

Applied Veterinary Gynaecology and Fertility Management

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Preface

Reproductive efficiency is a fundamental determinant of productivity, profitability, and sustainability in animal production systems. The book, *Applied Veterinary Gynaecology and Fertility Management*, has been developed to provide a comprehensive understanding of the principles and practical applications of reproductive health management in domestic animals.

Advances in reproductive physiology, diagnostic techniques, assisted reproductive technologies, and fertility management have transformed veterinary practice, enabling more accurate diagnosis and effective treatment of reproductive disorders. Modern tools such as ultrasonography, hormonal profiling, estrus synchronization, artificial insemination, embryo transfer, and molecular diagnostics have significantly improved reproductive performance and genetic advancement in livestock populations.

This volume brings together contributions from veterinary academicians, clinicians, and researchers to present current knowledge on reproductive anatomy, physiology, infertility, obstetrical management, reproductive diseases, breeding strategies, and emerging technologies in animal reproduction. Emphasis is placed on integrating scientific principles with clinical applications to enhance fertility, improve herd reproductive efficiency, and promote animal welfare.

The editors hope that this book will serve as a valuable resource for veterinary students, practitioners, researchers, and livestock professionals. We sincerely acknowledge the contributions of all authors and reviewers whose expertise and dedication have made this publication possible. It is our hope that this volume will contribute to advancing veterinary reproductive medicine and sustainable livestock production.

Dr. Deepak Kumar Chaurasia
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