

**DETEKSI *Toxoplasma gondii* TERHADAP MUSKULUS DAN OTAK
AYAM KAMPUNG YANG DIJUAL DI PASAR TRADISIONAL
KAPANEWON PIYUNGAN, KABUPATEN BANTUL
MENGUNAKAN *POLYMERASE CHAIN REACTION***

**Latifa Arundati
22/497985/KH/11289**

Toksoplasmosis merupakan penyakit zoonosis akibat infeksi *Toxoplasma gondii* yang menyerang manusia dan hewan berdarah panas. Infeksinya melalui jalur transplasental maupun akibat tertelannya oosista atau kista jaringan pada makanan dan minuman yang tercemar. Salah satu hospes intermediernya adalah ayam kampung yang menjadi sumber protein utama di Indonesia. Tujuan penelitian ini untuk mendeteksi infeksi *T. gondii* menggunakan metode *polymerase chain reaction* (PCR) pada ayam kampung yang dijual di pasar tradisional. Lima sampel terdiri dari muskulus dan otak ayam kampung didapatkan dari Pasar Panasan, Pasar Srimartani, dan Pasar Piyungan, Kapanewon Piyungan, Kabupaten Bantul. Teknik PCR digunakan untuk mengamplifikasi isolat DNA gen B1 *Toxoplasma gondii* dengan panjang 409 bp. Amplikon selanjutnya dielektroforesis dan divisualisasikan menggunakan transilluminator ultraviolet. Elektroferogram semua sampel tidak menunjukkan adanya pita DNA 409 bp, sehingga disimpulkan semua sampel dinyatakan negatif terinfeksi *T. gondii*.

Kata kunci: ayam kampung, Kabupaten Bantul, pasar tradisional, *polymerase chain reaction* (PCR), *Toxoplasma gondii*

**DETECTION OF *Toxoplasma gondii* IN THE MUSCLE AND BRAIN TISSUES
OF FREE-RANGE CHICKENS SOLD IN TRADITIONAL MARKETS
IN PIYUNGAN DISTRICT, BANTUL REGENCY
USING POLYMERASE CHAIN REACTION**

Latifa Arundati
22/497985/KH/11289

Toxoplasmosis is a foodborne zoonotic disease caused by *Toxoplasma gondii*, which infects humans and warm-blooded animals. Humans can acquire the infection through ingestion of oocysts and tissue cysts in contaminated food or water, as well as via the transplacental route. Free-range chickens serve as one of the intermediate hosts of *T. gondii* and are also an important source of protein for humans. This study aimed to detect *T. gondii* infection in free-range chickens sold at traditional markets using the Polymerase Chain Reaction (PCR) method. Five samples, consisting of muscle and brain tissues, were collected from Panasan, Srimartani, and Piyungan Market, Piyungan District, Bantul Regency. PCR was carried out by amplifying the B1 gene of *T. gondii* targeted 409 bp. The amplicons were subsequently analyzed by electrophoresis and visualized under an ultraviolet transilluminator. The electrophoresis results of all samples show no 409 bp DNA band. Therefore, it can be concluded that none of the samples were infected with *Toxoplasma gondii*.

Key words: Free-range chicken, Piyungan District, Polymerase Chain Reaction (PCR), *Toxoplasma gondii*, traditional market