# **Doctoral thesis presentation** 学位論文発表会

# Studies on Growth and Meat Production of Goats Raised in Abandoned Crop Fields

## 耕作放棄地におけるヤギ肉生産に関する研究

One of the most prevalent land use changes worldwide is farmland abandonment, which has posed effects on ecosystems and biodiversity. Therefore, the need to use natural methods to control farmland abandonment is of paramount importance. Additionally, these farmlands are great sources of botanically diverse pastures which could contribute greatly to growth of livestock and the quality of its products, meat and milk.

However, these meat quality parameters are affected by several factors including production system and season. The variations brought about by season propose for further research to understand how botanical quality and quantity in the field changes with varying season and how these changes affect growth and meat quality of goats. Consequently, this study hypothesized that grazing in abandoned farmland may be suitable for production of goat meat which is enriched with functional compounds from diverse field plants. Additionally, one of functional compounds, phytol may have some effects on growth and nutrient metabolism in young goats.

# $\begin{array}{c} \begin{pmatrix} \mathsf{Chlorophyll} \\ \mathsf{H}_{9}\mathsf{C}_{\mathsf{CH}_{9}} & \mathsf{CH}_{9} & \mathsf{CH}_{9} & \mathsf{CH}_{9} \\ & \mathsf{Phytol} \\ \mathsf{F}_{\mathsf{H}_{9}} & \mathsf{CH}_{9} & \mathsf{CH}_{9} & \mathsf{CH}_{9} \\ & \mathsf{H}_{9}\mathsf{C}_{\mathsf{H}_{9}} & \mathsf{CH}_{9} & \mathsf{CH}_{9} \\ & \mathsf{H}_{9}\mathsf{C}_{\mathsf{H}_{9}} & \mathsf{CH}_{9} & \mathsf{CH}_{9} \\ & \mathsf{H}_{9}\mathsf{C}_{\mathsf{H}_{9}} & \mathsf{CH}_{9} & \mathsf{CH}_{9} \\ & \mathsf{CH}_{9} & \mathsf{CH}_{9} \\ & \mathsf{CH}_{9} & \mathsf{CH}_{9} \\ &$



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This presentation is the subject of Science seminar of Graduate School of Integrated Sciences for Life. 本発表は統合生命科学研究科の共同セミナーとなります。 Contact: Prof. Taketo Obitsu (連絡先:小櫃剛人, tobitsu@hiroshima-u.ac.jp)

### Metabolic pathway of phytol in the rumen and tissues