

ABSTRACT

Suci, Iftinan, Amalia Rahma. 2014. **Potential test garlic solution (*Allium sativum*) as insecticides against green flies (*Chrysomya sp.*) with electrical methods**. Final Project, Faculty of Medicine, UB. Supervisor: (1) Dr.dr. Sri Poeranto YS,M.Kes,SpPark (2) dr. Aris Widayati,Sp.S.

Health problems for humans can be caused by various things, one of the problems caused by parasitic organisms. In many tropical developing countries, there are many factors that make the environment fit for life and development of the parasite. Bluebottle (*Chrysomya sp*) is a type of fly that is spreading cosmopolitan especially in countries with tropical climates. The fly is one of the mechanical vectors that can spread the cause of human health problems

Vector control is often done by using synthetic chemical pesticides, but on the other hand the use of chemical pesticides continuously in the long term will have a negative impact on the environment. One alternative is the use of botanical pesticides that are more environmentally friendly (Minister of Health, 2012; Susanto et al, 2011).

Garlic is a plant that grows in many tropical regions and well known by the public. Garlic contains many chemicals that are known as secondary metabolites such as flavonoids, allicin, saponin. A variety of secondary metabolites have been used as medicine or materials for making drugs , pesticides and insecticides (Zuraida et al, 2010). To determine whether garlic solution has potential as an insecticide against Bluebottle (*Chrysomya sp*) then conducted an experimental study with repetition as much as 4 times at intervals of time that clock to 1st, 2nd, 3rd, 4th, 5th and 24th by using a sample of 10 adult *Chrysomya sp* flies and garlic solution with a concentration of 20%, 22.5%, 25%, 27.5%, and 30%. For comparison used d - aletrin 45 mg as positive control and distilled water as a negative control. The results of this study showed that the treatment, 100 % death fly occurs to a concentration of 30% at the 24th hour. Results were comparable with the results obtained by the positive control (d-aletrin 45 mg). The conclusion from this study is that the solution of garlic has potential as an insecticide against flies *Chrysomya sp* at a concentration of 30 %.

Keywords : garlic, *Chrysomya sp*, Insecticides