Lichenicolous fungi from the Caucasus: new records and a first synopsis

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A list of 72 species of lichenicolous fungi known from the Caucasus is presented, including 21 species documented for the first time. Laeviomyces pertusariicola and Perigrapha superveniens are reported new to Russia and Asia, Sclerococcum simplex new to Asia and Unguiculariopsis lettauia new to Russia. The genus Laeviomyces is resurrected in order to distinguish L. pertusariicola.


Key words: Biodiversity, taxonomy, Laeviomyces, Russia, Asia.

Introduction

Lichenicolous fungi of Western Asia, where the Caucasus is usually included, have only recently received special attention (see for example: Temina et al. 2005, Halici 2008, Seaward et al. 2008) and are still insufficiently known. The aim of this paper is to provide a first synopsis of lichenicolous fungi from the Caucasus, based on original and literature records.

Materials and Methods

New records of lichenicolous fungi are documented by 41 specimens collected by V. Otte in the Russian Caucasus, mostly in the vicinities of Bol’shoy Tkhach Mt. (Bol’shoy Tkhach Nature Park, constituting part of Western Caucasus World Heritage Site). Location and detailed description of this area are presented in Otte (2004, 2007a, b).

The material was examined using Zeiss microscopes Stemi 2000-CS and Axio Imager A1 equipped with Nomarski differential interference contrast optics. Microscopical examination was done in water, 10% KOH (K), Lugol’s iodine, directly (I) or after KOH pre-treatment (K/I), or Brilliant Cresyl blue (BCr). The length, breadth, and length/breadth ratio (l/b) of the ascospores and conidia are given as: (min–){X – SD}–{X + SD}–{X + max}, where min and max are the extreme values, X the arithmetic mean, and SD the corresponding standard deviation.