

SUMMARY

Bagan Pete City Forest, which is located in Bagan Pete Village, Alam Barajo District, Jambi City, has a very important role in maintaining balance and harmony in the environment of Jambi City. Apart from that, the Bagan Pete City Forest also contributes various types of biodiversity and endemic plants to Jambi which must be preserved. There are 13 species of herbaceous plants grouped into 10 families found in the Bagan Pete City Forest, Jambi City and of these there are several invasive plants compresus, *Clidemia hirta*, *Imperata cylindrica*, *Cyperus rotundus*, *Mimosa pudica*, and *Melastoma sp.* One of the efforts to protect biodiversity in the Bagan Pete City Forest Park area, Jambi City is by conducting research on the diversity of invasive plant species, so it is hoped that this research can be used as a guide in efforts to manage, develop and protect plant species in the Bagan City Forest Park area. Pete Jambi City. The aim of conducting this research is to determine the diversity and spatial distribution of invasive plants in the Bagan Pete City Forest, Jambi City. The research was carried out in Bagan Pete City Forest Park, Jambi City from August to September 2021. Field activities included observation, determining the research location area, collecting plant samples, and measuring environmental factors. The data obtained is then recorded in an observation table, while plant species whose scientific names are unknown are labeled for further identification. Data collection on invasive plants was carried out by taking coordinate points using GPS and Avenza Software and then processing them using ArcGIS 10.3 Software. Based on the research that has been carried out, 18 types of invasive plant species were identified and included in 10 families, namely *Melastomaceae*, *Glicheniaceae*, *Poaceae*, *Malvaceae*, *Cyperaceae*, *Acanthaceae*, *Asteraceae*, *Nephrolepidaceae*, *Solanaceae* and *Fabaceae* with the *Clidemia hirta* species having the largest number of individuals, namely 1945 individuals and continued with *Dicranopteris linearis* with 1424 individuals. Bagan Pete City Forest, Jambi City has a diversity of invasive plant species with a medium index of 1.91. The diversity index value of invasive plants in the Bagan Pete City Forest shows a low species richness of 1.98, while the evenness tends to be. The invasive plant types that are often found in the Bagan Pete City Forest, Jambi City are *Clidemia hirta* and *Dicranopteris linearis* while the family most commonly found is *Poaceae* . The spatial distribution of invasive plants in the Bagan Pete City Forest, Jambi City has a clustered distribution pattern.

Keywords: Urban forest, Bagan pete, invasive plants, biodiversity, spatial distribution