

ABSTRAK

Lutfi Erwanto, 24020120140144, **Diversity and Status of Tree Species Regeneration in the Pagerwunung Darupono Nature Reserve Area, Kendal Regency** (under the guidance of Sri Utami and Jumari)

Pagerwunung Darupono Nature Reserve is a conservation area in Kendal Regency, Central Java, which requires data-based management of tree diversity and regeneration status. This study aims to determine the diversity and analyze the regeneration status of tree species in the Pagerwunung Darupono Nature Reserve Area using the diversity index, evenness index, similarity index, and important value index (INP). The study was conducted at two stations, namely plot 25B and plot 56B, using a 20m x 20m quadrat plot method. The results of the study found 19 tree species from 12 families, with tree diversity index (H') values (1.71–1.77) and species evenness index (E) (0.57–0.60) similarity index (IS) 54%. INP in the tree phase of stations I and II were *Tectona grandis* (117.5%) and (134.9%), in the pole phase of stations I and II were *Gluta renghas* (77.2%) and *Ficus benjamina* (111.8%), in the sapling phase of stations I and II were *Streblus asper* (87.4%) and (61.3%), in the seedling phase *Streblus asper* (50%) and *Mangifera indica* (116.7%). The regeneration status in the Pagerwunung Darupono Nature Reserve Area as a whole was included in the good category. Species that had good regeneration status were *Eugenia densiflora* Willd. ex O.Berg, 1856, *Gluta renghas* L., *Streblus asper* Lour., *Swietenia mahagoni* (L.) Jacq., and *Tectona grandis* L.f. Species that had low regeneration status were *Artocarpus elasticus* Reinw. ex Blume, *Ficus benjamina* L., *Manilkara zapota* (L.) P.Royen, and *Syzygium pycnanthum* Merr. & L.M.Perry. Species that have regeneration status that is not regenerating are, *Cinnamomum iners* (Reinw. ex Nees & T.Nees) Blume, *Delonix regia* (Bojer ex Hook.) Raf., *Ficus variegata* Blume, *Schoutenia ovata* Korth, *Syzygium aqueum* (Burm.fil.) Alston, *Syzygium aqueum* (Burm.fil.) Alston, *Terminalia catappa* L., *Tetrameles nudiflora* R.Br., and *Vitex pinnata* L. Species that are said to have just regenerated are, *Garcinia mangostana* L., and *Mangifera indica* L.

Keywords: Tree diversity, tree regeneration, Pagerwunung Darupono Nature Reserve