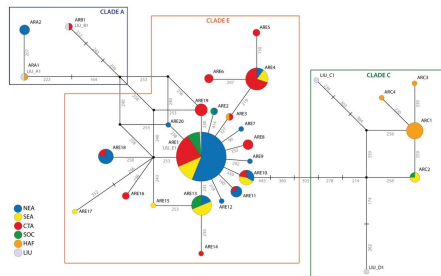




Badar Al-Qamashoui (Autor)
Towards Conservation of Omani Local Chicken
Management, Performance and Genetic Diversity

Badar Al-Qamashoui

Towards Conservation of Omani Local Chicken: Management, Performance and Genetic Diversity



Cuvillier Verlag Göttingen
Internationaler wissenschaftlicher Fachverlag

<https://cuvillier.de/de/shop/publications/6698>

Copyright:

Cuvillier Verlag, Inhaberin Annette Jentzsch-Cuvillier, Nonnenstieg 8, 37075 Göttingen, Germany
Telefon: +49 (0)551 54724-0, E-Mail: info@cuvillier.de, Website: <https://cuvillier.de>



Table of contents

Acknowledgments	i
List of figures	ii
List of tables	iii
Summary	v
CHAPTER 1: General introduction.....	1
1.1 Background	2
1.2 Genetic diversity in livestock and role of conservation	3
1.3 Local chicken breeds: production system and genetic diversity assessment	4
1.4 Risks of extinction of Omani local chickens.....	7
1.5 Scope of the thesis.....	8
References	9
Supplementary materials	13
CHAPTER 2: Towards conservation of Omani local chicken: Phenotypic characteristics, management practices and performance traits	15
Abstract	16
2.1 Introduction	16
2.2 Materials and methods	17
2.2.1 Study locations, interviews and data collection	17
2.2.2 Measuring morphological traits of chicken.....	18
2.2.3 Statistical analysis	19
2.3 Results and discussion.....	20
2.3.1 Household socioeconomic characteristics and farming activities.....	20
2.3.2 Ownership and task division in chicken farming	20
2.3.3 Housing and feeding management	22
2.3.4 Phenotypic characteristics and production traits of chicken	24
2.4 Conclusions and implications.....	28
Acknowledgements	28
References	28
CHAPTER 3: Assessment of genetic diversity and conservation priority of Omani local chickens using microsatellite markers.....	31
Abstract	32
3.1 Introduction	32



3.2 Materials and methods	33
3.2.1 Study area, sampling and DNA isolation	33
3.2.2 Statistical analyses.....	34
3.3 Results	35
3.3.1 Microsatellite markers, population diversity and relationship	35
3.3.2 Relative importance of populations for conservation	37
3.4 Discussion	37
3.5 Conclusions	38
Acknowledgements	38
References	39
Supplementary material.....	41
CHAPTER 4: From India to Africa across Arabia: An mtDNA assessment of the origins and dispersal of chicken around the Indian Ocean Rim.....	43
Summary	44
4.1 Introduction	44
4.2 Materials and methods	46
4.3 Results	48
4.3.1 Within- and between- population diversities	48
4.3.2 Phylogenetic analyses and haplotypes distribution	49
4.3.3 Out-of-India.....	51
4.4 Discussion	51
4.5 Conclusions	53
Acknowledgements	53
References	54
Supplementary material.....	57
CHAPTER 5: General discussion.....	61
5.1 General discussion.....	62
5.2 Conclusions	67
5.3 Implications and recommendations.....	68
References	69