

Peter Chrenek • Marcela Capcarová • Branislav Gálik

Biotechnology

in Animal Production

Nitra 2020

- Title:** Biotechnology in Animal Production
- Coordinator:** Prof. Ing. Peter Chrenek, DrSc.
Faculty of Biotechnology and Food Sciences
Slovak University of Agriculture in Nitra
Research Institute for Animal Production,
National Agricultural and Food Centre Nitra
- Contributors:** Prof. Ing. Marcela Capcarová, DrSc.
Faculty of Biotechnology and Food Sciences
Slovak University of Agriculture in Nitra
Prof. Ing. Branislav Gálik, PhD.
Faculty of Agrobiology and Food Resources
Slovak University of Agriculture in Nitra
- Reviewers:** Prof. Ing. Jozef Bulla, DrSc.
Faculty of Biotechnology and Food Sciences
Slovak University of Agriculture in Nitra
Prof. RNDr. František Strejček, PhD.
Faculty of Natural Sciences
Constantine the Philosopher University in Nitra
Ing. Alexander Makarevich, DrSc.
Research Institute for Animal Production,
National Agricultural and Food Centre Nitra

Approved by the rector of Slovak University of Agriculture in Nitra on 10th June 2020
as a university textbook for the students of Slovak University of Agriculture in Nitra.

Acknowledgement

This textbook was published in cooperation and with financial support of Slovak University of Agriculture in Nitra, Research Institute for Animal Production, National Agricultural and Food Centre, Nitra, the KEGA grant KEGA 026SPU-4/2018, VEGA1/0049/19 and APVV-17-0124.

© Slovak University of Agriculture in Nitra

© Research Institute for Animal Production, National Agricultural and Food Centre Nitra

ISBN 978-80-552-2181-6

C

Content

1	Biotechnology – definition, history and classification.....	5
2	Biotechnology in animal genetics – genomics and genetic markers	11
3	Biotechnology in animal production.....	27
4	The use of genetically modified animals.....	85
5	Biotechnology in biodiversity of farm animals.....	93
6	Biotechnology in livestock nutrition.....	103
7	Legislative and bioethical aspects in biotechnology	117
8	Perspective of biotechnology in animal production.....	123
9	References	127

Biotechnology in Animal Production

Coordinator: Peter Chrenek

Contributors: Marcela Capcarová, Branislav Gálik

Publisher: Slovak University of Agriculture in Nitra

Edition: first

Year published: 2020

Number of copies: 70 pcs

Number of pages: 135

Graphic design and cover: Martin Lopusný

Printed in: Publishing center of the Slovak University of Agriculture in Nitra

AQ – PQ: 8.83 – 9.07

Not edited in the Publishing center of the Slovak University of Agriculture in Nitra.

ISBN 978-80-552-2181-6