

ty of malaria detection by nested polymerase chain reaction using simple sampling and DNA extraction

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Abstract:

Malaria remains a disease of underdeveloped and remote regions of the world. The application of polymerase chain reaction (PCR) technology to malaria epidemiology has the potential for increasing our knowledge and understanding of this disease. In order to study malaria in all geographical locations it is important that specimen collection and DNA extraction for PCR be kept simple. Here we report a method for extracting DNA from dried blood spots on filter paper which is capable of detecting one Plasmodium falciparum and two Plasmodium vivax parasites/microliter of whole blood by nested PCR without compromising the simplicity of specimen collection or DNA extraction.