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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

SN/T 5185-2020

Technical specifications for swine paratyphoid quarantine

猪副伤寒检疫技术规范

(English Translation)

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Foreword

This document is drafted in accordance with GB/T 1.1-2020.

This document was proposed and managed by the General Administration of Customs of the People's Republic of China.

Drafting organizations of this document. Fuzhou Customs of the People's Republic of China, Weifang Customs of the People's Republic of China, Shenzhen of the People's Republic of China Customs, Hefei Customs of the People's Republic of China.

1 Scope

This document specifies the clinical diagnosis of swine paratyphoid, the isolation and identification of pathogens, enzyme-linked immunosorbent assay, polymerase chain reaction and real-time fluorescent polymerase chain reaction identification technology.

This document is applicable to clinical diagnosis and laboratory quarantine of swine paratyphoid fever.

2 Normative references

The contents of the following documents constitute the indispensable clauses of this document through normative references in the text. Among them, dated quotations Only the version corresponding to that date is applicable to this document; for undated references, the latest version (including all amendments) is applicable Used in this document.

GB/T 6682 Analytical laboratory water specifications and test methods GB/T 18088 Entry and Exit Animal Quarantine Sampling GB 19489 Laboratory Biosafety General Requirements

3 Terms, definitions and abbreviations

There are no terms and definitions that need to be defined in this document. The following abbreviations apply to this document.

4.1.1 Acute septicemia

Sudden increase in body temperature (41 °C~42 °C), lack of energy, and loss of appetite. Difficulty breathing, purple-red skin on the roots of the ears, chest and under the abdomen Color spots, or diarrhea in later stage. Sometimes death occurs within 24 hours after the onset of clinical symptoms, but most of the disease has a course of 2 to 4 days, and the fatality rate is very high.

4.1.2 Subacute and chronic

Sick pigs have elevated body temperature (40.5 °C~41.5 °C), lack of energy, chills, love to lay grass, get together, and have sticky or purulent secretions in their eyes.

A small number of corneal opacity, severe cases develop into ulcers, and even the eyeball is corroded. Sick pigs have poor appetite, diarrhea after initial constipation, yellowish feces or Yellow-green, foul smelling. Rough coat, anemia, long-term diarrhea, feces containing cellulose, necrotic tissue or feed clot. Some skin appears Mi Diffuse eczema. The growth is stunted, and it is a typical stiff pig.

4.2.1 Acute

Mainly changes in sepsis. The spleen is often enlarged, dark and blue in color, firm like rubber, and the splenic medulla is not softened. Mesenteric lymph nodes Swollen, other lymph nodes are also swollen, marble-like. The liver and kidney also have different degrees of swelling, congestion and bleeding, and the liver parenchyma can sometimes be See yellow-gray necrotic spots. The whole body mucosa and serosa have different degrees of bleeding spots, and acute catarrhal inflammation can be seen in the gastrointestinal mucosa.

4.2.2 Subacute and chronic type

Mainly necrotizing enteritis. The intestinal wall of the cecum and colon is thickened, and the mucous membrane is covered with a layer of diffuse necrosis and fermented bean curd-like substance, which is like bran.

The bottom is a red ulcer with irregular edges. The mesenteric lymph nodes were cord-like swelling, and some were caseous. splenomegaly. Liver is sometimes visible Yellow-gray necrotic spots.

5.1 Apparatus and equipment

5.1.1

Incubator (37 °C $\pm$ 1 °C and 42 °C $\pm$ 1 °C).

5.1.2

Autoclave.

5.1.3

Glass grinder or tissue homogenizer.

5.1.4

Desktop high-speed centrifuge.

5.1.5

Class II biological safety cabinet or ultra-clean workbench.

5.1.6

Water bath.

5.1.7

Refrigerator (2 °C~4 °C and -20 °C).

5.1.8

Sterile straws.

5.1.9

Fully automatic microbial biochemical identification system.

5.2 Medium and reagents

5.2.1

Water. Comply with the first grade water specification in GB/T 6682.

5.2.2

Buffered peptone water (BPW), see A.1 for the preparation method.

5.2.3

Selenite Cystine (SC) Enrichment Solution, see A.2. for the preparation method.

5.2.4

Sodium Tetrathiosulfonate Brilliant Green (TTB) Bacteria Enrichment Solution, see A.3 for the preparation method.

5.2.5

CHROMagar Salmonella is a chromogenic medium agar.

5.2.6

Bismuth sulfite (BS) agar, see A.4 for the preparation method.

5.2.7

Hektoen Enteric (HE) agar, see A.5 for the preparation method.

5.2.8

Xylose lysine deoxycholate (XLD) agar, see A.6 for the preparation method.

5.2.9

DHL agar, see A.7 for the preparation method.

5.2.10

Nutrient agar, see A.8 for the preparation method.

5.2.11

Triose iron (TSI) agar, see A.9 for the preparation method.

5.2.12

Lysine decarboxylase test medium, see A.10 for the preparation method.

5.2.13

Peptone water, indigo matrix reagent, see A.11 for the preparation method.

5.2.14

Urea agar (pH 7.2), see A.12 for the preparation method.

5.2.15

Potassium cyanide (KCN) medium, see A.13 for the preparation method.