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MICROSPHAERA PSEUDACACIAE - AN AGENT OF POWDERY MILDEW NEW FOR SERBIA

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Abstract

An agent of powdery mildew new for Serbia - *Microsphaera pseudacaciae* (Marčenko) U. Braun is described on the plant species *Robinia pseudo-acacia* L. (black locust). Symptoms of the disease are cited and taxonomic characters of this parasite in the anamorphic and teleomorphic stages of development are given in the paper.

Key words: powdery mildew; *Microsphaera pseudacaciae*; *Robinia pseudo-acacia*; Serbia.

INTRODUCTION

Fungi of the genus *Microsphaera* Lév. predominantly occur as parasites of woody plants GOLOVIN (1960), BLUMER (1967), HIRATA (1972), BUNKINA (1974) etc. They are widely disseminated and capable of covering a considerable surface of host plant organs in a relatively short time. They have been little studied on the territory of Serbia. There exist for the most part records of the occurrence of fungi of the genus *Microsphaera* on certain cultivated plants RANOJEVIĆ, (1910), PERIŠIĆ, (1952), MARKOVIĆ, (1974) etc. More extensive study of this genus in Serbia has been carried out by RANKOVIĆ (1988; 1989; 1999, 2002). However, powdery mildew and its agent on plants of the species *Robinia pseudo-acacia* L. have not been described to date in Serbia, in spite of the fact that black locust is a very common tree, after beech and oaks the most widespread of deciduous species. It is used for reforestation of deforested terrains, floodplains, sandy ground, etc.

The purpose of the present work was to investigate the agent of powdery mildew on the plant species *Robinia pseudo-acacia* and study its taxonomic characters.

MATERIAL AND METHODS

The plants affected by powdery mildew were sampled in Serbia from 1987 to 2002. Live samples of micelium, conidiophores and conidia were studied by microscope, by immersing in a drop of water on a glass disc. Simultaneously with determination of the type of conidiophores and measurements of the size of metodology HIRATA (1942), ZARAKOVITIS (1965), RANKOVIĆ, (1988), and then conidial germination, appearance and distribution of germ tubes and appressoria in them were studied by microscope. In the stage of cleistotecia, mainly the herbarized specimens of the fungi were studied. The microscope was used to determine: diameter of cleistothecia, size of wall cells, length, form and distribution of appendages, number of asci in cleis-