**Abstract**

Several attempts have been made by taxonomists and morphometricians to find out the best automated identification of biological species, but they haven’t found any effective species recognition system for several decades. It would be very helpful to carry out the behavioral and ecological studies on plants for plant classification with the help of species recognition system. Each species of a plant and its leaf has its own distinctive patterns, which enabled the researchers to perform some research on it to accurately classify the plants. In general, plant species recognition system includes image categorization and object recognition. Plant species recognition system is completely different from common image categorization, since the variation between the one plant species leaf and other is very small. As a result, the traditional image categorization techniques do not perform effectively on plant images. Automatic plant recognition system has not yet been well established largely being the fact that lack of research in this field and the complexity in obtaining the database. Species recognition system on plants is one of the major concerns at present and there is huge requirement for several researches to deal with the better plant species recognition system. In this survey, several plant species recognition system are discussed which will show the way for development of better plant species recognition system for plant classification.