

## POS -09

### Pictorial Presentation and Description of Commercial Herbal Poultry Products Sold in Veterinary Shops in Owerri, Imo State, Nigeria

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#### Abstract

For resource-poor smallholder farmers in Nigeria, conventional drugs have become very expensive and an out-of-reach resource for the health management of chickens. A diagnostic survey was undertaken in Owerri, Imo State, Nigeria to identify and document commercial herbal poultry products sold in veterinary shops in Owerri, Imo State, Nigeria. An informal diagnostic survey was carried out during which the veterinary shops in the study area were identified from the registered list of Animal Healthcare practitioners in Imo Agricultural Development Program and the practitioners informed on the nature and purpose of the study. Based on the result of the survey, 30 practitioners were purposively chosen for the study, based on their willingness to participate in the study. Twelve (12) commercial herbal poultry products were identified. Majority of the products originated from Nigeria followed by India, Malaysia, and Germany. The presentation was in liquid and powder form. Cost per treatment and treatment regimen of the commercial herbal products utilized in poultry production in Owerri, Imo State were identified and documented. In conclusion, there is a need for validation of the therapeutic function and effectiveness of these commercial herbal products.

**Keywords:** Herbal poultry products, veterinary shops, smallholder farmers, Nigeria

#### Introduction

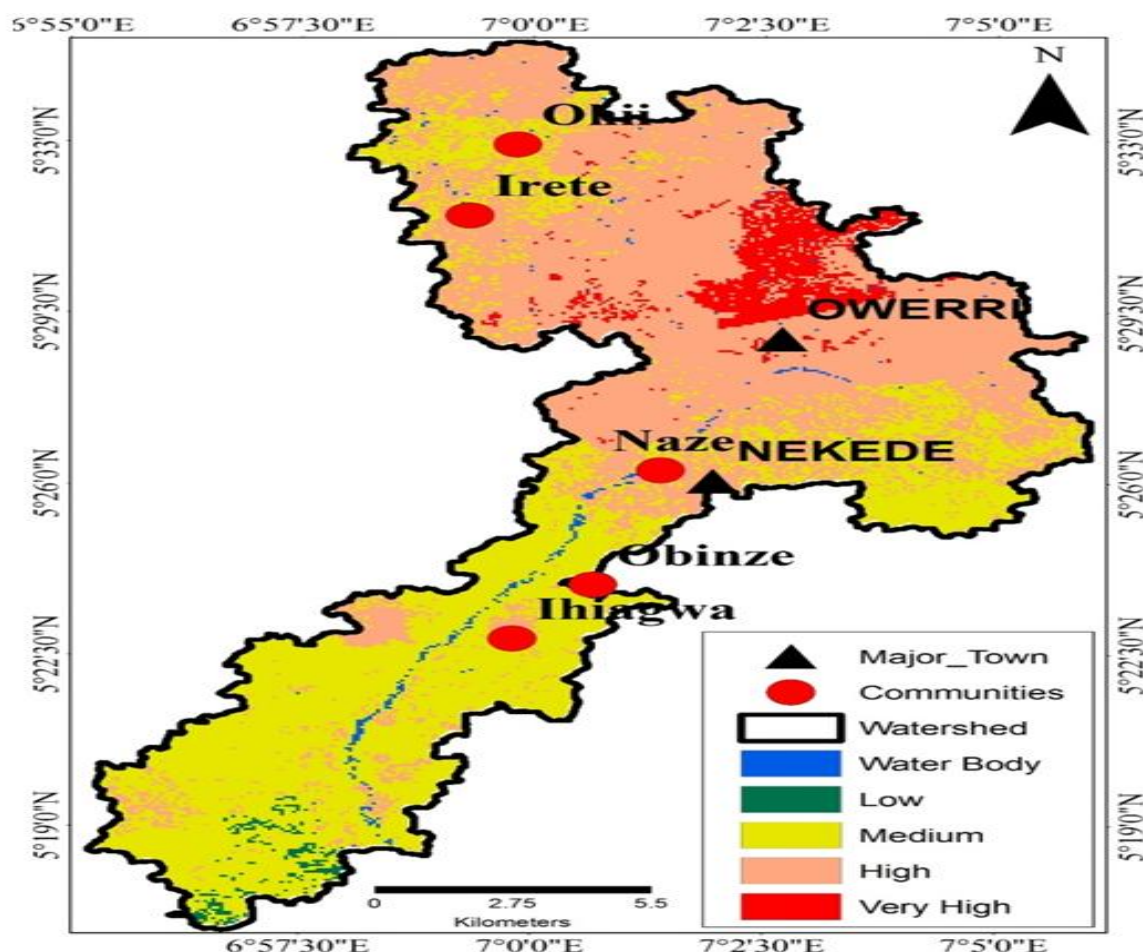
The use of herbal products to enhance animal productivity has generated renewed interest in recent times, as herbal preparations are increasingly been used in health care system to enhance growth and treat various animal diseases especially poultry (Fajimi and Taiwo, 2005; Olanipekun 2014). Herbal products are crude drugs which are made from raw herbs or herb extracts with the mixture of phytochemicals and may contain single herbal ingredient or mixture of small doses of multiple variations of herbal plant part (Jantan, 2006). Usually, it comes to the market either in the form of powders, liquid, pills or capsules (Kosalec *et al.*, 2009). The notion that herb is safe because of its natural background and have along record of use in folk medicine has encouraged the emergence of herbal products (Jantan, 2006; Kosalec *et al.*, 2009).

Therefore, this study was designed to identify and document the various commercial herbal poultry products sold in veterinary shops in Imo State Nigeria.

#### Materials and Methods

This study was conducted in Owerri, Imo State, Nigeria. Owerri is the capital of Imo State and is comprised of Owerri municipal, Owerri West and Owerri North Local Government Areas (LGAs). Owerri is bordered by the Otamiri River to the east and the Nworie River to the south. It is located at 5.476310°N latitude 7.025853°E longitude and an average altitude of 159 meters above sea level. The area receives a bimodal rainfall with a long rainy season occurring from April to October and an annual rainfall of 15000 mm – 2,200 mm and an average temperature of 29.39°C. Imo State Agricultural Development Project (ADP) first-quarter annual report 2008 reported that major Livestock enterprises of economic importance in Imo state include poultry, sheep, goat, cattle, beekeeping and pig rearing (Okoli *et al.*, 2009). The selection of towns in these 3 LGAs was based on the presence of veterinary shops. The map of the study area is described in Figure 1. In achieving the research project objectives different data collection techniques (questionnaire, field visit, and discussion) were employed. An informal diagnostic survey was carried out during which the veterinary shops in the study area were identified from the registered list of veterinary practitioners in Owerri agro-ecological zone and the practitioners informed on the nature and purpose of the study. Based on the result of the survey, 30 practitioners were purposively chosen for the study, based on their willingness to participate in the study. The data were collected using structured and semi-structured questionnaire.

Data on usage, presentation form, registration status, country of origin, treatment per cost and treatment regimens were obtained.



**Figure 1.** Map of Owerri, Imo state showing the study areas

**Source:** [http://www.nigeriagallery.com/Nigeria/States\\_Nigeria/Imo/Imo\\_State.htm](http://www.nigeriagallery.com/Nigeria/States_Nigeria/Imo/Imo_State.htm)

## Results and Discussion

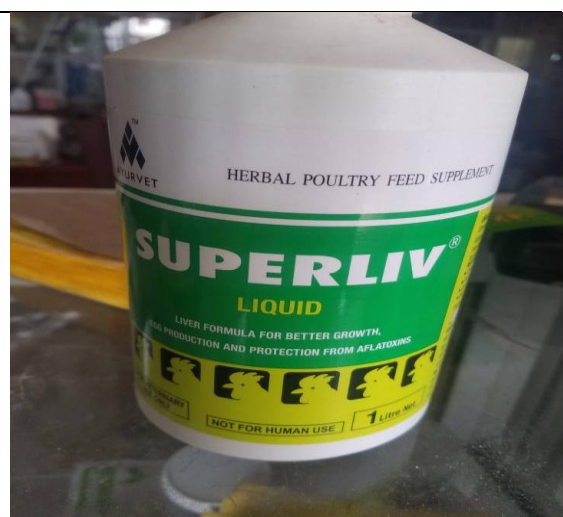
The usage, presentation form, registration status and country of origin of commercial herbal products utilized in poultry production in Owerri, Imo State are presented in table 1. The presentation forms were ranged from liquid to powder. Majority of the products were originated from Nigeria followed by India, Malaysia, and Germany. Pictorial presentation, cost per treatment and treatment regimen of commercial herbal poultry products were identified and documented as shown in Plate 1 and Table 2 respectively.

**Table 1:** Usage, presentation form, registration status and country of origin of commercial herbal products

| Herbal products | Usage                             | Presentation form | Registration   | Country of origin |
|-----------------|-----------------------------------|-------------------|----------------|-------------------|
| Liverton        | Liver tonic, performance enhancer | Liquid            | Registered     | India             |
| Yatt mak        | Growth promoter                   | Powder            | Not registered | Malaysia          |
| Estime          | Growth promoter                   | Powder            | Not registered | Malaysia          |
| Bio liv         | Liver tonic                       | Liquid            | Registered     | India             |
| Super liv       | Liver tonic                       | Liquid            | Registered     | India             |
| G.G. Herb       | Anti-viral                        | Liquid            | Registered     | India             |
| Chick on        | Growth promoter                   | Liquid            | Registered     | Nigeria           |
| Sangovet        | Performance enhancer              | Powder            | Registered     | Nigeria           |
| Attack          | Anti-bacterial                    | Liquid            | Not registered | Nigeria           |
| Kings herb      | Anti-viral                        | Liquid            | Not registered | Nigeria           |
| Super CRD       | Anti-viral, anti-bacterial        | Liquid            | Registered     | Nigeria           |
| Orygostion      | Growth promoter                   | Liquid/powder     | Registered     | Germany           |

**Table 2:** Cost per treatment and treatment regimen of commercial herbal poultry products sold in Owerri, Imo State

| Herbal products | Cost/treatment | Treatment Regimen                     |
|-----------------|----------------|---------------------------------------|
| Liverton        | N20/bird/day   | 1 ml/2l of drinking water             |
| Yatt mak        | N2/bird/day    | 50 gm/25kg feed                       |
| Estime          | N2/bird/day    | 50gm/25 kg feed                       |
| Bio liv         | N20/bird/day   | 1 ml/2Lof drinking water              |
| Super liv       | N20/bird/day   | 1 ml/2Lof drinking water              |
| G.G. Herb       | N20/bird/day   | 1ml/0.5L of drinking water for 7 days |
| Chick on        | -              | 50 gm/25 kg feed                      |
| Sangovet        | N10/bird/day   | 1 gm/4 L of drinking water daily      |
| Attack          | -              | 2ml/1Lof drinking water               |
| Kings herb      | -              | 2ml/1Lof drinking water               |
| Super CRD       | -              | 1 ml / 1 L of drinking water daily    |
| Orygostion      | -              | 1ml / 2Lof drinking water             |





**Plate 1:** Samples of commercial herbal poultry drugs sold in Imo State, Nigeria

### Conclusion and Recommendation

The study revealed that veterinary health practitioners in Imo State sell commercial herbal products to poultry farmers. These products range from anti-bacterial, anti-viral, performance enhancers, growth promoters, and liver tonic. However, there is a need for validation of the therapeutic function and effectiveness of these herbal products.

### REFERENCES

- Fajimi, A. K. and Taiwo, A. A. (2005). Herbal remedies in animal parasitic diseases in Nigeria: a review. *Afr. J. Biotech.*, 4 (4):303-307.
- Jantan, I. (2006). The scientific values of Malaysian herbal products. *J. Sains Kesihatan Malaysia*, 4: 59-70
- Kosalec, I., Cvek J. and Tomic, S. (2009). Contaminants of medical herbs and herbal products. *Arch. Ind. Hygiene Toksikol.*, 69: 485-501.
- Olanipekun, M.K. (2014). Survey and chemical composition of plants used as herbal remedies in managing poultry animal diseases in Ekiti-State, Nigeria. *IOSR J. Agric. and Vet. Sci.*, 7(11):10-16
- Okoli, I.C., Alaoma, O.R., Opara, M.N. Uchegbu, M.C., Ezeokeke, C.T., Durunna, C.S., Nnadi, F.N., Iheukwumere, F.C. and Okeudo, N.J. (2009). Socio-cultural characteristics of educated small holder pig farmers and the effects of their feeding practices on the performance of pigs in Imo state, Nigeria. *Report and Opinion*, 1(4): 59 - 65.