

A STUDY EFFECTIVE FACTORS ON THE CHLOROSIS CASE STUDY:SYCAMORE TREES OF LALEH PARK IN ISFAHAN

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INTRODUCTION

Due to inappropriate physical structure of the urban soil and the existence nutritional problems, problems in the micro elements absorption by plants seem to be happened. This phenomenon in the calcareous soils minimized the capability of absorbing iron by the plants and causes several problems such as chlorosis of the trees(kalbasi,1995). In this research ,tried to identify the reasons of chlorosis of Sycamore trees (Laleh Park) having high chlorosis and compared with the Sycamore trees of Ghadir Park which are rather in a better situation.

MATERIALS AND METHODS

According to the physical, mineralogical, chemical and morphological results, all the data regarding were Sycamore Trees processed.According to the research, the evaluation check list was provided and sycamore trees were divided to four groups according to their apparent situation: very bad, bad, mediocre and good. Then based on the results of physical and chemical tests, the parameters involved in chlorosis were identified and results showed, chlorosis in Sycamore trees is directly proportional to the absorption level and density of iron and zinc in the soil.

RESULTS AND DISCUSSION

It seems that little quantity of absorbable density of two above-mentioned elements in soil of the research scope (despite existing high quantity of these elements in soil) is one of the main reasons of chlorosis in Sycamore trees .Although ,the relative trends in the increased concentration of iron and zinc absorbable in soil ,With the improvement status of the trees ,the class observed very bad, bad and average .this case represent the complexity chlorosis, the results of this search is matched with the results of khoshgoftarmanesh(2009).

The mineralogical examinations indicated Chlorite minerals, mica, vermiculite, kaolinite were in all profiles of the study area (17 horizons) so, this result matches with the results of other research on the arid and semi-arid climate, but Smectite mineral was observed in some horizons, with compare the appearance of trees and minerals of each profile particular relevance between minerals and the chlorosis of trees was not observed.

Keywords: Physiochemical properties, Mineralogy Properties, Green space,Sycamore.

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