ABSTRACT

The primary purpose was to create a monitoring and identification of pests damaging the corn crops in Barangay Cayus, Pilar, Capiz. Specifically, this study aims to design and develop a database that could easily monitor the pests, develop a database that keeps data on different kinds of flying insects, have early detection of pest infestations and to allow farmers adopt technology without significant financial investment. This project used programming languages essential in developing the system, the JavaScript and Python. The hardware device used were the personal laptop, 8GB(RAM) or above, 800MB disk space and 64 bit Operating System (OS): Intel ® Dual-Core N3050, up to 2.16GHz or any model, 1366x786 screen resolution, Arduino Uno R3, Webcam, Jumper Wires, Servo Motor and Solar Panel. This study was tested by three IT experts and 20 Farmers, and it was found out that the system are useful in terms of identification and in pest monitoring. This capstone study was approved to the Municipal Agriculture Department in terms of usability, reliability, functionality, compatibility, maintainability, security and performance efficiency.

Keywords: Pest identification, monitoring, database, digital, detection and captured image.