

ABSTRACT

Coconut (*Cocos nucifera* L.), often referred to as the "tree of life," is a valuable plantation crop whose parts are utilized for various human needs. North Aceh, Indonesia, serves as one of the main coconut production centers, yet detailed information about its distribution and cultivation systems remains sparse. This study aims to explore the distribution, characterize the cultivation systems, and assess the fruit quality of coconuts in Baktiya Subdistrict, North Aceh. The research, conducted from June to August 2023, employed a descriptive approach and utilized purposive sampling with a completely randomized design comprising two factors: village location (Tanjung Gelumpang, Alue Buya, Matang Cut) and coconut type (Baktiya 1 to Baktiya 8). Results revealed significant variability in coconut distribution, cultivation practices, and fruit quality across villages. Key factors such as location influenced attributes like flesh thickness and edible portions, while coconut types significantly affected parameters such as fruit weight, flesh weight, and water volume. This research provides valuable insights into coconut cultivation, contributing to improved management and utilization of coconut resources in North Aceh.

Keywords: Coconut, Exploration, Characterization, fruit quality, North Aceh, Baktiya, coconut varieties, genotypes, local agriculture.