

**THE EFFECT OF CONCENTRATION ARECA SEED  
EXTRACT (*Areca catechu* L.) ON PHYSICO-  
CHEMICAL AND SENSORY PROPERTIES  
OF PINEAPPLE JUICE (*Ananas comosus*  
L. MERR) AS A FUNCTIONAL  
BEVERAGES**

**DANIEL TUA PURBA**



**STUDY PROGRAM OF AGRICULTURAL PRODUCTS TECHNOLOGY  
MAJORS OF AGRICULTURAL TECHNOLOGY  
FACULTY OF AGRICULTURE  
UNIVERSITY OF JAMBI  
2021**