



Genetic parameters for ultrasound-evaluated carcass and body traits in Anglo-Nubian goats [

2021

text (article)

Analítica

Background: Meat goat breeding programs should prioritize the identification and selection of genetically superior animals for traits related to meat quality and carcass yield in order to increase the value of the final product. **Objective:** To estimate (co)variance components and genetic parameters for ultrasound-measured carcass traits, body size and body weight in AngloNubian breed goats raised in the Mid-North region of Brazil. **Methods:** (Co)variance components and genetic parameters were estimated using the single and two-trait animal model analyses via Bayesian inference for loin eye dimensions (area, length, and depth), sternal fat thickness, rump height, chest circumference and depth, leg perimeter, and body weight. **Results:** Heritability estimates were higher when two-trait analyses were used. This finding implies that it is possible to recover part of the additive genetic variance included in the residual variance due to the correlation between traits. Genetic correlations between carcass and body size traits showed different magnitudes. On the other hand, genetic correlations between the traits related to muscularity showed high magnitudes. **Conclusions:** Body weight was not a good indicator of muscularity; therefore, it is not recommended as a criterion for indirect selection to improve carcass traits of Anglo-Nubian goats. Leg perimeter and chest circumference may be important to construct selection indexes in meat goat breeding programs

Background: Meat goat breeding programs should prioritize the identification and selection of genetically superior animals for traits related to meat quality and carcass yield in order to increase the value of the final product. **Objective:** To estimate (co)variance components and genetic parameters for ultrasound-measured carcass traits, body size and body weight in AngloNubian breed goats raised in the Mid-North region of Brazil. **Methods:** (Co)variance components and genetic parameters were estimated using the single and two-trait animal model analyses via Bayesian inference for loin eye dimensions (area, length, and depth), sternal fat thickness, rump height, chest circumference and depth, leg perimeter, and body weight. **Results:** Heritability estimates were higher when two-trait analyses were used. This finding implies that it is possible to recover part of the additive genetic variance included in the residual variance due to the correlation between traits. Genetic correlations between carcass and body size traits showed different magnitudes. On the other hand, genetic correlations between the traits related to muscularity showed high magnitudes. **Conclusions:** Body weight was not a good indicator of muscularity; therefore, it is not recommended as a criterion for indirect selection to improve carcass traits of Anglo-Nubian goats. Leg perimeter and chest circumference may be important to construct selection indexes in meat goat breeding programs

Background: Meat goat breeding programs should prioritize the identification and selection of genetically superior animals for traits related to meat quality and carcass yield in order to increase the value of the final

product. Objective: To estimate (co)variance components and genetic parameters for ultrasound-measured carcass traits, body size and body weight in AngloNubian breed goats raised in the Mid-North region of Brazil. Methods: (Co)variance components and genetic parameters were estimated using the single and two-trait animal model analyses via Bayesian inference for loin eye dimensions (area, length, and depth), sternal fat thickness, rump height, chest circumference and depth, leg perimeter, and body weight. Results: Heritability estimates were higher when two-trait analyses were used. This finding implies that it is possible to recover part of the additive genetic variance included in the residual variance due to the correlation between traits. Genetic correlations between carcass and body size traits showed different magnitudes. On the other hand, genetic correlations between the traits related to muscularity showed high magnitudes. Conclusions: Body weight was not a good indicator of muscularity; therefore, it is not recommended as a criterion for indirect selection to improve carcass traits of Anglo-Nubian goats. Leg perimeter and chest circumference may be important to construct selection indexes in meat goat breeding programs

<https://rebiunoda.pro.baratznet.cloud:28443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMzQwNDM4OTk>

Título: Genetic parameters for ultrasound-evaluated carcass and body traits in Anglo-Nubian goats electronic resource]

Editorial: 2021

Tipo Audiovisual: Anglonubian animal production bayesian inference carcass (co)variance genetic correlation genetic parameters Gibbs sampling goats heritability meat quality selection selection index ultrasonography Nubian Goats Animal production Goat meat - Quality Genetic parameters Animal breeding Genetic gain Heritability Ultrasonography Selection index Anglonubiana cabras canal calidad de carne correlación genética (co)variancia heredabilidad índice de selección inferencia bayesiana muestreo de Gibbs parámetros genéticos producción animal selección ultrasonografía Cabras Nubia Producción animal Carne de cabra - Calidad Parámetros genéticos Mejoramiento animal Mejora genética Heredabilidad Ultrasonografía Índice de selección Anglonubiana amostragem de Gibbs carcaça caprinocultura correlação genética (co)variância heredabilidade índice de seleção inferência bayesiana parâmetros genéticos produção animal qualidade da carne seleção ultrassonografia Cabras da Núbia Produção animal Carne de caprino - Qualidade Parâmetro genético Melhoramento animal Aumento da variabilidade de genes Hereditariade Ultrasonografia Índice de selecção

Documento fuente: Revista Colombiana de Ciencias Pecuarias, ISSN 0120-0690, Vol. 34, N°. 1, 2021 (Ejemplar dedicado a: January - March 2021), pags. 40-50

Nota general: application/pdf

Restricciones de acceso: Open access content. Open access content star

Condiciones de uso y reproducción: LICENCIA DE USO: Los documentos a texto completo incluidos en Dialnet son de acceso libre y propiedad de sus autores y/o editores. Por tanto, cualquier acto de reproducción, distribución, comunicación pública y/o transformación total o parcial requiere el consentimiento expreso y escrito de aquéllos. Cualquier enlace al texto completo de estos documentos deberá hacerse a través de la URL oficial de éstos en Dialnet. Más información: <https://dialnet.unirioja.es/info/derechosOAI> | INTELLECTUAL PROPERTY RIGHTS STATEMENT: Full text documents hosted by Dialnet are protected by copyright and/or related rights. This digital object is accessible without charge, but its use is subject to the licensing conditions set by its authors or editors. Unless expressly stated otherwise in the licensing conditions, you are free to linking, browsing, printing and making a copy for your own personal purposes. All other acts of reproduction and communication to the public are subject to the licensing conditions expressed by editors and authors and require consent from them. Any link to this document should be made using its official URL in Dialnet. More info: <https://dialnet.unirioja.es/info/derechosOAI>

Lengua: English

Enlace a fuente de información: Revista Colombiana de Ciencias Pecuarias, ISSN 0120-0690, Vol. 34, N°. 1, 2021 (Ejemplar dedicado a: January - March 2021), pags. 40-50

Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es