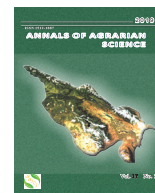




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Georgian veterinary manuscripts in Georgian and foreign depositories

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ABSTRACT

The work deals with the veterinary and zootechnical manuscripts (compilations, writings, karabadins) with the newly found manuscripts and their thematic groupings (those of a horse, a dog, birds treatments) among them; the results of the multidisciplinary research and the peculiarities of the manuscripts. The Georgian veterinary manuscripts attract our interest in many ways: as the ones created in the Georgian tradition and tailored to practical needs; marked with the trends of the common cultural area; as the compositions reflecting on the features of the cultural dialogue, the results of the knowledge transformation, and generally, the particular stages of the history of science. The systematic review, characterization and evaluation of these manuscripts and the written sources in terms of the veterinary history, along with the multidisciplinary study, reveal specifically important material. The article gives the analysis of these very lists.

Keywords: Veterinary Manuscript, Foreign Depositories, Karabadin. Sources, Medical texts, Birds treatments.

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Introduction

The manuscripts of Georgian veterinary and zootechnical content, dating from the XVII-XIX centuries, reflect the knowledge and practical experience of the Georgian reality, as well as the influences of the common cultural area. The compositions are about horse, bird, dog care, their treatment, and they give tips on their breeding.

The material is neither fully valued in the field of history, nor widely available for the interested public with foreign scientific circles included; the data is not transmitted electronically. The present research, the planned printed and electronic products will significantly fill the existing gap.

The article presents a general overview and grouping of Georgian veterinary manuscripts by their content and purpose, also their distribution in Georgian and foreign antiquity depositories, and the detailed descriptions of some of the distinguished

manuscripts according to the designed specimen.
The challenges of the Georgian medical and veterinary manuscripts research history

Medical manuscripts - the outstanding monuments of Georgian spiritual culture - reflect the achievements of the Hellenistic-Byzantine and the Muslim-oriental civilizations. This connection is apparent in the medieval and later period Georgian manuscripts presented in the general medical, pharmacological or veterinary content monuments, as well as in karbadins, educational-medical and family books. This type of material is accumulated in the depositories of manuscripts of Georgia, as well as in the Georgian manuscript collections preserved abroad. The chronological boundaries of the manuscripts involve 10 centuries.

The systematic scientific study of the medical texts preserved in the Georgian manuscripts began in the 1930s. The works known are by L. Kotetish-

vili [1-3], Iv.Beritashvili [4, 5], M.Saakashvili [6], Il.Abuladze [7], B.Rachvelishvili [8], M.Shengelia [9], R.Shengelia [10], P.Pirpilashvili [11]. In veterinary medicine – studies by L.Leonidze [12] K. Kapanadze [13], K.Jvareshishvili [14]. The recent publications by N. Khelaia [15], D.Kukhianidze [16], L.Samkurashvili [17, 18], L. Shatirishvili [19], T.Abuladze [20,21] are dedicated to certain medical manuscripts and the materials depicting the medical knowledge disseminated in the particular theological compositions. In 2017 the Catalogue of Georgian Medical Manuscripts was published [22].

However, the majority of the medical and veterinary manuscripts have not been studied from the historical perspective of medicine; There is basically no systematic, unified and accessible information available to a wide range of scholars. In addition, with the rare exception, no medication has been made according to the recipes given in the medical manuscripts; The medical knowledge preserved in Georgian manuscript heritage is not fully represented in the curricula of the relevant higher education institutions.

Further research of the manuscripts, their comparative and the multidisciplinary study, searches for parallels and sources are hampered by the lack of a common annotated database of medical manuscripts that would provide baseline data on the Georgian medical manuscripts and their evaluation in terms of medical history.

The medieval Georgian medical manuscripts typologically form the following groups:

- Medical books containing the issues of theoretical and practical medicine, encyclopedic kind of works;
- The materials presented in ecclesiastical literature – in exegetic, homiletic, ascetic, hagiographic works, euchologies;
- The separate works and sections containing medical content included in mixed or thematic compilations (“Chemistry” by Vakhtang VI, collections on precious stones, etc.)
- Small and large karabadins;
- Textbooks;
- Lists of medicines - only lists or lists with descriptions and indications of diseases, sometimes those of curative forms (pills, kursis (tablet), majuni (mixture), jam, powder, balsam, etc.);
- Dictionary material – comprehensive dictionaries including explanatory ones, Latin and /

or Oriental matchings; Sometimes add-ons to the existing dictionaries;

- Inscriptions - brief descriptions of diseases, various recipes, etc.
- Later works (mainly those of the nineteenth-century) which are, in fact, the analogues of the modern scientific ones with reference to numerous sources (written - original and translated, folk, physician practitioners' experience), with added annotations, footnotes, etc.

This group also includes the compositions containing descriptions of any of the diseases with the appropriate diagnoses, treatment methods and remedies.

Veterinary manuscripts create a separate group. The research of the veterinary manuscripts kept in the Georgian and foreign depositories allows us to track over time the domestic animal and bird diseases considered, the illnesses singled out by practicing veterinarians, the medicinal drugs and manipulations tried against the diseases. In the end, there is formed an image of the veterinary medicine development and its clearly cut social role in the society.

Georgian veterinary manuscripts and their distributions in the collections

Various diseases of domestic animals and birds, anti-disease medications, as well as, in part, the methods of their care and breeding exploited by the Georgian people, are presented in the ancient Georgian written veterinary monuments or karabadins. Accordingly, there is a “Horse Karabadin”, a “Bird Karabadin”, a “Falcon Karabadin”, a “Dog Karabadin.” These manuscript compilations provide a rich material on the diseases of domestic animals and birds known in ancient Georgia along with the medicines used to treat them.

Veterinary manuscript books have been found in Georgia since the 17th century. It is feasible that similar compilations existed in earlier centuries, as in this country the knowledge of poultry and domestic animal diseases, their treatment and maintenance were a thing of great importance not only for the elite layers of the society, but for a wider socius as well. However, the number of the preserved karabadins, their translation history or the notes on creating the original sets have been known just since the XIX century (a “Dog Carabadin” written by Ioane Batonishvili (Prince), Q-198 [23].

From the late medieval times the translation of karabadins begins. Vakhtang VI left his indeli-

ble trace on this field. He translated “The Horse” - “this small Karabadin” from Persian into Georgian which, as the manuscript books Q-281 [23] and S-14 [24] announce, had a practical purpose “for young horsemen to get mastery, and for chieftains and herd owners”.

The deeds of Vakhtang VI were continued by Ioane and Bagrat Batonishvili (Princes), Giorgi XII's sons, who made a special mark in the development of the veterinary medicine and considered it necessary to share the knowledge with the Georgians, benefitting the people this way.

Presumably, medical collections were very popular, and therefore, often written and composed, on the hand, they were also frequently damaged, thumbed and torn for their intensive usage. This is the reason why not many of the medical collections have reached us.

The karabadins come up today are mostly without paintings and special decorations. Their embellishments are just the initial letters in cinnabar, ornamented simply. Unfortunately, there are no specimens of medical devices in medical collections, neither in human anatomy.

Instead, European-influenced veterinary karabadins are richly illustrated with medical instruments and animal skeletal imagery, in the analogy to the already discovered and well-known philosophical medical monuments.



Fig 1. Veterinary manipulation tools with inscriptions. Horse Healing Collection. Translated from French by Bagrat Batonishvili. Autograph. 1817, Petersburg.

Kept at Korneli Kekelidze National Center of Manuscripts of Georgia.

The animal and bird karabadins come from the late medieval times, the number of which is reaching 45. Korneli Kekelidze Georgian National Centre of Manuscripts holds 30 veterinary collections, the remaining 15 are kept in various museums of

Georgia and Russia. Six of these 30 manuscripts contain the text of the “Bird Karabadin”, 21 manuscripts are the five different works lists dedicated to the horses treatment, two copies contain collections of the same text and present veterinary recipes, and one is a fragment of a “Dog Karabadin”.

Each manuscript has its own origin, adventure and value. They are copied from different originals by the scribes of different literacy background and literary tastes.

There are identified four main groups of manuscript books:

Group I includes horse karabadins, which present the issues of care, treatment and breeding. There are five subgroups marked out:

A) To the first subgroup belongs the oldest H-414 preserved at the National Center of Manuscripts [25]. Written with Nuskhuri it is chronologically the earliest record and its copying dates back to the merge of the first and second halves of the seventeenth century. The text is fragmented, containing 4 pages;

B) Subgroup II contains manuscripts of the same text translated from Persian by Vakhtang VI. The earliest of them is dated with 1763, the latest – with 1874. The extensive edition of this work consists of 114 paragraphs, 43 of which are devoted to zootechnical issues, and 71 - to the veterinary ones.

C) Subgroup III includes a work performed by Ioane Osedze and ordered by Giorgi Batonishvili (later Giorgi XII). The Karbadin contains 280 paragraphs, 56 of which are devoted to zootechnical issues and 224 - to veterinary ones. According to the colophon, the compiler uses the Armenian language Karabadins and the ones by Vakhtag VI. Thus, the work is a kind of a compilation.

D) Subgroup IV contains texts translated from Russian by Bagrat Batonishvili, which deals with the treatment of horses and cattle. This subgroup combines 5 manuscripts, three of which are autograph manuscripts by Batonishvili. One of them is Q-311 [23] (Fig.1). The manuscript presents two different veterinary works. The first part of the Q-311 is presented at 4r-92v, written in 1817 in Petersburg. The translation is from French, preceded by a horse picture (3v) (Fig.2). On 5v-6r there are featured veterinary manipulation tools with inscriptions (Fig.1).

E) Subgroup V presents two manuscripts of the “Horse Karbadin”: S - 3728 [26] and the manuscript from the Manuscript section of the Russian National Library (St. Petersburg) № 24/20 [27], which deals

with zootechnical and veterinary issues, namely: diseases of the horse skin [scabies], malanders, those of the respiratory tract (cough, breath shortness), digestive system, teeth and gums, etc. In addition, therapeutic and surgical methods used for the treatment of diseases are identified, and medical remedies are indicated.

Group II of the veterinary manuscripts includes a “Dog Karabadin”. It is survived as an only manuscript in fragment Q-198 [23]. The fragment of the collection contains six pages, dating with the 18th century. The existing colophon informs us that “it was done by Ioane, the son of the son of the King of Georgia.”

Group III contains a “Bird Karbadin”. It describes poultry breeding, care and treatment. Most of it is copied in the 17th century. One of the manuscripts (Q-562:2) is led by a physiological introduction [28]. According to Ilia Abuladze, with regard to the linguistic data of the monument, it should be a work of XII-XIII centuries. This setting allows the researchers to think that most of the veterinary manuscripts were created much earlier.

Group IV contains two carabadins with veterinary recipes. The manuscripts consider 117 recipes of the main forms of remedies such as: whey, i.e. extract, ointment, solution, dirt (now: powder), pills, sherbet, etc. The Q-311 veterinary prescription is described in the collection on pages 105r-149r.

Sample of the detailed description of the veterinary manuscript

Within the framework of the project, codicological-textological analysis of the particularly important manuscripts was carried out; A special bulletin scheme was developed to prepare the manuscripts description and their placement in the database.

For illustrative purposes we will present a bulletin containing a description of the veterinary content manuscript - Horse Treatment Collection, Q-311.

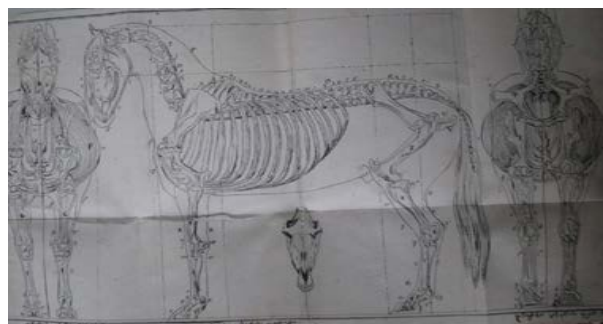


Fig 2. Horse skeleton.

Horse Healing Collection. Translated from French by Bagrat Batonishvili. Autograph. 1817, Petersburg. Kept at the Korneli Kekelidze Georgian National Centre of Manuscripts.

Table 1. Georgian Veterinary Manuscripts and the Depositories

Veterinary Manuscripts kept in the Depositories of Georgia and Abroad									
Totally - 45 Manuscripts									
Institution	Kutaisi State	Sighnaghi Museum of History and Ethnography	Telavi Historical Museum	Tbilisi State University Library Funds	Korneli Kekelidze Georgian National Centre of Manuscripts	National Archive of Georgia	The National Parliamentary Library of Georgian	National Library of Russia	Institute of Oriental Manuscripts (St. Petersburg)
Manuscripts	1. №200 2. №220 3. №228 4. №239 5. №243	1. №721	1. № 2476, 2. №2482	1. S-3447	1. A-652 2. A-671 3. A-1127 4. A1224 5. S-12 6. S-26 7. S-225 8. S-226 9. S-268 10. S-325 11. S-330 12. S-1737 13. S-2401 14. S-3467 15. S-3728 16. Q - 198 17. Q - 281 18. Q - 311 19. Q-562/2 20. Q-1135 21. Q-1187 22. H - 297 23. H - 352 24. H - 414 25. H-956/2 26. H-1255/0 27. H-2156 28. H-2212 29. H3260	1. №359 2. №619	1. S-75 2. S-106	1. № 24 (20).	1. M37 2. C 16

Table 2. *Veterinary Manuscript Bulletin*

Manuscript cipher	Q-311
Place of protection	Korneli Kekelidze Georgian National Centre of Manuscripts
Composition title / Contents	Horses Treatment Compilation
Author / Translator / Compiler	Bagrat Batonishvili (Prince)
Manuscript date	1817
Number of sheets	155
Sizes	19,5 x 15,5
Ink	Black
Handwriting	Mkhedruli
Scribe	The first part of the manuscript is copied by Bagrat Batonishvili. The place of copying: St. Petersburg; The second part scribe: Deacon Bazierov. The place of copying: Moscow.
Owner	-
Manuscript history	-
Ornaments, drawing / graphic drawing /table:	horse image - 3v, horse anatomy - 150r
The manuscript consists of two different horse karabadins. Both compositions were translated from Russian by Bagrat Batonishvili, the son of George XIII.	
The First Part Colophon „I, Bagrat, the son of the King, translated this karabadin from Russian into Georgian, from different karabadins, the very best and many times tested. I plead those having this karabadin used and read, not to forget me. I have described all- black and white. St. Petersburg, 1817: 2 May; completed “	
The manuscript is preceded by a Zanduki (table of contents) (4r-5r)	
For bleeding	
Purifying bot caper spurge	

For catching cold or running nose of a horse

For a horse fever

For a colic and stretching

For coughing of a horse

For Breath shortness

For a horse tuberculosis ,when a horse is growing thinner and not gaining fat

For giddiness: dizziness, numbness

For sore throat and swollen throat

Eye aching of a horse

For the *makao (Corjza contagiosa eguorum)* a horse disease

For yvatsi of a horse

For worms of a horse

For wounded men and horses

Leaking fluid in a knee or a leg

For swelling of a body and feet

For warts

For Athemak or siraj

For snake biting

For scabies or mange or itching

Enema soluble, great opilation for men and horses

For fever and intense sweating of a horse :

For a horse nose bleeding

Life essence or a life drop

Making opium

For an aching tongue

Horse tail cutting

The medication names in Latin and Georgian;

Horse Treatment, Part II, consists of 117 paragraphs. It refers to the rules for medicine-making. At the end of the second composition there is added a recipe for the "Wounded and Bad Pimple" ointment, written by Bagrati on October 9, 1822.

Part Two Colophon: "This horse treatment book is translated from Russian into Georgian by Bagrati, His Literacy, the son of 13th king of Georgia."

It has been copied by hand of the sinful priest, deacon Bazierov, in the royal city of Moscow."

It should be noted that the majority of Georgian veterinary manuscripts, in addition to purely veterinary matters, contain zootechnical issues (compiled and translated by Ioane Osedze, compilatory work "Horse Karabadin", H-2156 [29]). It presents the following practical advice for horse breeding and care: for breeding there should be selected a horse with a proper appearance and behavior, thoroughbred; Taking into account the length of the horse pregnancy there is indicated the time of a year when a bull should be let into a herd; Prior to the birth, a skilled and experienced person called "qeshik" should be attached to the pregnant horse. Special tips on bird treatment and care are also provided.

The multidisciplinary study of veterinary manuscripts in terms of the field history and codicology-textology is carried out by the staff of the National Centre of Manuscripts with the direct participation of a veterinary specialist in the frameworks of Shota Rustaveli National Science Foundation funded project "Medical and Veterinary Manuscripts in Depositories of Georgia and abroad"(Grant №HE17-54; 2017-2020).

Conclusion

The article presents the results of a multidisciplinary study of veterinary and zootechnical manuscripts preserved in the depositories of Georgia and abroad (St. Petersburg, Russia): the material listed and grouped by the place of protection; the recent manuscripts; detailed description and evaluation of some outstanding manuscripts on the basis of a special scheme (bulletin).

The results, information and assessments of the study complementing the existing data, are important

for the study of veterinary and zootechnical history. It will provide some support to scientific and educational circles interested in the subject.

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