BY

ORUNMUYI MODUPE AND MOMOH OJOH MICHAEL

Some indigenous chicken types in Nigeria





RESEARCH ACTIVITIES

 CHARACTERIZATION OF THE NIGERIAN LOCAL CHICKEN IN KADUNA AND BENUE STATES OF NIGERIA

OBJECTIVES

- To access the social/economic back ground of the respondents.
- To access the frequency of the different local chicken genotypes.

COMPARING THE REPRODUCTIVE PERFORMANCE OF INDIGENOUS CHICKEN TYPES.

OBJECTIVES

 To compare the reproductive performance of indigenous chicken types.

 To estimate the correlation between the reproductive parameters in the chicken types.

COMPARATIVE EVALUATION OF NIGERIAN HEAVY AND LIGHT LOCAL CHICKEN ECOTYPES AND THEIR CROSSES FOR GROWTH AND EGG PRODUCTION TRAITS

Objectives

- To evaluate the performance of the heavy and light chickens and their crosses for growth traits under onstation management condition
- To evaluate egg production characteristics of the various genetic groups.
- To estimate heterosis for growth and egg production traits

HAEMATOLOGICAL AND SEMEN QUALITY CHARACTERISTICS OF INDIGENOUS CHICKENS IN NIGERIA

OBJECTIVES

 To evaluate effect of age and sex on hematological parameters in the indigenous chickens.

 To evaluate the effect of age on semen quality characteristics of cocks.

EFFECT OF STORAGE METHOD AND TIME ON EGG QUALITY TRAITS OF NIGERIAN INDIGENOUS CHICKENS

Objectives

- Determine the effects of storage method and holding period on egg quality characteristics of Nigerian indigenous chicken
- Comparing the internal and external egg quality traits of indigenous and exotic chickens (Rhode Island Red) under storage method and storage time.



Teaching Activities

Curriculum review at undergaduate and post-graduate levels to include

1 Conservation of animal genetic resources

- 2 Animal Biotechnology
- 3 Scientific writing and oral presentation
- 4 Teaching with the use of projectors

Other Teaching Activities

Use of different teaching methods such as

- Group discussion
- Buzz group
- Assignments
- Class presentation
- Field trips
- Computer lab. for statistical analysis

Outcomes of research

Characterization of the indigenous chicken based on

- Plumage morphology
- Reproduction
- Growth and egg production
- □ Egg quality traits

New research proposals

- Molecular characterization of indigenous chicken of Nigeria.
- Genetic parameter estimates of plasma alkaline phosphatase and eight week body weight in indigenous chicken of Nigeria.
- Enhancing small holder Diary goat production in Northern Nigeria through the application of biomarkers.

Outcomes of teaching

- Students have been trained on scientific writing, oral presentation and use of visuals.
- The course materials were place in libraries for students and staff use.
- Students now have research topics in the area of genetic engineering
- The use of visuals helped students to make contributions and ask questions.
- The students can make use of computer labs better.
- A combination of teaching methods improved teaching and learning.

Challenges

Low funding of research activities.

Poor collaboration among researchers.

 Time allocated for a course is small for efficient use of different teaching methods.

 There is still problem in handling some statistical packages e. g ASREML etc.

Solutions to problems

 ILRI/SLU/FAO to liase with ARCN/NACGRAB on possible collaboration and joint funding of research on AnGR.

Suggested livestock record/ technology

Open nucleus breeding scheme (OBNS)

Breed organizations/societies

Central recording station/analysis of data

SUGGESTED COLLABORATORS

Ghana

Sierra Leone

Côte d'Ivoire

OTHER ISSUES ON AGB

 National and Regional Training workshop for students and other researcher.

Visiting lecturers for exchange of ideas.

Field trip to other institutions by students.

National Institutions involved in conservation of Animal Genetic Resources

- Nigerian Conservation Foundation (NCF)
- National Centre for Genetic Resources and Biotechnology (NACGRAB)
- Agricultural Research Institute of Nigeria (ARCN)
- National Animal Production Research Institute (NAPRI)
- Nigerian Universities with Faculties of Agriculture

Present collaborators

 NCF and NACGRAB are planning to collaborate in the area of conservation of the genetic resources (both plants and animals) of Nigeria.

Objectives

- to ensure the sustainable use of these rich biodiversity through research and development.
- Collate data on indigenous plants and animals, especially those of economic and conservation importance.
- Development of a joint concept for Nigerian fauna gene pool to further enhance the genetic database of NACGRAB.
- wildlife flora gene base development, especially those of economic importance.
- Internship development program.



Other collaborators

ARCN is currently collaborating with the following on Agricultural research.

- All Agricultural research institutes of Nigeria
- Nigerian Universities with Faculties of Agriculture