生物与环境工程学院

题 目 高架桥附生攀援植物的环境影响

及景观设计

高架桥附生攀缘植物的环境影响及景观设计

摘要

随着城市化进程的不断加快,各特大城市以及大、中城市的人口不断增多,道路系统的压力也在不断增大,为了缓解这一压力,城市纷纷建立起高架系统,高架桥在很大程度上缓解了道路交通压力,但其由混凝土构造的外形单调且生硬,完全没有观赏特性,这对城市居民的生活环境带来了损坏。对高架桥进行绿化,既可以增加城市绿化面积,增加有氧供给,还能增强景观效果,打造出生态宜居的城市。而现有绿化存在一些问题需要改善。

通过查阅文献可知现有的大部分高架桥绿化针对的是如何进行绿化,部分有设计案例。本文首先介绍高架桥绿化相关的理论知识,最后根据高架桥绿化景观设计的原则,针对不同走向的高架桥,结合生态环境,因地制宜地进行了植物种类的选择以及配置模式。构思出了高架桥桥面雨水收集处理的方案,希望为高架桥绿化及后期养护管理提供一点思路。

关键词: 高架桥; 垂直绿化; 墙面绿化; 景观设计; 攀援植物

Environmental impact of epiphyte climbing plants on viaduct and landscape design of viaduct

Abstract

With the acceleration of urbanization, the population of megacities and large and medium-sized cities continues to increase gradually, and the pressure on the road system is increasing all the time. To a certain extent, the road traffic pressure is relieved, but the concrete structure is monotonous and rigid, and has no ornamental characteristics at all, which brings damage to the living environment of urban residents. Greening the viaduct can increase the urban greening area, increase aerobic supply, and enhance the landscape effect, creating an ecologically livable city. The existing greening has some problems that need to be improved.

By consulting the literature, we can see that most of the existing viaduct greening is aimed at how to carry out greening, and some have design cases. This article first introduces the theoretical knowledge related to viaduct greening. Finally, according to the principles of viaduct greening landscape design, for the viaducts with different directions, combined with the ecological environment, the plant species selection and configuration mode were adapted to local conditions. Conceived a plan for the collection and treatment of rainwater on viaduct decks, hoping to provide some ideas for greening and maintenance management of viaducts.

Key words: Viaduct; vertical greening; wall greening; landscape design; climbing plant

以上内容仅为本文档的试下载部分,为可阅读页数的一半内容。如要下载或阅读全文,请访问:

https://d.book118.com/336012042002010204