

**MOLECULAR IDENTIFICATION OF 18S SSU rRNA GENES OF
Blastocystis sp. THAT INFECTS PIGS IN BADUNG AND TABANAN
DISTRICT, BALI.**

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ABSTRACT

The purpose of this study is to prove molecularly and analyze homologically and phylogenetic of *Blastocystis* sp. which infected pigs in Badung and Tabanan Regencies, Bali Province. The samples used in this study were 100 pig faecal samples from Tabanan and Badung, 50 samples each and 50 faecal samples. *Blastocystis* sp. isolated and identified microscopically and confirmed by Polymerase Chain Reaction and DNA sequencing. The examination results showed that 63 positive samples were natively infected with *Blastocystis* sp. and were found to form round and thick-walled cysts that had a diameter of 5-20 μm . 10 of 63 positive samples of *Blastocystis* sp. the microscopic examination was continued with the confirmation stage of the PCR test and each sample from each district was taken to proceed using the sequencing method. Two positive PCR samples that were shown with the amplified bands at 310 bp were analyzed using the BLAST method. Based on 18S SSU rRNA SSU rRNA gene detection, it showed that the Badung and Tabanan samples, Bali had homology with *Blastocystis* sp. in pigs that infect in Thailand by 96% and the subtype found in the Badung and Tabanan samples is ST5. This study shows that *Blastocystis* detection using the PCR method is more sensitive than direct microscopic examination.

Keywords: Bali, *Blastocystis* sp., Molecular Identification, Pig, PCR.