

## **Chemical and mineral composition of raw goat milk as affected by breed varieties available in Malaysia**

The chemical (proximate, amino acid, fatty acid) and mineral composition of raw goat milk from British Alpine, Jamnapari, Saanen, Shami, and Toggenburg breed (n= 30) were investigated. The results showed a significant difference ( $p < .05$ ) on the chemical and mineral composition between the breeds. Principal component analysis (PCA) grouped the breeds into three groups; Jamnapari, Saanen and Shami, British Alpine and Toggenburg. This study showed that chemical and mineral composition of goat milk can be used as the criteria to classify goat breeds. These findings were important for goat breeder and manufacturer of goat milk to improve their products using breed selection.

**Keyword:** Goat milk; goat breed; Chemical composition; Principal component analysis (PCA)