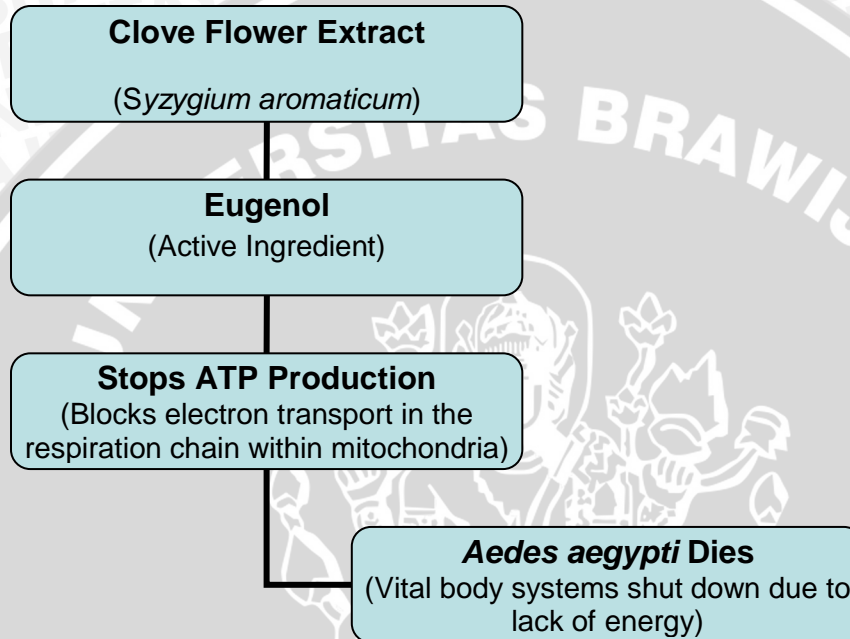


## CHAPTER 3

## CONCEPTUAL FRAMEWORK AND OBSERVATIONAL HYPOTHESIS

## 3.1 Conceptual Framework



Clove flower extract contains eugenol as one of the active substances. This compound acts as an insecticide via inhibition of the electron transport process in the mitochondrial respiratory chain. Inhibition of mitochondrial electron transport causes failure of ATP production leading to failure of the nervous system, respiratory system and the digestive system ultimately causing the death of the *Aedes aegypti* mosquito (Enan, 2005).

## 3.2 Observational Hypothesis

Clove (*Syzygium aromaticum*) extract has the potential to be an insecticide towards *Aedes aegypti* mosquito.