

ABSTRACT

The purpose of this study is to analyse the influence that vegetation has got in the Public Works design.

For a long time, landscape integration and aesthetics have been the only uses of plants. However, nowadays, the increase of social ambient conscience makes plants necessary to be add in each project.

In this work, we propose a fast, easy and objective method that allow to equal plants to the rest of work units and increase their use. Our objective is to establish formulas whose implementation limber up the plant election process.

This proceeding is based on the application of two criterions, Climatic Criterion and Development Criterion, and on formulas obtained from them.

At first, plants functions have to be settled, as well as their characteristics for a correct development.

Fixing these properties, Climatic Criterions will be applied. These criterions will determinate if a plant can survive in the zone to be plant. They measure the climatic adaptation of different plants, obtaining a first selection. The plants that don't tolerate the climate, will be rejected.

Secondly, we have defined Development Criterions. These counting criterions are based on objective characteristics of plants. They include different properties, from resistance to extern agents, like plagues or contamination, to maintenance required. They are objective parameters, that any plant file contains, and, for that reason, easy to obtain.

From these development criterions, Implantation Formulas have been established. These formulas have been specified for road and maritime boundaries, boundaries that are the meaning of this project. From the application of these formulas to each plant, we will obtain each Final Punctuation. With this punctuation we make the definitive selection. The plant that obtains the highest Final Punctuation will be the most appropriated plant for this plantation.

In conclusion, we propose a manual for engineers that will be helpful in order to choose the plants. This manual will be an easy guide that erases the subjective component of the process.

Likewise, our study also analyses the main functions that plants develop in Public Works, verifying that plants can execute right multiple functions, in addition to the main basis that is visual functionality.