Abstract

Database of filter paper porosity in mosquito resistance test becomes significant in the quality parameter of mosquito resistance paper test. Insecticide has an important role in such paper. Some insecticide used in the resistance test was included in the porosity test. In order to find the porosity of WM filter paper with WHO standard, an imageJ application is needed to look for the volume of air-cavity. The paper used in this measurement was WM filter paper without insecticide as the control paper and WM filter paper with insecticide, namely cypermethrin, lamdacy halotrin, and permetrin with the concentrate that has been decided in the resistance test. The results of this study showed that the porosity of filter paper with 0,05% cypermethrin as the active insecticide was 47,78%, the porosity of filter paper with 0,03% lamdacy halotrin as the active insecticide was 49,37% and the porosity of filter paper with 0,25% permetrin as the active insecticide was 49,60%. Therefore, it was found out that based on its porosity, the filter paper with cypermethrin as the active insecticide was better.

Keywords: Paper Porosity, Insecticide, ImageJ Application