Shoot Tip Culture: A Potential In Vitro Culture Multiplication of Screw Pines (Pandanus tectorius Park.)

Title	Shoot Tip Culture: A Potential In Vitro Culture Multiplication of Screw Pines (Pandanus tectorius Park.)
Author Order	3 of 6
Accreditation	2
Abstract	Pandanus tectorius Park., tree of life, which almost all of its parts are used by humans. Industrial fiber made from screw pine leaves has been successfully exported to several countries, while the fruit is consumed as an alternative staple food. Fruit is only produced by female plants, because screw pine is dioecious plant. Farmers obtain screw pine seedling using stem cuttings from female trees, but the number of seedling produced is limited and this technique can damage the plant. Alternative seedling production using seeds has constraints in the form of uncertainty over the sex of the seedling. One of the best ways to provide screw pine seedling is to use a shoot-tip culture technique. Shoot-tip culture is able to reproduce plants efficiently and quickly and does not damage the plant. Seedling will also have the same genetic traits as the selected plant. However, efforts to develop an efficient and fast screw pine shoot-tip culture protocol have not been carried out massively. The induction and shoot multiplication stages still had a low success rate. Another problem in seedling production through tissue culture is the certainty seedlings are true-to-type. This review article aims to reveal the potential of shoot-tip culture for in vitro screw pine seedling production and to test the genetic stability of the screw pine seedling.Ã‚Â Ã‚Â
Publisher Name	Research Center for Biology-Indonesian Institute of Sciences
Publish Date	2022-09-19
Publish Year	2022
Doi	DOI: 10.14203/beritabiologi.v21i2.4208
Citation	
Source	BERITA BIOLOGI
Source Issue	Vol 21, No 2 (2022): Berita Biologi
Source Page	119 - 132
Url	
Author	Ir ALICE YUNIATY, Ph.D