

INTISARI

DETEKSI TOXOPLASMOSIS PADA KAMBING DI KECAMATAN KOKAP, KALIBAWANG, DAN GALUR, KABUPATEN KULON PROGO DENGAN METODE *POLYEMRASE CHAIN REACTION* (PCR)

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Kambing merupakan bagian penting dari usaha tani masyarakat Indonesia. Kambing dapat digolongkan menjadi dua tipe, yaitu kambing potong (penghasil daging) dan dwiguna (penghasil daging dan susu). Banyak parasit yang menyerang kambing, diantaranya *Toxoplasma gondii*. Parasit intraseluler menyebabkan toxoplasmosis dengan kucing sebagai hospes definitif serta hewan *non feline* sebagai hospes intermedier. Infeksinya dapat menyebabkan keguguran pada hewan bunting. Penelitian ini bertujuan untuk mendeteksi toxoplasmosis pada kambing di Kecamatan Kokap, Kalibawang, dan Galur, Kabupaten Kulon Progo.

Sampel darah diambil dari 11 desa di tiga kecamatan tersebut. *Toxoplasma gondii* dideteksi menggunakan metode *polymerase chain reaction* (PCR) menggunakan primer GRA6. Hasil amplifikasi tersebut divisualisasikan dengan metode elektroforesis.

Pada penelitian ini metode tersebut dapat dipakai untuk mendeteksi toxoplasmosis pada kambing. Pada penelitian ini didapatkan tiga sampel positif yang berasal dari Desa Hargotirto (Kecamatan Kokap), Desa Banjarsari (Kecamatan Kalibawang), dan Desa Brosot (Kecamatan Galur).

Kata kunci: Toxoplasmosis, kambing, *polymerase chain reaction* (PCR)

ABSTRACT

DETECTION OF TOXOPLASMOSIS ON GOATS IN KOKAP, KALIBAWANG, AND GALUR DISTRICTS, KULON PROGO REGENCY USING POLYMERASE CHAIN REACTION (PCR) METHOD

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Goat is an important livestock of agricultural sector for Indonesian farmers. Goat farming can be divided into two types, meat producer and dual-purposes goat which produces both meat and milk. Parasites could infect goats, include *Toxoplasma gondii* as an intracellular obligate parasite. The parasite causes toxoplasmosis which *Felidae* as definitive host. The disease transmits orally and congenitally that may cause abortion. The research aims to detect toxoplasmosis using polymerase chain reaction (PCR) method on goats in Kokap, Kalibawang, and Galur Districts, Kulon Progo Regency.

Goat blood samples were taken from 11 villages in the districts above. Toxoplasmosis was detected by isolation and amplification of its deoxyribonucleic acid (DNA) using PCR method with GRA6 primers. The results were electrophoresed and illuminated its gel by ultra-violet light.

The PCR method could detect toxoplasmosis which is showed 546 basepair DNA band on the electrophoregram. The study observed three positive samples which taken from Hargotirto Village (Kokap District), Banjarsari Village (Kalibawang District), and Brosot Village (Galur District).

Keywords: Toxoplasmosis, goat, polymerase chain reaction (PCR)