## **ABSTRACT**

Neng Ciceu Haniaturohmah, 2024. Analysis of Stored Carbon Reserves in Trees in the Green Open Space (RTH) of Ade Irma Suryani Nasution Park, Bandung City and Surrounding Areas. Supervised by Dr. Ida Yayu Nurul Hizqiyah, S.Pd., M.Si and Gurnita S.Si., MP.

Public parks and green belts are a form of Green Open Space (RTH). Trees are the most important element of RTH which plays an important role in absorbing carbon reserves through the process of photosynthesis, improving environmental quality, and related to climate factors. The aim of this research is to find out the types of trees in RTH Taman Ade Irma Suryani Nasution Bandung City, the potential annual carbon reserves in Taman Ade Irma Suryani Nasution Bandung City, the trees that can store the most carbon, and the recommendations resulting from the research. This research was conducted at Ade Irma Suryani Nasution Park, Bandung City. Research data includes vegetation analysis data and carbon reserve calculations. Data analysis techniques using quantitative research techniques. Based on research, 115 trees were found from 29 species and 19 families. The highest potential carbon reserves in RTH Taman Ade Irma Suryani Nasution Bandung City Fillicium decipiens with a biomass value of 60,508.93 kg and carbon reserves of 30,254.46 kg, the tree that stores the lowest carbon reserves is Cerbera manghas with a biomass value of 236.61 kg and carbon reserves of 118.31 kg, and the average biomass in Taman Ade Irma Suryani Nasution, Bandung City is 9,334.01 kg and carbon reserves are 4,333.04 kg.

Keywords: Biomassa, Carbon Stored, Green Open Spaces, Ade Irma Suryani Nasution Park