DNA FINGERPRINTING ON ITS REGION OF *Sauropus androgynus*' DNA FROM EAST JAVA, BY RANDOM AMPLIFIED POLYMORPHIC DNA METHOD

OEKE YUNITA[1,2 *)], SULISETIORINI[2]

[1]*Postgraduate Program, Airlangga University,*
[2]*Faculty of Pharmacy, University of Surabaya,*
Surabaya, East Java, Indonesia
oeke@ubaya.ac.id, [*)]*Corresponding author*

ABSTRACT

The important effect of Sauropus androgynus / SA (katuk), as a lactagogum for increasing human breast-milk production in Indonesia, must face the reality that there are also many investigations revealing its side effect, associated with Bronchiolitis obliterans, in Taiwan and Japan.

This research had performed a genetic assessment, by the use of DNA fingerprinting with a RAPD method, for mapping the genetic pattern among SA accessions from East Java, Indonesia. The genetic map of SA accessions will become the supporting database on further research to ensure the safety of SA in Indonesia, as a lactagogum.

The DNA fingerprinting had been done by a Random Amplified Polymorphic DNA (RAPD) method which amplified the Internal Transcribed Spacer (ITS) region on DNA of SA, from different geographic locations at East Java, Indonesia. The amplification mixture, contained ITS region of DNA and RAPD primers (OPF-07, OPF-12, OPF-15), was cycled in a thermocycler. Amplification products were separated by agarose electrophoresis, visualized and imaged after staining with Ethidium bromide.

Statistical analysis using Cluster Analysis had shown high similarity (0.786 – 0.895) between SA samples. The result assumed that genetic material of SA accessions had not been influenced directly by different environmental conditions. Despite this result, genetic assessment by DNA fingerprinting, could distinguish SA accessions more clearly than morphological assessment.

Key Words: *Sauropus androgynus, DNA fingerprinting, ITS region, RAPD*