

Evaluation of Plant Landscape in Colleges and Universities-- A Case Study of Mianyang Normal University

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Abstract. The purpose of this paper is to provide some references for the construction of plant landscape in the north campus, that is, to design the most reasonable plant landscape in the limited space and create a healthy, ecological and comfortable learning, working and living environment for the teachers, students and all staff in the north campus. And the way to do that is to investigate the plant landscape in the north campus of mianyang normal university and summarize the advantages and disadvantages of the plant landscape in the north campus. The results are only applicable to the plant landscape of the north campus of mianyang normal university.

Keywords: College Campus; Mianyang Normal University North Campus; Plant landscape evaluation; Campus plants.

1. Introduction

At present, talent resources become particularly important, and colleges and universities are an important place for personnel training. However, in the construction of university campus in the past, people pay more attention to the overall planning of the school and the design form of the building, and often ignore the important problem of the construction of the plant landscape in the school. With the vigorous development of education in our country, people's attention to the plant landscape of university campus is strengthening. The plant landscape of university campus is the embodiment of a university's humanistic feelings and an important carrier of university spiritual civilization, which affects the quality of education in the school to a certain extent. At present, China's university campus in the construction practice has made significant achievements, but in the large school campus greening has not yet formed a complete evaluation system. Therefore, studying the present situation of plant landscape in university campus can provide some theoretical support for the future plant landscape design of university campus. This study takes the basic concept, basic principle, basic principles, landscape function zoning, design form, landscape characteristics and humanistic environment as the theoretical basis of plant landscape design, taking the North campus of Mianyang Normal University as an example, and evaluates its campus plant landscape.

2. Plant Landscape

Plant landscape mainly refers to the nature of vegetation, plant communities and plant individuals expressed by the image, through people's perception to the cerebral cortex, resulting in a sense of beauty and association. Plant landscape is a kind of soft landscape, is to plant as the basic material, the use of artistic combination of techniques created, used to express a certain artistic conception or have a certain purpose of space.

2.1 The Development Trend of Campus Plant Landscape

Nowadays, "green" and "ecological" are more and more mentioned and recognized in plant landscape design. As an open green space for students, university campus should be closely connected with the development of times and society.

2.2 The Function of Campus Plant Landscape

The main function of plant landscape in university campus is to provide a place for students and teachers to learn, live and so on. The plant landscape in the campus is a dynamic green landscape which is easy to coordinate with other hard landscapes and has both aesthetic value and educational value. It is also the landscape with the most ecological value among various factors of the campus environment. Therefore, it mainly has the following three functions:

2.2.1 Ecological Function

The ecological functions of campus plants mainly refer to their functions of purifying air, controlling pollution, adjusting temperature and humidity, improving illumination, reducing noise and sound insulation, absorbing toxic and harmful gases, preventing wind and snow, retaining dust, and regulating microclimate.

2.2.2 Ornamental Function

The plant landscape of the campus reflects the life rules of spring, summer, autumn and winter, and contains profound life philosophy. Campus plant species are various, each plant has its own unique form and characteristics, these characteristics can change with the change of the season, is the campus can not be ignored a beautiful scenery, make the whole campus full of vitality.

2.2.3 Teaching and Research

Most of the plants in colleges and universities are listed with their family names, scientific names and ecological habits, etc., which provides convenience for students to identify plants in teaching. Especially for students of related majors, it promotes the combination of theory and practice and becomes the second class for students to learn and live. The ingenious plant configuration in the campus is one of the best learning materials for students majoring in landscape architecture and garden enthusiasts. These plant landscapes often become their creative inspiration and perhaps the source of their problems. The natural laws of time passage and historical succession can be understood from the changes of plant growth and decay and the process of life from young to old (ChunXiang Liu, 1999).

2.3 Basic Principles of Plant Landscape Design in University Campus

2.3.1 Principles of Plant Ecology

Plant ecology is a discipline that studies the relationship between plants and the environment, plants and plants. In plant landscape design, efforts should be made to form a plant community system, trees, shrubs and vines are adapted to local conditions in this system, and eventually form a stable ecological community. Create ecological coordination and stability, beautiful landscape, as well as can greatly regulate, improve, enrich people's spiritual life of the recreation scene.

2.3.2 Principles of Environmental Psychology

Environmental psychology mainly studies the relationship between people's psychology and behavior and the environment, reveals the law of people's psychological changes and development in different environments, and improves the environment with this knowledge to improve people's quality of life. The beautiful landscape in the campus can effectively relieve students' pressure, inspire students' inspiration and promote their overall healthy development.

2.3.3 Principles of Landscape Aesthetics

A good plant landscape can not only meet the needs of the environment, but also realize people's pursuit of beauty. In the design of plant landscape, aesthetic principles must be followed and the landscape functions of plants should be emphasized. In landscape design, aesthetic principles must be followed in order to realize its landscape functions. The seasonal change and landscape effect of plants should strive to be different in step and in time.

2.4 Campus Plant Landscape Planning and Design Issues

2.4.1 Plant Collocation Lacks Artistic Conception Beauty

In the selection of tree species and plant configuration, we can consider the use of Chinese traditional famous flowers and popular flowers and trees, to enhance the construction of campus cultural artistic conception of beauty, strengthen the influence of traditional culture, combined with ancient poetry allusions.

2.4.2 Plant Species Selection

In the selection of plant species, it should be noted that plants with too short flowering season should not be planted if the flowering season is long. Plant species should be selected according to the conditions of temperature and humidity required for plant growth.

3. The Research Content

3.1 The Research Content

Taking the plant landscape of Mianyang Normal University as the research object, this paper evaluates the plant landscape of the North Campus of Mianyang Normal University. Through a large number of literature reading, to understand the domestic university campus plant landscape development process and research status, analysis of the current university plant landscape advantages and existing problems. Combined with the research and mastery of the existing plant landscape of Mianyang Normal University campus, a relatively appropriate evaluation method was selected to carry out the study on the effect evaluation of plant landscape nodes in the North Campus. Through the analysis of the data processing, this paper analyzes the advantages and problems of the existing plant landscape, and puts forward the places that can be borrowed and needed to be improved, and puts forward a better development direction for the better campus greening environment.

3.2 Specific Locations

The main site of this investigation is located in the green space in front of the North Campus library of Mianyang Normal University and in the green space in front of the complex building.

4. Research Results

4.1 Present Situation of Plant Landscape

The green space in front of the library and the green plants in front of the comprehensive building are abundant. At present, the front green space of the library has cherry blossoms, cherries, cypress, holly, iris, red leaves Heather, soda, Finch Yellow, lobular privet, Gardenia, Moon, Osmanthus, Pomegranate, June snow, South Tian Bamboo, palm, ginkgo, Hai Tung, wheat winter, Phoenix Bamboo, gold embedded jasper, Woody vine and other commonly used landscape plants.

4.2 Educational Learning Applications

Many students like to read and study in the green space in front of the library and the green space in front of the complex building. The green space in front of the library and the green space in front of the comprehensive building have relatively good plant landscape, among which the plant configuration basically reaches the four seasons. For example, there are cherry blossom in spring, pomegranate in summer and ginkgo in autumn. Therefore, many students are willing to study here, which shows that plant landscape plays a positive role in promoting the education career of the university campus.

5. Conclusion

Plant landscape is an important part of university campus, which is of great significance to the university. The shaping of campus plant landscape depends on the overall planning of the campus, so it is imperative to strengthen the construction of campus plant landscape. The plant landscape of mianyang normal university should be scientific and reasonable in the construction. In addition to enriching the campus landscape, it should also embody the humanistic atmosphere so as to make the campus cultural atmosphere more intense. As an important place for talent cultivation, the plant landscape of colleges and universities should have its own characteristics. Only good plant landscape can further improve the quality of the university campus.

Acknowledgments

This work was supported by Sicuan Military and Civilian Integration Strategy Research Center Project (Grant No. JMRH-1812).

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