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Distribution of pharmacognosy plant species by the correlating to numbers of landscape types and numbers of tourists in *Qi-Cheng park* of China

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Abstract
Landscape types attract numbers of pharmacognosy plant species and tourists. This article suggested that there are 7 types of eco-environ-culture (such as *Shang Culture*, *Yang-shao Culture*, *Long-Shan culture*, *Dong-zhou Culture*, *Chun-qiu Culture*, *Han Culture*, and *Dragon Culture*) have 264 pharmacognosy plant species in *Qi-cheng Eco-Environmental Culture Park*. And there is the significant positive correlation between numbers of landscape types and numbers of tourists ($P<0.01$). There is the significant positive correlation between landscape types and distribution of 264 pharmacognosy plant species in *Qi-cheng Park*. Thus, it is a rule of relationships between 24 landscape types and numbers of pharmacognosy plant species, as well as landscape types are key factors of 264 pharmacognosy plant species by the quantitative statistics and qualitative analysis of "big data" in *Qi-cheng Park* of China.

Keywords: landscapes; pharmacognosy species; tourists; links; quantitative and qualitative

Introduction
Distribution of pharmacognosy plant species lived on eco-environmental cultural landscape types. Many researchers not only suggested the links of eco-environmental cultural landscape types and pharmacognosy plant species, but also explained the links of eco-environmental cultural landscape types and numbers of tourists [1-5]. Many ecologists research on dynamics of pharmacognosy plant species along environmental, elevation and disturbance gradient [6-16].

For instance, Liao, *et al* suggested the links between plant functional groups diversity and environmental gradient, as well as the links between different pharmacognosy tree structure and elevation by the quantitative statistics and qualitative analysis of "big data" of long-time wild investigations [6-16].

However, it is unknown that links among numbers of pharmacognosy plant species and landscape types and numbers of tourists, which landscape type effect distribution of pharmacognosy plant species and numbers of tourists in *Qi-cheng Park* of China. Therefore, it is a vital rule that understand the links among pharmacognosy plant species, landscape types and numbers of tourists by anthropogenic cognitive theory and leaning eco-environmental level [17], as well as distribution of pharmacognosy plants in *Qi-cheng Eco-Environmental Culture Park* of China at the multilevel scale.

Condition of Links among Landscapes and Pharmacognosy Species and Tourists
Qi-cheng Eco-Environmental Culture Park not only is location in transition zone of north subtropical warm temperate zone, but also is a key eco-environmental culture park in *Pu-yang City* of *Henan Province* of China of Earth by GIS (Figure 1). This work is based on eco-investigation and long-time "big data" of government by plant paleontology and modern eco-environment in *Qi-cheng Park*.

All investigation content includes that numbers of landscape types and numbers of pharmacognosy plant species and numbers of tourists at the spatial and temporal and landscape scale.

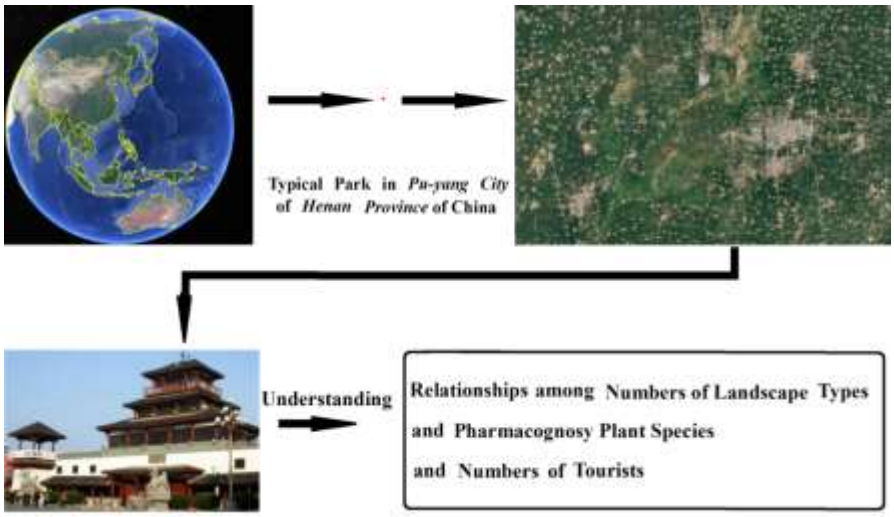

Fig 1: *Qi-cheng Ecological Environmental Culture Park* is location in China of Earth

Qi-cheng Eco-Environmental Culture Park is built on the basis of *Pu-yang City* of China. *Qi-cheng Park* is oldest and longest lasting ancient settlement city in *Pu-yang City* and it's nearby. More and more pharmacognosy plant species were found by the long-time researches of paleontology and modern plant ecology. According to the trial excavation by *Henan Provincial Institute* of cultural relics and archaeology in 1986, many distributions of pharmacognosy plant species were found from ancient times to present landscapes. *Qi-cheng Eco-Environmental Culture Park* include a series of pharmacognosy plant species in *Yang-shao Culture* of more than 6000 years, *Long-Shan culture* of more than 4000 years, as well as *Shang Culture*, *Dong-zhou Culture*, *Chun-qiu Culture*, *Han Culture*, *Dragon Culture*. *Pei-li-gang Culture* (seven thousand years to eight thousand years ago) is the earliest physical witness from ancient times to present of pharmacognosy plant species in *Qi-cheng Park* of China.

Thus, it is a rule of relationships between landscape types and numbers of tourists and pharmacognosy plant species, as well as landscape types are vital eco-factors of pharmacognosy plant species at spatial-temporal-landscape scale in *Qi-cheng Park*.

Results

This article suggest numbers of landscape types attract numbers of pharmacognosy plant species and numbers of tourists, and it is dynamic processes of numbers of 264 pharmacognosy plant species and numbers of tourists along different numbers of landscape types gradient in *Qi-cheng Park* in *Pu-yang City* of China (Figure.2, 3).

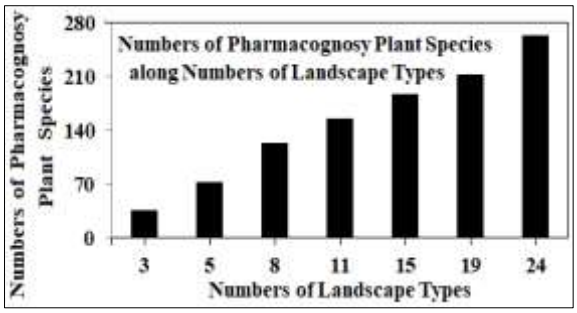

Fig 2: Dynamics of numbers of pharmacognosy species along landscape types

And *Qi-cheng Ecological Environmental Culture Park* includes seven types of ecological environmental culture (*Yang-shao Culture*, *Long-Shan culture*, *Shang Culture*, *Dong-zhou Culture*, *Chun-qiu Culture*, *Han Culture*, and *Dragon Culture*) by long-time investigation and "big data" of local governmental and planners.

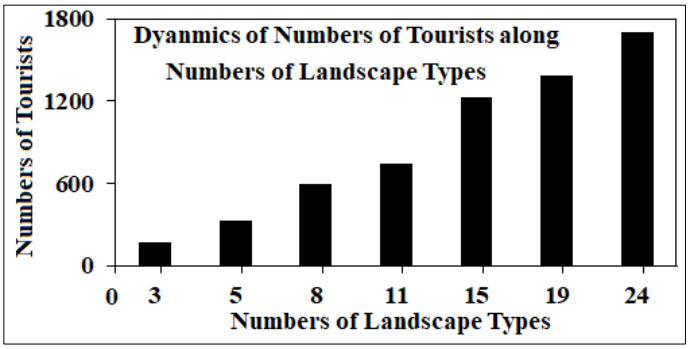

Fig 3: Dynamics of numbers of tourists along numbers of landscape types every hour

In this article, these results suggested that there is significant positive correlation between numbers of landscape types and numbers of pharmacognosy plant species, as well as there is significant positive correlation between numbers of landscape types and numbers of tourists in ecological environmental culture types (P<0.01) (Table.2).

Table 2: Correlation among landscape types and pharmacognosy plant species and tourists

Dynamics of numbers of pharmacognosy plant species and numbers of tourists along numbers of landscape types	Numbers of landscape types
Numbers of pharmacognosy plant species	0.985**
Numbers of tourists	0.993**

Note: **, P<0.01.

In this work, there are the most numbers of landscapes types include twenty-four landscape types: such as Yellow River 's branch, natural forestation, natural grassland, plantation, lake,

wetland, mountain, hill, plain, countryside, farmland, roads, buildings, unban, abandon farmland, grazing grassland, deforestation, watershed, sand, green corridor, watershed, trees, shrubs, herbs landscape in *Qi-cheng Park* (Figure 1).

Conclusion and Discussion

As is known to all, landscape types and pharmacognosy plant species are full of beautiful memories, recording many interesting things in eco-environ-culture Park, which is very charming tourist attraction [18-33]. So, every hour there will be a lot of tourists to play here, especially in the spring when everything is revived, there are many people here, really add infinite vitality in *Qi-cheng Eco-Environmental Park*.

Qi-cheng Ecological Environmental Culture Park not only is a park of long-time advance history of landscape types and pharmacognosy plant species, but also is known as hometown of Chinese Dragon Park. There are linkages of landscape types and pharmacognosy plant species and plant species diversity numbers of tourists of interesting in the typical eco-environmental culture places of *Qi-cheng Ecological Environmental Culture Park* in *Pu-yang City* of *Henan Province* of China.

However, different numbers of landscape type effect on numbers of tourists and numbers of pharmacognosy plant species in eco-environmental culture conditions of *Qi-cheng Eco-Environmental Culture Park*. So, more numbers of landscape type attract more pharmacognosy plant species and more numbers of tourists for human health [34-38]. There is significant positive correlation among numbers of landscape type and numbers of pharmacognosy plant species and numbers of tourists in *Qi-cheng Eco-Environmental Culture Park* of China ($P<0.01$) (Figure.1,2,3 Table.2).

Therefore, numbers of landscape type are vital ecological factors of numbers of pharmacognosy plant species and numbers of tourists by the quantitative statistics and qualitative analysis of "big data" of modern eco-environment and plant paleontology and long-time wild investigation at the spatial, temporal, landscape and plant species scale in eco-environmental culture conditions and 24 landscape types *Qi-cheng Park*.

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