Potential of local castor plant as plantation crop in Sabah

ABSTRACT

Castor is an economic oilseed crop and biodiesel feedstock that thrives in tropical climate such as Malaysia. Currently, the global production of castor oil is insufficient with the demand. This study was conducted to determine the potential of wild Sabah castor as plantation crop. 'Keningau' castor accession was planted on January 5, 2013 with 2m x 2m planting distance. No fertilizer was supplied during the planting period and the crop and was left with low maintenance. Ten randomly selected plants were observed weekly from January to December 2013. This study found that Sabah castor can produce an average of 907.39 fruits per tree and, 48.8 fruiting racemes per tree, 75.56 g 100-fruit weight, 12.27 g 100-seed weight and 5 0.95% of extractable crude oil. Local Sabah castor can produce approximately 1,216.80 kg/ha of seeds and 592.81 kg/ha of castor oil. Result of study shows that wild Sabah castor has high oil content, but low seed yield. Therefore, further studies are required to develop proper agronomy practises and breeding programme to increase castor yield.