

Study reveals positive effects of *Agriophyllum squarrosum* on meat quality traits in growing Tan lambs

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Agriophyllum squarrosum, also known as "sand rice," is a drought-tolerant and saline-tolerant psammophyte. As a pioneer plant on the

quicksand, *A. squarrosus* is widespread on sandy surfaces in northern China and is well-adapted to climate change. In addition, *A. squarrosus* is known to be one of the herbage resources for camels, goats and sheep in desert areas of China. However, the nutritional and feeding value of *A. squarrosus* is still unknown.

A research team led by Prof. Yang Guo from the Northwest Institute of Eco-Environment and Resources (NIEER) of the Chinese Academy of Sciences (CAS) investigated the effects of dietary *A. squarrosus* on the growth and meat quality traits of the local sheep breed of Tan lambs.

The study was published in *Meat Science*.

The researchers investigated the effect of different levels of *A. squarrosus* on average daily gain, feed-to-gain ratio, carcass traits, meat quality and fatty acid profile of meat using nutritional analysis, feeding test, metabolic test, slaughter test and meat quality analysis.

The results showed that the adding of *A. squarrosus* to [lamb](#) meals had a beneficial effect on the growth performance of Tan lambs and a positive effect on the [meat](#) quality traits of Tan lambs, including the water-holding capacity of muscle tissue, fatty acid content, muscle fiber area, diameter and density.

This study provides data support for understanding the feeding values of *A. squarrosus*, further developing and utilizing unconventional feed resources in sandy areas, and promoting high-quality animal husbandry development in the Yellow River basin.

More information: Yanping Liang et al, Effect of dietary *Agriophyllum squarrosus* on average daily gain, meat quality and muscle fatty acids in growing Tan lambs, *Meat Science* (2023). [DOI: 10.1016/j.meatsci.2023.109195](https://doi.org/10.1016/j.meatsci.2023.109195)

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