

В дальнейшем на этом месте обычно формируются сухобочины, уменьшая поступление сахаров из кроны в корневую систему. Установлено, что сезонная активность бактериозов (весна, осень) связана с характером углеводного питания, в том числе с сезонным перераспределением крахмала и увеличением концентрации сахаров в древесине (Гниненко, Жуков, 2006). К зиме такая древесина не обезвоживается и при наступлении морозов на дереве возникают крупные морозобойные трещины. Бактерии также значительно снижают морозостойкость деревьев, являясь центрами кристаллизации льда, а продукты их метаболизма (при водянке ствола) служат причиной появления морозобойных трещин (Гниненко, Жуков, 2006). Возбудитель может проникать в ткани стволов через различные повреждения коры. Уровень пораженности деревьев бактериальной водянкой повышается с увеличением возраста и полноты насаждений березы, также степени увлажнения почвы.

## **THE PRESENCE OF MICROFUNGI IN URBAN FORESTS AND THEIR SPECIES CONTENT**

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Developing technology has moved people away from the natural environment and made them the most important actor of city life. People became aware of the destruction of the environment in parallel with the increasing needs and, since they also need it in its nature, it has carried what is in nature into urban life. In this context, the most common items are trees and shrubs besides of the other vegetation. The effects of trees and green areas on the urban ecosystem shouldn't be evaluated within the scope of the climate structure that is constantly deteriorating. These include: cooling of the air, increase of relative air humidity, supply of fresh air, air filtration, noise absorption, oxygen production, reduction of greenhouse effect and energy saving too (Bariş, 2005).

Changes in air movement of the most cities around the world are characterized by air pollution, land economy, and changes in temperature

economy. Considering the natural balances, on the basis of sustainable development, both the welfare and economic income of the people should be improved and we should not destroy the nature that allows this.

Natural and cultural afforestation areas are infected by various phytopathogenic fungi. This situation causing obvious damages on the tree's formation and as a result of this damages the ecological balance can be disturbed seriously. Therefore, the issue becomes even more important in terms of biological diversity and sustainable resources.

It is necessary to know the species composition and trophic status of fungi to protect trees and shrubs from fungal diseases. Microfungi, which are both phyllostrophs and xylostrophs, are directly effective on trees and shrubs, which are serious elements of urban life in terms of landscape and health. Phyllostroph microfungi develop on the leaf and disrupt its physiology, as well as drying, weakening and shedding, a tree without leaves is nothing more than wood. Xylostrophic microfungi disrupt the structure of the wood and cause the loss of the sanitary condition of the tree. Carpotroph fungi infect fruit and cones and hinder the tree's ability to produce seeds. Sometimes, fungus appears in vascular bundles and in this case causes the tree to dry.

As a result of our mycological researches 108 micromycetes species have been found on trees and bushes from urban forestry areas of Kırşehir region. Among them, 70 species that given below are new record for Turkey.

When evaluated these species in terms of trophic structure, Saprotroph (48 species), Lignoxylostroph (8 species), Carpotroph (8 species) and Phyllostroph (6 species) have been found. The most important of them are *S. conigenus* and *S. geniculata* in aspect of their pathogenic capacity.

## References

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