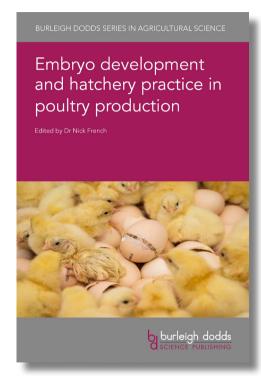
BURLEIGH DODDS SERIES IN AGRICULTURAL SCIENCE



AVAILABLE NOW!

About the book

This book addresses the key stages and factors in embryo development in poultry to optimise hatchability and chick health and reviews the role of parental and environmental factors on embryo development and skeletal growth.

The book also considers the effects of incubation on chick health and development, including factors such as temperature, light exposure and humidity, as well as best practice in managing the hatching stage.

About the editor

Dr Nick French is former Head of Technical Transfer at Aviagen, one of the world's foremost poultry breeding companies. His distinguished contribution to both research and practice has been recognised in the Aviagen Nick French Award given to the best paper at the annual Incubation and Fertility Research Group (IFRG) meeting.

Embryo development and hatchery practice in poultry production

Available in print and digital formats: ISBN - print 978-1-80146-252-5

Pages 504

Pub. Date May 2023

Price £150/\$195/€180/C\$255

Series No AS134

For a complete list of titles visit www.bdspublishing.com

T: +44 (0) 1223 839365

E: info@bdspublishing.com

www.bdspublishing.com

@bdspublishing

in Burleigh Dodds Science Publishing



Empowering knowledge - delivering sustainable agriculture

Embryo development and hatchery practice in poultry production

Edited by: Dr Nick French

Part 1 Parental influences and embryo development

- 1. Genetic selection to improve reproductive traits in chickens: David Cavero and Maurice Raccoursier, H&N International, Germany
- 2. Managing breeder poultry flocks to optimise hatchability and chick health: R. A. van Emous, Wageningen Livestock Research, The Netherlands
- 3. Advances in understanding the development of defences against pathogens in the chicken egg: Maureen M. Bain, University of Glasgow, UK
- 4. Assessing poultry semen quality: Murray R. Bakst, formerly USDA-ARS, USA
- 5. Key stages of embryo development in poultry: Marleen Boerjan, formerly R&D Royal PasReform, The Netherlands
- 6. Chicken egg storage and transport: *Dinah Nicholson, Aviagen Ltd, UK*
- 7. In ovo sexing in poultry chicks: Anke Förster, Agri Advanced Technologies GmbH, Germany; and Thomas Bartels, Institute of Animal Welfare and Animal Husbandry, Germany
- 8. In ovo vaccination of chicken eggs: Christopher J. Williams, Consultant, USA

Part 2 Incubation

9. Incubator design for poultry eggs: principles and techniques: Ron Meijerhof, Poultry Performance Plus, The Netherlands

- 10. Understanding the effects of incubator temperature on embryo and post-hatch chick development: R. Michael Hulet, Penn State University, USA; and Michael J. Wineland, North Carolina State University, USA
- 11. Understanding the effects of light on embryo and post-hatch chick development: Israel Rozenboim, Liron Dishon, Natalie Avital-Cohen and Joanna Bartman, The Hebrew University of Jerusalem, Israel; and Ronen Shviki, BeyondEdge Inc, USA
- 12. Understanding the effects of humidity/air composition on embryo and post-hatch chick development: E. David Peebles, Mississippi State University, USA
- 13. The role of egg turning in embryo development: Okan Elibol, Ankara University, Turkey
- 14. Poultry embryo development and skeletal growth: Edgar Orlando Oviedo-Rondón, North Carolina State University, USA

Part 3 Managing the hatching stage

- 15. Managing the poultry hatcher environment: Roos Molenaar and Henry van den Brand, Wageningen University & Research, The Netherlands
- Alternative hatching systems for broilers: Henry van den Brand, Bas Kemp and Roos Molenaar, Wageningen University and Research, The Netherlands
- 17. Key issues in transportation of broiler and layer chicks: M. A. Mitchell, Scotland's Rural College (SRUC), UK