

## **ABSTRACT**

***Use of PlantNet Applications on Plant Species Level Diversity Material to Improve Learning Outcomes and Motivation of Students. Supervised by Dr. Cartono, M.Pd., M.T. and Mimi Halimah, S. Pd., M.Si.***

*Based on the research entitled "The Use of PlantNet Applications on Plant Species Level Diversity Material to Improve Learning Outcomes and Student Motivation" there are results regarding learning outcomes and learning motivation. Learning outcomes are a part of the learning process using measuring instruments in the form of well-planned tests, both written and oral tests. The purpose of this study is to measure the effectiveness of learning outcomes and student motivation. This study used the Pre-Experimental Design method with a one-group design pretest-posttest design. The population in this study were all students of class X MIPA MA Atsauri Sindangkerta, while the sample used in this study was class X MIPA 1 with a total of 13 students. The data collection technique used in this study was purposive sampling. Data collection was carried out by observing the learning activities of students during learning, by looking at the learning outcomes of students, and questionnaires as a measuring tool to see the increase in students' learning motivation. The analysis of the learning outcome data used the N-Gain formula, while the motivation questionnaire data analysis used descriptive analysis. The results showed that the pretest mean score was 43.5, and the posttest average score was 61.9, while the results of the learning motivation questionnaire showed an increase in learning motivation so that the learning outcomes achieved by students increased. The results of the trial report show that the use of the PlantNet application at the plant species level material can improve student learning outcomes.*

***Keywords:*** *PlantNet application, learning outcomes, learning motivation, plant species diversity*