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HELMINTHIASES OF CATTLE IN KOSTANAY REGION

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The article describes the common helminth infections in cattle. The article describes the common helminth infections in cattle.

The conditions have created a mixed economy, a high enough level of veterinary and sanitary services in the fragmented livestock farms has led to an increase in infectious and parasitic diseases. A special place among the diseases of cattle occupy helminth infections, which cause great economic losses due to a significant reduction in meat and milk production, reducing the breeding value of calves, resistance of the body and often death of animals. In addition, some helminth infections (bovisny cysticercosis, hydatid disease) are gelmintozoonozami and represent a constant danger of human infection.

In the Kostanay region Helminths infestation of cattle in recent years has increased due to change ownership and financial conditions of farms,which mostly can't purchase antihelmithical drugs and dehelmithade animals on regular basis.

In the region of helminth infections in cattle is not yet fully understood. To date, poorly understood helminthofauna cattle degree invazirovannosti its most common types of worms , the timing of infection in calves, changes in the structure and abundance of worms in cattle , depending on the age of the animals , seasons and zonal characteristics of the region .

Laboratory researches consisted of koproskopical studies using the methods of Darling and Fuliborn.

Keywords: helminthiases, prevention, kaproskopical, research, immunological method.

ҚОСТАНАЙ ОБЛЫСЫ БОЙЫНША ІРІ ҚАРА МАЛДАРДЫҢ ГЕЛЬМИНТТІК АУРУЛАРЫ

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Бұл мақалада жиі кездесетін ірі қара малдарының гельминтозы туралы баяндалған, сонымен қатар, гельминтозды аурулармен күресу шаралары қарастырылған.

Көп қолданбалы экономика құру жағдайларында, бөлініп кеткен фермерлік шаруашылықтардағы мал шаруашылығына ветеринарлық-санитарлық қызмет көрсету деңгейінің жеткіліксіздігі инфекциялық және инвазиялық ауруларды тудырды. Әсіресе, мал ауруларының ішінен гельминтоздар орын алады, олар ет және сүт өнімдерінің біршама төмендеуі салдарынан, жас малдың асыл тұқымдылығының, ағза төзімділігі мен жануарлардың сирек өлуінің төмендеуі әсерінен үлкен экономикалық шығындар келтіреді. Одан басқа, кейбір гельминтоздар (қойдың цистеркозы,эхинококкозы) гельминтозооноздар болып табылады және адамдардың зақымдалуына тұрақты қауіп төндіреді.

Қостанай облысындағы ірі қара малдың гельминттік ауыруы жоғарылап кетті , ауылшаруашылығына қиындық әкеп түсірді, көбінің антигельминтті препараттар алуға шамалары келмейді.

Ірі қара мал гельминттері толықтай тексерілмеді .Ірі қара малдың гельминтофауна ауруы төмен анықталған, сондықтан ауру жоғарылап кетті , малдың бұл ауруының жағдайы жануардың жасына , денсаулығына және табиғаттық жағдайына байланысты болады.

Зертханалық зерттеулер келесі әдістердің көмегімен капроскопиялық зерттеулерден тұрды: Дарлинг, Фюлеборн

Маңызды сөздер: гельминтоздар, алдын – алу, капроскопиялық зерттеу,иммунологиялық әдіс.

ГЕЛЬМИНТОЗЫ КРУПНОГО РОГАТОГО СКОТА В КОСТАНАЙСКОЙ ОБЛАСТИ

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В статье изложены часто встречающиеся гельминтозы крупного рогатого скота.

В условиях создавшейся многоукладной экономики, недостаточно высокий ветеринарно-санитарный уровень обслуживания животноводства в раздробленных фермерских хозяйствах привел к повышению инфекционных и инвазионных заболеваний. Особое место среди заболеваний скота занимают гельминтозы, которые причиняют большой экономический ущерб вследствие значительного снижения мясной и молочной продуктивности, снижения племенной ценности молодняка, резистентности организма и нередко падежа животных. Кроме того, некоторые гельминтозы (бовисный цистицеркоз, эхинококкоз) являются гельминтозоонозами и представляют постоянную опасность заражения людей.

Инвазированность крупного скота гельминтами в Костанайской области в последние годы по нашим данным увеличилась, что обусловлено сменой формы собственности и финансовым состоянием частно фермерских хозяйств, большинство из которых не способны приобретать антгельминтики и регулярно проводить дегельминтизации животных.

В регионе гельминтозы крупного рогатого скота ещё не полностью изучены. На сегодняшний день слабо изучена гельминтофауна крупного рогатого скота, степень инвазированности его наиболее распространенными видами гельминтов, сроки заражения телят, изменения структуры и плотности популяций гельминтов у крупного рогатого скота в зависимости от возраста животных, сезона года и зональных особенностей региона.

Лабораторные исследования состояли из копроскопических исследований с помощью методов: Дарлинга, Фюлиборна

Ключевые слова: гельминтозы, профилактика, капроскопические исследования, иммунологический метод.

The main role in increasing the production of meat and other high-quality food products belongs tocattle breeding. This can be achieved by the correct execution complex of general veterinary sanitary and special events with considering of local climatic and geographical conditions as well as.Technology of keeping and breeding animals.However increasing of livestock, milk and meat producing of animals often disturbed by a variety of parasitic diseases.The most common infestations in cattle include : fascioliasis, dicroceliasis, monithes, dictyocauliasis and strongylatosis of gastrointestinal tract.It is promoted by many objective and subjective reasons,but the main one is host-parasite relationship,which is constantly improving, especilally from the parasite's side.

The widespread of intestinal of parasites in animals and humans is contributing to the intensive colonization of environmental objects of their agents, which in turn creates the conditions for high-risk of new infections. Epizootic process arises and develops as a result of the interaction of three required elements: the source of the pathogen, the mechanism of transmission (factor) and susceptible animals. These three elements constitute the epizootic chain and it is impossible to allocate a main link. Exclusion of any part of the chain breaks it, therefore interrupts the epizootic process.

In the body of farm animals parasitized more than 200 species of helminths and protozoa. This facilitates colonization of the various components of the environment (soil, surface water, etc.) eggs and larvae of worms, and cysts (oocysts) of intestinal pathogenic protozoa, thereby creating the risk of new infections [2].

In Kazakhstan among the helminth of gastrointestinal tract of cattle are most often found strongylosis, strongyloidiasis, fascioliasis, paramphistomosis, monieziosis, capillariasis and others.

Last years, Kazakhstan has made significant progress in the treatment and prevention of parasitic diseases. However, damage to livestock by helminths continues to be considerable.

Distribution helminthosis was studied in 2013-2015 by method of helminthological autopsies cattle of different age groups in the slaughterhouses, as well as during the slaughter of homestead farms of different ownership forms. We analyze data based on the results of the reports Anatomic pathological researches in Kostanay region veterinary laboratory.

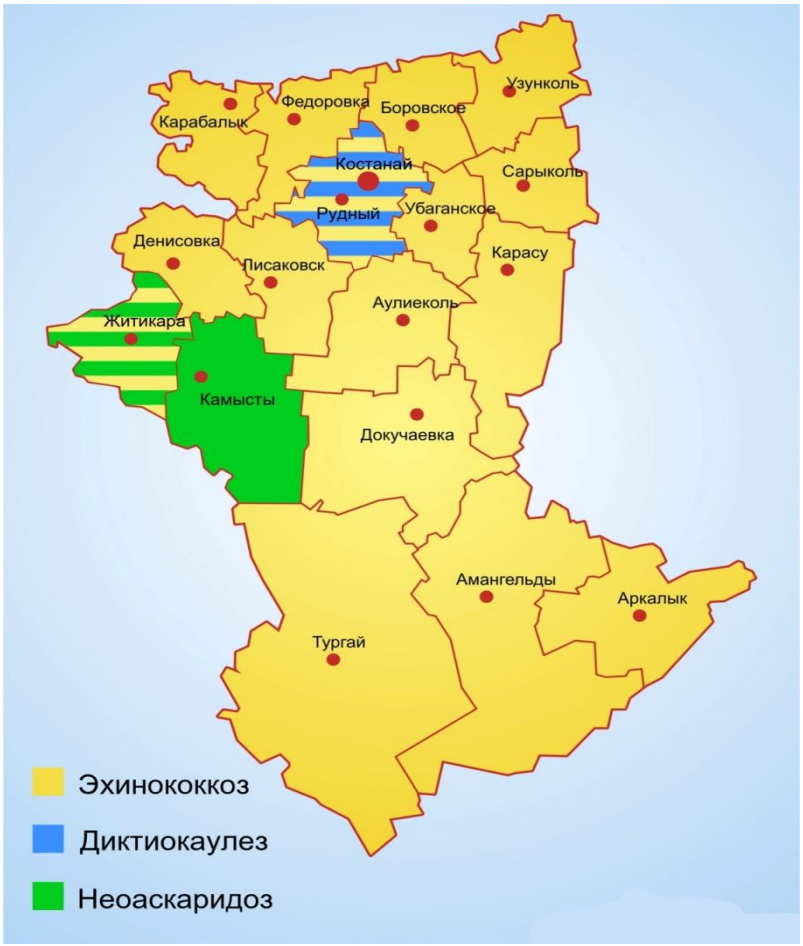

Figure 1 - Conventional Zone invazirovannosti cattle Kostanai region

For an objective assessment of the situation about helminthological was made a continuous monitoring of the veterinary reports directly on the farms, regular consultation with veterinary specialists of farms, areas .

In the study helminth fauna since 2013 we made 26 complete and 486 incomplete autopsies helminthological carcases and certain organs of cattle at slaughterhouses and on farms of Kostanay region.

Based on the results of helminthological autopsies in Kostanay region we found 3 types of helminths in cattle.

It is found that in the gastro - intestinal tract of cattle parasites 1 species of helminths in liver and lungs -1 in the respiratory organs - 1.

Class combines the kind of cestodes Echinococcus granulosus (Echinococcus uniloculari, Echinococcus multilocularis). Class combines two species of nematodes Neoascaris (N.vituloru), Dictyocaulidas (D. viviparus).

Incidence and intensity of helminth infestations in cattle in the Kostanay region determined according to quantitative studies faeces.

Echinococcosis (Echinococcus granulosus) of cattle was found in all areas, but the most common of the disease was found in Zhitikara, Taranovsk, Mendygara, Dzhangeldi, Amangeldy areas where the extent of infestation was on average 3.3%

Neoascaridosis, Neoascaris vitulorum, amounted to the regional average of 0.5% in Denisov and Kamysty region.

infestation of Dictyocaulus of cattle was equal to an average of 1.2% with the highest affected population in the Kostanay region.

The most important problem in this context are hydatid disease (was changing within 2,5-4,1%).

According to helminthological research of feces determined that the extent of Echinococcus infestation of adult cattle in Kostanay region in all seasons of the year ranged from 4.1% to 2.5%. Regional seasonal dynamics of adult cattle infestation Kostanay region echinococcosis in the area, according to koproscopy is a peak in June. Echinococcus summer was in the liver of animals, which corresponds to the peak of the infestation, which amounted to 4,1-3,5%.

In winter echinococcosis fertility declined slightly in January and amounted to an average of 10,5 ± 4 ind. In spring and summer marked increase in fertility. In August, it amounted to 15,5 ± 4ekz., And on average it was 13 ± 4ekz. The slight increase in the number of eggs in the feces of echinococcus observed in spring and summer. However, no significant difference in the number of echinococcus eggs in different seasons of the year is not mentioned. According to the results of autopsies helminthological echinococcus often found in the liver of adult infested cattle throughout the year. Therefore hydatid disease in the body of cattle parasites in all seasons. In the fall, winter and summer in the liver was found for both adults and young echinococci and spring only adults. The findings are of practical importance when choosing anthelmintics.

With the age of the animal increases EI maximum contamination of echinococcosis registered animals aged from 4 to 10 years old (1,28 ± 0,1% - 2,35 ± 0,21%); AI observed maximum between the ages of 8 to 14 years.

According to the results of helminthoscopycal research of feces of adult cattle found that throughout the year the animals were to invade Dictyocaulus . Extent of infestation ranged from 1.5 to 0.9%. In summer and autumn (August, September) animal fertility with Dictyocaulus slightly increased during the summer period with a decrease in winter. The average number of Dictyocaulus eggs adult cattle was 11,5 ± 6 ind. with minor variations in the number of eggs diktikaulezom in different seasons. In August, the infestation of animals was an average of 18,6 ± 4 ind. / Goal.

The results of the inspection of bodies and carcasses on the slaughtering plants in Kostanay region koproscopy fully confirmed by the results of studies on the spread of helminthiasis cattle in the study region.

Work to improve the health of the herds neblagopoluchnyh helminthisms carried out in the aforementioned holdings , these activities were brought farm managers , agronomists , veterinary service staff (milkmaids and gurtopravy) with them were interviewed and lectures on various diseases.

Recommended updates Cultural pastbisch by plowing and reseeding , raising them to new lands , held annually replace the use of grassland (pasture year , another hay) , was expelled from the places of grazing wetlands , lowland bogs and meadows . In neblagopoluchnyh farms to full recovery practiced stall- range conditions and young calves . Backyard playground picked paved or dry natural surface level , with diversion ditches and fitted equipment for watering and feeding .

In grazing calves and young stock grazed their isolation in some areas pastures are not used in the second half of last summer . Do not allow animals to grazing raznyh owners on some pastures .

Vypasavshihsya animals examined after a statement on the stabling in November - December and before the pasture to pasture for 21-30 days.

With extensive invasion degelmintizirovali entire herd . In order to prevent rasseivaniya helminth eggs on pasture after 10-12 days, the animals were again examined for infection and a positive result , and again degelmintizirovali .

Planning profilakticheskih activities carried out each year , taking into account the epidemiological situation, disease and natural and economic conditions . The plan calls for a complex event , complete coverage of the number of animals , regardless of their affiliation. It ukazyvayut performers, responsible for carrying out the activities , deadlines and funds held .

Diagnostic examinations of animals of a certain age , treatment and preventive measures , excluding infected animals and measures to prevent the external environment adolescariae dissemilyatsii ponds , pastures , runs. In drawing up the plan are based on the biology of helminth epizootology disease. The plan is approved by the head of the economy , brought to the professionals and staff of service animals.

Veterinary carried out by qualified farms and vetuchrezhdeny district must keep a record of regular events held in helminthiasis in disadvantaged farms and farm. At the same time , should keep journals in which otmechayut data on diagnostic surveys , deworming animals , disinfestation of premises and the results of surveys of pastures . Analysis of census data allows the executor to determine performance , detect errors , correct them in the future.

To achieve uspeha in the fight against disease requires not only the participation of veterinary experts , and zooengineers , farm managers , and other employees of cattle that should have some knowledge of the matter . The experience of recovery from farms in helminthisms pokazyvaet that put them into practice contributes to successful eradication of infection.

It is possible to use different ways of teaching staff -lektsii service animals , conversation , leaflets , consultation, organizing and conducting special courses helminthological . Measures against helminths of cattle in the region of Kostanai region in terms of prevention and therapy in many ways , to a certain extent effective in other pastoral helminthoses -fastsioleze , dicroceliasis , monithes , dictyocauliasis . With this in mind , we consider it possible to present them here in an expanded form .

These veterinary and sanitary examination show that it detected, mostly those worms that are found in the laboratory diagnosis koproscopycal methods: hydatid disease. However, this type of research increases the probability of finding those who are not diagnosed helminths koproovoskopicheskimi methods: fasciolosis, Dictyocaulus .

The results obtained in the study of helminth fauna main types of worms in cattle are the basis for anthelmintic activities at the optimum time.

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