

GAMBARAN VARIASI KONSENTRASI LARUTAN GIEMSA TERHADAP KUALITAS SEDIAAN TELUR *SOIL TRANSMITTED HELMINTHS* (STH)

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ABSTRAK

Latar Belakang : Pemeriksaan telur cacing dapat ditegakkan dengan pemeriksaan metode langsung menggunakan Eosin 2%. Pewarna Giemsa memiliki komposisi konsentrasi asam basa dan memiliki estimasi biaya lebih murah dibandingkan pewarna Eosin sehingga dapat digunakan sebagai alternatif pewarnaan sediaan telur *Soil Transmitted Helminth* metode langsung (Natif).

Tujuan penelitian : Untuk mengetahui kualitas telur *Soil Transmitted Helminth* menggunakan pewarna Giemsa 1%, 2%, 3%, 4%, 5% dan pewarna Eosin 2%.

Metode Penelitian : Penelitian *Pre-Eksperimental* dengan cara sampel dibuat preparat dengan variasi konsentrasi pewarna Giemsa 1%, 2%, 3%, 4%, 5% kemudian dibandingkan dengan pewarna Eosin 2% sebagai gold standar kemudian dinilai kualitas lapang pandang, penyerapan warna dan bagian-bagian telur cacing menggunakan skor kriteria penilaian.

Hasil Penelitian : Pewarna Giemsa konsentrasi 3% memiliki kualitas paling baik dengan latar belakang berwarna putih kontras, lebih mudah dan nyaman untuk membedakan dengan telur cacing, hasil embrio berwarna keunguan dengan warna biru keunguan pada dinding telur cacing *Necator americanus* / *Ancylostoma duodenale*. Pewarna Giemsa konsentrasi 1% dan 2% memiliki hasil warna embrio dan dinding telur yang terlalu lemah. Pewarna Giemsa konsentrasi 4% dan 5% memiliki hasil warna embrio dan dinding telur yang terlalu pekat samar-samar berwarna ungu. Pewarna Eosin 2% memiliki lapang pandang yang tidak nyaman dengan warna merah yang membuat hasil embrio berwarna merah keunguan dan dinding telur merah tua hampir menyerupai kotoran dari feses.

Kesimpulan : Pewarna Giemsa 3% memiliki kualitas paling baik dengan efektifitas 150% dan dapat digunakan sebagai alternatif pengganti Eosin 2% dalam pembuatan sediaan telur *Soil Transmitted Helminths* metode langsung.

Kata Kunci : *Soil Transmitted Helminths*, Giemsa, Natif, Kualitas

DESCRIPTION VARIATION OF THE CONCENTRATION OF GIEMSA SOLUTION TO THE QUALITY OF EGG- PREPARATION *SOIL TRANSMITTED HELMINTHS* (STH)

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ABSTRACK

Background: Inspection of worm eggs can be enforced by a direct method examination using Eosin 2%. Giemsa dyes have a concentrated acid concentration composition and have a lower cost estimation compared to the dye Eosin so that it can be used as an alternative to staining of the egg-preparation *Soil Transmitted Helminth* direct method (Natif).

Objectives: To know the quality of egg *Soil Transmitted Helminth* using the dye Giemsa 1%, 2%, 3%, 4%, 5% and dye Eosin 2%.

Methods: Pre-experimental research by way of sample made preparations with variations in the concentration of colorant Giemsa 1%, 2%, 3%, 4%, 5% then compared with the dye Eosin 2% as standard gold then assessed the quality of field of view, the absorption of color and the parts of worm eggs using scoring criteria score.

The Results of The Research: dye Giemsa concentrations of 3% have the best quality with a white background contrast, easier and convenient to distinguish with worm eggs, purplish-colored embryo results with purplish blue color on the wall of the worm *Necator americanus/Ancylostoma duodenale*. Giemsa dye concentrations of 1% and 2% have the color results of embryos and wall eggs are too weak. Giemsa dye concentrations of 4% and 5% have the color results of the embryos and the wall of the eggs are too thick purple colored. The dye Eosin 2% has an uncomfortable view of the red color that makes the embryo color of purplish red and the old red egg wall almost resembles the dirt of the feces.

Conclusion: Dye Giemsa 3% has the best quality with the effectiveness of 150% and can be used as an alternative substitute Eosin 2% in the manufacture of egg preparations *Soil Transmitted Helminths* direct method.

Keywords: *Soil Transmitted Helminths*, Giemsa, Natif, Quality