

Table of Contents

SECTION 1. HISTORICAL ASPECTS AND EPIZOOTIC SITUATION

ABOUT THE PORCINE EPIDEMIC DIARRHEA

1.1. Introduction	1
1.2. Materials and methods	2
1.3. Historical aspects of spread PED virus in the world	3
1.4. The spread of the PED virus in Ukraine throughout 2016-2017.	5
1.5. Genotyping of a field PED virus isolated from various regions of Ukraine	18

SECTION 2. CLINICAL SIGNS, BIOCHEMICAL, IMMUNOLOGICAL AND HISTOLOGICAL CHANGES IN THE ORGANISM OF SUCKLING PIGLETS WITH PORCINE EPIDEMIC DIARRHEA DISEASE

2.1. Introduction	30
2.2. Materials and methods	32
2.3. The clinical and epizootological analysis manifestations of the disease PED.	34
2.4. Morphological parameters of blood of piglets at PED.	39
2.5. Biochemical parameters of blood of piglets at PED.	42
2.6. Immunological parameters of blood of piglets at PED.	46
2.7. Pathologists Anatomical and histological changes in the small intestine of piglets in the PED.	48

SECTION 3. MEASURES TO CONTROL AND PREVENT PORCINE EPIDEMIC DIARRHEA. SPECIFIC IMMUNOLOGICAL PROPHYLAXIS

3.1. Introduction	53
3.2. Materials and methods	54

3.3. Formation of specific immunity in sows by oral and parenteral immunization	55
3.4. Colostral immunity in newborn piglets under oral and parenteral immunization of sows	58

**SECTION 4. MEASURES TO CONTROL AND PREVENT
PORCINE EPIDEMIC DIARRHEA. CONTROL OF CLEANING
AND DISINFECTION OF PREMISES FOR PIGS
CONTAMINATED WITH A CORONAVIRUS**

4.1. Introduction	64
4.2. Materials and methods	67
4.3. Control of cleaning and disinfection efficiency of surfaces from surrounding objects at the pig farm with PED.	68

**SECTION 5. NATURAL PEPTIDOGLYCAN IMPROVES PIG
IMMUNITY AGAINST PORCINE EPIDEMIC DIARRHEA**

5.1. Introduction	77
5.2. Materials and methods	78
5.3. The number of leukocytes and their subtypes in the piglet blood	79
5.4. Age features of lymphocytes and their subpopulations in blood of piglets of the 23 postnatal days	84

**SECTION 6. INFLUENCE OF CELL WALL PEPTIDOGLYCAN
OF *LACTOBACILLUS DELBRUECKII* ON SPECIFIC
IMMUNOPROPHYLAXIS OF PORCINE EPIDEMIC DIARRHEA**

6.1. Introduction	96
6.2. Materials and methods	98
6.3. Formation of specific immunity in sows under the active immunoprophylaxis of PED.	100
6.4. Colostral immunity in newborn piglets with active immunoprophylaxis of PED in sows.	102