Можно констатировать, что здесь сильнее, чем в остальной части Армении, сказывается влияние Иранской фауны.

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THE HISTORY OF FORMATION OF STAPHYLINID FAUNA (*Coleoptera, Staphylinidae*) IN ARMENIA

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The paper discusses the hypotheses of formation of fauna of staphylinid beetles in Armenia from Paleogene to present time, taking into account the extant data on faunistics, paleogeography and paleontology. For reconstruction of faunistic development, basic concepts of floristic and faunistic genesis in Caucasus are taken into account. Based on analysis of contemporary fauna of staphylinids in Armenia, the history of its formation is reconstructed.

***Ամիրյան Ա.*, Հայաստանի ստաֆիլինիդ-բզեզների (*Coleoptera, Staphylinidae*) ֆաունայի կայացման պատմությունը:** Հոդվածում դիտարկվում է պալեոգենից մինչ օրերս Հայաստանի ստաֆիլինիդ-բզեզների ծագման հիպոթեզները՝ հաշվի առնելով ֆաունիստական, պալեոաշխարհագրական և հնէաբանական առկա տվյալները: Ֆաունայի զարգացման վերակառուցման համար հաշվի է առնված Կովկասի ֆաունայի և ֆլորայի գենեզիսի ընդհանուր դրույթները: Հայաստանի ստաֆիլինիդ-բզեզների ժամանակակից ֆաունայի վերլուծության հիման վրա վերակառուցված է նրա ձևավորման պատմությունը:

***Амирян А.*. История становления фауны стафилинид (*Coleoptera, Staphylinidae*) Армении.** В статье рассматриваются гипотезы происхождения фауны жуков-стафилинид Армении с палеогена до настоящего времени, с учетом имеющихся данных по фаунистике, палеогеографии и палеонтологии. Для реконструкции развития фауны учтены общие положения генезиса фауны и флоры Кавказа. На основе анализа современной фауны стафилинид Армении реконструирована история ее формирования.

INTRODUCTION. The studies of fauna of staphylinid beetles in Armenia continues for about 150 years [1-6, 14-17, 19, 22-28, 30-32, 33-35, 36, 46, 47, 53], but their information is insufficient for clarification of the history of formation of staphylinid fauna. Meanwhile, the issues of faunistic formation, its major components that make up this fauna, its origin and interrelationships present both theoretical and practical interest.

Even though the genesis of fauna had always been attracting attention of natural scientists, until now there is no any single technique for performing such an analysis.

This paper is based on monography by S.M. Yablokoff-Khnzorian [29] which summarizes information on geography of Armenia in by gone geological times. Simultaneously, a number of other works are used [41, 49]; in some cases, zoogeographical data allowed to choose the viewpoint that best fits a given study.

Analysis of genesis of staphylinid fauna of Armenia hinges on 21 zoogeographical groups [29], which are unified by us into 4 complex [7]. Below we discuss the history of formation of fauna of family *Staphylinidae* in Armenia based on hypotheses of the origin of fauna and flora in Armenia and adjacent territories formulated by both zoologists and botanists [8-12, 18, 20, 21, 29, 37-41, 44, 45, 48, 50-52, 54].

The importance of inclusion of these data to our study is justified by the fact that the modern physic-geographical conditions and patterns of geographical distribution of insects in Armenia are tied closely to its history. That is why paleogeographical reconstruction enables to understand many aspects of formation of fauna of this region, which cannot be explained by up-to-date conditions. It also clarifies the age of modern geographical landscapes and basic types of their evolution.

MATERIALS AND METHODS. The principal method of this analysis was biocenological as all other methods that consider species apart from their environment as pure systematic or limited to discussion of geographical distribution area only are insufficient and can serve only as supplementary instruments. The principal method is based on studying biotopes and effect of changes in them.

RESULTS AND DISCUSSION. Faunas of different ecosystems of Armenia differ sharply between each other in specific composition, relationships with the environment, connections with faunas of other areas, apparently by origin. Hence, it will be expedient to discuss some of most important patterns in composition of these faunas and try to

outline the possible ways of their origin and development. For understanding of this issue, it is essential to briefly note some basic stages of geological history in the discussed time frame.

Knowing the spectrum of geological past of the region, we can try to reconstruct the basic directions of landscape migrations in the time frame from Oligocene to Holocene, taking into account the existence of unavoidable local deviations from overall scheme caused by relief, continental edges, soil conditions, microclimate, etc.

In Oligocene, all southern Holarctic region was dominated by humid climate which contributed to distribution of evergreen forests which were presented in Europe by Poltava flora and in Siberia (up to Pacific Ocean) – by Turgai flora. Between two these zones, the desert zone with xerophilic vegetation might have been existing somewhere from Central Asia to China. Elements of this vegetation penetrated to Europe in Crestaceous era and jointly with two other floras shaped the Mediterranean "Ginkgo flora".

In the discussed period, shape of the continents differed substantially from what is today: the vast sea Tetis was spread south of Europe which reached Himalayas in the east, and may be even Pacific. Due to this, it is clear that Syria, Iran and Iraq were completely underwater. Anatolia with southern Greece made the island Egeida; another large island existed from Crestaceous at the place of contemporary Arabia; the third island linked Northwestern Africa with southern Spain (Betis mattif). Caucasus consisted of several islands; Tetis covered all Turan, Pre-Caucasus and basins of Black, Azov and Caspian seas; east of Ural ridge, the wide strait connected Tetis with Arctic Ocean. A great part of Europe was a big island that was absolutely isolated from Africa and Asia. The link with America that existed in Crestaceous was broken. The shape of European continent differed that time somewhere from modern one.

In late Oligocene, Tetis began to retreat and Europe joined with Asia along Ural Mountains what contributed to exchange in their fauna and flora. By that time, sea regression and a number of orogenic uplifts characterized Apennine peninsula appeared and Caucasus with Western Europe.

In Miocene, climate began to cool down but stayed still warm enough. In Europe, forestlands continued their existence but evergreen species were substituted by deciduous what is confirmed by discoveries of amber that reflected the stages of southward migrations of subtropical flora. In Middle Europe, by the end of Miocene vast treeless areas began to appear north of forest zones – pre-steppes flora of which is unknown, but widespread distribution of Hipparionic fauna that consisted mainly of herbivores proves the existence of grass cover here. According to some suggestions, three type of landscape might exist here: 1) savannas that extended from northern edge of Mediterranean forest lands, remnants of which still survive in Central Asia as "relict savannas" [44]; 2) true pre-steppes with relatively dense grass cover; 3) deserts existence of which is proved by some desert formations and powerful salt accumulations of that time [54]. In Miocene period, a strong regression of Tetis occurred that caused liberation of all Turan lowland; Caucasus gets free from sea cover almost completely, and Pre–Caucasus is still underwater. North of Tetis the shallow Sarmat Sea emerges. That time [8] its area joined the basins of Aral, Caspian and Black seas and spread westwards to Danube bank; here this sea embraced by narrow strait the northern and western ridges of Alps and flowed to Mediterranean Sea (near modern mouth of Rona).

In mid-Miocene as a result of powerful orogenic movements, the Alps was formed. In low Sarmat, Trans-Egeic strait closes that separated Europe from Egeida. By that time, approach of Tetis in west to modern Mediterranean basin took place, and in east – up to Himalayas. In Sarmat, Africa joined with Italy by territorial bridge. In Meotis, Hipparionic fauna became common and used to be enriched by immigrants from forest environment what shows the expansion of pre-steppes and impoverishment of arboreal vegetation of that time. In Pliocene, Hipparionic fauna goes southward up to northern India, Burma, Abyssinia and East Africa where it stayed alive up to Pleistocene. Corsica and Sardinia still kept isolation, but joined each other several times and succeeded to maintain representatives of their ancient faunas. But beginning from Pliocene, elements from neighboring countries began to migrate here during the short communications with continent. For Corsica, such territorial link was with France in low Pliocene and with Italy later through the island Elba. Sardinia had three such links with Italy in Pont, Akchagyl and Quaternary times.

For the Caucasus, first link with the north was established in Kimmerian time and was expressed in deposits of Balakhan productive zone that reach Grozny town and have the structure of continental deposits, partly as mouth deposits and lake sediments, and partly – as proluvium and mountain deposits. West of these deposits, the link with the north existed through the Stavropol plateau. In Akchagyl, this link was interrupted by Manych sea strait. An opportunity is not excluded that territorial connection of Caucasus with the north took place up to Kimmerian times (may be even to Meotis), but for a short period.

In late Tertiary period, a new sea regression of Caspian basin occurred northwards to middle Volga basin. Regarding the link of Caucasus with east, existence of significant changes in shape of Caspian sea in Tertiary and Quaternary times is supposed and here is a ground to speculate the formation of terrestrial bridge in the past that crossed Caspian sea at the level of Apsheron peninsula and had been the continuation of big anticline of Great Caucasus Ridge. Unlike the Caspian Sea, Black Sea was never crossed by terrestrial bridge.

Pleistocene was marked by succession of a number of glacier periods, first of which apparently took place in Pliocene between Akchagyl and Apsheron. The results of the pollen analysis in the zone of European steppes of the former Soviet Union have shown that by that time taiga encroached the steppe, reached Black sea coast and had to join with expanded areas of Caucasian forests in north-west Pre-Caucasus [20]. In eastern Transcaucasus, forestlands did not expand due to the climate aridity.

In glaciating periods, two separate phases can be identified: humid and arid. First, apparently, lasted from Pliocene to great interglacial period and comprised one or two cooldowns that lead to formation of powerful mixed cover glaciating in Europe. However, this was insignificantly reflected in European flora and fauna as proved by preservation

of many warm-loving forms, such as P. Jannel's [37] discovery of insects of Angara origin on Elgon and Kilimanjaro Mts. right at equator.

Second phase is characterized by formation of powerful loess and loess-like deposits throughout Europe. In this time, one to three cooldowns took place; they also lead to cover glaciating in northern Europe. This contributed to forest driveway and distribution in vast territories of tundra that was inhabited by cold loving steppe fauna. As a result, multiple landscape alterations occurred.

Holocene started by sharp warming of climate, retreat of glaciers and strong expansion of conifer and broadleaf species. Here two climatic phases changed each other: ancient cold and dry; young, warm and humid. In European part of former USSR in ancient Holocene the northern and southern borders of forest zone differed insignificantly from todays, but the forest was taiga-like. In mid-Holocene, broadleaf forests began to expand and reach White Sea and even penetrated by 450*km* north of modern forests; tundra disappeared almost completely, southern border of forest went down to lower latitudes of contemporary borders. Whereas Pleistocene was marked by sharp fluctuations of climate, its flora and fauna did not change much despite some extinction in Pliocene times.

Taking into account all said above, analysis of modern staphylinid fauna in Armenia allows to reconstruct the history of its formation, which is discussed by us in periods.

Low Tertiary period to Sarmat. Formation of Caucasus biota in early Paleogene is linked with forest lands of Egeida what partially explains the ancient nature of forest fauna; for Torton period, exchange between the forest faunas of Asia Minor and Balkans was characteristic. This caused the penetration of migration "waves" to the Caucasus.

To clarify the genesis of forest staphylinid fauna in Armenia, faunas of should divide it: 1) tree cover, litter and streams with canyons, and 2) dung. Representatives of tree cover and litter faunas are distributed by three groups: 1) known in Caucasus only in Talysh Mts.; 2) found, besides Talysh, in other parts of Transcaucasus (*Stenus claritarsis* Puthz., *S. prometeus* Puthz., *S. ganglbaueri* Bernh.); 3) known in Gaucasus but absent in Talysh. Initial Caucasus fauna formed first two groups, and the last is the product of the later migrations.

As a result of analysis of forest fauna of Armenia, it is found that the ancient core of this fauna has Paleogenic origin with insignificant admixture of younger species. This time, riparian ecosystems and sazes might have been settled. In analysis, we have found the following faunistic groups: East Mediterranean (7 species) and Mediterranean (11 species). Poor representation of west Caucasus and Pan-Caucasus species has been a result of limited linkage of Arax River with other basins of Transcaucasus. Along with ancient and Mediterranean elements, in fauna of riparian ecosystems the following Asiatic element is abundant (*Platystethus rufospinus* Hochh., *Paederus rubrothoracicus* Goeze., *Stenus aereus* Solsky, *Rabigus formosus* Motsch., *Trogophloeus arquatus* Steph., *Scopaeus minutus* Er., *Philonthus rufimanus* Er.). This fauna passed to Armenia only in Kimmerian time. Majority of endemic in faunas of riparian ecosystems and sazes (genera *Stenus* Latr., *Scopaeus* Er.) show affinity to Turan element and, most likely, come from east.

In the period from Sarmat to Pont the main characteristic feature of formation of Caucasus biota is fast aridization of climate and absence of terrestrial linkages, except for corridor with Asia Minor, hence formation of biota was based on changes in "aboriginal" forest forms [42]. In Pont, connection of Asia Minor and Balkans revived and the elements of pre-steppe fauna of Europe came to Caucasus; at the same time, it is possible that some forestlands occurred that produced an obstacle to such penetration. Anyway, even if migration took place, it has not left to us some tangible traces, as ancient fossils of Hipparionic fauna are not found in eastern Transcaucasus. That is why it is supposed [43], that basic landscape in central Transcaucasus and Armenia in that time was sparse forest, as well as the elements of desert and phrygana that are discussed below.

In the fauna of sparse forests, a number of elements are present that differ in origin times: 1) hydrophilic genera that live now in our forests or are presented by close forms (*Omalium* Grav., *Phyllodrepa* Thoms., *Stenus* Latr., *Quedius* Steph., *Philonthus* Steph., *Tachinus* Grav., *Zyras* Steph.), 2) initially xerophilized forest genera – comers from faunas of Paleogenic sparse forests (*Bryoporus* Boisd., *Homoeotarsus* Hochh., *Astenus* Steph., *Mycetoporus* Manhh.).

Endemics of arid sparse forests (no one is found in light forests) have Egeid origin, except *Phyllodrepa armena* Khnz. Regarding marine Mediterranean and eastern Mediterranean species that are widespread in Mediterranean region and Central Asia, their arrival from west is surmised. Egeid-Turan group is represented in our fauna by 2 species. *Ocypus ensifer* G. Muell. is distributed in Caucasus and northern Iran, hence the center of its origin should be searched in western part of its distribution area, i.e. in Caucasus where it is common somewhere. The distribution area of *Quedius cohaesus* Epp. embraces Caucasus, Asia Minor and Central Asia – it is a characteristic member of Turan fauna. The rest groups are richer in arid sparse forests, which is more ancient than the light forests. The three species described here penetrated to us not earlier than in upper Pliocene. It is supposed that Turan element was insignificant in formation of our sparse forests *that* is why the miocenic antiquity of this ecosystem is understandable.

In Tertiary period, continental linkage of Caucasus with north was established in Kimmerium. That time, a powerful regression emerged that caused a complete isolation of basins of Black and Caspian seas – formation of sea strait (in Akchagyl) what caused a sharp shrinkage of Caspian Sea. This opened a way for penetration of Central Asian fauna to Caucasus: either through Mangyshlak peninsula or through the supposed mountain chain over Capian sea. That time the climate of Armenia was arid, but with patches of humid places where fragmented areas of sparse forests and forests have remained.

The desert fauna of Armenia in different biotopes has different origins *that* are why the specific composition of each of above-mentioned faunas has been considered separately. Fauna of humid salt lands (solonchaks) is considered as the remnant of fauna of marine lagoons that existed up to Miocene in Arax riverside. The typical littoral species of Miocene origin are *Bledius spectabilis* Kr. and *Platystethus nitens* C. Sahlb, which co–exist with Turan forms (*Platy-*

prosopus elongatus Mnnh., *Philonthus velatipennis* Solsky) that penetrated in low Pliocene. Endemics from red clay deserts (*Zyras urartu* Khnz. and *Scopaeus khnzoriani* Coiff.) have Egeid origin. The species *Eremodromius takhtajani* Khnz., that was hitherto thought to be endemic, was found in Western Kopetdag where it also has the roots of Egeid origin and had come to us in Kimmerium. Species with wider ranges have been the intermediate forms that occur in sazes and sparse forests. The ideas described above favor the conclusion that already in Miocene a desert zone existed in Arax riverside that was similar to that in eastern Egeid.

In fauna of thistle semideserts, along with typical semidesert forms (*Physetops herculeanus* Sem., *Piochardia reitteri* Wasm.), the species are recorded that are associated with steppe landscapes of the country; their fauna is younger. Among the species with smaller distribution areas (groups 1-3, 5; totally 8 species), majority have come from northern pre-steppes. Representatives of groups 1-3 can be considered as products of late Miocenic migrations, and representative of 5th (*Aleochara cephalotes* Bh.) – as a descendant of eastern Mediterranean migrations. Domination of species from Ararat and eastern Mediterranean groups over the Turan ones can be explained by more xerometric structure of Central Asia. All the rest groups (Mediterranean, southern Palearctic, widespread and European-Siberian) are comers from north and European-Siberian species are youngest. Domination in phrygana of Mediterranean forms proes the presence in the past of a wide spectrum of Egeid fauna in Armenia.

Climate of Kuyalnitsk century was colder than in Kimmerium, but due to subtle differences in temperature it did not have a significant effect on faunistic composition. Taking into account the distribution of elements of steppe fauna, it can be supposed that just in Pliocene period this fauna had to distribute. Some Caucasus endemics of steppes (groups 1-4) we can regard as the taxa from forests and sparse forests (*Philonthus concinus* Grav., *Creophilus maxillosus* L., *Ocypus picipenis* subsp. *caucasicus* Coiff., *Platystethus arenarius* Fourc., *Aleochara crassicornis* Lac.). These species are not characteristic to steppe, but can be present. The typical steppe species *Homoeusa accuminata* Maerkl., *Medon exquisitum* Kirsch., *Eusphalerum zolotarevi* Reitt., *Tachinus corticinus* Grav., *Mycetoporus ambiguus* Luze., *Philonthus eriwanensis* Bh. which mainly have the Asia Minor origin. Representatives of other groups can be considered as the elements of ancient savannas. The species presented in other groups have different origin places, but majority of them belonged to the steppe fauna of Palearctic in the past from which they migrated to Caucasus.

In Akchagyl the landscape zones of Caucasus were similar to today's (European part of former USSR): first zone was stretched more southwards than now and joined with the forests of Pre-Caucasus; slow transformation of European and Caucasus landscapes took place as a result of climate cooling. That times the finite migration and forest speciation occurs. However, unlike Caucasus, climatic conditions of Arax riverside differed by higher altitudes in Akchagyl times and were protected from north by Great Caucasus ridge. This says about dry subtropical climate of this riverside which could serve a refuge to many warm-loving Transcaucasus forms that had no chance to adapt to cooling in northern regions. Forest migration in Akchagyl did not have to cause significant changes in ancient forest fauna, i.e. forest-forming species remained the same. That times the cold-loving species of genera *Phloeonomus* Heer and *Proteinus* Latr. had to penetrate from north during the first glacial period.

Analysis of this information shows that Akchagyl migration had to enrich the forst fauna of Caucasus; by those time representatives of genera *Nudobius* Thoms. and *Metopsia* Woll. might have been penetrating to Caucasus dispersal of which throughout all Palearctic regions shows their Angar origin. In Mediterranean region they should penetrate no later than in Sarmat times. All forest forms of European-Siberian group, as well as some species that are widespread in Palearctic, should also be attributed to Akchagyl migration.

All processes tied with two glacial periods in Armenia were associated mainly with Quaternary period in which our swamps were formed. Conditions of that period did not favor forest growth and the forest areas shrieked dramatically with formation of several refuges. For fauna of sparse forests, a concentration of species is characteristic to Meghri region (*Omalium cribriceps* Fauv., *Homoeotarsus chaudori* Hochh.) where a strong refuge for thermophilic species had to survive. Another refuge should have been northwestern Iran from which such species as *Astenus filiformis* Latr., *Philonthus acculeatus* Coiff. and *Ocypus ensifer* G. Muell. have migrated and are found in northeastern Armenia.

In the period of Pleistocene changes the fauna of phrygana had to completely disappear, but in Arax riverside this formation stayed alive in small refuges, mainly in Vayots Dzor province (Gndevaz, Shatin, Eghegnadzor, Zaritap, Vayk). This is proved by rich diversity of phrygana ecosystem (*Zyras argus* Khnz., *Medon fusculoides* Coiff., *Hypomedon armeniacus* Coiff., *Mycetoporus brucki* Pand. and others) presented in this province.

The fauna of deserts had to survive during subsequent glaciating (*Zyras urartu* Khnz., *Eremodromius takhtajani* Khnz., *Scopaeus khnzoriani* Coiff.) with a possibility for penetration of desert forms from neighboring countries (*Falagria gratilla* Er. etc.). In this period the fauna of riparian ecosystems could tolerate cooling without significant losses.

Changes in steppe and meadow landscapes were substantial, as beside the climatic conditions the important factor was volcanic activity that periodically exterminated vast areas of local biota. That time, our mountainous fauna was enriched by meadow element [52]. In this connection, boreal migration of genera *Olophrum* Er. [47], *Mannerheimia* Maekl. and some species (*Platystethus cephalotes* Epp., *Mycetoporus punctus* Gyll., *Atheta tibialis* Heer.) took place. Among the rich local boreal fauna, there are several genetic groups: 1) 5 species of boreal origin; 2) 6 species of local steppe origin; 3) 3 species of forest origin, and 4) 3 species of precarious origin. All this says about heterogenic origin of fauna of our mountain meadows and about domination of species from mountain meadow belt in them.

Fauna of swamps is younger and heterogenic; hence it can be supposed that it was richer before Pleistocene beginning of which was marked by arid period when many representatives of ancient fauna of these ecosystems became extinct.

As a result of gradual warming in Holocene, all zone borders had higher elevations those modern ones. If this uplift took place, then we can surmise that forestlands joined in upper Arpa River, lake Sevan and northern Armenia; due to this, migration from refuges of Armenia and other highland massifs of Asia Minor had to occur. Hypothetically, just to that time is attributed the penetration of some thermophilic species from northwestern Iran to Arax riverside. However, already in upper Quaternary period it was difficult to perform the exchange between the faunas of Armenia and more distant countries caused by orographic specifics of this region.

In contemporary time (*Holocene*) nature began to transform under man-made factor which causes the changes in landscape zones and specific composition of ecosystems as a whole. The extreme complication of the issue of faunistic formation in cultural landscapes and uncertainty in origin of many of their element demand for special and careful studies which are still to be continued.

CONCLUSION. Modern staphylinid fauna of Armenia had been formed during the whole Kainozoic time as a result of numerous immigrations, extinction's and speciation acts. Majority of modern endemics, Mediterranean and many polyzonal species exist in Armenia since Paleogene. In Kuyalnitsk century, the great part of thermophile disappeared and boreal elements began to penetrate. Due to this, it has been clarified that Caucasus endemics and stenotopic thermophilic forest species with disjunctive distribution of European-Siberian or Mediterranean types present the most ancient faunistic elements. The latest comers are widespread species of boreal origin that penetrated to Armenia during Pleistocene glaciating.

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К ПОЗНАНИЮ ПРЕДСТАВИТЕЛЕЙ РОДА *Tachyporus* Grav. (*Coleoptera : Staphylinidae : Tachyporinae*) ФАУНЫ АРМЕНИИ

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В статье приведены результаты изучения видов рода *Tachyporus* Grav. фауны Армении. Приведены и рассмотрены список, сведения о распространении (с приложением карты), типы местообитаний и сезонная динамика для 13 видов; 5 видов впервые отмечены для фауны республики.

Ամիրյան Ա., Հայաստանի ֆաունայում *Tachyporus* Grav. (*Coleoptera: Staphylinidae : Tachyporinae*) ցեղի ներկայացուցիչների ուսումնասիրման վերաբերյալ: Հոդվածում բերված են Հայաստանի ֆաունայի *Tachyporus* Grav. ցեղի տեսակների ուսումնասիրման արդյունքները: Բերված և քննարկված են ցուցակը, տարածվածության մասին տվյալները՝ քարտեզի կցմամբ, բնակավայրերի տարբերակները և սեզոնային շարժընթացությունը 13 տեսակի վերաբերյալ: 5 տեսակը հանրապետության ֆաունայի համար բերված է առաջին անգամ:

Amiryan A. **The studies of the genus *Tachyporus* Grav. (*Coleoptera: Staphylinidae*: *Tachyporinae*) species from the fauna of Armenia.** The article includes the list of the species of genus *Tachyporus* Grav. of the fauna of Armenia. 13 species of the genus are revised of which 5 are described as new for the fauna of Armenia. The distribution of each species is mapped. Habitat records and seasonal dynamics are given for each species.

Фауна Армении – стафилиниды – Tachyporus Grav.

Род *Tachyporus* Grav. в основном имеет голарктическое и ориентальное распространение, но 5 видов отмечены из Эфиопского региона и 2 из Австралийского [1, 2, 8]; ни один вид не отмечен из Неотропического региона (южнее Гватемалы). В мировых каталогах [3-5] и в последующих работах отмечено 95 видов [7].

Род был описан Дж. Гравенхорстом [9], который разместил его представителей по 2 группам: в первую был включен только вид *T. dissimilis* Grav. (ныне относится к роду *Heterotops* Steph.), во вторую – 13 видов, большинство из которых в современной систематике включены в рода *Tachyporus* Grav. и *Sepedophilus* Gist.

П. Латрейллем [11] выделен вид *Staphylinus chrysomelinus* L. как типовой для рода; В. Эрихсоном [8] была проведена ревизия видов *Tachyporus* Grav., и в ней он незначительно модифицировал объем рода за счет новых видов. Ревизия европейских видов была проведена М. Панделлем [16], а палеарктических – Г. Лузом [14]. Недавние фаунистические исследования видов рода из Старого Света были проведены М. Камероном [6] для Индии, Г. Керстенсом [10] – для Германии, Г. Лозе [13] – для Центральной Европы и Т. Палмом [15] – для Швеции.

Единичные исследования посвящены изучению личинок рода *Tachyporus* Grav. Р. Паулиан [17] дал краткое описание личинки *T. montanus* Bernh.; В. Потоцкая [19] описала личинку *T. nitidulus* F. и снабдила ключами для определения известных родов подсемейства; И. Зуранска [21] провел сравнительный морфологический анализ некоторых видов родов *Tachyporus* Grav. и *Tachinus* Grav.; Е. Липков [12] проиллюстрировал личинку *T. obtusus* L.

Разрозненны и недостаточны сведения о биологии представителей этого рода, хотя большинство взрослых особей и личинок всех видов являются хищниками. Все взрослые особи и личинки поедают коллембол, нематод, личинок двукрылых и даже личинок представителей семейства *Carabidae* и *Staphylinidae*. При отсутствии тривиальной трофической базы личинки и взрослые особи поедают пыльцу цветов сосудистых растений или плодовые тела шляпочных грибов.