

## ABSTRACT

**Rachel Dewita Sari. 24020117140074. Antifungal Activity Test of Ethanol, Acetone and Chloroform Extract of Red Chili (*Capsicum annuum* L.) against *Fusarium oxysporum*. Under the guidance of Arina Tri Lunggani and Susiana Purwantisari.**

*Red chili (Capsicum annuum L.) is a plant that is widely used for food needs, medicine, and also has the potential as an antimicrobial agent. Fusarium oxysporum is known as a soil-borne phytopathogen that causes fusarium wilt disease that infects many plants, causing major losses in infected plants. This research aims to determine the antifungal potential of ethanol, acetone and chloroform extracts from red chili fruit (Capsicum annuum L.) against Fusarium oxysporum mold which infects potato plants. Red chilies (Capsicum annuum L.) were extracted using the maceration method. The yields of ethanol, acetone and chloroform extracts were respectively 15.3%, 13.43% and 14.56%. Based on antifungal tests on Potato Dextrose Agar (PDA) media, the three extracts in the same concentration, namely 100%, were unable to inhibit Fusarium oxysporum. This is possibly because Capsicum annuum L. is known to have antimicrobial abilities in a narrow spectrum, while Fusarium oxysporum is generally a stress-adaptive pathogen. Controlling Fusarium oxysporum by using red chili extract cannot be an alternative for controlling fusarium wilt disease.*

**Keywords:** *Capsicum annuum* extract, antifungal, *Fusarium oxysporum*