

Thesis Title	Segmentation Blood Smears Image of Malaria Parasite
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ABSTRACT

At the beginning, the inspection of malaria parasite was done by smearing malaria patient's blood and dying. Next, the blood was searched for its color using a microscope; for example: the nucleus will become magenta; and cytoplasm will become sky-blue. Then, the image segmentation of malaria parasite was performed by taking an image from a microscope and sending to a computer via a scanner. The group of color malaria parasite was set and computed to find out a hue value, which is a color angle value measured from a light spectrum, then kept the values as references in a database. On contrary, testing a blood image, whether it infects malaria or not, can be accomplished by comparing the hue values of the image pixels from the scanner with the reference hue values. If one of the hue values of the image is the same as the reference value, it indicates that the blood have malaria parasite. On the other hand, if the hue values are not the same as the reference value, it indicates that the blood doesn't have malaria parasite.

This experiment is conducted using 50 images from infected samples and 50 test images. All of them are 24 bits uncompress images and have 100 pixel/inches resolution. As a result, hue values analysis given up to 100 % correction.