Professor Josip Ubl’s contribution to the development of veterinary medicine in Croatia

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ABSTRACT: Numerous data point to the fact that Czech people played an important role in the cultural development of Croatia. Professor Josip Ubl was one of the many outstanding Czech veterinarians who greatly contributed to the Croatian veterinary medicine. Prof. Josip Ubl was born on the 4th April 1844 in Chudenice, in the Plzeň district. He descended from a respectable family, which highly influenced his schooling. He finished his primary and secondary education at his birthplace. He graduated from the k. u. k. Militär-Thierartznei-Institute in Vienna in 1867. Prof. Josip Ubl first worked as an assistant lecturer and as a professor of animal husbandry and veterinary medicine at the School of Farming and Farming Crafts in Doubavrice near Loštice and Mohelnice in Moravia. Later on he was appointed a teacher of veterinary medicine, animal husbandry, anatomy and zoology at the Kraljevsko gospodarsko-šumarsko učilište i ratarnica (Royal School of Farming and Forestry) in Križevci in Croatia. He was an exceptionally prolific writer and wrote seven veterinary manuals. Besides being an outstanding teacher he was also engaged in social work and was awarded for his contribution to this field of work several times. As the author of the first veterinary works in Croatian language and the creator of the Croatian veterinary terminology he has gained a prominent place in the history of Croatian veterinary medicine. For free full paper in pdf format see http://www.vri.cz/vetmed.asp

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Numerous data point to the fact that Czech people played an important role in the cultural development of Croatia. Prof. Josip Ubl was one of the many outstanding Czech veterinarians who greatly contributed to the Croatian veterinary medicine.

He put all his intellectual and emotional energy to improve veterinary medicine of Croatia, his foster country. In this paper we shall try to introduce the work of prof. Josip Ubl as one of the first pioneers of the Croatian veterinary medicine.

Prof. Josip Ubl was born on the 4th April 1844 in Chudenice, in the Plzeň district. He descended from a respectable family, which highly influenced his schooling. He finished his primary and secondary education in Chudenice. He graduated from the k. u. k. Militär-Thierartznei-Institute in Vienna in 1867.

At the beginning of his career, from 1868 to 1870, he worked at the School of Farming and Farming Crafts in Doubavrice near Loštice and Mohelnice in Moravia as a teacher of veterinary medicine and animal husbandry. In 1870 he was appointed a lecturer of anatomy and zoology, veterinary medicine and animal husbandry at the Kraljevsko gospodarsko-šumarsko učilište i ratarnica (Royal School of Farming and Forestry) in Križevci in Croatia, where he was appointed a professor of animal husbandry and veterinary medicine in 1875. He stayed in Križevci for 30 years, i.e. his whole work life.

Prof. Josip Ubl started his scholarly work in Moravia. For the needs of the School of Farming and Farming Crafts in Doubavrice near Loštice and Mohelnice, he wrote a textbook on the anatomy of domestic animals in 1872 according to the anatomy by Leih and Müller. Having come to Križevci, prof. Josip Ubl very quickly discovered a lack of textbooks, so he translated the above mentioned manuscript into the Croatian language and published it in 1874 under the title “Anatomija i životoslovje domaće životinje s osobitim obzirom na gospodarstvo” (“Anatomy and Life of the Domestic Animal with Special Regard to Farming”). This was the first modern manual of veterinary anatomy based on a new conception and systematization in Croatia. Although prof. Josip Ubl still had problems with the Croatian language at that time, thanks to his diligence he managed to collect and was the first to use scientific Croatian veterinary terminology that had not existed until then. The book aroused great interest as it included sections on anatomy and physiology of different organs.
This book was intended for veterinary trainees, and was therefore composed according to the schedule of lectures and divided into several sections.

The section on bones includes a survey of bones and the section on teeth a table showing the comparative growth of teeth in domestic animals. The section on muscles lists groups of muscles. Each individual muscle is not however individually described. The section on the womb also describes parturition, instruments used for parturition, and instructions for assistance during parturition. Separate sections focus on the senses, brain, lymphatic and nervous systems.

This book just as all the other prof. Josip Ubls’ works are written in a simple and clear language and are understandable to farmers. Therefore prof. Josip Ubl is considered the first Croatian veterinary educator. As one of the first in the field of veterinary medicine he could not dispose of any equipment for his work. He made some exquisite collections; collection of animal skeletons, collection of jaws and teeth, collection of fetuses, collection of animal parasites and collection of concerements. He also made a collection of horse-shoes for which he was awarded at a World Exhibition in Vienna in 1873.
In 1876 prof. Josip Ubl published the book “Sudbeno živinarstvo” (“Judiciary Stockbreeding”). This most valuable piece of work is divided into forensic section, section on the most common defects and section describing frauds on cattle fairs. Prof. Josip Ubl describes various diseases and the possible ways of their detection, duration of warranty and possible frauds. He also described the method of removal as well as building of the dental cavity (the cup) on teeth, for the purpose of deception during the process of estimating the animal’s age.

This book was primarily designed for farmers. Prof. Josip Ubl warns buyers not to purchase a diseased animal and instructs sellers about self-protection measures in case a buyer asks for his money back and wants to return the animal under various pretexts after he has already used the animal for some time and contributed to its deteriorated health.

In 1876 the book “Bolesti i liekovi za domaću životinju” (“Diseases and Medications for Domestic Animals”) was published. It is also divided into two parts. In the first part prof. Josip Ubl describes various medications. Therefore the book can be considered an introduction into pharmacology. The second part describes diseases of domestic animals, and gives instructions for their treatment and medication to be used. Symptomatology and pharmacology that are included in the book are adapted for the needs
of the students at the Kraljevsko gospodarsko-šumarsko učilište i ratarnica (Royal School of Farming and Forestry) in Križevci.

Prof. Josip Ubl was very interested in onichology and in 1880 he published the book “Kopitoznanstvo i podkivanje” (“Hoofs and Shoeing Science”). This book comprises the section on anatomy of the foot and hoof, presentation of the deformed and diseased hoof, and a section including instructions how to treat horses during shoeing. Special attention is paid to the importance of shoeing in horse orthopedics and exploitation.

In 1882 prof. Josip Ubl published “Pouka ob uzgoju domače životinje” (“Instructions for the Breeding of Domestic Animal”). The first part of the book contains general instructions for livestock (breeding, feeding, housing and pastures), and the second part describes zoohygienic conditions and breeds of all species of domestic animals. This book can thus be considered to be an almost complete general and specialized manual on stockbreeding and nutrition.

In 1884 prof. Josip Ubl participated in translating Schlepfl’s book “Populares Handbuch der Landwirtschaft”.

Figure 4. Vienna World Exhibition Participation Medallion, 1873
He worked on the chapter “Sheep and Horse Breeding”, and this book was published in 1885 under the title “Uputa u ratarstvo i gospodarstvo” (“Instructions for Crop Growing and Farming”). In 1886 he wrote the chapter “Uzgoj govedah navlastito kravah muzarah” (“Cattle Breeding, Dairy Cows”) for the book “Umno mliekarenje” (“Sensible Milk Production”) by G. A. Vichodil, R. Lemać and J. Ubl. In this book prof. Josip Ubl gives instructions for rational milk production, cattle raising, grooming and breeding, but he also gives instructions what to do with clean and sour milk, and how to treat udder diseases.

In 1892, prof. Josip Ubl’s last extensive book “Živinarstvo” (“Livestock Raising”) was published which is the sum total of the complete veterinary medicine of that period. This book was primarily written for the students of agriculture at the Kraljevsko gospodarsko-šumarsko učilište i ratarnica (Royal School of Farming and Forestry) in Križevci. It introduces the readers into the anatomy, physiology and pathology of domestic animals, contagious diseases, and parturition and judiciary stockbreeding. Thanks to its quality, this book presents an anthology in Croatian veterinary literature of that time.

Besides being an exceptionally prolific writer and outstanding teacher, prof. Josip Ubl was also an excellent practitioner of veterinary medicine and animal husbandry. For his contribution to the development of veterinary medicine and animal husbandry in 1877 he was elected an honors member of Društvo Slavonskih Liječnika (Slavo-
nian Medical Association). He was a prominent member of the Križevci section in which he educated and advised farmers on animal husbandry. In 1881 he was elected an honors member of Slavonsko Gospodarsko Društv (Slavonian Agricultural Society) situated in Osijek. The same year he was also appointed a judge at the jubilee farming exhibition.

Prof. Josip Ubl was extremely fond of horse raising and he therefore participated in this field of work for the whole 30 years. He was engaged in testing stud horses, awarding horse breeders, and licensing stallions and horses’ classifying. As a prominent and respected expert, in 1870 he became a member of the Veterinary Committee of the Physiocratic Society in Prague.

In spite of all his duties he spent much time curing cattle and examining meat in Križevci district. After his retirement he was engaged in establishing a savings and loan section of the writer’s guild and was elected its president.

Besides all the above-mentioned work, all his life prof. Josip Ubl highly contributed to the establishment of the veterinary school. Unfortunately, due to his high age he was not able to take an active part in students’ education once the Veterinarska Visoka Škola in Zagreb (Zagreb Veterinary School) was set up.


In the Museum of History of Veterinary Faculty at University of Zagreb there is a separate section dedicated to prof. Josip Ubl. There all the books that prof. Josip Ubl published, diplomas and other archival materials are stored. They all witness the great importance of this pioneer of Croatian veterinary medicine.

As a sign of their respect the Karlovac section of the veterinary association in 1925 raised prof. Josip Ubl a tombstone in Novi Vinodolski.

By using the available archival materials and published literature we tried to show prof. Josip Ubl’s long-lasting work in Croatia. We tried to demonstrate how great his contribution to the Croatian veterinary literature and Croatian veterinary terminology was, as well as how much he contributed to the establishment of the Veterinarska Visoka Škola in Zagreb (Zagreb Veterinary School) and to veterinary medicine and animal husbandry in general.

Contribution of prof. Josip Ubl, a Czech by birth, to the development of veterinary science in Croatia can be seen from the presented archival materials.

Prof. Josip Ubl entered the Croatian history as a pioneer of veterinary medicine. In 1924 at the occasion of the 50th anniversary of his graduation in Vienna, Veterinarska Visoka Škola in Zagreb (Zagreb Veterinary School) conferred upon him an honorary degree in veterinary medicine. As the author of the first veterinary works in Croatian language and the creator of the Croatian veterinary terminology he has gained a prominent place in the history of Croatian veterinary medicine.

A list of publications of prof. Josip Ubl

Josip Ubl (1874): Anatomija i životoslovje domaće životinje s osobitim obzirom na gospodarstvo (Anatomy and Life of the Domestic Animal with Special Regard to Farming), Zagreb.
Josip Ubl (1876): Sudbeno živinarstvo (Judiciary Stock-breeding), Zagreb.
Josip Ubl (1876): Bolesti i liekovi za domaće životinje (Diseases and Medications for Domestic Animal), Zagreb.
Josip Ubl (1880): Kopitoznanstvo i podkivanje (Hoofs and Shoeing Science), Zagreb.
Josip Ubl (1882): Pouka ob uzgoju domaće životinje (Instructions for the Breeding of Domestic Animals), Zagreb.
Gustav August Vichodil, Josip Ubl, Rajo Lemać (1886): Umno mliekarenje (Sensible Milk Production), Zagreb.
Josip Ubl (1892): Živinarstvo (Livestock Raising), Zagreb.

Literary Sources