

DNA EXTRACTION FROM *Hopea odorata* AND *Gynura procumbens*

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ABSTRACT

DNA EXTRACTION FROM *Hopea odorata* and *Gynura procumbens*

In this study was focusing on *Hopea odorata* from the Dipterocarpaceae family and this study also will cover about the genetic study of *H. odorata* or known as “Merawan Siput Jantan” at locality. *G. procumbens* is one of the important medicinal plants in Malaysia, Korea, Indonesia, Thailand and Philippines. It is also known as “Sambung Nyawa” in Malay. DNA extraction is the technique that used to separate DNA in biological sample study. The aims of this study were to extract DNA, to compare the base pair size and determine whether there are *SleE01* in *H. odorata* and *G. procumbens*. The DNA extraction was been done by using Invisorb® Spin Plant Mini Kit procedure. The procedure involved in this study was used 60mg of sample leaves have been grind under liquid nitrogen state, gene amplification by using Polymerase chain reaction (PCR), gel electrophoresis and visualized of PCR product under UV light. The result show that before amplified in PCR the DNA molecule were at above and both have similar base pair because the DNA does not have specific site to bind and they coagulate with each other that make large DNA size. In contrast, after amplified in PCR by using *SleE01* primer reverse and forward the DNA fragment move along site with the 100 base pair ladder. These shows the DNA have the specific site to bind and because of this reason the DNA migrate to the bottom of gel. In conclusion, the extractions from the *H. odorata* and *G. procumbens* leaves to get the genomic DNA were successfully extracted. This study showed that *H. odorata* and *G. procumbens* genes or specifically the *SleE01* gene can be successfully amplified in *H. odorata* and *G. procumbens* by using the *SleE01* primers. By using *SleE01* primers have successfully isolated DNA from the *H. odorata* and *G. procumbens* leaves.