

**MOLECULAR IDENTIFICATION of *Blastocystis* sp In Long Tailed
Macaque (*Macaca fascicularis*) At BALURAN NATIONAL PARK
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Abstract

Blastocystis is a gastrointestinal protozoa that could be transmitted through contaminated food and water. Baluran National Park is one of the highest number of tourist visit among Indonesian national park. In the past decades, excessive feeding have induced change in macaque behaviour which has increased the number of recorded human-macaque interaction. The close contact between macaque and humans can increase the risk of disease transmissions. This study aimed to identify *Blastocystis* sp. infecting macaque with molecular identification. To provide identification about *Blastocystis* sp, we adopted both morphologic and molecular methods. We collected 90 unidentified individuals of Long tailed macaque in Baluran National Park and did microscopic screening after culture in Jones Medium. Twenty eight from Positive microscopic samples were used in polymerase chain reaction targeting barcode region with visualization of 600bp. Three samples with positive band 600bp continued sequencing. The result processed in BLAST and MLST. Only one sample confirmed as *Blastocystis* sp with mix infection of subtype 1 allele 2 and subtype 3 allele 34. The results indicate that *Blastocystis* are exist in macaques in Baluran National Park with low prevalence.

Keywords: *Blastocystis* sp, Baluran National Park, zoonotic disease