CORYLUS AVELLANA L.

POLLEN AND CATKINS CHARACTERIZATION ON GENOTYPES FROM SELECTED LOCALITIES OF WEST SLOVAKIA

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NITRA 2020

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Approved by Rector of Slovak University of Agriculture in Nitra on 21th August 2020 as a scientific monograph.

Nitra 2020

ISBN 978-80-552-2199-1

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Introduction

Hazelnut (*Corylus avellana* L.) has unusual ability to adapt to extreme conditions and is widely spread throughout Slovakia. Under the influence of various environmental factors shape and size of habitus, leaves, fruits, and catkins change. That is the reason why hazelnut became the subject of research in many countries. The important stage in the study of hazelnut plants was the use for cultivation purposes. The traits from cultivated genotypes are transported also on wild genotypes. Genetic diversity of hazelnuts confirmed survival adaptability.

The application research and experimental development in conservation of environment and agriculture are interconnected by different approaches. The biological objectives are native organisms, and they are constantly in inseparable unity with the environment, but environment conditions are unstable. Organisms adapt to new living conditions through the activation the synthesis of nucleic acids and proteins. This factor influences on variability evaluation of genetic resources.

In our study we tried to find the most distinguishing sample by combined empiric knowledge with innovative methods for morphological characterization. We worked with pollen grains and catkins (male inflorescences). We proposed to combine the results of different experimental works for identifying the suitable genotypes for further using.

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Publisher: Slovak University of Agriculture (SUA) in Nitra

Edition: First

Number of copies: 100

Author of pictures on the book cover: Nataliia Nikolaieva**,** Radovan Ostrovský**,** Alexej Oravec, www.pixabay.com

Book cover design: Martin Lopušný

AQ – PQ: 4.61 – 4.76

Printed: Publishing center of SUA in Nitra

Not edited in the Publishing center of SUA in Nitra.

ISBN 978-80-552-2199-1