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Guinea fowl, one of the domesticated galliforms birds, is important not only for economic reasons, but also for academic reasons.

The certain unique characteristics of guinea fowl such as herding instinct, excellent foraging ability, hard and adaptable to harsh climate and resistance to most of the common chicken disease makes it an ideal poultry species to be reared under low input rural poultry farming system.

The resistance to common chicken disease in guinea fowl makes it an ideal model for studying the mechanism of disease resistance through functional and comparative genomic studies.

In present book, we have tried to give some fundamentals of genetics and breeding and discussed the various aspects of genetics including cytogenetics, immunogenetics and molecular genetics. The inheritance of certain qualitative and quantitative traits have also been covered.

Dr Deepak Sharma, Ph.D. has worked for more than 25 years in poultry genetics and breeding. For last 12 years, he was engaged in guinea fowl breeding and also in Immuno-genetics as well as on Molecular Genetics. Presently he is Head, Animal Genetics Division, Indian Veterinary Research Institute, Izatnagar (UP). He has published more than 120 research articles. He may be contacted at ds7758@yahoo.co.in

Dr Harpreet Singh is retired Principal Scientist from Central Avian Research Institute, Izatnagar, Uttar Pradesh and at present is a consultant. He has worked on Blood polymorphism, Biochemical polymorphism in large animals as well as in poultry. He initiated research programmes on guinea fowl improvement at CARI and worked more than 13 years on guinea fowl.



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