

ABSTRACT

The use of geomembranes as a medium for evaporation of sea water has been used by many salt farmers in Indonesia since 2011 and it is claimed by many researchers that the use of geomembranes as a medium for evaporation in salt ponds can affect the quality of the salt produced and the harvest times of salt farmers which tend to be faster.

In this study, a comparison of variations in brine evaporation media was carried out using geomembranes and other materials. This study uses two ceramics where one is coated with a geomembrane and the other uses other materials such as LDPE plastik and black paint to compare the effect of the material and color of the evaporation medium. In addition, a comparison of the thickness variations of the geomembrane material and the LDPE plastik was also carried out to determine their effect in increasing the evaporation rate of salt water. From the results of this study, the highest temperature and evaporation rate of each medium used can be compared. Of the 10 experiments conducted, there were 4 experiments that gave the highest temperature results and better evaporation rate than geomembrane, namely the temperature of brine on black ceramics, black plastik on black ceramics, 3 layers of geomembrane, and 5 layers of geomembranes, but from 4 the experiment is deemed less efficient if it is used by salt farmers directly. Apart from the 4 experiments, it is still no better than the geomembrane in terms of the highest temperature and yield rate of evaporation. So it can be concluded that of the 10 experiments conducted, the use of geomembranes as a medium for evaporation of salt water is still considered more efficient for use by salt farmers.

Keywords: Salt Farmers, Salt, geomembrane, evaporation.