

DOMINIKUS WIRATAMA ANDAYANI. Land Suitability for *Paraserianthes* (*Paraserianthes falcataria*) and Breadfruit (*Artocarpus communis*) in Limestone Mining Reclamation Area PT. Sugih Alamanugroho Bedoyo village Ponjong Subdistrict of Gunung Kidul Regency. Under the guidance of Dr. Ir., S. Setyo Wardoyo MS and Ir. Dyah Arbiwati, MP.

ABSTRACT

Gunungkidul is one area that has karst topography (Sewu mountains). Natural potential in this area is dominated by limestones, one of the foremost resources for limestone mining companies. However, every mining activity will inevitably lead to environmental damage. One of the methods to repair the damage of the limestone mining area is land reclamation, termed as revegetation. This study is aimed at determining the suitability of reclaimed land area for *Paraserianthes* sp (*Paraserianthes falcataria*) and Breadfruit (*Artocarpus communis*). The study took place at PT. Sugih Alamanugroho which was established in 1991 and has been operating since 1992 in the village of Bedoyo, Subdistrict Ponjong, Gunung Kidul regency, Yogyakarta. This study employed survey method and soil sampling which were done purposively based on the age of the reclamation plant. The parameters observed soil drainage, soil texture, topography / slope, erosion hazard level, surface stoniness, rock outcrops, soil CEC, and pH of the soil. The results of the analysis of field and laboratory indicated that the suitability of land for *Paraserianthes* sp (*Paraserianthes falcataria*) is in N class (not suitable) the effective depth limiting factor in all locations, whereas the suitability land for Breadfruit crops (*Artocarpus communis*) is in N class (not suitable) and S3 (marginally suitable) the limitations are effective soil depth, soil pH and soil CEC.

Keywords: land suitability, breadfruit, paraserianthes sp, reclamation area.