## **ABSTRACT**

Tika Nurfarida. 2017. Abundance and Diversity of Fruit Flies *Bactrocera sp* (Diptera: Tephritidae) in Sindangkerta Beach Cipatujah District Tasikmalaya. Under guided by Dr. Riandi, M.Si. as a First Counselor and Drs. Suhara, M.Pd. as a Second Counselor.

The purpose of this research is to measure the abundance and diversity of fruit flies Bactrocera sp (Diptera : Tephritidae) in Sindangkerta Beach Cipatujah District Tasikmalaya. This research was done on Mei 16th – 19th 2017, and use descriptive method. This research used attractant methyl eugenol trap which built with six stations. Each stations has 10 meters distance and has three quadrats within 25 meters of space between each quadrats. Supporting data for this research is environment factors (temperature, humidity, light intencity, and wind velocity). The impact of enviroment factors for abundance and diversity of Bactrocera sp known from multiple linear regression on SPSS. Based on this research there are Bactrocera sp which consist of four spesies. Bactroceras' species were found are: Bactrocera papayae, Bactrocera carambolae, Bactrocera neocognata, and Bactrocera umbrosa. Species with highest abundance value as 4 ind/m<sup>2</sup> is *Bactrocera papayae* and Bactrocera carambolae besides other species with low abundance value as 1 ind/m<sup>2</sup> is Bactrocera neocognata. Bactrocera sp diversity index analysis from all stations is 0,82 It means diversity of Bactrocera sp in Sindangkerta Beach Cipatujah District Tasikmalaya is belonging to low category.

Keywords: Abundance, Biodiversity, Bactrocera sp.