

DOI 10.30612/re-ufgd.v7i14.13032

**PROFILE OF CAIPIRA BROILER MEAT PRODUCERS AND CONSUMERS
IN THE ALTO SAN FRANCISCO REGION – MG****PERFIL DOS PRODUTORES E CONSUMIDORES DE CARNE DE FRANGO
CAIPIRA NA REGIÃO DO ALTO SÃO FRANCISCO – MG**Sandra Beatris Diniz Ebling¹Greice Machado Pieszak²Marciele Moreira Da Silva³Fabiana Zanini Marin³Verônica Hemann Piecha³Patrícia Stangherlin Minuss³

Recebido em 21/11/2020

Aceito em 01/12/2020

Abstract: The production and consumption of chicken meat have grown a lot during the last few years. Thus, consumers and chicken producers began to worry more about each production process of the poultry chain, thus aiming at a good quality final product. Thus, the objective was to evaluate the profile of producers and consumers of redneck chickens in the Region of Alto São Francisco - MG. The research was carried out in the municipality of Bambuí - MG, located in the center of Minas Gerais. The questionnaire included 60 bambuienses addressed in different supermarkets in the city, free fairs, and in their residences, where predefined questionnaires were used. Data analysis was performed with the aid of spreadsheets, and Microsoft Office Excel was used® in 2007. Consumers of redneck chicken meat are interested in knowing the origin of the product, as well as the guarantee of a healthy product, with affordable price, and quality. The flavor of the redneck chicken is still the determining factor for those looking for this type of food. It can be observed with research that the production of redneck chicken is an activity with great sales potential, but still lacks tools related to the improvement of the production process, which encourage breeders to work with more quality. The production of any animal product needs to adapt to welfare standards, a reality that few producers know about.

Keywords: requirement, well-being, quality, consumer market.

Resumo: A produção e o consumo de carne de frango tem crescido muito durante os últimos anos. Com isso os consumidores e os produtores de frango passaram a se preocupar mais com cada processo produtivo da cadeia avícola, visando assim um produto final de boa qualidade. Assim, objetivou-se avaliar o perfil dos produtores e consumidores de frangos tipo caipira da Região do Alto São Francisco – MG. A

1 UNIPAMPA - Uruguaiana

2 Colégio Politécnico da Universidade Federal de Santa Maria RS, Brasil.

3 Universidade Regional do Alto Uruguai e das Missões (URI), Santiago, Rio Grande, RS



pesquisa foi realizada no município de Bambuí – MG, situado no centro oeste mineiro. Participaram do questionário 60 bambuienses abordados em diferentes supermercados da cidade, feiras-livres, e nas próprias residências, onde foram utilizados questionários já pré-definidos. A análise dos dados foi realizada com o auxílio de planilhas eletrônicas, sendo utilizado o Microsoft Office Excel® 2007. Os consumidores de carne de frango caipira estão interessados em saber a origem do produto, bem como a garantia de um produto saudável, com preço acessível, e de qualidade. O sabor do frango caipira ainda é o fator determinante pra quem procura esse tipo de alimento. Pode-se observar com a pesquisa que a produção de frango caipira é uma atividade com grande potencial de venda, mas ainda carece de ferramentas relacionadas a melhoria do processo produtivo, que impulsionem os criadores a trabalharem com mais qualidade. A produção de qualquer produto de origem animal precisa cada vez se adequar as normas de bem-estar, uma realidade que poucos produtores conhecem.

Palavras-chave: exigência, bem estar, qualidade, mercado consumidor.

INTRODUCTION

Most small farmers in Brazil have an alternative in poultry breeding activities to obtain the food of high nutritional value and profitability. It is notorious the appreciation by the urban population for this differentiated product, being an activity whose market is very promising, since the supply of this product is lower than the demand. Also, the commercialization can be carried out directly, producer/consumer, making compensating and attractive the prices of products (ARAÚJO et al., 2020).

The hillbilly-type aviculture has as characteristics the use of the family workforce, providing the participation of women and children because it is an activity of easy management; fixation of man in the field, the use of small areas of land, and the great capacity of conversion of grains and other products of plant origin (fruits, vegetables, cassava, sorb, corn, weeds, and others) in meat and eggs, used in the feeding of the family (SIQUEIRA, 2014).

Currently in large urban centers the "redneck chicken" has stood out with prices higher than chicken produced in commercial farms and its supply has not sufficiently met the demand of this market niche (MATOS et al., 2019).

The consumer market is increasingly demanding in search of organic products aimed at health benefits. Most small farmers in Brazil have in activities of breeding redneck birds as an alternative to obtain the food of high nutritional value and profitability (VALENTIM et al., 2017).

One of the barriers to production is related to the difficulty of the producer in marketing his final product due to the lack of adequate and legalized places where animals can be slaughtered with all the correct procedures for this purpose (DA ROCHA et al., 2016). With this the clandestine slaughter of birds has been increasing in all cities, offering risks to the health of the consumer and difficulty for the breeder in processing his product.

It is of great importance to carry out socio-productive studies and to determine the use of zootechnical indexes in rural properties, because the gathering of information on production techniques and conditions in which food is produced provides subsidies for the detection of critical processing points and to draw guidelines for the training and training of labor to be used in quality production, making properties competitive in the market (BARQUETE et al., 2019).

The calculation of the productive characteristics of rural properties about the nutrition, genetics, ambiance, and health of their cattle through the application of applicable zootechnical indices may indicate which actions would be most consistent with their productivity (MONÇÃO et al., 2019).

Therefore, rural producers must have full access to technologies and information that enable them to improve the production process on their property, which are incorporated into the role of technical assistance within the areas of research and academic extension as an integral part of both the student's curriculum and the institutional action in the teaching-research-extension tripod (PERES et al., 2019).

Therefore, there is a great need to know the socioproductive reality of the rural producer to try to understand what their production process systems are, what are the decision-making on the property, and how they act in the productive context they have.

Therefore, it is certain that the proper characterization of the forms of production and application of technical references zootechnical treatment are of paramount importance for these objectives, aiming to meet the expectations of the producers and consumers of this food sector.

Because of this, the objective was the profile of consumers and producers of "caipira" chicken in the region of Alto São Francisco - MG and to unveil its particularities of buying and selling this product.

MATERIAL AND METHODS

Taking into account the proposed objectives, we opted for descriptive-exploratory research that, according to Gil (1999), aims to characterize and measure a given population or phenomenon and, therefore, establish certain relationships between variables, of a quali-quantitative nature, due to the interdependence in the demands imposed in this study, given the complexity of the social reality of the target audience.

The municipality of Bambuí - MG, Located at 725 meters of altitude, of Bambuí has the following geographical coordinates: Latitude: 20° 1' 1' 17" South, Longitude: 45° 57' 39" West. It has approximately 23,000 inhabitants and is located in the Midwest region of the State of Minas Gerais, with a territory of 1,455,380 km² covering a vast area in rural properties.

To know the profile of the producers of redneck chicken in the region, 14 interviews were conducted with the breeders in different parts of the city and the rural area, such as free markets, and in the residences themselves using questionnaires already predefined, with questions related to the production system, the bird lineage used, the concern with the welfare of birds, food, management procedures, forms of sale, among others.

It was also questioned the degree of interest in participating in a future association of chicken producers, as well as the use of a legalized slaughterhouse for the performance of slaughter and packaging procedures of the final product.

For the consumer data, 60 bambuienses approached in different supermarkets in the city, free fairs, and in their own homes participated in the questionnaire. The data collection instrument was pre-elaborated, and included multiple-choice questions, with the possibility of obtaining more than one answer in some questions

The questionnaires applied to consumers contained questions regarding the preference of redneck and redneck chicken meat, frequency of consumption, the notion of the difference between the country chicken and the hillbilly type, place of purchase, way of purchase, concern with items such as price and origin, type of rearing as an influencer of consumption, knowledge about animal welfare, valorization of products created and slaughtered in a legalized way, and opinion regarding the expansion of the market of redneck products.

Data analysis was performed with the aid of spreadsheets, and Microsoft Office Excel was used® in 2007. The data from the questionnaires were tabulated and transformed into percentage values, based on these, constructed graphs to facilitate the

interpretation of the results obtained. Thus combining a descriptive statistic of the data obtained.

RESULTS AND DISCUSSION

Producers of broilers

According to table 1, of the total producers interviewed, 57% only produce animals, legitimately hillbilly, another 43% work with both, hillbilly and hillbilly type and neither of the producers work only with hillbilly animals. About 64% of these producers work with the extensive system and 36% with the semi-intensive system.

Of the interviewees, 57% of the producers are based on the feeding of the animals corn and crop remain and another 43% use their feed for each phase and corn. The results allowed us to affirm that 64.5% use vaccination in the first days of life of the animals, and 78% perform hygiene practices regularly.

Table 1. Responses from producers on the rearing of hillbilly chickens.

Sex	Male: 24%	Female: 66%	-----
Age	Under 30 years: 10%	Between 30 and 45 years: 18%	Over 45 years: 72%
Main activity	Egg production and poultry meat: 18%	Poultry production with other crops: 82%	-----
Strains of the birds used	Rednecks: 57%	Hillbilly type: 0%	Both: 43%
Production system	Extensive: 64%	Semi-extensive: 36%	Intensive: 0%
Animal welfare	Apply: 21%	Do not apply: 79%	-----
Power	Corn and crop scraps: 57%	Feed for each phase: 43%	-----
Vaccination	Yes: 64.5%	No: 36.5%	-----
Hygiene	Realize: 78%	Do not perform: 12%	-----
Sales control	Performing: 42.7%	Do not perform: 57.3%	-----



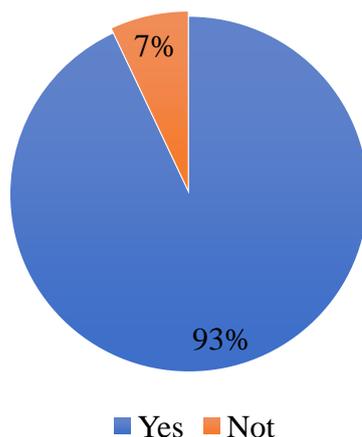
Point of Sale	Fair: 14.2%	Orders and fairs: 57.2%	Orders: 28.6%
Output for sale	Yes: 100%	No: 0%	-----
Spending control	Yes: 7.2%	No: 92.7%	-----
The assistance of some agency	Yes: 0%	No: 100%	-----
Reason for lack of assistance	Free assistance: 71.4%	Interest in searching for this service: 28.6%	-----

Among them, only 42.7% know how many animals sell per batch or month. 28.6% sell live animals and another 21.4% are slaughtered and cleaned and 50% sell both ways depending on the customer. All interviewees reported that the form of slaughter is homemade and has no preparation or professional guidance about good slaughter practices.

Corroborating this research, Rocha et al. (2016) in its socioeconomic study, the objective of evaluating the practices of the rearing of birds and pigs and the perceptions of the environmental impacts perceived by the family producer on properties in the periurban region of Senador Canedo (GO), reported that the hillbilly breeding of pigs and birds generates income and provides animal protein to the families involved, but the low level of tissues, little concern with zootechnical characteristics and the lack of public policies are points to be worked.

The main point of sale of 14.2% of producers is the fair, another 57.2% attend fairs and also order, 21.4% only on demand and 7.2% has its products sold to the city hall. All producers reported that if they increased production, it would have a way out for sale, thus showing the productive potential of this crop. Only 7.2% of the producers control the expenses with food, medicines, etc., thus showing the need for specialized assistance in production. 100% indicated that the sale of chicken helps in the monthly income of the family, according to graph 1.

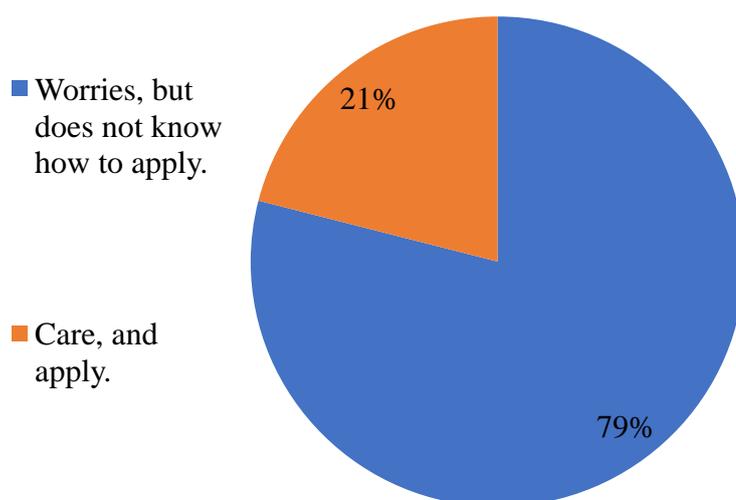




Graph 1. Control of production costs.

None of the interviewees receive help from anybody or a professional specialized in poultry culture, 71.4% of the point out that the reason for this lack of assistance would be the lack of free programs that offer this service. 85.7 are unaware of producer associations in this area, and the others are affiliated with associations focused on cattle culture. 78.6% showed interest in participating in associations and in using the slaughterhouse appropriate to current standards and 92.8% are interested in participating in short training courses in the production of hillbilly birds.

According to Graph 2, when the subject was well-being 79% of producers did not know the real meaning and its application in production, another 21% concerned about this issue and reported the practices used to ensure the same.



Graph 2. Concern for the animal welfare of production.

The production of "redneck" broilers has been growing a lot in recent years, mainly due to the appeal of animal welfare, because these animals are raised in less intensive systems and with more freedom to express their natural behaviors. Being an economically viable activity for small farmers to explore (VALENTIM et al., 2018). The production of hillbilly birds is an activity whose market is very promising since the supply of this product is lower than the demand (SANTOS et al., 2010). Also, the commercialization can be carried out directly, producer/consumer, making compensating and attractive the prices of products (DA SILVA et al., 2019).

Silva and Nakano (1997) report that there are differences in the country system due mainly to the ingestion of pasture, vegetables, insects, earthworms, among others, by the bird, which are abundant in the semi-intensive system of rearing. Thus, more traditional consumers prefer the meat of birds raised semi-confined because they have a more "natural" flavor than the meat of fully confined poultry (SAVINO et al., 2007).

Most small farmers in Brazil have an alternative in hillbilly bird breeding activities to obtain the food of high nutritional and biological value. This type of creation provides a product of excellent quality for family food, in addition to providing an extra income for the sale of surplus (CRUZ et al., 2016). In the Region of Alto São Francisco, consisting of the municipalities of Bambuí, São Roque de Minas, Piumhi, Medeiros, Arcos, Iguatama, Córrego Danta, and others, it is observed the great appreciation of this product (country chicken) by the urban population.

This differentiated product reaches prices ranging from R\$ 25.00 to R\$ 30.00 reais per live bird, a very high value when compared to the price of commercial chicken traded in supermarkets. It is an activity whose market is very promising since the supply of this product is lower than the demand. Also, the marketing can be carried out directly, producer/consumer, making compensating and attractive the prices of products (CRUZ et al., 2016).

The meat of the redneck chicken has advantages of differentiated flavor, is more consistent than the meat of commercial chicken, free of antibiotics or growth promoters, the skin is more compact and has a lower fat content and high protein content (VALENTIM et al., 2018). Poultry farming within family farming is easily feasible, since it requires little manpower, has a relatively fast financial return due to the life cycle of birds, and functions as a food source for the family (FERNANDES and SILVA, 2001).

According to the results found, one can perceive the real need for technical assistance for these producers in order to maximize their production. The producers showed a great acceptance regarding the information on improvements in nutritional, sanitary management and production costs of poultry breeding.

Consumers of redneck chicken

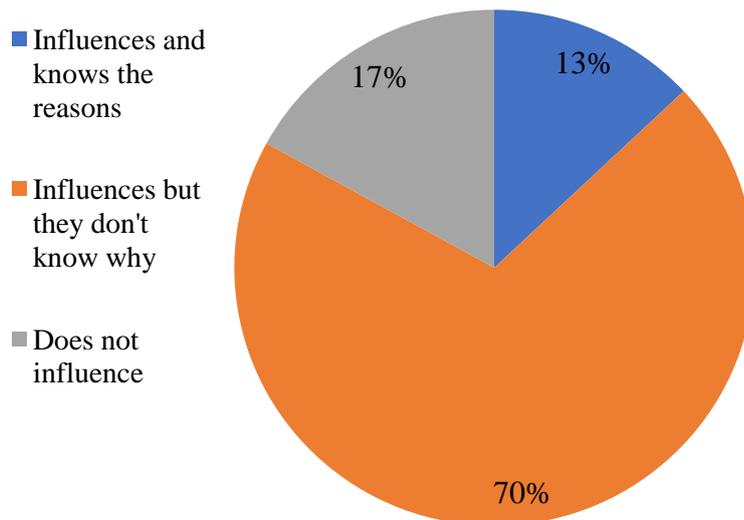
Of the total number of people interviewed, 57% consume redneck chicken meat at least once a week, 17% 2 to 3 times a week, 20% 2 to 3 times a month and 6% are not frequent consumers. Of these people, 46.5% know the difference between country chicken and hillbilly type, another 33.5% could not explain this difference despite demonstrating knowledge and 20% did not opine. The results of the research allow us to infer that 73.4% prefer to consume the legitimate redneck chicken, due to factors such as flavor, color, and differentiated texture.

It can be said that 46.6% of consumers prefer to buy the chicken at fairs, 13.4% in supermarkets, and another 40% directly from the producer. Regarding the forms of consumption, 76.6% of the interviewees prefer to buy the slaughtered and clean chicken, and another 23.4% purchase the live chicken.

Junior et al., (2017) characterized the profile of the chicken consumer of the city of João Pessoa-PB, and reported that chicken meat is the second place in the ranking of consumer preference and that cuts are more requested of a whole chicken.

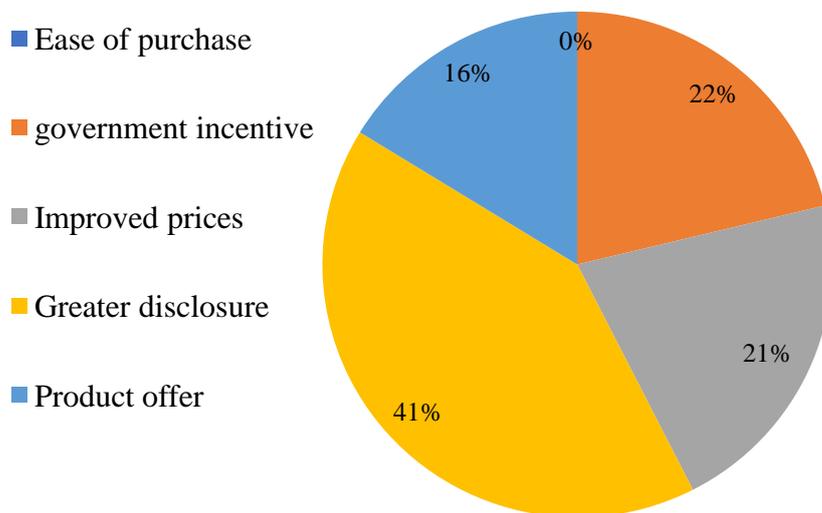
Among the interviewed population, 100% reported that they are concerned about price and origin factors, 43.4% of them said that the price is more analyzed and another 56.6% try to verify the best origin. Regarding the principle of good practices of production and animal welfare 70% of the interviewees stated that this is a point that can be an influencer in consumption, but these do not know the necessary principles, 13.4% think that this point is an influencer and know the meaning of animal welfare, and another 16.6% do not think that this item can interfere in the purchase.

As reported in Graph 1, about 86.6% of consumers would be willing to pay more for a product that is by the standards of creation, well-being, slaughter, and marketing, and another 13.4% think that this item is not as important.



Graph 1. Well-being as an influencer in the consumption of redbirds.

About the expansion of the market, 16.6% of consumers believe that the price factor is predominant and 33.4% report that the sector needs greater disclosures, 16.6% say that there is a lack of government incentive for this growth, 20% pointed out that there is a lack of ease in buying because it does not have many suppliers and another 13.4% think that there is a lack of interest from the man in the field to expand the creation.



Graph 2. What's missing from the hillbilly bird market.

Mendes et al., (2016) characterized the consumer profile of the municipality of Janaúba-MG, and observed that the low consumption of both meat and egg is associated

with false information disclosed regarding the feeding of birds and the production system. Consumers are looking for healthier foods, which are produced according to food safety rules, to ensure animal welfare, which will result in a quality final product (STRINGHETA & MUNIZ, 2004; SAVINO et al., 2007; NAZARENO et al., 2011).

Improvements in communication channels are of vital importance for opening new markets and knowledge of the population about the advantages of consumption of these foods, therefore technical professionals and producers must work together to meet the demands of consumers and increase the visibility of "hillbilly" production. Interestingly, the government, producers, and the academic community come together to facilitate the actions of improvements, seeking to provide quality products for the entire consumer population.

CONCLUSIONS

Consumers of redneck chicken meat are interested in knowing the origins of the product as well as the guarantee of a healthy product, with affordable price, and quality. The taste of the redneck chicken is still the determinant in the taste of those looking for this type of food. Basic differences between hillbilly and hillbilly type is not yet a careful analysis performed between consumers, as well as the type of breeding that these animals received throughout the production cycle.

The supply of labor specialized in the activity is still a problem, due to several factors ranging from the absence of contact of producers with professionals in the area to the unfeasible cost of investing in this type of training. However, it should be emphasized that the responsible bodies must be close to show that such investment tends to generate significant long-term profits, thus justifying the need to adapt the activity to the current legislation.

It is increasingly necessary that professionals in the agricultural sciences and food promote the supply of safe and quality food to the population, respecting the minimum needs of animals and providing well-being.

REFERENCES

BARQUETE, P. H. A.; VALENTIM, J. K; NORONHA, C. M. S. Estudo Sócio-produtivo e Zootécnico da bovinocultura de corte: Estudo de caso do município de São

Vicente de Minas, Brasil. **Revista de Extensão e Estudos Rurais**, v. 8, n. 2, p. 43-61, 2019.

CRUZ, F. G. G. et al. Perfil socioeconômico da avicultura no setor primário do Estado do Amazonas, Brasil. **Revista em Agronegócio e Meio Ambiente**, v. 9, n. 2, p. 371-391, 2016.

DA ROCHA, L. O. et al. Diagnóstico Participativo/Rural aplicado a criação de aves e suínos caipiras em regiões periurbanas no município de Senador Canedo (GO). **Fronteiras: Journal of Social, Technological and Environmental Science**, v. 5, n. 2, p. 135-152, 2016.

DA SILVA, S. V. et al. Sistema Sustentável De Criação De Aves Na Comunidade Quilombola De Dourados, Mato Grosso Do Sul. **Revista online de Extensão e Cultura Realização**, v. 6, n. 11, p. 130-139, 2019.

DE ARAÚJO, A. G. G. et al. Potencialidades e valorização da raça de suíno nativo Piau no contexto dos assentamentos de reforma agrária. **Revista online de Extensão e Cultura Realização**, v. 7, n. 13, p. 145-154, 2020.

FIGUEIREDO JÚNIOR, J. P. F. et al. Caracterização do consumo e perfil do consumidor de frango da cidade de João Pessoa-PB. **Agropecuária Técnica**, v. 38, n. 3, p. 153-159, 2017.

MATOS, N. E. et al. Banana leaf in the diet of laying hens in cage free system. **Acta Scientiarum. Animal Sciences**, v. 41, p. e46908-e46908, 2019.

MENDES, L. J. et al. Perfil do consumidor de ovos e carne de frango do município de Janaúba-MG. **Ars Veterinaria**, v. 32, n. 1, p. 81-87, 2017.

MONÇÃO, F. P. et al. Transferência de tecnologias zootécnicas a agricultores familiares no município de Espinosa/MG. **Revista online de Extensão e Cultura Realização**, v. 6, n. 11, p. 84-92, 2019.

NAZARENO, A.C. et al. Bem-estar na produção de frango de corte em diferentes sistemas de criação. **Engenharia Agrícola**, v.31, n.1, p.13-22, 2011.

PERES, F. D. et al. Milk quality evaluation of dairy farmers in the Alto São Francisco Region. **Revista online de Extensão e Cultura Realização**, v. 6, n. 12, p. 108-120, 2019.

PUCHETA, R. et al. PERFIL DO CONSUMIDOR E DO CONSUMO DA CARNE DE FRANGO NO MUNICÍPIO DE ANASTÁCIO-MS. **ANAIS DO SEMEX**, n. 11, 2018.

SANTOS, et al., Comportamento bioclimático de frangos de corte caipira em piquetes enriquecidos. **Revista brasileira de engenharia agrícola e ambiental**. v.14 n.5. 2010.

SAVINO, V.J.M.; A. A. D. C.; M. F. R.; M. A. N.S; Avaliação de materiais genéticos visando à produção de frango caipira em diferentes sistemas de alimentação. **Revista Brasileira de Zootecnia.**, v.36, n.3, p.578-583, 2007.

SILVA, R.D.M.; NAKANO, M. Sistema Caipira de criação de galinhas. Piracicaba: O Editor, 1997. 110p.

STRINGHETA, P.C; MUNIZ, J.N. **Alimentos orgânicos**. Viçosa, MG: Editora UFV, 2004. p.37-128.

VALENTIM, J. K.et al. Use of probiotics in diets of wild-type chickens and its effects on performance. **Revista Brasileira de Saúde e Produção Animal**, v. 19, n. 3, p. 315-323, 2018.

VALENTIM, J. K. et al. Uso de probiótico em dietas de frangos tipo caipira e seus efeitos sobre o rendimento de carcaça, a morfologia e o pH gastrointestinal. **Revista Brasileira de Saúde e Produção Animal**, v. 18, n. 4, p. 530-541, 2017.

VALENTIM, J. K; RODRIGUES, R; BITENCOURT, T. M; LIMA, H. J. D; ALMEIDA, G. R. Implicações sobre o uso de promotores de crescimento na dieta de frangos de corte. **Revista eletrônica Nutritime**, v. 15, p. 8191-8199, 2018.