ABSTRACT

Botany is growing rapidly from time to time. Eventually it develops new branches including the one that studies plant's morphology. This particular branch studies extensively into plant's anatomy and shape especially on its leaves's shape. This final project will build a program to classify leaves's types. The shape of leaves's edge is used as a feature to classify leaves's type. Image processing used in the process are gray scaling, thresholding and edge detecting. Edge detection will counted using invariant moment. This final project will use classification based on centroid linked and K means. The classification process will create 10 cluster based on the shape of leaves's edge.

Keyword: Morfologi, gray-scale, thersholding, edge detection moment invariant, centroid linked, k-means