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A HISTORY AND PRESENT-DAY SITUATION OF THE INVESTIGATION OF THE RECENT LAND SNAILS IN THE GREAT HUNGARIAN PLAIN

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Abstract

The author is surveying the history of the malacological investigation in the Great Hungarian Plain from 1868 until our days.

The Great Plain belonged to the least explored regions of Hungary, though it is the largest geographical region of the country. Till 1956, not more than 31 publications dealt with the land-snail fauna. The research workers of the fin di siècle and of the early part of our century, mostly geologists: MOCSÁRY, LÓCZY, TÖMÖSVÁRY, TRAXLER, CSIKY, KORMOS, TREITZ, SCHLESCH, carried out mainly sporadic collections at the fringes of the Great Plain, now outside our frontiers. The fauna of the Great Plain is characterized by L. Soós, Rotarides, CZÓGLER, until the end of the nineteen-forties, who relied on the data of seventy sampling sites. They did not perform any investigations on the marshlands and wooded areas, which were in that time still undisturbed and free from draining. The systematical malacological exploration of the Great Plain began in the nineteen-fifties, when the Academical Programme of Tisza Research started. This programme was limited to the inundation area of the Tisza. HORVÁTH, VÁSÁRHELYI and later BÁBA, as members of the Tisza-Research Working Committee, have extended their investigations outside the inundation area of the Tisza, as well. In addition to VÁGVÖLGYI, mainly the students of A. HORVÁTH have joined, apart from BÁBA, since the sixties-seventies, in the research work, in some regions of the Great Plain (GEBHARDT, RICHNOVSZKY, KOVÁCS). The first Hungarian malacological conference, as well, was organized on their suggestion in Szeged.

In the Great Plain 97 species have so far been found, proving that the Great Hungarian Plain may be considered as an impoverished foreground of the Carpathians and Alps (the Drava plain). Of these seven species live only outside our frontiers (Table 1, column 8).

The research of the Great Plain cannot be closed. The systematic elaboration of the plain parts of the neighbouring states, and that of the culture and semi-culture areas, are missing.

Introduction

The Great Hungarian Plain is the largest geographical region of the country. Its largest part is formed by the Plain along the Tisza (PÉCSI 1969).

Its malacological investigation has been, and remained, the poorest among all the other regions. The explanation of this was already given by Soós 1915: "...even those dealing with these were more attracted by the mountainous district, which promised more things of interest, concealed a greater richness than the plain so poor in molluscs". At the same time, at any rate, Soós threw light upon, with his works (1915, 1928) that this fauna was not poor. This has throughly been confirmed by the researches of the latter decades.

In the past twenty years (since 1958), a new light was thrown upon this fauna by my forest investigations, carried out with a quadrating method, which investigations included the Hungarian, Czechoslovak and Rumanian parts of the Great Plain.

The method of elaboration

In addition to my own collections, I have also used the data of authors, publishing about the Great Plain. The documentary material of the collections concerning the Great Plain was namely annihilated by the destruction of the Zoological Department of the National Museum by fire, in 1956. On the basis of the literary data, it turned out that, till the forties, the authors, with the exception of CSIKY 1906 and ROTARIDES 1931, have not summarized the data of one another.

I have also used the journal of collection of CZÓGLER, written between 1915 and 1934, which is in my possession.

I am presenting the data coming from the different parts outside the frontier of the country in nine columns in Table 1.

Owing to the changes in nomenclature in the course of the almost 100 years, the names of species, published by the different authors, were modified, as follows. *Perpolita radiatula* = *Nesovitrea hammonis, Aegopinella nitens* = *Aegopinella minor, Arion empiricorum* = *Arion fasciatus, Oxychilus callarius* = *O. draparnaudi.* I have arranged the taxonomical sequence of the species list of Table 1 and the nomenclature of species according to Pintér's publication (1974). *Vallonia enniensis* (GREDLER 1856) takes place under the name of *V. pulchella.*

History of the malacological research in the Great Hungarian Plain

The first data are published of Nagyvárad and environment in 1868, 1872, 1891 by MOCSÁRY. He is followed by LÓCZY 1886, TÖMÖSVÁRY 1889, TRAXLER 1893, with data from the environments of Temesvár and Munkács. The environs of Budapest are elaborated by HAZAY, 1881. Following their activity, the fauna catalogue of CSIKY 1906 already renders account of 54 land species, unfortunately without exact data of habitat. Of this, 42 species can be accepted as origins really from the Great Plain. Csiky's work contains Westerlund's data (1890), as well, taken over from Hungarian authors, resp. coming from Hungarian exchange material abroad concerning the Great Hungarian Plain. It is stated by CSIKY 1906 that "we don't know entirely the mollusc fauna of the central parts, to which the Great Hungarian Plain belongs, as well; on the other hand, some points of that — mainly the environs of Budapest and Nagyvárad — are known enough".

The data of scattered items, coming from some geologists, working in the fringe areas of the Great Plain, were not yet published by CSIKY at the beginning of this century. Thus, he published neither the collection by KORMOS 1904, nor that by TREITZ 1909, from Püspökfürdő, resp. Palics.

KERTÉSZ 1890, 1901, and DUDINSZKY 1907 are publishing aquatic species, their data do, therefore, not take place in my Table.

L. SOÓS deserves credit for having turned—in conformity with the instructions of the Hungarian Geographical Society — his attention to the Great Plain and collecting between 1909 and 1911 on several points of the Great Plain at seventy sites (on the basis of the works of SOÓS 1915, ROTARIDES 1931, SOÓS 1943, 1956). He first summarized his works (in answer to Sturany-Wagner's work, 1914) in 1915. He used the scattered data of other collectors (CSIKY, ENDREY, GYŐRFFY, HAZAY, HORVÁTH, KERTÉSZ, ÚJHELYI), as well. Of the collections, summarized here, the data of 25 collecting places on the part of the Great Hungarian Plain outside the national frontiers.

My Table published here also encloses the data of MOCSÁRY and KERTÉSZ on the slugs collected by them. These were, namely, omitted by SOÓS. He wrote: "because

of omitting the shell-less forms, I have also omitted the data of MOCSÁRY and KERTÉSZ referring hereto". Soós could not collect slogs owing to aridity.

The fringes of the Great Plain let know very much of the fauna of the Great Plain of yore. On the one hand, they afford the proofs of the dispersion to the Great Plain. On the other hand, the forest fauna, the remains of which are recognized by Soós in the fauna of Bátorliget (Soós 1928), could then be found just in the fringe areas of the Great Plain (e.g, in the first part of the century, the environment of Mohács and the plain at Bereg—Szatmár belonged to an almost continuous forest area).

The later works of Soós concerning the Great Plain were inspired by a faunistical publication of DUDICH 1926.

Later on, Soós's attention turned towards the past of the Hungarian mollusc fauna (Soós 1926), at which he takes into consideration the data coming from the fringe of the Great Plain, resp. from the mountainous areas (Transylvania). The main merit of this work is the observation of faunal history (KROLOPP 1973).

Soós's attention was attracted, later on, in the course of his research work in the Great Plain, by the exploration of the fauna at Bátorliget. Answering to the establishments of DUDICH 1926, he writes his recent works (1927, 1928). In the debate, both of them reach at a right knowledge. DUDICH recognizes the role of subsoil water, moving close to the surface, as the main factor. Soós, referring to the reconstruction of the plain vegetation by RAPAICS 1925 and KAÁN 1927, establishes that Bátorliget is a remainder of an earlier forest phase of the Great Plain. As he writes, "we may conclude, of full right, that in the old humid Great Plain with forests, groves, lived a similar fauna to that of the present-day Bátorliget, or even richer".

However they reached knowledge, demonstration was, unfortunately, missing. Although in the nineteen-twenties, a high number of forests, preserving a similar fauna, may have existed in the Great Plain: in the Nyír (a district in north-eastern Hungary), in Szatmár—Bereg, and even in the area Turjánvidék. The intensive draining of subsoil water began namely only in the thirties.

Following Soós's work (1915), two newer malacologists began working in the Great Plain: CZÓGLER (in his collecting diary, led from 1915, the last note is in 1934), as well as Rotarides. Both collected the water and land fauna of Szeged and its wider environs. Some recent data are published by Schlesch 1929, as well. Rotarides is the first who, as the first member of Gelei's school of ecological point of view, approaches the molluscs of the Great Plain (ROTARIDES 1926 a, b, 1928). He mentions first the "exchange fauna" of water-edges, but he recognizes spreading by water only in case of some species. He refers to the effect of drainage and cultivation of the Great Plain in making the fauna island-like, as a result of which the mass of the surviving species consists of ubiquitous organisms. He exposes the fauna of the forest at Kistelek and Deszk, collected since then; establishes that the "ribbon" variations of the *Cepaea* species are induced by their interaction with the environment. The species could be used, at present, too, for inducing a change in the environment. Rotarides, getting connected with the work of the Plain Research Committee in Szeged, discovered the fossil fauna of the loess soils in the neighbourhood of Szeged, not forgetting the recent fauna, either (ROTARIDES 1927, 1931, 1932). Then he drew up the list of the mollusc fauna in Hungary, in which the data from the Great Plain get a place, as well (ROTARIDES 1933).

In the meantime, there were some informations about the fauna of the environs of Szeged, from ecofaunistical point of view by CZÓGLER 1927, 1935. CZÓGLER 1927 was only dealing with shell-fish. (The picture of Rotarides and Czógler about the fauna of the Great Plain is to be seen in Table 1, column 4).

FINALLY, CZÓGLER, ROTARIDES 1938 analyse the deposit fauna of the Tisza and Maros. They recognize the role of water in the distribution of the fauna. Their investigations are, however, localized to the environs of Szeged.

In the nineteen-thirties, WAGNER publishes some data of the Great Plain only in connection with a few species. He gave a description (later proved erroneous) of a new species (1933 a, 1935 b, c, d) and then wrote of the distribution of the Pomatias genus in 1938.

Soós 1943, 1956 summarizes the knowledge referring to the mollusc fauna in the Carpathian basin. His principal work is, of course, containing the data of the Great Plain, as well.

With this, the activity investigating into the Great Plain of the three great malacologists of the beginning of our century (ROTERIDES, SOÓS, WAGNER) is closed. Of their 240 monographs of malacological subject 17 were dealing with the Great Plain. Even the number of the papers of malacological subject, dealing with the Great Plain since 1872 was not more than 31 (a number of these are, however, dealing with aquatic fauna, as well.)

Rotarides's student, A. HORVÁTH, dealt with molluscs in Szeged since 1940. His main merit is, to have recognized the importance of the systematic Tisza Research among the first researchers (BÁBA 1973). Before drawing attention to the research of the animal kingdom of the Great Plain (SZENTIVÁNYI 1944—1945), he wrote eight papers, mainly in connection with the Tisza. These deal, for the most part, with the aquatic fauna of the Tisza and its dead arms. Land snails are treated by HORVÁTH 1950, 1955, 1957, 1958, 1962. His ecofaunistical works give valuable dates to the knowledge of snails in the inundation areas of the Tisza valley. He classifies the different species on the basis of their humidity and temperature demands. He deals with the effect of draining on the formation of the environment. In respect of Bátorliliget, he brings the opinions of Dudich and Soós nearer to each other. He writes: "...the mollusc fauna of the Great Plain preserved, besides the Holocene changes, a number of Pleistocene qualities in the primeval bogs (HORVÁTH 1954) (!?)

In his papers, treating Pleistocene snails from the Danube—Tisza interstream region (HORVÁTH—ANTALFI 1954, HORVÁTH 1962, 1963, 1964, 1965, 1966, 1972), he uses his ecological observations, too, concerning the species from the Tisza valley.

In 1956—1957, the organized Tisza-research work in the framework of the Tisza-Research Working Committee, began with Academical support, led by Prof. KOLOSVÁRY.

In the work of the Working Committee I have also participated from its beginning, on the proposal of A. HORVÁTH, and my work has included the forests of the Great Plain. Cf.: BÁBA 1958, 1962 a, b, 1964, 1965, 1966, 1968, 1969 a, b, c, 1970, 1971, 1970—71 a, b, 1972, a, b, 1973 a, b, 1974 a, b, c, d, 1975 a, b, sc, d, 1977 a, b, d, 1978, 1979 (these publications deal only with land snails).

The Tisza deposit fauna is analysed by VÁSÁRHELYI 1958, on the basis of his collections from the Upper and Middle Tisza. The non-published data of his collections, concerning the Great Plain, were reviewed by the elaborator of his collections, VARGA, in 1979.

Vágvölgyi's paper (1953) is extremely informative from methodical point of view, as well. In the course of reelaborating the snail fauna of Bátorliget, he already deals with the dominance relations, too. He carries out his collections in plant-coenological units, summarizing also the sporadic collections of Z. KASZAB, V. SZÉKESSY, GY. ÉHIK, Mrs. KISS-KOCSIS, Mrs. G. FEJÉRVÁRY, J. STILLER, G. GERE, G. ZILAHI-SEBESS.

From the nineteen-sixties and seventies, parallel with my investigations, more and more people have joined in the malacological research work, mainly in connection with some regional units of the Great Plain. Particularly, the activity of some students of A. HORVÁTH is considerable.

The elaboration of the Danube valley and the Drava-flat was the first (GEBHARDT 1961). The: RICHNOASZKY 1962, RICHNOVSZKY-KOVÁCS 1962, RICHAOVSZKY 1963, 1967, 1973, RICHNOVSZKY—ZEISSLER 1968. (From the above-listed papers those dealing with aquatic snails are missing). I. PINTÉR 1962 gives an exact survey of the distribution of *Cepaea* species in this country.

From among the specialists of the University in Debrecen, BOGNÁR 1969 gives coenological data from the flood-plain groves of the Danube at Baja. M. TÓTH 1971—1973, 1975 elaborates the molluscs of the inundation area of the Bodrog at Sárospatak and studies the molluscs of Haláp.

Horváth's student, KOVÁCS 1974, gives some faunistical knowledge of the molluscs in the environs of Békéscsaba. He also publishes the data from. A. Varga's collections in County Békés. He finds a new species *(Ochychilus hydatinus)* in the fauna of our country.

AGÓCSY 1965, 1966, 1968 also publishes some data of the Great Plain (his data from the Nyír, from the area between the Duna and Tisza rivers are only published by PINTÉR—RICHNOVSZKY—SZIGETHY 1979). He investigates, how the occurrence of the single species can be inserted in the climate district classification of Thornthwaite concerning our country.

L. PINTÉR 1962, 1967, 1970 and his student, A. SZIGETHY 1973 clarify, in connection with their fauna-revising activity, on the basis of the data being at their disposal, the proper anatomical-taxonomic place and distribution of the single genera and species. VARGA—PINTÉR 1972 describe a new species, found in Kovács's new collections, from the southern part of the Great Plain *(Hygromia kovacsi)*.

In 1971, the malacologists of the southern Great Plain (HORVÁTH, BÁBA, RICHNOVSZKY, KOVÁCS, HORNUNG, SZEKERES) arranged a meeting in Szeged. In the Summer of 1972, in Baja, on their suggestion, the malacologists working in the country had a meeting, resolving the systematical exchange of information and organizing the systematic research of the fauna (BÁBA 1974). As a result of this, the journal Soósiana has been published. And on the basis of the common processing of the recent data of distribution after 1950, as secord in the World, the monograph: PINTÉR—RICHNOVSZKY—SZIGETHY 1979: The present-day situation of the malacological research in the Great Plain was published, according to the system U TM, with faunalistical distribution maps.

From the fauna of the Great Hungarian Plain no full picture can be made, even today. The systematic elaboration of the flat parts of Czechoslovakia, Rumania, Jugoslavia, and the Soviet Union (Sub-Carpathia or Ruthenia) is missing. About this, the collections from the beginning of this century could only give some loose survey. My own collections 1970, 1972—1973 from Rumania, Czechoslovakia also give only a little contribution to knowledge (Eastern Slovak Plain, Rumanian part of the Nyír, Temesköz, the area along the Maros).

The investigation into the Great Hungarian Plain can also not be closed. The areas under forest culture, planted forests, banks of canals, investigated only a little by me, can faunistically yield some interesting problems. Good examples for this are the two living individuals of *L. plicata,* collected by I. MAHUNKA in Újszentmargita in 1977, as well as the collections of GY. KOVÁCS, carried out in the different semiculture areas (parks of manor-houses, banks of canals and rivers) and culture areas

Table 1. *Phases of knowing the snail fauna of the Great Hungarian Plain from the beginning of the century until our days*

	1	2	3	4	5	6	7	8	9
Pomatias elegans (O. F. MÜLLER 1774)				+				X	
Pomatias rivulare (EICHW. 1829)		+	+		+			X	+
Aricula polita (HARTM. 1840)	+		+		+			+	
Carychium minimum (O. F. MÜLLER 1774)		+	+		+	+	+	×	+
Carychium tridentatum (RISSO 1826)					+		+	×	
Cochlicopa lubrica (O. F. MÜLLER 1774)	+	+	+	+	+	+	+	×	+
Cochlicopa lubricella (PORRO 1837)					+		+	×	
Columella edentula (DRAP. 1805)				+	+			×	
Truncatellina cylindrica (FER. 1807)		+	+	+	+	+	+	×	+
Truncatellina claustralis (GREDLER 1856)					+			+	
Vertigo augustior JEFFR. 1830		+	+		+			×	+
Vertigo pusilla O. F. MÜLL. 1774					+			×	
Vertigo antivertigo (DRAP. 1801)		+	+	+	+		+	×	+
Vertigo moulinsiana (DUPUY 1849)	+	+		+	+			+	
Vertigo pygmaea (DRAP. 1801)		+		+	+	+	+	×	+
Orcula doliolum (BROUG. 1972)							+	×	
Granaria frumentum (DRAP. 1801)	+	+	+	+	+	+	+	×	+
Pupilla muscorum (L. 1758)	+	+	+	+	+	+	+	×	+
Pupilla sterri (VOITH 1838)								×	
Vallonia pulchella (O. F. MÜLLER 1774)	+	+		+	+	+	+	×	+
Vallonia costata (O. F. MÜLLER 1774)	+	+	+	+	+	+	+	×	+
Acanthinula aculeata (O. F. MÜLLER 1774)					+		+	×	
Chondrula tridens (O. F. MÜLLER 1774)	+		+	+	+	+	+	×	+
Ena obscura (O. F. MÜLLER 1774)								×	
Zebrina detrita (O. F. MÜLLER 1774)		+		+				+	+
Cochlodina laminata (MONTAGU 1803)	+	+	+	+	+	+		×	
Ruthenica filograna (ROSSM. 1836)			+					+	
Macrogastra ventricosa (DRAP. 1801)				+		+		+	
Macrogastra latestriata (A. SCHMIDT 1857)	+								+
Clausilia dubia DRAP. 1805				+		+		+	
Clausilia pumila C. PFEIFF. 1828			+		+			×	
Lacinaria plicata (DRAP. 1801)	+	+			+			×	+
Laciniaria biplicata (MONTAGU 1803)		+		+		+		×	+
Succinea putris (L. 1758)	+	+		+	+	+		×	+
Succinea oblonga DRAP. 1801	+	+	+	+	+	+	+	×	+
Succinea elegans RISSO 1826	+	+		+	+	+	+	×	+

	1	2	3	4	5	6	7	8	9
Cecilioides acicula (O. F. MÜLLER 1774)		+		+		+	+	×	+
Punctum gygmaeum (DRAP. 1801)		+			+	+	+	×	
Discus rotundatus (O. F. MÜLLER 1774)	+		+					+	+
Arion hortensis FER. 1819	+	+		+			+	×	+
Arion circumscriptus JOHNSTON 1828			+		+	+	+	×	×
Arion fasciatus (NILSSON 1822)	+	+		+				+	+
Arion subfuscus DRAP. 1805	+			+		+		×	×
Vitrina pellucida (O. F. MÜLLER 1774)		+			+	+	+	×	
Zonitoides nitidus (O. F. MÜLLER 1774)	+	+	+	+	+	+	+	×	+
Vitrea crystallina (O. F. MÜLLER 1774)	+	+	+	+	+	+	+	×	
Vitrea diaphana (STUD. 1820)						+		×	
Aegopis verticillus (LAM. 1822)						+		+	
Aegopinella pura (ALDER 1830)			+	+				×	
Aegopinella minor (STABILE 1864)	+	+	+		+	+	+	×	+
Aegopinella ressmani (WEST. 1883)						+		×	
Nesovitrea hammonis (STRÖM 1765)							+	×	×
Oxychilus draparnaudi (BECK 1837)				+			+	×	
Oxyhilus hydatinus (RM. 1838)							+	+	
Oxyhilus glaber (RM. 1835)	+	+	+		+	+		×	+
Oxychilus inopinatus (ULIČNÝ 1887)				+			+	×	
Daudebardia rufa (DRAP. 1805)						+		×	
Daudebardia transsylvanica (CLESSIN 1877)	+							+	+
Daudebardia calophana (WEST. 1881)								×	×
Milax rusticus (MILLET 1843)	+							+	+
Milax budapestiensis (HAZAY 1881)							+	+	
Limax nyctelius BOURG. 1861								×	
Limax tenellus O. F. MÜLLER 1774							+	×	
Limax maximus L. 1758	+		+	+	+			×	+
Limax cinereoniger WOLF 1803	+	+				+		×	×
Limax flavus L. 1758				+			+	×	
Bielzia coerulans (M. BIELZ 1851)								+	+
Lehmania marginata (O. F. MÜLLER 1774)	+	+						×	+
Deroceras laeve (O. F. MÜLLER 1774)				+		+		×	
Deroceras reticulatum (O. F. MÜLLER 1774)						+		×	×
Deroceras agreste (L. 1758)	+	+		+		+	+	×	×
Euconulus fulvus (O. F. MÜLLER 1774)	+	+		+	+	+		×	+
Bradybaena fruticum (O. F. MÜLLER 1774)	+	+	+	+	+	+		×	+
Helicella obvia (HARTM. 1828)	+	+	+	+	+	+	+	×	+
Helicopsis striata (O. F. MÜLLER 1774)	+	+		+			+	×	

	1	2	3	4	5	6	7	8	9
Monacha cartusina (O. F. MÜLLER 1774)	+	+	+	+	+	+	+	×	+
Perforatella bidentata (GM. 1788)		+	+	+		+		×	+
Perforatella dibothrion (M. KIM. 1884)								×	
Perforatella rubiginosa (A. SCHMIDT 1853)	+	+	+	+	+	+	+	×	+
Perforatella incarnata (O. F. MÜLLER 1774)				+	+	+		×	
Perforatella vicina (RM. 1842)			+	+	+			×	
Perforatella umbrosa (C. PFEIFFER 1828)				+		+		+	+
Hygromia transsylvanica (WEST. 1876)								×	
Hygromia kovacsi VARGA—PINTÉR 1972							+	×	
Trichia unidentata (DRAP. 1805)				+		+		×	+
Trichia striolata danubialis (CLESSIN 1874)		+		+		+		×	+
Trichia hispida (L. 1758)	+	+		+		+		×	
Trichia villosula (RM. 1838)	+	+						+	+
Euomphalia strigella (DRAP. 1801)	+	+	+	+	+	+	+	×	+
Helicigona banatica (RM. 1838)		+		+	+			×	+
Helicigona arbustorum (L. 1758)	+	+		+		+		×	+
Isognomostoma isognomostoma SCHRÖTER 1784								×	
Cepaea vindobonensis (FER. 1821)	+	+	+	+	+	+	+	×	+
Cepaea nemoralis (L. 1758)						+		×	
Cepaea hortensis (O. F. MÜLLER 1774)	+	+				+		×	+
Helix pomatis L. 1758	+	+		+	+	+	+	×	+
Helix lutescens RM. 1837	+	+	+		+		+	×	+
Sum total:	42	48	32	51	48	49	42	97	54
till —1—4			69						
till —5—7			77						

Meaning of the single columns of the Table:

1. MOCSÁRY, TÖMÖSVÁRY, WESTERLUND, HAZAY, Collections from CSIKY (1892—1906).
2. KORMOS, TREITZ, SOÓS 1906—1915).
3. DUDICH, SOÓS, collections from Bátorliget (1925—1928).
4. CZÓGLER, ROTARIDES, SCHLESCH, SOÓS, WAGNER (1915—1943).
5. AGÓCSY, HORVÁTH, VÁGVÖLGYI, SOÓS (1943—1956).
6. BOGNÁR, GEBHARDT, RICHNOVSZKY in Danube valley, Drava plain (1956—1972),
7. KOVÁCS, TÓTH, A. VARGA, VÁSÁRHELYI, (County Békés, the Nyir, till 1974).
8. Summarized fauna of the Great Hungarian Plain. Own collections marked by x.
9. Species occurring in the part of the Great Plain outside of the border of the country.

of County Békés (acacia groves, environs of fish-ponds, cemeteries, town parks, hothouses, etc.)

It is proved by the 97 species, taking place in the summary that the Great Hungarian Plain can be regarded as the impoverished foreground of the Carpathians and Alps (Drava-flat). From among the species listed in column 8, *Pupilla sterri, Orcula*

doliolum, Vitrea diaphana, Laciniaria plicata, L. biplicata, Trichia unidentata, Trichia striolata danubialis, Isognomostoma isognomostoma are expressly living but accidental elements, carried by the river water. *Zebrina detrita* was found in Soós's collection from Kalocsa and Verbász. Its occurence in the Great Plain is dubious. *Macrogastra latestriata, Dandebardia transsylvanica, D. calophana* (BÁBA 1972), *Milax rusticus Trichia villosula* only occured in the parta outside the frontier of the country.

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The paper will be continued together with References.

Az Alföld malakológiai kutatásának története és mai helyzete

BÁBA K.

A szerző 1968-tól napjainkig áttekinti az Alföld malakológiai kutatásának történetét.

Kivonat

A Nagyalföld faunájáról ma sem alkothatunk teljes képet. Hiányzik Csehszlovákia, Románia, Jugoszlávia és a Szovjetunió (Kárpátalja) alföldi részeinek rendszeres feldolgozása. Erről a század eleji gyűjtések csak áttekintő képet adhattak. Saját 1970, 1972—73. romániai, csehszlovákiai gyűjtéseim is csak egy-egy adalékot nyújtanak a megismeréshez (Kelet Szlovák Alföld, Nyírség romániai része, Temesköz, Maros mente).

A Magyar Alföld kutatása se zárható le. Az általam kevéssé vizsgált, erdőgazdasági művelés alá eső területek, telepített erdők, csatornapartok még több érdekességet nyújthatnak faunisztikailag. Erre jó példa a MAHUNKA I. által Újszentmargitán gyűjtött L. plicata 2 élő példánya 1977-ben, valamint KOVÁCS GY. Békés megye különböző félkultúr (kastélyparkok, csatorna, folyópartok) és kultúr területein (akácosok, halastavak környéke, temetők, városi parkok, üvegházak, stb.) végzett gyűjtései.

Az összesítésben szereplő 98 faj azt bizonyítja, hogy az Alföld a Kárpátok és az Alpok (Drávasík) elszegényedett előtereként fogható fel. A 8 oszlopban felsorolt fajok közül a *Pupilla sterri, Orculadoliolum* kifejezetten folyóvízhordta véletlen elemek. A *Zebrina detrita* Soós gyűjtéséből került elő Kalocsáról és Verbászról. Léte az Alföldön kétséges. A *Macrogastra latestriata, Dandebardia transsylvanica, D. calophana* (BÁBA 1972), *Milax rusticus, Trichia villosula* csak az országhatáron kívüli részekről került elő.

ИСТОРИЯ И СОВРЕМЕННОЕ СОСТОЯНИЕ МАЛАКОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ АЛФЁЛЬДА

К. Баба

Резюме

Автор рассматривает историю малакологических исследований Алфёльда с 1968 года до наших дней.

Относительно фауны Большой Европейской низменности и в настоящее время нет полного представления. Нет систематической разработки низменных районов Чехословакии, Румынии, Югославии и Советского Союза. (Карпатский хребет). Собранные здесь в начале столетия коллекции дают лишь обзорное представление. Некоторый вклад представляют коллекции автора, собранные в Румынии и Чехословакии в 1970, 1972—73 гг. (Восточно-Словацкая низменность, румынская часть Ниршега, Темешкёз, подережье Мароша).

Следует продолжать исследования и в Венгерской низменности. Много интересного могут дать фаунистике менее исследованные автором подлежащие ведению лесного хозяйства территории, лесонасаждения, берега каналов. Хорошим подтверждением этого являются обнаруженные И. Махунка в 1972 году в районе Уйсентмаргит 2 живых образца L. plicata, а также результаты исследований Д. Ковач, собранные им на различных полукультурных (парки бывших дворцов, берега рек, каналы (и культурных) насаждения акаций, районы рыбных озёр, кладбища, городские парки, теплицы и т.д.) территориях обл. Чонград коллекции.

Собранные в общей сложности 98 сортов свидетельствуют о том, что Алфёльд следует признать обедневшим преддверием Карпат и Альп (равнина Дравы). Из перечисленных в восьми столбцах водов Pupilla sterri, Orcula doliolum являются случайными элементами, занесенными сюда водой рек.

Zebrina detrita попала из коллекции Шоша районов Калача и Вербас. Наличие в Алфёльде является спорным. Macrogastra latestriata, Dandebardia transsylvanica, D. calophana (Баба, 1972), попали сюда только из-за границы. Milax rusticus, Trichia villosula

Istorijat i dana nje stanje malakolo kih istra ivanja u Panonskoj niuiji

Bába K.

Abstrakt

Autor daje pregled malakoloških istraživanja u Panonskoj niziji od 1968. godine do danas. O fauni Panonske nizije do danas nemano potpunu sliku. Nedostaje sistematska obrada faune sa područja ćehoslovačke, Rumunije, Jugoslavije i nizijskog dela Zakarpatskog područja SSSR. Sopstven materijal prikupljen u toku 1970, 1972—73. sa područja ćehoslovačke (nizija istočne Slovačke) i Rumunije (Nyírség, Temesköz, područje Marosa) takodje su samo prilog upoznavanju faune.

Ni istraživanja madjarskog dela Panonske nizije nisu okončana. Sopstvena sporadična ispitivanja površina pod šumama, plantažnih šuma, pošumljenih deponija kanala, mogu dati još dosta interesantnih podataka u faunističkom pogledu.

Prikazanih 98 vrsta ukazuju na osiromašenje faune na području Panonske nizije, Karpata i Alpa (područje Drave). Medju utvrdjenim vrstama *Pupilla sterri, Orcula doliolum* su slučajni, sa vodotokom prispeli elementi. *Zebrina detrita* je konstatovana u zbirci Soós-a iz okoline Kaloče i Vrbasa. Njegovo prisustvo u Panonskoj niziji je sporno. *Macrogastra latestriata, Dandebardia transsylvanica,* D. calophana (Bába 1972), *Milax rusticus, Trichia villosula* prikupljeni su samo sa područja preko državne granice.