Kókay & Gy. Rozner.
208. Prov. Kordestan, Zagros Mts., Kamyaran, 2000. VI. 17., leg. K. Gaskó, T. Kókay & Gy. Rozner.
209. Prov. Markazi, Zagros Mts., Far, 2000. VI. 17., leg. K. Gaskó, T. Kókay & Gy. Rozner.
210. Prov. Markazi, Qohrud Mts., Sarafgegan, 2000. VI. 18., leg. K. Gaskó, T. Kókay & Gy. Rozner.
211. Prov. Esfahan, Qohrud Mts., Ozvar, 2000. VI. 18–19., leg. K. Gaskó, T. Kókay & Gy. Rozner.
212. Prov. Esfahan, Sahin Sahr, 35 km N from Esfahan, 2000. VI. 19., leg. K. Gaskó, T. Kókay & Gy. Rozner.
213. Prov. Esfahan, Zagros Mts., Tarrar, 20 km S from Daran, 2000. VI. 19–20., leg. K. Gaskó, T. Kókay & Gy. Rozner.
214. Prov. Esfahan, Zagros Mts., Miyandast, 2000. VI. 20., leg. K. Gaskó, T. Kókay & Gy. Rozner.
215. Prov. Lorestan, Zagros Mts., Sepidast, 25 km S from Dorud, Osturan Mt., 2000. VI. 20–21., leg. K. Gaskó, T. Kókay & Gy. Rozner.
216. Prov. Fars, Zagros Mts., Bidak, 2000. VI. 21., leg. K. Gaskó, T. Kókay & Gy. Rozner.
217. Prov. Fars, Zagros Mts., Dehbid, 2000. VI. 22., leg. K. Gaskó, T. Kókay & Gy. Rozner.
218. Prov. Fars, Zagros Mts., Sangar, 50 km W from Shiraz, 2000. VI. 22–23., leg. K. Gaskó, T. Kókay & Gy. Rozner.
219. Prov. Fars, Zagros Mts., Safe Abad, 2000. VI. 23–24., leg. K. Gaskó, T. Kókay & Gy. Rozner.
220. Prov. Hormozgan, Zagros Mts., Tazyán, 30 km NW from Bandar-e Abbas, 2000. VI. 24., leg. K. Gaskó, T. Kókay & Gy. Rozner.
221. Prov. Khorasan, 10 km S from Mashad, 2000. VI. 26–27., leg. K. Gaskó, T. Kókay & Gy. Rozner.
222. Prov. Khorasan, Kopet Dag Mts., Chari, 10 km S from Farug, 2000. VI. 27–28., leg. K. Gaskó, T. Kókay & Gy. Rozner.
223. Prov. Khorasan, Aladag Mts., Kerek, 2000. VI. 28., leg. K. Gaskó, T. Kókay & Gy. Rozner.
224. Prov. Mazandaran, Sah Mts., Tang Rah, 2000. VI. 28., leg. K. Gaskó, T. Kókay & Gy. Rozner.
225. Prov. Mazandaran, Sah Mts., 15 km SE from Azad Sar, 2000. VI. 28–29., leg. K. Gaskó, T. Kókay & Gy. Rozner.
226. Prov. Mazandaran, Sah Mts., Hos Yeilag Pass, 2000. VI. 29., leg. K. Gaskó, T. Kókay & Gy. Rozner.
227. Prov. Mazandaran, Elborz Mts., Kiyasar, 2000. VI. 29–30., leg. K. Gaskó, T. Kókay & Gy. Rozner.
228. Prov. Mazandaran, Elborz Mts., Damavand Mt., 3500 m, 2000. VI. 30–VII. 2., leg. K. Gaskó, T. Kókay & Gy. Rozner.

229. Prov. Azarbaygan-e Sarqi, Tales Mts., Miyane, 2000. VII. 4., leg. K. Gaskó, T. Kókay & Gy. Rozner.
230. Prov. Azarbaygan-e Sarqi, Tabriz, 2000. VII. 4., leg. K. Gaskó, T. Kókay & Gy. Rozner.
231. Prov. Zangan, Zangan, 2200–2300 m, 2000. VI. 30–VII. 1., leg. B. Benedek, T. Hác & G. Kőszegi.
232. Prov. Tehran, Elborz Mts., Sahrak, 1800 m, 2000. VII. 2., leg. B. Benedek, T. Hác & G. Kőszegi.
233. Prov. Esfahan, Zagros Mts., Sahreza, 1200 m, 2000. VII. 3., leg. B. Benedek, T. Hác & G. Kőszegi.
234. Prov. Buyer Ahmad-o-Kuhgiluye, Zagros Mts., Yasug, Dinar Mt., 3000 m, 2000. VII. 4–5., leg. B. Benedek, T. Hác & G. Kőszegi.
235. Prov. Buyer Ahmad-o-Kuhgiluye, Yasug, 1800–2000 m, 2000. VII. 5–6., leg. B. Benedek, T. Hác & G. Kőszegi.
236. Prov. Buyer Ahmad-o-Kuhgiluye, Zagros Mts., Yasug, Dinar Mt., 3000 m, 2000. VII. 6., leg. B. Benedek, T. Hác & G. Kőszegi.
237. Prov. Esfahan, Zagros Mts., Daran, 2200–2500 m, 2000. VII. 7–8., leg. B. Benedek, T. Hác & G. Kőszegi.
238. Prov. Lorestan, Zagros Mts., Aligudarz, 3000 m, 2000. VII. 8., leg. B. Benedek, T. Hác & G. Kőszegi.
239. Prov. Hamadan, Zagros Mts., Nehavand, 2300–2500 m, 2000. VII. 9., leg. B. Benedek, T. Hác & G. Kőszegi.
240. Prov. Zangan, Zangan, 2200–2300 m, 2000. VII. 10., leg. B. Benedek, T. Hác & G. Kőszegi.
241. Prov. Tehran, Elborz Mts., Dizin, 2600 m, 2000. VII. 11–12., leg. B. Benedek, T. Hác & G. Kőszegi.
242. Prov. Semnan, Sah Mts., Golestan, 2000. VII. 13., leg. B. Benedek, T. Hác & G. Kőszegi.
243. Prov. Khorasan, Aladag Mts., Bognurd, 1700 m, 2000. VII. 13., leg. B. Benedek, T. Hác & G. Kőszegi.
244. Prov. Khorasan, Kopet Dag Mts., Qucan, 2000 m, 2000. VII. 13–16., leg. B. Benedek, T. Hác & G. Kőszegi.
245. Prov. Khorasan, Aladag Mts., Bognurd, 1700 m, 2000. VII. 16., leg. B. Benedek, T. Hác & G. Kőszegi.
246. Prov. Semnan, Sah Mts., Golestan, 2000. VII. 16., leg. B. Benedek, T. Hác & G. Kőszegi.
247. Prov. Semnan, Sah Mts., Chehel Dokhtar, 2000. VII. 17., leg. B. Benedek, T. Hác & G. Kőszegi.
248. Prov. Tehran, Elborz Mts., Firuzkuh, 1800 m, 2000. VII. 17., leg. B. Benedek, T. Hác & G. Kőszegi.
249. Prov. Mazandaran, Elborz Mts., Damavand, 2500 m, 2000. VII. 18–19., leg. B. Benedek, T. Hác & G. Kőszegi.
250. Prov. Mazandaran, Elborz Mts., Balade, 2300–3300 m, 2000. VII. 19–21., leg. B. Benedek, T. Hác & G. Kőszegi.
251. Prov. Tehran, Elborz Mts., Dizin, 2600 m, 2000. VII. 21., leg. B. Benedek, T. Hác & G. Kőszegi.
252. Prov. Azerbaygan-e Garbi, Rasakan, near Urmiye Sea, 1500 m, 45°12'09"E 37°21'17"N, 2001. IV. 26. leg. Gy. Fábíán & K. Vig.
253. Prov. Azerbaygan-e Garbi, 12km E of Mahabad, 1600 m, 45°35'12"E 36°51'13"N, 2001. IV. 26. leg. Gy. Fábíán & K. Vig.
254. Prov. Azerbaygan-e Garbi, 5km S of Boukan, 1780 m, 46°14'22"E 36°25'10"N, 2001. IV. 26. leg. Gy. Fábíán & K. Vig.
255. Prov. Kordestan, 25km E of Sanandag, 1770 m, 46°59'14"E, 35°28'27"N, 2001. IV. 27. leg. Gy. Fábíán & K. Vig.
256. Prov. Kordestan, 3km E of Marad-Abad, 2200 m, 47°19'14"E, 35°03'49"N, 2001. IV. 28. leg. Gy. Fábíán & K. Vig.
257. Prov. Bahtaran, 3km E of Harsin, 1800 m, 47°23'14"E, 34°14'03"N, 2001. IV. 29. leg. Gy. Fábíán & K. Vig.
258. Prov. Lorestan, Zagros Mts., 25km SE of Nehavand, 1900 m, 48°23'02"E, 34°03'10"N, 2001. IV. 29. leg. Gy. Fábíán & K. Vig.
259. Prov. Esfahan, Zagros Mts., Dare Hoz, 1800 m, 49°55'09"E, 33°16'21"N, 2001. IV. 30. leg. Gy. Fábíán & K. Vig.
260. Prov. Esfahan, near Esfahan, 1700 m, 51°35'12"E, 32°26'20"N, 2001. IV. 30. leg. Gy. Fábíán & K. Vig.
261. Prov. Esfahan, near Shareza, 12km N of Qasr-e Cham, 2200 m, 51°44'13"E, 31°50'14"N, 2001. V. 01. leg. Gy. Fábíán & K. Vig.
262. Prov. Fars, 175km NE of Shiraz, 2500 m, 53°11'10"E, 30°42'21"N, 2001. V. 02. leg. Gy. Fábíán & K. Vig.
263. Prov. Fars, Saadat-Shah, 1900 m, 53°12'38"E, 30°05'21"N, 2001. V. 02. leg. Gy. Fábíán & K. Vig.
264. Prov. Fars, 175km NE of Shiraz, 2500 m, 53°11'10"E, 30°42'21"N, 2001. V. 03. leg. Gy. Fábíán & K. Vig.
265. Prov. Fars, Naghsh-e Rostam, 1600 m, 52°34'09"E, 30°01'44"N, 2001. V. 03., leg. Gy. Fábíán & K. Vig.
266. Prov. Fars, Zagros Mts. Barm Firuz Mt., 15km S Khomer, 3000 m, 51°57'20"E, 30°20'30"N, 2001. V. 04. leg. Gy. Fábíán & K. Vig.
267. Prov. Fars, 25km W of Siraaz, 1600 m, 52°10'11"E, 29°42'11"N, 2001. V. 05., leg. Gy. Fábíán & K. Vig.
268. Prov. Fars, 21km NW of Kazerun, 2000 m, 51°25'12"E, 29°51'13"N, 2001. V. 05., leg. Gy. Fábíán & K. Vig.
269. Prov. Busehr, 5km S of Delvaz, 20 m, 51°02'11"E, 28°43'04"N, 2001. V. 5–6., leg. Gy. Fábíán & K. Vig.
270. Prov. Busehr, 25km N of Borazgan, 900 m 51°17'16"E, 29°36'06"N, 2001. V. 07., leg. Gy. Fábíán & K. Vig.
271. Prov. Fars, 3km W of Pasargad, 1700 m, 53°35'13"E, 35°10'03"N, 2001. V. 07., leg. Gy. Fábíán & K. Vig.
272. Prov. Esfahan, near Natanz, 2100 m, 51°55'11"E, 33°35'12"N, 2001. V. 08. leg. Gy. Fábíán & K. Vig.
273. Prov. Markazi, Houz-e Soltan, 3km S of Kusk-e Nosrat, 830 m, 50°55'26"E, 35°05'14"N, 2001. V. 09. leg. Gy. Fábíán & K. Vig.

274. Prov. Mazandaran, Elborz Mts., 5 km E of Razan, 1100 m, 52°15'24"E, 36°11'12"N, 2001. V. 09. leg. Gy. Fábíán & K. Vig.
275. Prov. Mazandaran, Elborz Mts., 24km E of Valiabad, 2990 m, 51°27'21"E, 36°14'34"N, 2001. V. 10. leg. Gy. Fábíán & K. Vig.
276. Prov. Mazandaran, Elborz Mts., 15km S of Amol, 380 m, 52°21'46"E, 36°19'42"N, 2001. V. 11. leg. Gy. Fábíán & K. Vig.
277. Prov. Mazandaran, Elborz Mts., 15km E of Lar-e Polur, 2580 m, 52°06'10"E, 35°52'28"N, 2001. V. 12–13. leg. Gy. Fábíán & K. Vig.
278. Prov. Mazandaran, Elborz Mts., 5km W of Pel, 2480 m, 51°36'22"E, 36°13'23"N, 2001. V. 14. leg. Gy. Fábíán & K. Vig.
279. Prov. Mazandaran, Elborz Mts., 16 km E of Valiabad, 2500 m, 51°22'02"E, 36°14'02"N, 2001. V. 15. leg. Gy. Fábíán & K. Vig.
280. Prov. Gilan, Talesh Mts, 12km E of Gilvan, 300 m, 49°11'58"E, 36°45'52"N, 2001. V. 15. leg. Gy. Fábíán & K. Vig.
281. Prov. Zangan, 30 km NE of Zangan, 2230 m, 48°51'12"E, 36°46'23"N, 2001. V. 16. leg. Gy. Fábíán & K. Vig.
282. Prov. Zangan, 20 km NE of Zangan, 2220 m, 48°45'04"E, 36°42'21"N, 2001. V. 17. leg. Gy. Fábíán & K. Vig.
283. Prov. Markazi, Tagarak, 2004. IV. 6. leg. T. Hác & B. Benedek
284. Prov. Markazi, Küh-i-Tafrash, 20 km N of Salafehegan, 2004. IV. 7. leg. T. Hác & B. Benedek
285. Prov. Esfahan, 10 km S of Kashan, 900 m, 2004. IV. 8. leg. T. Hác & B. Benedek
286. Prov. Yazd, 5 km NW of Ashkezar, 2004. IV. 9. leg. T. Hác & B. Benedek
287. Prov. Fars, 10 km S of Saidat Shar, 2004. IV. 10. leg. T. Hác & B. Benedek
288. Prov. Fars, 30 km NW of Ghir, 2004. IV. 11. leg. T. Hác & B. Benedek
289. Prov. Fars, 20 km W of Evaz, 2004. IV. 12. leg. T. Hác & B. Benedek
290. Prov. Hormozgan, 3 km W of Herang, 2004. IV. 13. leg. T. Hác & B. Benedek
291. Prov. Hormozgan, 10 km S of Haji Abad, 2004. IV. 14. leg. T. Hác & B. Benedek
292. Prov. Kerman, 25 km S of Sirjan, 2200 m, 2004. IV. 15. leg. T. Hác & B. Benedek
293. Prov. Kerman, Küh-e Gebal Barez, 5 km NE of Deh Bakri, 2004. IV. 16. leg. T. Hác & B. Benedek
294. Prov. Kerman, Qohrud Mts, 30 km S of Anar, 2004. IV. 18. leg. T. Hác & B. Benedek
295. Prov. Fars, 10 km S of Saidat Shar, 2004. IV. 19. leg. T. Hác & B. Benedek
296. Prov. Buyerahmad-va-Kohliguye, Zagros Mts, 10 km S of Yasug, 2004. IV. 20. leg. T. Hác & B. Benedek
297. Prov. Fars, 5 km S of Nur Abad, 2004. IV. 21. leg. T. Hác & B. Benedek

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