

EPIZOOTIC INVESTIGATIONS OF COLIBACTERIOSIS ON FARMS AND DEVELOPMENT OF VACCINE

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Summary. Bacteriological investigations revealed that calves on farms usually get infected with several infectious diseases. They are colibacteriosis, salmonellosis and sometimes pastereullosis. However, colibacteriosis is the main cause. On experimental farms the calves subjected to colibacteriosis were aged from 1-2 days to 1 month. The dead calves from the organs of which *E. coli* cultures were isolated, belonged to agricultural companies and farmers from 7 regions (Akmenė, Plungė, Šiauliai, Kaišiadorys, Kupiškis, Panevėžys, Zarasai).

For the vaccine production *E. coli* No. 132, 186, 235, 239 and 240 were selected which are stored and listed in the collection of microorganisms. The isolated cultures were propagated through many passages (11-16 and more), but preserved the morphological, biochemical, antigenic and immunogenic properties. They are polyvalent and have adhesive antigens such as K88, K99, 987P, F41 and A20. Using these strains of *E. coli* the technology of production of inactivated colibacterial vaccine was worked out in 1995-1996. The efficacy of the experimental vaccine produced was examined by immunisation of mice.

Keywords: *E. coli* epizootic investigations, experimental animals, calves, specific prophylaxis, immunity.