

Título: Urban open space quality with ecological function: a proposition of evaluation index

Autores: Alvarez, Ivan André; Liner Pereira Lima, Ana Maria; Alvarez, Marina André

Tema: 3. Los bosques al servicio de la gente

Subtema: 3.4 Arbolado urbano

Resumen: The presence of vegetation in cities has been considered synonymous of life quality. Cities are altered environments; its vegetation is remnant from natural areas or originated from implemented areas such as public areas (parks, gardens and squares), around streamlets and rivers or in private areas (residences and industries). It is necessary a good diagnosis of the presence of vegetation in urban plan to serve of information to implant green areas and manipulate the existing tree cover. The quantification of known as green existent elements in the cities is important to guarantee a minimum of well-being for the population. The challenge nowadays is how to quantify these elements and to determine how they are related each other. The objective of this study was to propose an index to assess the quality of plant cover in relation to its ecological function in the urban environment. The index was elaborated using surveys of sidewalk trees, digital plans, aerial photography and videography to measure the areas occupied by the vegetation. The methodology to obtain the IQEVUe considers the following prerequisites: a) The index must broadly represent the quality characteristics of the urban green spaces; b) The number of parameters to be assessed must be the smallest possible, but they need to be chosen in order to represent all the relevant characteristics of the green space, from the point of view of the ecological functions; c) The index must contain the direct contribution of sidewalk trees; d) Temperature, hydrology and carbon fixing are parameters that have to be considered for all green spaces; e) The index must be a number pure, without any measurement unit because it expresses a "quality". The landscape unit chosen for the study was the Santa Cecília neighborhood, Piracicaba, São Paulo State, Brazil. Obtaining a so-called "Urban Green Space Quality Index" IQEVU for urban open space assessment was discussed, specified for the ecological function, and thus called "Urban Green Space Quality Index with Ecological Function" (IQEVUe). The assessment parameters for the latter index were: shading by sidewalk trees, hydrology, carbon fixing and temperature influence, for all the green spaces. The IQEVUe was adequate and coherent in measuring the benefits of vegetation in urban areas, supplying information for urban planning and management.

Email: ivan.alvarez@cpatsa.embrapa.br, amiplima@esalq.usp.br, marinaalvarez@uol.com.br

Trabajo Completo: -