

ABSTRACT

Water can affect the thermal conditions in the surrounding area. This occurs, because the water evaporates due to receiving heat energy from an energy source. In this study, we want to apply evaporative cooling in a room. With a span of research carried out during the day. The research was carried out by filling water into three different sized tubs, by placing temperature and humidity sensors before and after the tub. During the study, we gave winds of 2.26 m/s and 4.52 m/s. While the sun will be replaced by six 60 Watt bulbs. When wind blows; without 60 watt bulbs, the sensor that placed after the tub was measuring temperature reduction, up to 0.1020 °C. The faster the wind blows, the greater the temperature drop measured on the sensor placed after the tub. Where the measured air conditions are more humid. When the 60 watt bulbs were on and the wind was blown, the air temperature increased in each sensor which is placed on after the tub. Meanwhile, the measured air humidity is getting drier. In this scenario, the faster the wind blows, the smaller the difference in temperature and humidity between sensors placed before and after the tub.

Keywords: *Evaporative cooling, Water, Wind, Temperature, Wind Speed*