**Leaf Green Pixel Analyzer**

**Objective** – To develop an android application that can recognize plant species from image of its leaf or leaves.

**Developed Model** – Currently developed program is designed for analysis of leaf using Digital Image Processing and to record analyzed parameters.

These parameters are as follows

1. Average RGB values of leaf
2. Maximum Horizontal Sequence of Pixels of leaf
3. Maximum Vertical Sequence of Pixels of leaf
4. Ratio of HSP and VSP
5. Increase and decrease in width of leaf
6. Image name and description
7. Image height and width in pixel

It is based on identification of green pixels in image hence the project name.

Techniques used for programming are as follows

1. Java 1.8
2. Meta Data Extractor Master
3. XMP core – 5.1.1
4. IDE – Eclipse Neon 3

**Usage** – The inputs for leaf analysis are given as command line argument i.e. as follows

**LGPA.jar <filename.jpg> <description>**

**Usefulness** – The developed system can be used to collect data which can be later used for machine learning tools to conduct plant biodiversity surveys

**Limitations** – The currently developed model is for analysis and data collection purpose only. Plant identification model is not yet built. Also, it collects limited data which is insufficient for accurate plant identification.