

## *Abstract*

Langsat (*Lansium domesticum*) is a tropical plant that grows in humid climates and is native to Malaysia and East Kalimantan, Indonesia. It shares similarities with several other plant species within the Meliaceae family, such as Kokosan, Pisitan and Celoring. However, information regarding the morphological characteristics of the Langsat plant in Aceh Province has not yet been obtained. Identification efforts are necessary to gather information on the distribution of production centers, characteristics, and the diversity of traits of the local Langsat plants in Aceh. The objective of this research was to obtain information on the distribution areas, morphological characteristics, and fruit quality, as well as the similarity level of local *Langsat* plant in North Aceh Regency. The research was conducted in the sub-districts of Simpang Keuramat and Kuta Makmur within North Aceh Regency. The exploration and characterisation were carried out from February to April 2024. The results of the research showed that the distribution of local Langsat plants in North Aceh Regency. There are central areas for local langsat cultivation in North Aceh Regency, specifically in Simpang Keuramat Subdistrict, located between the coordinates of 5.088288°N to 5.093159°N latitude and 97.048486°E to 97.142629°E longitude. Meanwhile, the distribution of local langsat plants in Kuta Makmur Subdistrict is found within the coordinates of 5.071110°N latitude and 97.048081°E to 97.089589°E longitude. Morphological variation was observed among 35 accessions of local langsat from North Aceh Regency. This variation includes branch density, leaf blade shape, leaf apex shape, leaf base shape, fruit shape, fruit shoulder, fruit apex, and seed shape. The similarity coefficient among the 35 local langsat accessions from North Aceh Regency ranged from 63% to 85%. The highest morphological similarity (85%) was observed between accession IT1-5 (from Ie Tarek 1, Simpang Keuramat Subdistrict) and accession BL5 (from Babah Lueng, Kuta Makmur Subdistrict).

Keywords: Aceh, characteristics, Langsat, identification, morphology