

ABSTRACT

This study aims to see the effectiveness of *Morinda citrifolia* L. and *Azadirachta indica* extracts in controlling anthracnose disease in red chilies. This method includes the extraction of *Morinda citrifolia* L. and *Azadirachta indica*, preparation of Potato Dextrose Agar (PDA) media, culturing of *Colletotrichum capsici* mushroom isolates, as well as in-vitro and in-vivo testing of anthracnose disease in red chilies. This research was conducted in the laboratory with two factors, the first factor was the type of extract, namely extracts of *Morinda citrifolia* L. and *Azadirachta indica* and the second factor was the concentration of the extract. The experimental treatments were arranged in a completely randomized design (CRD). The results of the in-vitro test at a concentration of 25 ml showed that the extracts of *Morinda citrifolia* L. and *Azadirachta indica* could inhibit the growth of *Colletotrichum capsici* by 79.62% and 92.02%, respectively. In-vivo testing of *Morinda citrifolia* L. extract showed a disease incidence of 46.67%, disease severity of 31.00%, chili fruit weight loss of 44.20% and inhibited the incubation period to 2.75 days. *Azadirachta indica* extract only caused 32.00% disease incidence, 17.00% disease severity, 41.87% chili fruit weight loss and delayed the incubation period to 3.13 days. *Azadirachta indica* extract has greater potential to be used as a vegetable fungicide in controlling anthracnose disease in chili plants compared to *Morinda citrifolia* L. extract..

Keywords: *Azadirachta indica* extract, *Morinda citrifolia* L extract, *Colletotrichum capsici*, red chili, and anthracnose