

ABSTRACT

Potato Dextrose Agar is a medium for growing fungal, which is relatively expensive. With the abundance of raw materials in Indonesia that contain lots of nutrients, researchers try to find alternative media with cheap prices, local corn. Corn seed flour was the main ingredient in this study. This study was conducted to determine the effectiveness of corn kernels as an alternative medium for the growth of *Trichophyton rubrum* with PDA as a positive control.

This research was an experimental laboratory at the Parasitology Laboratory of Health Analyst Department, Surabaya in April 2021. PDA and alternative media for corn kernels with mass variations of 6 grams, 7 grams, 8 grams, and 9 grams were planted. *Trichophyton rubrum* with single dot method then incubated at room temperature for 14 days and repeated 5 times.

From the research, can be concluded that the alternative media of corn kernels are effective to used for growth medium for the *Trichophyton rubrum*. It is characterized by the optimal growth of the *Trichophyton rubrum* found in alternative media of corn seeds with a mass variation 9 grams which can grow colonies on day 5 with average final diameter 12.8 mm. Meanwhile, PDA grew colonies on day 10 with an average final diameter 7.4 mm. The average colony diameter in the alternative media increased along with the increase in mass variation due to the presence of higher nutrient content which affected the growth of the *Trichophyton rubrum*.

Keywords: *Alternative media of corn kernels (Zea mays L), PDA media, Trichophyton rubrum*