

The result of DNA analyzed using PCR techniques SK IV is a new strain of *Bacillus circullans* with 97% similarity. There were three strains based on DNA sequences where all three are *Bacillus circullans*. Three strains of *Bacillus circullans* named BC I, BC II, and BC III. The next step is to choose one of the three most superior strains to produce hydrogen and acetic acid using the substrate sucrose 1%, molasses 2% and lignocelluloses. Production of hydrogen and acetic acid carried out in anaerobic conditions at 60 ° C and incubation time of 72 hours. The research method using a random system with three replications. Table 2 shows the encryption system used.

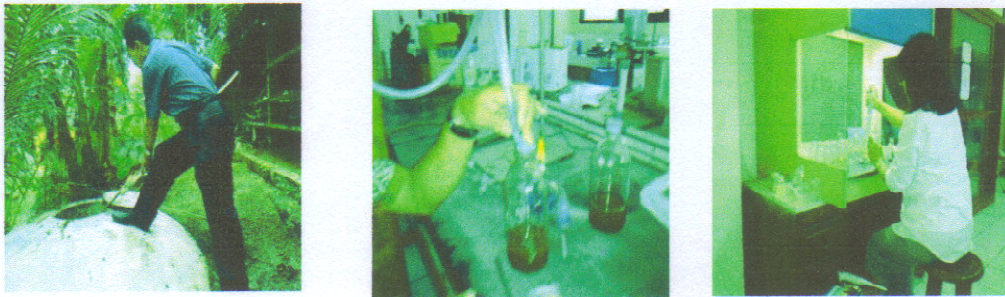


Figure 2 The process of isolation of microorganisms from biogas slurry.