

THESIS

**IDENTIFICATION OF GASTROINTESTINAL
PROTOZOA OF SWINE (*Sus sp.*) IN SURABAYA
SLAUGHTERHOUSE IN DRY SEASON**



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Thesis

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DECLARATION

Hereby, I declare that in this thesis entitled:

**IDENTIFICATION OF GASTROINTESTINAL PROTOZOA OF
SWINE (*Sus sp.*) IN SURABAYA SLAUGHTERHOUSE IN DRY
SEASON**

There is no other work ever published to obtain college degree in a certain college and to my knowledge there is also no work or opinion ever written or published by others, except those in writing referred to this paper and mentioned in the references.

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SUMMARY

Swine (*Sus* sp.) are omnivorous animals that are bred to meet human consumption needs. Swine farming is spread in almost all regions in Indonesia, including in East Java. In order to meet the needs of pork in East Java, especially Surabaya, the Surabaya slaughterhouse provides pork cuts from swine farms in Mojokerto, Blitar, Tulungagung, Situbondo, and several other areas in East Java Province. Prior to slaughter, the swine were placed in a temporary pen at the location of the Surabaya slaughterhouse. This allows the transmission of gastrointestinal protozoa to fellow swine and to humans at the Surabaya slaughterhouse.

In this research, the fecal sample was obtained from 100 swine during four slaughtered conducted in August 2021 period. Samples was observed in the laboratory of Veterinary Parasitology division in Faculty of Veterinary Medicine, Airlangga University. This research used native method, sedimentation method, Fulleborne floating method, and Ziehl Neelsen method as the protozoan examination method.

The results of the examination conducted on 100 samples of Landrace swine feces that slaughtered at the Surabaya slaughterhouse for the period of August 2021, it was found that 47 out of 100 stool samples were positive for protozoa infection. The protozoa found included *Balantidium* sp. was found with 46% prevalence. Meanwhile, *Eimeria* sp. / *Isospora* sp. was found in this study with 32% prevalence, *Entamoeba* sp. was found with 24% prevalence. The last, *Blastocystis* sp. also found in this research with 12% prevalence.

IDENTIFICATION OF GASTROINTESTINAL PROTOZOA OF SWINE (*Sus* sp.) IN SURABAYA SLAUGHTERHOUSE IN DRY SEASON

Amalia Rosydinasari

ABSTRACT

Surabaya slaughterhouse provides pork cuts from several swine farms. Prior to slaughter, the swine were placed in a temporary pen which allows the transmission of gastrointestinal protozoa to fellow swine and to humans at the Surabaya slaughterhouse. This research was conducted to identify gastrointestinal protozoa of swine that slaughtered in Surabaya slaughterhouse. Total of 100 fecal samples was observed using native method, sedimentation method, Fulleborne floating method and Ziehl neelsen method. Based on the results, there were 47 samples positive. The protozoa found included *Balantidium* sp. with 46% prevalence, *Eimeria* sp. with 32% prevalence, *Entamoeba* sp. with 24% prevalence, and *Blastocystis* sp. with 12% prevalence.

Keywords : Swine, *Balantidium* sp., *Eimeria* sp., *Entamoeba* sp., *Blastocystis* sp.

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The author realizes that this thesis is still far from perfect, so criticism and suggestions are needed. Wish this thesis can contribute benefits to science.

Surabaya, 7 March 2022

Author

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ABBREVIATIONS AND SYMBOLS

et al. = *et alli*

µm = micrometer

rpm = rotation per minute

sp. = species