ABSTRACT

Ramadhanti, Sarah Yasmin. 2013.The Potency of Soursop (*Annona muricata*) Leaves Ethanol Extract As Natural Insecticide Against *Chrysomya sp* Flies With Spray Method. Final Assignment, Medical Program Faculty of Medicine Brawijaya University. Supervisors: (1) dr. Sudjari, DTM&H., M.Si., Sp.Park. (2) dr. Dian Nugrahenny, M.Biomed.

Chrysomya sp. is a fly that plays a role in the disease transmission in humans. Various diseases can be transmitted among others, such as myasis, diarrhea, dysentery, and typhoid. Flies eradication using chemical insecticides can cause environmental pollution and health problems, so that there is necessary to find alternative insecticide derived from nature. Soursop *(Annona muricata)* leaves ethanol extract contains acetogenin and flavonoids that have insecticidal properties. This experimental study was conducted to determine the potency of soursop leaves ethanol extract against flies. Fifty *Chrysomya sp.* flies were divided into 5 groups (A / B / C / D / E) with 4 repetitions. Groups A / B / C were sprayed using extract with concentrations of 25%, 20%, and 15%, group D using malathion, group E using distilled water. The total mortality of flies was counted at minute 20, 40, 60 and 24 hours. The average number of dead flies at concentrations of 25%, 20% and 15% were 55%, 75%, and 100%. The 100% death occurred at a concentration of 25% at 24 hours, and it was comparable with the positive control (malathion). It is concluded that the soursop leaves ethanol extract has potency as an insecticide against *Chrysomya sp.* flies.

Keywords : soursop leaves ethanol extract, insecticide, *Chrysomya sp.* flies